PERCEPTION OF ICT FIRMS IN KENYA TOWARDS PROPOSED KONZA ICT CITY

KENNETH KAMAU MUIRURI

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DECLARATION

This research proposal is my original work and has not been presented for the award of degree in any other university or institution for any other purpose.
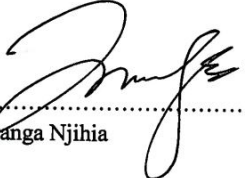
Signature .... Date ..28/08/2013

Kenneth Kamau Muiruri

D61/ 61485/ 2010

This research proposal has been submitted with my approval as the:

Supervisor

Signature .... Date ..26/8/13.

Dr James Muranga Njihia

Moderator

Signature .... Date ..26/8/13

Dr Kate Litondo

Head of Department

Signature .... Date ..28/8/13

Dr James Muranga Njihia

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This research project is my original work and has not been presented for the award of degree in any other university or institution for any other purpose.

Signature …………………………………..   Date ……………………….

Kenneth Kamau Muiruri

D61/ 61485/ 2010

This research project has been submitted for examination with my approval as the:

Supervisor

Signature …………………………………..   Date ……………………….
Dr James Muranga Njihia

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DEDICATION

I dedicate this work to my wife Catherine for her unwavering support throughout this period of the study and to my son George and my daughter Faith to whom this will be an inspiration to work hard in their studies.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF CHARTS

ABBREVIATIONS

BPO	Business Process outsourcing
CSO	Customer service Outsourcing
EPZ	Export Processing Zone
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
IASP	International Association of Science Parks
ICT	Information Communication and Technology
IDRC	International Development Research Centre
ISP	Internet Service Provider
IT	Information Technology
ITES	Information Technology Enabled Services
ITO	Information Technology Outsourcing
KOTDA	Konza Technopolis Development Authority
KPO	Knowledge Process Outsourcing
KTC	Konza Techno City
MDG	Millennium Development Goal
MDP	Master Delivery Partner
NIS	National Innovation Systems
OECD	Organization for Economic Co-operation and Development
R&D	Research and Development
SME	Small and Medium Enterprise
STPs	Science and Technology Parks
VPO	Virtual Process Outsourcing

APPENDICES

ABSTRACT

Kenya has a development plan which will help achieve its Millennium Development Goals called "Vision 2030". One of its flag ship projects is setting up a science and technology park at Konza which will also be a hub for Business Process Outsourcing (BPO) and Information Technology Enabled Services (ITES). Developing countries are adopting the concept of BPO and ITES as a way creating jobs to eradicate poverty.

The objective of this study was to establish level and form of involvement, perceptions and opportunities of ICT firms in Kenya towards Konza ICT city project. The study was modeled on a mixed research design of descriptive cross-sectional and indepth interviews with four key informants. Both studies were carried out simultaneously, and triangulation was used to combine both qualitative and quantitative findings which complement each other. The population for the quantitative study was all ICT firms in Kenya and the sampling frame was acquired from Soft Kenya directory (Soft Kenya) which comprised of 550 ICT firms. Data collected was analyzed using content analysis techniques for qualitative study, and for the quantitative studies, analysis was done for each of the objectives using Excel's add-ins as a statistical analysis tool and to provide descriptive statistics and charts.

The study established that the perception of Kenyan ICT firms indicated that the government needs to do a lot more on ICT infrastructure, water and sanitation and the transport network. The government also needs to improve on involvement of Kenyan ICT firms in Konza. The study also indicated a need to improve on existing ICT policies and that Kenyan ICT firms were quite optimistic about taking up ICT related opportunities at Konza which they deemed as strategically located. Incentives by the government would also see improved participation by both local and foreign investors. The study also recommended faster ICT policy review and recommended further studies after completion of Konza project, and on perceptions of research and development institutions as well as universities towards Konza ICT city proposed project.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

A country will have a vision that will define the path for achieving its long term strategies. Kenya has a development plan which will help achieve its Millennium Development Goals called "Vision 2030". One of its flag ship projects is setting up a science and technology park at Konza which will also be a hub for Business Process Outsourcing (BPO) and Information Technology Enabled Services (ITES). Developing countries are adopting the concept of BPO and ITES as a way of creating jobs to eradicate poverty. Science and Technology Parks (STPs) are formed with the purpose of joining economic and intellectual resources in the region in which the park is established to improve existing companies and concentrate knowledge in one place (Basile, 2011). A survey carried out on 15 Italian Science parks indicates there is a relationship between networking, innovation and science parks (Basile, 2011). In a standalone environment, Research and Development (R&D) costs are quite high as compared to a networked environment where there is collaboration of the various actors. Successful STPs in the world have science clusters like Cambridge and Oxford in the UK, Sophia Antipolis in France and the first science park Stanford University Science park in California founded in 1950, dubbed Silicon valley. Most STPs in Europe were created in the 80's while in the 90's , other science parks in the world started emerging.

Business Process Outsourcing (BPO) refers to the process of outsourcing of non core activities to a third party. Processes that were previously handled internally by employees are now given out to contractors. Contracted vendors can be within the country or outside the country, if within the country this is referred to as onshore outsourcing, and if outside the country, this is referred to as offshore outsourcing. Information Technology Enabled Services (ITES) is an industry that provides services that are delivered over networks or telecommunication to external businesses like customer service, and back office management. Most countries are now considering Information Communication Technology (ICT) for fast economic growth particularly BPO & ITES which has India leading in this sector. India employs 1.5 million people and the sector contributes 5.2% of

national Gross Domestic Product (GDP). Maskell et al., (2007) asserts that the main driving factors for outsourcing by both small and large enterprises are cost reduction, improved services and acquiring knowledge. With internet coupled with low cost of telecommunication and Information Technology (IT), (Hitt et al., 2001) , innovation has helped create new business which has brought a paradigm shift in the way organizations work by receiving services from a different Geographical location at reduced costs, and giving outsourcing vendors sustainable competitive advantage.

Success of Konza ICT City will create opportunities for employment and an environment for innovation. Currently there are a lot of activities and civil works going on that are aimed at ensuring success of the project. Kenya ICT firms have increased their capacity in anticipation. However there are perceptions that this being a government project, it is not likely to succeed.

1.1.1 Business Process Outsourcing and Information Technology Enabled Services

Firms could outsource their accounting functions, payroll processing and other important tasks in order to free up resources and have time to improve on service delivery to their esteemed customers in their key competencies (Lacity & Rottman, 2009). According to Dossani & Kenney (2009), offshore outsourcing is "the next wave of globalization". Ernst (2006) suggests that organizations are driven to off shoring due to increased globalization of markets and knowledgeable workers. Lacity & Rottman (2009) further explain that organizations are increasingly shedding off non core activities not just to concentrate on their core business but to reduce costs as well, and to meet this objective they pursue offshore destinations. Developed countries outsource their services from developing countries which have low labour costs which results in cost reduction and business process improvements. Organizations are now outsourcing more complex activities requiring more skilled manpower. From this premise, the preferred outsourcing destinations are those with high caliber of staff, a country with good infrastructure, low labour costs and capability in managing BPO-ITES sector.

Tate et al. (2009) in a study of US firms highlighted that there was an increase in outsourcing of services by organizations due to increased internal and external pressure to conform and reduce costs. Companies in the same industry will tend to behave the same, and so if the industry majority outsource, this means an organization in that industry is likely to outsource. Hymer (1976) states that organizations are looking for improved efficiency from other geographical regions, and in the process, they get an opportunity to increase quality and market share. Besides low labour cost in call centre operation, capabilities of the vendor and low rent cost is also given consideration.

However, if there is a downturn on this trend of off shoring by U.S., it would adversely affect the BPO sector. Some U.S. companies have been blacklisted on TV shows for off shoring. Rottmann & Lacity (2009) ask "Is offshoring stealing America's IT jobs ?", others think that off shoring is improving U.S. economy since savings by out sourcing companies is used to create more wealth. Firms will continue to outsource in order to improve on efficiency (Hymer, 1976).

1.1.2 Konza ICT City and Kenya Vision 2030

The government of Kenya has a development plan covering 2008 to 2030. This is the Kenya Vision 2030, "To create a globally competitive and prosperous nation with a high quality of life by 2030". To benefit from BPO and ITES concept which is a flag ship project in the vision's economic pillar, Kenya has invested in under sea cables TEAMS and EASSY which should see communication costs to the rest of the world go down.

Kenya ICT strategy 2006 emphasis on collaboration and outsourcing for economic growth with a belief that "great things occur when people and institutions work together!". The strategy adopted is to secure the broad band ICT infrastructure that will support development of in-shore and off-shore ICT services through BPO. The services to be offered include financial, call centres and office operations. The other strategy is to ensure a conducive environment for Small and Medium Enterprises (SMEs) to flourish. Compared to India, the retention rate of staff in call centres will be higher thus reducing cost of training and induction. With an estimated salary of 15,000 shillings which is lower than that in India, this will make Kenya a more preferred outsourcing destination.

The park will be developed in four phases, and expansion will be on a need basis. The key focus areas within ITES are BPO, ITO, Knowledge Process Outsourcing (KPO) and Customer Service Outsourcing (CSO). On full completion of the project, it is estimated to generate a revenue of 5.4 billion shillings by 2032, with 349,000 direct jobs, and with 1 million indirect jobs.

The opportunity availed by Konza BPO services should see organizations wishing to build a partnership with outsourcers with a view to improving their efficiency and improved capital base. Some of the services offered by BPOs include back office, data transcription, software development and digital content. Studies are on going to support the best services that can be offered at Konza. Organizations like IBM and Price Waterhouse Coopers which have a local presence in Kenya will be expected to be the first to grab opportunities to provide outsourcing services at Konza city. This concept could have an impact on Kenyan ICT firms since business parks have a linkage with SMEs from all sectors both ICT related and non ICT related.

1.1.3 ICT Industry in Kenya

Kenya ICT industry broadly comprises of software developers, IT trainers, computer assembly and financial services. Examples include Craft Silicon who is in various countries all over the world. Netcom a software developer offers human resource solutions that include payroll and on line leave processing, IAT offers IT corporate training, Symphony has partnered with big players in the international market like IBM, Oracle and others in IT solutions that include consultancy, ERP solutions and infrastructure solutions. Seven Seas provides solutions in software, business applications, consulting, ICT infrastructure, SAP business consulting and implementation, corporate training taken as corporate social responsibility and as a means of knowledge transfer. Developers like Source Code Ltd and Cellulant offer design software mobile solutions and banking.

Since liberalization of the telecommunications sector in 2001, the mobile phone sector has experienced phenomenal growth and with innovative ideas like mobile money transfer, a concept that is unique in the world. Kenya is the global leader in mobile

money transfer. According to the economist, May 2013 magazine, the mobile phone and communications industry is contributing over 5% of the country's GDP and with 25% of Kenya's GDP passing through mobile money transfer. According to Mureithi (2012), Kinyili (2010) and Gathara (2009), strategies adopted by the four mobile phone companies studied have given them competitive advantage. The sector is also attracting major foreign investors like Erickson.

To bridge the 'digital divide' which leads to widening of the poverty gap (Mcnamara, 2003) the government of Kenya ICT infrastructure initiatives have seen the country get connected to the rest of the world with high speed cables for transmission of voice and data. This initiative is complemented further by laying fibre optic cable throughout the country. This is to help ensure e-Government services can be availed to all Kenyans. According to ICT board of Kenya, Kenya now has over 100 Internet Service Providers (ISP), and now has over 3 million internet users.

Besides the large number of ICT SMEs in the country, there are a number of ICT multinationals like Google, Oracle, SAP and IBM among others who have brought Foreign Direct Investment (FDI) into the country. This has a direct positive impact on the economy.

1.1.4 BPO and ITES Industry in Kenya

Kenya ICT board was set up in 2007 to market Kenya as a BPO and ITES destination. Kenya's vision 2030 elaborates on BPO and ITES as one way of creating wealth and jobs to improve on social and economic being of Kenyans. According to Kenya ICT board, the BPO industry in Kenya is very young with not more than 5,000 employees, and comprises of SMEs, but is expected to grow phenomenally with government support. The government among other initiatives has invested heavily on communication infrastructure and hopes to bring down the cost of connectivity and communication in general. Kenya as an outsourcing destination has favorable time zones and good English accent. The BPO sector now has an association, Kenya BPO and Contact Centre society (KBPOCCS) that looks after the interests of now over 50 members in terms of legislation and acting in liaison with the Kenya Government.

Services currently rendered by this BPO sector include data entry, autocad drafting, ICT consultancy, I.T. training, internet research, transcription services, data mining, web design and development, software development, IT outsourcing, Inbound and Outbound calling, data management , call centre services, document management services (DMS) among others. There are also informal BPOs in the sector. Ongoing comparative studies by University of Nairobi (UoN), KBPOCCS, Kenya ICT board funded by IDRC seek to establish the services that would best be offered by the Konza ICT city. Critical Success Factors (CSFs) being examined are "policy, legal, regulatory and institutional frameworks; human resource issues; youth and gender issues; and various forms of incentives."

1.2 Statement of the problem

In Pearce and Robinson (2011), guidelines to decisions are embedded in policies. Policies institutionalize organizational behavior as they help in minimizing conflicting practices, brings consistency in the way actions are performed and give solutions to routine tasks as well as reduce misunderstanding. OECD (2009) report states that developed countries have National Innovation Systems (NIS) that are strong and are members of OECD. The objective of OECD is to guide development of member and non member countries in poverty eradication. According to David and Foray (1995), they have policies that favor creation, nurturing of knowledge and knowledge sharing and creating a climate for innovation. This is achieved by matching universities, research centres with particular institutions for guided collaboration.

In contrast, most developing countries do not have such innovation policies, they have only adopted BPO and ITES concept as a means of job creation and poverty eradication. Collaboration between actors is best advanced through formation of Science and Technology parks, that meet world class standards and have Government support and with policies based on best practice to guide these actions. Kenya ICT firms could enjoy having to increase training, capacity to assemble computers among other services in anticipation of Konza ICT City.

Previous Kenya Government projects have not been successful and are riddled in acts of corruption and poor implementation strategies like the Export Processing Zone (EPZ) (Wanyama, 2002). Despite heavy investments and attractive incentives by the Government, Wanyama (2002) asserts that investors are withdrawing from EPZ in Kenya. He also states that most firms are owned by foreigners, and that reasons for withdrawal are due to poor infrastructure, power outages, poor telecommunications system and poor road network. However, Ndinya (2000) argues that incentives by the Government are inadequate and should be improved. Muranga (2011) asserts that improved Government policies would increase Kenya's manufactured exports.

Besides, there are land ownership issues yet to be resolved at Konza. The Government might use the slack labour laws that will allow exploitative hiring practices in low paying jobs. Most Kenyans see Konza ICT City as too big a project to be handled by the Kenyan Government and will fail like Sameer which was to be the first BPO centre in Kenya (Wanjiru, 2012). According to Wanjiru (2012), poor infrastructure, weak BPO incentives, high operational costs and poor marketing strategies were the cause of failure. Recommendations given from the study was improvement of legal and regulatory framework, incentives for both local and foreign investors and to have a good BPO strategy. Science parks could be an advanced complex form of real estate if the concept of knowledge transfer is not embraced (Gower & Harris, 1994).

ICT parks do not meet goals especially in adequately engaging with existing ICT companies, some ICT parks in Malaysia and India are typical examples. According to Brooker (2013), Cyberjaya in Malaysia was meant to be a Science and Technology Park, but 10 years later it is seen as a center that offers disconnected BPO services or a back office servicing a world elsewhere. Astonishingly, this centre is seen as a development model for other emerging economies. Times of India magazine (2012) reported how a state of the art IT Park meant to create jobs had been lying idle for over a decade with no single IT company showing interest in setting up business at the park prompting a manufacturing association to seek Government intervention to boost the park.

There are few local studies in this area in Kenya, and hence the need for this study. From these premises, the success of Konza ICT City as a Science and technology park as well as a BPO and ITES hub is not guaranteed. No studies have focused on perceptions of Kenyan ICT firms towards Konza ICT City, and so the study will help answer the question: What are the perceptions of ICT firms in Kenya towards proposed Konza ICT city.

1.3 Research Objectives

The objective of this study was to establish perception of ICT firms in Kenya towards proposed Konza ICT City.

1. To establish level and form of involvement of ICT firms in Kenya in Konza ICT city project
2. To establish perceptions of ICT firms in Kenya towards Konza ICT city
3. To establish opportunities for ICT firms in Kenya in the proposed Konza ICT City

1.4 Value of the Study

This study will have value in various aspects:

The study will be of value to the Government of Kenya as it will give perceptions of expected key players in this field towards Konza ICT city project, and reemphasize the importance of success of this project given the criticality of this project in meeting Millennium Development Goals (MDGs) and "Vision 2030". Good government policies and a vibrant government with a vision to empower its people could easily eradicate poverty through innovative initiatives.

The study will also help demystify the role of ICT SMEs in the Konza ICT city initiative, and entrepreneurs wishing to take this opportunity to engage in the Konza ICT city initiative will now be better informed of their roles and can make better informed decisions. The concept of science and technology parks will no longer be a foreign ideology. SMEs play a big role in the economy of a country and have a chance to compete in the global arena by embracing technology for competitiveness.

The study will be of academic value and will add to the body of knowledge as readers of this academic writing will be able to see how knowledge can be concentrated in one area and spill over to other sectors and create phenomenal growth in a country through growth in technological capabilities and creation of conducive environment that fosters innovation.

CHAPTER TWO: LITERATURE REVIEW

2.0 Introduction

This chapter reviews literature related to the research problem. It examines the concept of innovation and how innovation can be nurtured to spur economic growth through formation of Science and Technology parks. This chapter is divided into 5 areas: National Innovation Systems, innovation, Science and Technology parks, BPO and ITEs in a global context, and ICT park perceptions and opportunities for ICT firms in Kenya.

2.1 National Innovation systems

Metcalfe (1995) Defines National Innovation Systems (NIS) as " that set of distinct institutions which jointly and individually contribute to the development and diffusion of new technologies and which provides the framework within which governments form and implement policies to influence the innovation process. As such it is a system of interconnected institutions to create, store and transfer the knowledge, skills and artefacts which define new technologies." The concept looks at linkages of various institutions like private enterprises, universities, research institutions and public institutions and how they relate in terms of information flow that is critical for innovative initiatives. Understanding NIS helps in identifying mismatches in the system and hence avoid pitfall as a result of implementing projects that will not be feasible. Since interaction between actors in a process help in creating innovation, it is prudent to increase organizations access to technology which would then be adopted, thus linking NIS to economic performance. According to David and Foray (1995), ability to effectively diffuse knowledge has direct influence on economic performance. For this reason, studies show that for success of particular industries, they will have to cluster around particular research centres and particular universities for effective knowledge sharing that then translates to acquiring knowledge which then leads to innovation.

Lasagni (2012) argues that external relationships are key to innovation for small businesses. SMEs that have strong relationships with innovative suppliers, users and customers have higher innovation performance. Innovation is now seen as linkages with

external sources of knowledge which helps to stimulate new ideas. Competition has forced SMEs to become innovative in order to survive. Improved relationships between SMEs, laboratories and research institutes will result in having better new product development results.

From diffusion of innovation theory, one of the factors in adoption of innovations is perceived need (Bradford and Florin, 2003; Crum et. al., 1996). Diffusion of innovation is classified broadly as early adopters and late adopters. When there is perceived need, this would see technology being adopted faster. Diffusion of innovation is absorbed at different rates in different sectors. Patterns of knowledge flows can also vary from cluster to cluster. This will thus see some economies of particular sectors growing faster than others. This also means that you could have some countries being more technologically endowed than others. Information flow that leads to innovation can be from within an organization through its Research and Development (R&D) or it could be from external sources which include other industries or from other countries. This means you could have countries that rely more heavily on external technology than others and is measured though their imports. Those that fail to take up technology could be due to lack of finance, lack of information, lack of technical expertise or organizational and managerial differences.

If there is lack of interaction between actors in a system, mismatch between research institutions, and enterprises, and lack of absorptive capacities and capabilities within the actors would lead to poor performance in innovativeness. Rogers (1995) characterizes innovators as 'venturesome, educated and multiple info sources'. Studies in NIS give a new approach to technology policies. Policy makers must therefore use NIS to guide them in making policies that lead to innovative performance.

According to Lundvall (1992), Nelson (1993) and Freeman (1995) National institutions determine the direction in which a country will take as well as the agility with which change in a country takes place. This is seen in the way organizations in a country use innovative ideas to adopt change as institutions in a country are guided by its policies. A firms innovative behavior is dependent on a country's characteristics. A country's

innovation performance is determined by its education system, labour market, area of specialization and innovation polices and technology policies. This will ultimately have an effect on how firms within the country behave. Fagerberg et al., (2009), states that NIS characteristics of a country are determined by policies that have shaped institutions over a long period of time. Nelson (1993) further argues that social capabilities that are not necessarily dependent on technology foster innovation of a country. Innovation requires actors that are linked in order for knowledge to flow. Linkage of universities, research centers and institutions foster innovation.

Filippetti & Archibugi (2010) analysis of European countries with strong NIS tend to be resilient at times of economic down time and are not adversely affected by economic recession. These firms also have a cyclical behavior in terms of money spent on research and development, they tend to spend less while new EU members continue to spend more on innovation and research. However there are some firms that were consistent on their spending in innovation at times of crisis which is explained by the nature of NIS structural characteristics. Capable human resource was found to be very important in managing during a crisis, as well as having strong financial systems. According to OECD (1996), diffusion of technology is as important as R&D in NIS and resources should be used to ensure that knowledge flows, as shown by research carried out in Japan, as well as enhancing "technology adoption capabilities".

2.2 Innovation

The Standard Oxford dictionary (Dictionary, 2010) defines innovation as introduction of new things, ideas or ways of doing things. "Innovation is the profitable exploitation of ideas" (Stewart & Fenn, 2006) and requires openness and adaptability to ideas. This will require management to inspire and motivate in order to have innovative staff, which is key to gaining competitive advantage of a business. Organizations need innovation management to drive the development of the innovation process. For an organization to be successful, it must implement the innovation it adopts successfully (Klein, Conn, & Sorra, 2001). Many organizations fail to achieve performance improvements through innovation due to poor implementation. This can be avoided through good innovation

policies, strategies, processes and most importantly embracing a creative culture in an organization. Klein et al., (2001) further asserts that strong management support for implementation and availability of financial resources are more likely to demonstrate high quality implementation policies and practices and provide a conducive environment for implementation.

According to Lundvall (1992) in (Sabir & Sabir, 2010) discussing the concept of NIS, the growth of a nation depends on its ability to produce innovative and high quality goods to be used within and outside a country. Innovation is most essential in enhancing competitiveness of organizations and a nation. China, the fastest growing economy aims at moving towards an innovation driven nation. The aim is to enhance competitiveness through innovation for development (Sabir & Sabir, 2010). To achieve this goal, it has to overcome high rate of piracy, improve on skilled manpower and embrace an innovation culture. For successful innovations, you must have a strategy. Improvement on innovation capacity requires key factors like continuous supply of innovation resources, and accumulation of innovation knowledge (Szeto, 2000). This is critical to R&D which leads to improved products and services that will meet customers demand. Improvement of products and services is also considered as innovation and innovation is not just limited to creation of new products and services. Innovation which is commercialization of inventions of new products and services as stated by Pearce and Robinson (2011), is aimed at achieving a competitive edge, and can be through incremental innovation or continuous improvements.

2.3 Science and Technology Parks

There are various definitions of Science and Technology Parks (STP). One definition by International Association of Science Parks (IASP) in year 2002, is "a science/technology park is a property-based Initiative which: first, has operational links with Universities, Research Centres and other Institutions of Higher Education; secondly, it is designed to encourage the formation and growth of knowledge-based industries or high value added tertiary firms, normally resident on site; and finally, has a steady management team

actively engaged in fostering the transfer of technology and business to tenant organisations".

Montoro-Sa´nchez et al., (2011) argues that firms within STP experience knowledge spillovers. By examining 784 firms selected in Europe from the Spanish Technological Innovation Panel , half of which were selected from Science and Technology Parks and matched with a similar group of companies using acceptable criteria for selecting off STP parks, study showed that : there is a positive effect of knowledge spillovers on innovation, there is also positive effect of knowledge spillovers on organizations R&D collaboration and that for both parameters, this was greater for firms located on Science and technology Parks. STPs provide a favorable atmosphere for businesses and institutions since they stimulate flow of knowledge and technology in firms, R&D and universities. Fritsch & Schwirten (1999), states that the location of a firm within a science park also affects the intensity of the effect of knowledge spillovers on innovation. This is due to lower information costs, transport and communication costs.

Cumming & Johan (2013) look at technology parks from an entrepreneurial dimension and they consider two aspects; legal and nature of tenants who occupy the STP. High legal standards of a country are conducive for financing of entrepreneurs and their growth.   Research also revealed that a big impact is noted when you have foreign universities and government sponsored tenants compared to having private foreign tenants. This has an implication that research focused and not assembly based tenants bring more success to the park. Entrepreneurs will enter parks in order to have access to shared resources which leads to success and regional development. Other incentives for joining a park are services that are offered by the STP and a conducive environment that stimulates innovation which is good for doing business.

Marshall (1920) elaborates on three forces that cause formation, growth and clustering of industries. These forces are information exchange, thick labour market and linkages caused by local market. This has been used to explain how STPs have been formed. When there is linkage between organizations, this leads to innovation which is more pronounced than in firms without linkages (Powell et al., 1996). China which is among

the fastest growing economy in the world has STPs which have spurred fast economic growth gives tax incentives, the objective being to nurture technology diffusion for institutions around the park. Guangzhou (2003) elaborates that the first Chinese STP was in 1988 and is located near the best universities and research institutes in China. By 1997, China had 53 parks, about one per province. He further explains that the fastest growing parks are not necessarily based in big cities, and that the most successful parks host most firms. Parks grow even faster than host cities. This is explained by tax incentives as a driving force to growth of parks and that any FDI in the cities spills over to the parks, spurring faster economic growth.

Xu (2010) Examines business incubators in China, and deems them as an important aspect for new upcoming businesses particularly SMEs which are very important to economic growth and social development. The concept of business incubators is to give its tenants shared services at below market rate including rent and office services in order to minimize start up costs.

2.4 BPO and ITES in a Global Context

BPO and ITES outsourcing is becoming a big trend, and developing countries have become preferred destinations for developed countries due to their cheap IT knowledge. Lacity & Rottman (2009) elaborate that outsourcing is rendering of services by a third party who operates in a low cost structure and helps in supporting non niche activities like accounting, marketing, finance, HR, information management and other similar activities. Fixed costs are converted to variable costs as the process reduces capital investment. (Jain & Natarajan, 2011) assert that huge organizations like banks and insurance companies look forward to shedding off non core activities as a way of improving their processes and not necessarily as a cost reduction strategy. Resource dependency theory according to Pfeffer (1981) suggests that organizations wish to shed off services in order to concentrate on core activities and to use the scarce resources in a more efficient manner. This happens by decreasing dependency on others and by increasing others dependency on it.

The Indian outsourcing industry generates huge employment opportunities every year and has greatly improved employees standard of living (Panda, 2012). Besides this, it has helped restrict "brain drain" which means retaining talent in the country. According to (Raul, 2004), western countries have outsourced their services to Indian companies in order to get "competitive cost advantages". Raul (2004) further asserts that outsourcing is an enabler to better performance with fewer resources, acquire outside expertise and keep up with demands of the customer.

India is recognized as the hub for BPO and ITES industry. Creation of this market was to help resolve market saturation in the western countries which had cost structures that it could not support. This lead to sourcing for an alternative in the low cost market which happened to be India by virtue of the fact that most Indians had worked in US companies in IT firms. Indian Expatriates particularly from Silicon Valley helped set up   BPO in India. Rottmann & Lacity (2009) elaborate that, rather than establish new relationships with new suppliers in new countries, U.S. companies opted to go offshore using their domestic suppliers. However, according to Rottmann & Lacity (2009), to mitigate risks, proof of concept was still required, services were tried out from remote sites in India, and once satisfied, they settled for this destination. (Dossani & Kenney, 2009) state that India has become particularly famous for being a leader in this field of BPO-ITES where it exports services and not the traditional physical goods. He further argues that client firms which perform well are found to be more likely to outsource than others. Preconditions for BPO and ITEs outsourcing are skilled labour, good ICT infrastructure, conducive business environment and supportive Government policies (Mehra, 2005). Further to this, low labour costs, information security, favourable time zones, manpower size, Government incentives and culture are given consideration when looking for an outsourcing destination.

Lacity et al (2011) indicate that BPO business worldwide could be about $279 billion and is predicted to continue growing at 25% every year. The BPO industry is smaller than the Information Technology Outsourcing (ITO) industry, but BPO is growing at a faster rate than ITO, and having more opportunities for growth, and now there are many studies being carried out in this area. However, the ITO industry is more mature. Other

considerations made are access to skills; knowledge sharing and expertise of the vendor which helps improve an organization's business processes. Organizations tend to outsource activities that are less complex. Complex activities are better handled indoors. Jain & Natarajan (2011) observe that when data security is considered as critical, this tends to reduce possibility of an organization outsourcing a particular service. Relationship with vendor who is seen as more of a partner and ability to manage the vendor is also critical consideration.

Magtibay-Ramos, Estrada, & Felipe (2007), state that Philippine's BPO is not a key sector in the contribution of the country's economy. However enactment of proper policies that favour BPO and improvement on human resource could change this situation. The sector could reach 500,000 to 600,000 BPO workforce in 2010. Philippines identified key sectors that create employment and planned to match skilled human resource with the industries requirements. Key competencies were identified and a curriculum was rolled out to schools and training institutions to churn out human resource suitable for these jobs. 70% of BPO employees are university graduates from any discipline. This however has created an employment-education mismatch.

Contact centers in Philippines offer inbound and outbound services. This sector and software development contributes a bigger chunk of the total BPO business. Contact centres require a lot of investment to set up, but create about 1,000 jobs per centre on average. The governments support for this sector will see it continue to dominate the BPO industry. Indian firms having matured in BPO are moving to Knowledge Process Outsourcing (KPO) leaving other low end BPO services to their competitors. Lacity & Willcocks (1998) observe that they are now moving to areas that affect critical success factors (CSFs) of a company.

2.5 ICT Park Perceptions and Opportunities for ICT Firms in Kenya

Most ICT projects are likely to fail (Heeks, 2002). A project is successful if it is within budget, delivered on time and meets expectations and standards of all stakeholders. The Ministry of Information and communication has given a clear concept on which Konza ICT City is based on. Technology parks should be away from town but not far from an

17

airport. Parks should also be in a place that can expand at low costs. According to Dr Bitange the former PS for Information and communication, Konza will bring universities, companies and Government to do research and grow companies which will create jobs and not just putting up a city as people think. This concept was conceived after visiting science and technology parks in Egypt and Malaysia. Montoro-Sa´nchez et al., (2011), states that by partnering with other universities and researchers, knowledge will be concentrated in one area and harnessed without letting any idea go to waste. The Ministry of Agriculture's emphasis to Kenyans is to rely on agriculture for economic development. However developed countries have adopted ICT which contributes much more to a country's GDP than agriculture. Dr Bitange in twitter further adds that youth are seen as valuable human resource and the economy should expand to absorb them. (Bradford and Florin, 2003; Crum et. al., 1996), knowledge will diffuse to the rest of the country when firms start exporting knowledge to the locals which in turn make them have capacity to compete with the rest of the world.

Kenya ICT industry is increasing capacity in BPO and ICT related training, and enhancing capacity to assemble computers to accommodate the anticipated demand. Increased ICT infrastructure improvement and civil works are also on the rise. After successful implementation of under sea cables, the ICT sector in Kenya has really grown, and currently, there are innovation centres like iHub and Nailab that are located in Nairobi but cannot accommodate all innovators. Konza is seen as a place to accommodate Tech Savvy as indicated by ICT board. Other views expressed through social media are of the opinion that Konza ICT City is based on concept similar to Tatu city which is not based on formation of STPs. There are land issues and politics which have not been resolved and this could jeopardize the project.

2.6 Summary of Literature Review

The literature review examined how Science and technology parks are formed to foster innovation. Developed countries have NIS to guide their innovations and development strategies. Developing countries have adopted BPO and ITES as a way of creating jobs by rendering services to developed counties. They have also formulated policies to help

guide these activities and adopted creation of STPs to complement BPO and ITES. The Government of Kenya has flag ship projects that will help achieve   2030 and one of them is setting up Konza ICT City. Not all Science and Technology parks are a success, which could mean diffusion of innovation intended to help in economic growth would not be feasible. This study aims at investigating involvement of local ICT firms in Konza ICT City, get the perceptions of local ICT firms and find out what possible opportunities exist for them.

2.7 Conceptual Framework

Actors and linkages in the innovation system

Figure 1   Conceptual framework
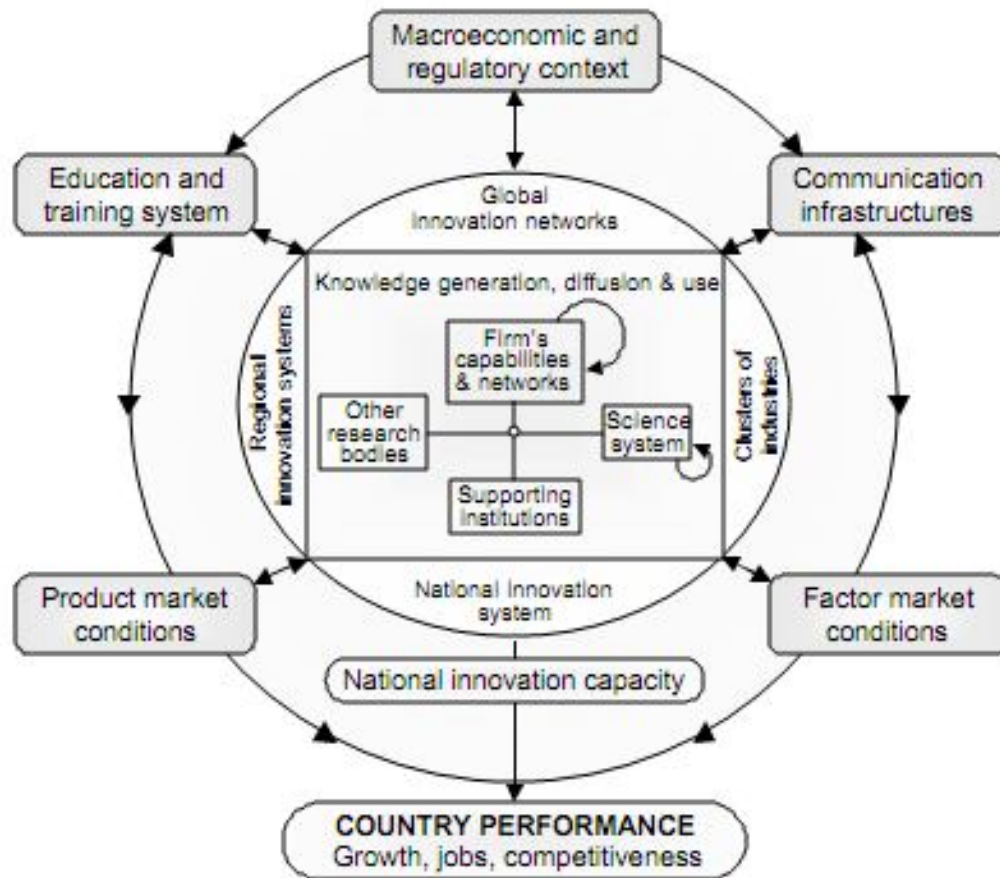
Source: OECD, Managing National Innovation Systems, 1999

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This chapter discusses the research methodology that was used in the research and includes research design, population, sample design, data collection methods and data analysis.

3.1 Research Design

The study was modeled on a mixed triangulation design of descriptive cross-sectional and indepth interviews with key informants. Both qualitative and quantitative studies were carried out simultaneously. Every study has some degree of exploratory before the formal study. Qualitative research is necessary in order to get hidden interpretations, understandings and motivations as the researcher is able to get detailed description of events, situations and interaction between people. In order to answer investigative questions, quantitative research was used in the survey. Hence we shall use triangulation to combine qualitative and quantitative findings. Cross sectional survey is conducted only once and reveals a snapshot of one point in time. Indepth interviews helped to get contextual analysis from well informed people in the various organizations. To fulfill these objectives, the research design described was best suited for this purpose (Cooper and Schinider, 2011).

3.2 Population

The population was all ICT firms in Kenya. The sampling frame was obtained from Soft Kenya Directory (Soft Kenya) and Kenya BPO guide book of year 2013. This comprised of 550 ICT companies, 510 from Soft Kenya directory, and 40 from Kenya BPO guide book. See Appendix 3 on sample list of ICT firms.

For the qualitative study, experts in BPO and ICT were the key informants who were interviewed. These are key decision and policy makers on ICT related matters. Appendix 4 shows the list of the experts who were interviewed.

3.3 Sample design

Simple random sampling was used to select from the 550 ICT companies. A sample of 100 ICT companies was used. This is based on sample sizing by (Bartlett, Kotrlik, & Higgins, 2001).

3.4 Data Collection

The study used primary data which was collected using two questionnaires for the triangulation research method chosen to cater for the qualitative and quantitative methods. Each guide had four sections which covered the three research objectives and background information:

1. Background information of the firm,
2. Level and form of involvement of ICT firms in Kenya in Konza ICT city project
3. Perceptions of ICT firms in Kenya towards Konza ICT city
4. Opportunities for ICT firms in Kenya in the proposed Konza ICT City

For the qualitative study, the respondents were interviewed on face to face interview to answer questions on the three research objectives and also gave background information. The respondents were informants in the BPO sector, selected experts in the ICT industry and Chairman of the ICT board of Kenya.

The second questionnaire which is structured was used for quantitative study to interview ICT firms in Kenya. The questionnaire was sent by e-mail to all participants. The respondents were senior managers of the targeted ICT firms in Kenya, and are considered to be key decision makers in the organization and are involved in strategy formulation of the organization.

3.4.1 Reliability and validity

Reliability and validity of the measurement instruments was pretested by sending questionnaire to non participants in the actual research as a pilot test run and necessary changes were made. The participants were people who are able to add value to the

questionnaire and were not in the sampling frame. These comprised of postgraduates who had done MBA or MSC from various universities.

3.5 Data analysis

Data was analyzed to establish consistency, credibility and accuracy in information. For the qualitative perspective, content analysis techniques were used, and each of the three objectives were examined separately. In case of a conflict in responses from respondents, the most common outcome was used. For the quantitative perspective, analysis was done as described in section 3.5.2 below.

3.5.1 Qualitative study

On Level and form of involvement of ICT firms in Kenya in Konza ICT city project, perceptions of ICT firms in Kenya towards Konza ICT city, opportunities for ICT firms in Kenya in the proposed Konza ICT city, these objectives were analyzed using the responses to the open ended questions of their respective questionnaire guides using content analysis technique.

3.5.2 Quantitative study

For the quantitative studies, analysis was done for each of the objectives using Excel as statistical analysis tool. Other tools like Minitab and SPSS were not necessary as Excel has add-ins that are used for financial and scientific analysis to achieve the same objective and is readily available. Descriptive statistics and measures of central tendency were used. Inferential statistics for purposes of generalization of results for the population were used as well. The objectives are:

On Level and form of involvement of ICT firms in Kenya in Konza ICT city project, this objective was analyzed using the responses to the structured questionnaire with close ended questions. A five point likert's scale, with 1 – being very low, and 5 – being very high was used to measure the degree of both level and form of involvement of the organization.

On Perceptions of ICT firms in Kenya towards Konza ICT city, this objective was analyzed using the responses to the structured questionnaire with close ended questions. A five point likert's scale, with 1 – being very low, and 5 – being very high was used to measure the level of perception of the organization.

On Opportunities for ICT firms in Kenya in the proposed Konza ICT City, this objective was analyzed using the responses to the structured questionnaire with close ended questions. A five point likert's scale, with 1 – being very low, and 5 – being very high was used to measure the level of opportunity for the organization.

These objectives will help in testing the hypothesis:

H1: ICT firms in Kenya have a positive opinion about Konza ICT City

CHAPTER FOUR : DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.0 Introduction

This chapter discusses responses from respondents on perception of ICT firms in Kenya towards proposed Konza ICT city. It discusses the respondents profile, Level and form of involvement of ICT firms in Kenya in Konza ICT City project, their perceptions and opportunities available for them at Konza ICT city. Both qualitative and quantitative perspectives are analyzed for each case.

4.1 Respondent's Profile

The respondents in the quantitative study comprised of one key person in the organization and at the level of either senior manager, director or a chairman. These are people involved in the organizations strategy formulation. The average number of years of experience of the respondents was 10 years and ranged from 2 years to 27 years. The gender comprised of 25% ladies and 75% men. The average number of employees in all the organizations was 73 employees, the range being an organization having the least number of employees at 3 and another having the highest number of employees at 340.

Chart 1   Employees in organization
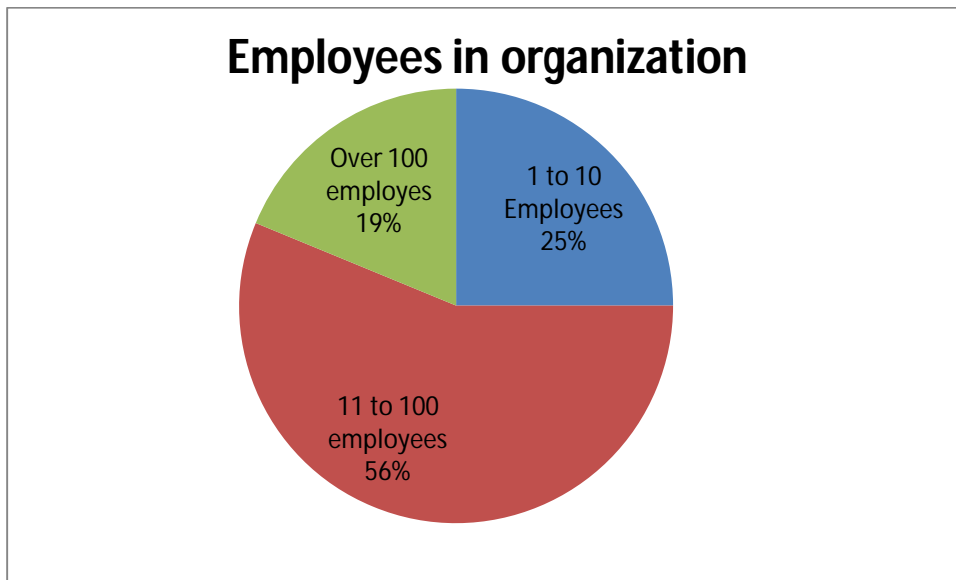
Organizations were either a micro organization with less than 10 employees comprising 25%, small and medium sized organizations with more than 10 employees but less than 100 employees comprising 56% while the rest of 19% comprised of large organizations with over 100 employees. This is illustrated in Chart 1 above.

The nature of the firms ranged from software development, training, web development, ICT publishing, management of information systems, consultancy, telecommunications and internet service providers (ISP), and general ICT support services.

Chart 2   Organization's Age profile

Organization's Age Profile

1-5 years
12%

6-10 Years
37%

11-15
Years
13%

Over 15 years
38%
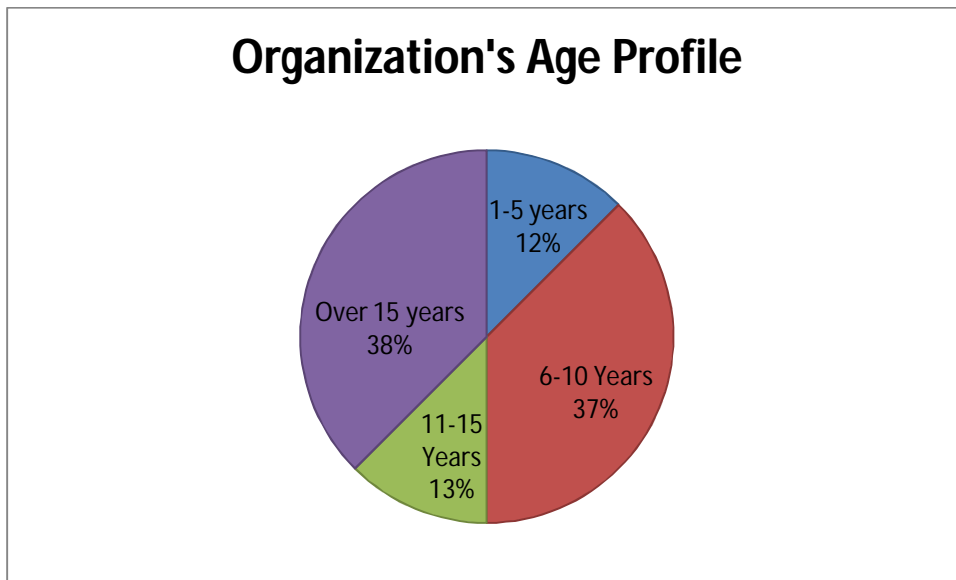
The oldest and probably the most established organization was 26 years old, while the youngest was 4 years old. 50% of the organizations had been trading for over 10 years. All the ICT firms were located in Nairobi and comprised mainly of SMEs.

The respondents were people with many years of experience as illustrated in Chart 3 below.

Chart 3   Experience in years

Experience in years

Over 15 years
19%

11-15 Years
25%

6-10
years
12%

1-5 years
44%
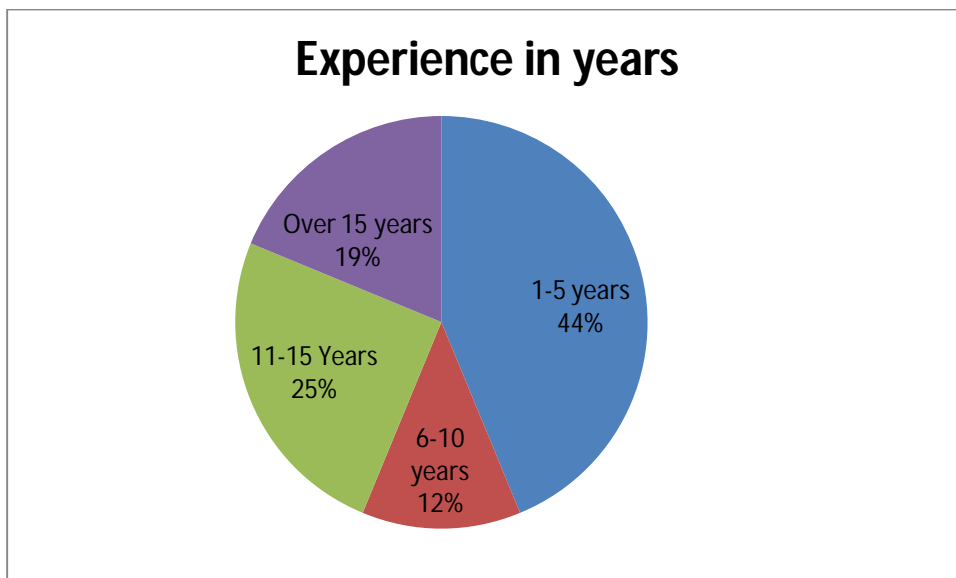
4.2 Level and form of involvement of ICT firms in Kenya

The section sought to establish Level and form of involvement of ICT firms in Kenya in Konza ICT city project. The interview guide was divided into two sections; one on Level of involvement of the organization in Konza ICT City project and the other on Form of involvement of the organization in Konza ICT City project.

4.2.1 ICT Firms Involvement in Konza ICT City

Table 1 below illustrates the average of responses from the respondents on a likert scale of 1 to 5.

Table 1   Level of involvement of organizations

Level of involvement of your organization in Konza ICT City project		Mean rating
1	The organization is involved in a way on Konza ICT City project	2.06
2	We have been involved in training in readiness to get opportunities at Konza ICT City	1.94
3	Our organization has influenced decisions at Konza ICT city	1.69
4	Our organization plans to have dealings with Konza	3.88
5	Our organization collaborates with suppliers	3.31
6	Our organization collaborates with customers	4.06
7	Our organization collaborates with government institutions	3.69
	Overall mean	**2.95**

The results indicate that in general, all organizations felt they were not involved in Konza ICT city project, they had not trained enough in readiness to get opportunities at Konza nor had they influenced decisions. There was a strong negative perception of these three factors which averaged at 1.90 for all organizations, with organization's influencing decisions at Konza trailing the list with 1.69. However, large organizations had a stronger perception over these same factors and averaged 2.67. They had a strong perception of

involvement on Konza and having influenced decisions at Konza, with 3.33 and 2.67 respectively. Both averaged 3.00 but training had 2.0 bringing the average down to 2.67. This is shown in Table 2 below. However, qualitative findings indicate that ICT authority is involved in awareness creation and marketing strategy.

Table 2   Level of involvement on first three factors

		Number of Employees		
	Level of involvement (First three factors)	**<10**	**10 to100**	**> 100**
1	The organization is involved in a way on Konza ICT City project	1.25	2.00	3.33
2	We have been involved in training in readiness to get opportunities at Konza ICT City	1.00	2.33	2.00
3	Our organization has influenced decisions at Konza ICT city	1.25	1.56	2.67
	Total	1.17	1.96	2.67
	Other factors	3.19	4.00	3.67

On the remaining factors, the SMEs had a very strong positive perception level of 4.0 compared to 3.67 for the large firms. The micro enterprises had the lowest perception level at 3.19.

The first three factors of level of involvement were relatively strong for the large organizations and diminished with the size of the organization as illustrated in Chart 4 below.

Chart 4   Organization size and level of involvement
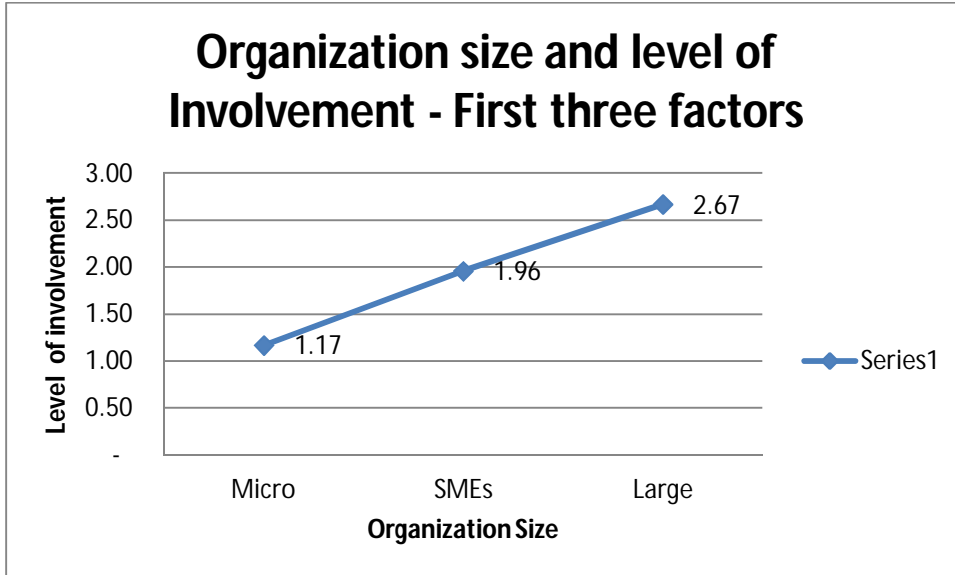
4.2.2 ICT firms level of collaboration

Patterns of knowledge flow are experienced when you have collaboration between actors. Interaction between actors in a system comprising of research institutions, government institutions ICT firms, and universities leads to good performance in innovation. Despite the fact that ICT firms involvement in Konza appears to be insignificant, they show a high level of collaboration with customers, suppliers and government institutions. However they are quite optimistic that they will have dealings with Konza and their level of perception is 3.88. A Master Delivery Partner (MDP) has been identified to compliment KOTDA and will be involved in vetting universities, research institutes and ICT firms that will have affiliation with Konza technology city as observed during qualitative interviews.

4.2.3 ICT firms form of Involvement

The ICT industry comprises of software developers, web designers, IT trainers, computer assembly, financial services and BPO services. Most organizations were likely to continue offering similar services like software development services, back office

services and offshore services at Konza. They were not keen on offering offshore services and onshore services, an indication that there is unawareness of these opportunities. See Table 3 below. Despite the Kenyan industry having ICT firms with capability to offer financial services, the organizations did not deem offering financial services as an opportunity for new business at Konza ICT City, and was ranked the least in terms of form of involvement at Konza ICT city with a very negative perception of 1.31. The highest indication was the likelihood of firms interacting with universities and this was followed closely by interaction with research institutions which is a strong indication of successful diffusion of innovation. For all the firms, regardless of size, they had similar perceptions on form of involvement which averaged at 2.57.

Table 3   Form of involvement of organizations

Form of involvement of your organization in Konza ICT City project		Mean
1	Our organization is likely to offer software development services at Konza	2.69
2	Our organization is likely to offer back office services at Konza	2.38
3	Our organization is considering offering financial services at Konza	1.31
4	Our organization is considering offering offshore services at Konza	2.00
5	Our organization is considering offering onshore services at Konza	2.13
6	Our organization will interact with research institutions	3.63
7	Our organization will interact with universities	3.88
	Overall Mean	**2.57**

4.3 Perceptions of ICT firms in Kenya towards Konza ICT city

This section discusses perceptions of ICT firms in Kenya towards Konza ICT city. Table 4 summarizes responses from respondents. The section will address Government policies and infrastructure, Organizations preparedness and Konza location, involvement and training, as perceived by Kenyan ICT firms on Konza ICT city.

4.3.1 Government policies and infrastructure

The government of Kenya has invested a lot on ICT infrastructure in the last few years, but as shown in Table 4 below, according to local ICT firms, the government has not done much on communication infrastructure development as well as water and sanitation facilities. The huge government investments on ICT infrastructure was meant to connect the country to the rest of the world and bring down the cost of communication. Communication network, water and sanitation and transport network were the most poorly ranked with an overall perception of 2.31, besides involvement at 1.81 and relocation to Konza.

Table 4   Level of perception of organizations

Level of perception of your organization towards Konza ICT City		Mean
1	The government has done enough on communication infrastructure	2.56
2	The government has involved this organization in the Konza ICT City project	1.81
3	Konza ICT city is going to create many jobs	4.00
4	Our organization is prepared to take opportunities at Konza	4.50
5	Our organization has trained its staff in anticipation of opportunities at Konza	2.81
6	Konza ICT City is strategically located	3.56
7	Our organization is likely to move to Konza	2.00
8	Employees located at Konza city are likely to be paid well	2.88
9	The government has supportive policies for Business Process Outsourcing	2.81
10	The government has supportive policies for Science and Technology parks	2.94
11	The transport network to Konza is adequate	2.50
12	Water and sanitation facilities at konza are adequate	1.78
13	Land disputes at Konza is not likely to affect the project	2.33
	Overall Mean	**2.83**

The transport network was fairly ranked at 2.50 an indication that it needs to be improved. The qualitative findings indicate that the government has recently funded Thwake dam to provide water, and has plans to upgrade dual carriage way up to Konza, have a fast rail to Nairobi and build a new airport at Konza. These are indications that a need to upgrade infrastructure has been identified. The government does not have supportive policies for business process outsourcing as well as science and technology parks. Land disputes were not likely to affect the project. However, the respondents strongly believed that Konza ICT city will create many jobs, and that it was strategically located.

4.3.3 Organizations Preparedness for opportunities and Konza location

The strongest perception was that there are many opportunities at Konza and that ICT firms are prepared to take them. This perception was shared by all firms and rated at 4.50 which was the highest ranked. The other positive perceptions were strategic location of Konza ranked at 3.56. Konza was deemed to be strategically located. ICT Parks that are successful are located far from town and are near airports and located in places that allow for inexpensive organic growth. Konza was going to create many jobs and was rated at 4.00. E-government initiatives as explained by the respondent during qualitative interviews are underway and this will help create more opportunities for ICT firms in Kenya. Land disputes were rated at 2.56 and rating was not significantly different for all firms.

4.3.4 Involvement and Training

There was very little involvement of ICT organizations on Konza ICT project, and was rated at 1.81. This could explain why ICT firms have not trained a lot in readiness for opportunities available and training was at 2.81. Many organizations have not shown a likelihood of moving to Konza, with a very low perception rating of 2.00. For the large organizations, the rating is quite low at 0.5, an indication that they do not have plans to shift base to Konza. This could be attributed to heavy capital investments at their current locations. However the small organizations were more likely to shift to Konza with a rating of 2.23. The large organizations indicated that workers at the park will be well paid

with perception level of 3.33 compared to 2.76 for the SMEs which could be the reason why small firms feel they might want to relocate to Konza to enjoy low labour cost of workers.

In summary, perception levels for all organizations based on size agreed very closely as shown in Chart 5

Chart 5 **Organization size and perception level**
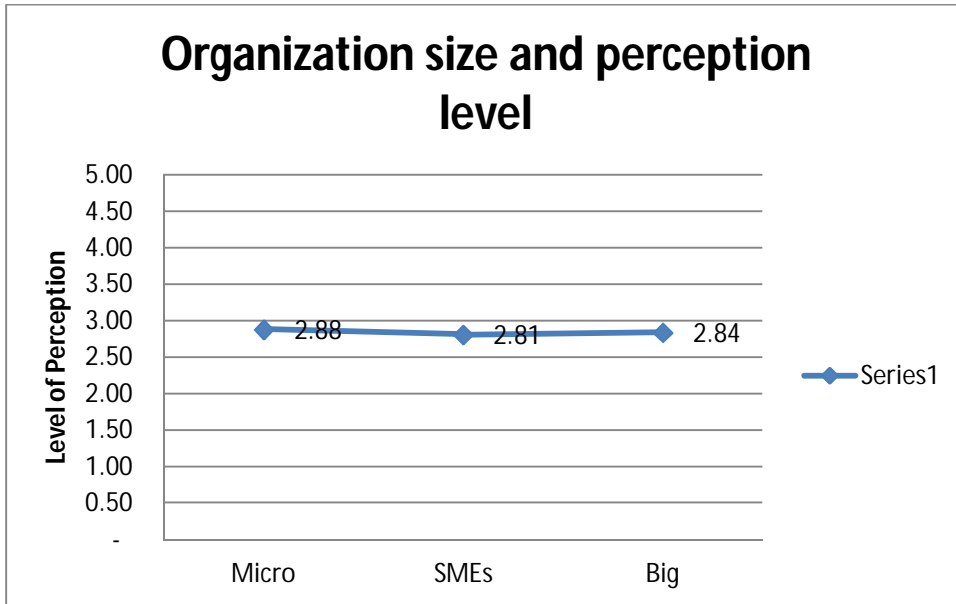
4.4 Opportunities for ICT firms in Kenya in the proposed Konza ICT City

In Kenya's development plan, 'Vision 2030' aims at creating a competitive nation through creation of jobs using Konza ICT City as one of its flag ship projects in the economic pillar. Table 5 below summarizes views from respondents on opportunities for ICT firms in Kenya in the proposed Konza ICT City.

4.4.1 Training

Respondents very strongly perceived training is very important for users giving services at Konza and was ranked the highest at 4.38. Training opportunities for Kenyan ICT firms was also ranked high at 3.69.

Table 5   Opportunities for organizations

Opportunities for your organization at Konza ICT City		Mean
1	Konza will create training opportunities for our organization	3.69
2	Konza ICT City will require training of staff working at Konza from ICT firms in Kenya	4.38
3	Our organization is likely to give onshoring services at Konza	3.06
4	Our organization is likely to give offshoring services at Konza	2.63
5	Our organization is likely to give consultancy services at Konza	3.73
6	Our organization is likely to give financial services at Konza	1.44
7	Konza ICT city will be a success	4.00
8	Developed countries will continue outsourcing their services to developing countries	3.31
9	Our organization is considering giving software development services at Konza ICT City	3.19
	Overall Mean	**3.27**

4.4.2 Financial services, Consultancy and software development

Organizations are not willing to give financial services, and this was ranked last at 1.44, a very strong negative perception. Organizations did not deem giving financial services as a likely opportunity at Konza. However, organizations deemed great opportunities for giving consultancy services and software development. Consultancy perception was ranked third at 4.38 after training of staff requirement and Konza success. Software development services was at 3.19 an indication of positive perception by ICT firms to offer this service, and overly, Konza project will be a success at 4.0 and was ranked second.

4.4.3 On shoring and offshoring outsourcing

There are onshoring and offshoring opportunities available for the Kenyan ICT firms and firms were willing to grab these opportunities. Onshoring services had a stronger positive perception of 3.06 compared to offshoring at 2.63.

However the likelihood of developed countries continuing to outsource their services to developing countries was significant and strong compared to onshoring opportunities available, and was at 3.31 which was stronger than offshoring at 2.63. There is an indication of low correlation between offshoring opportunities and developed countries continuing to outsource their services to developed countries.

Overall rating for opportunities at Konza was 3.27 which is a strong positive perception. Chart 1 below shows a trend which indicates that micro organizations see more opportunities than SMEs and big organizations. The trend declines se as the organization size grows. Big organizations, besides having being more engaged in Konza as compared to smaller organizations as discussed earlier, do not perceive many opportunities compared to micro and small organizations.

Chart 6   Organization size and opportunities

36
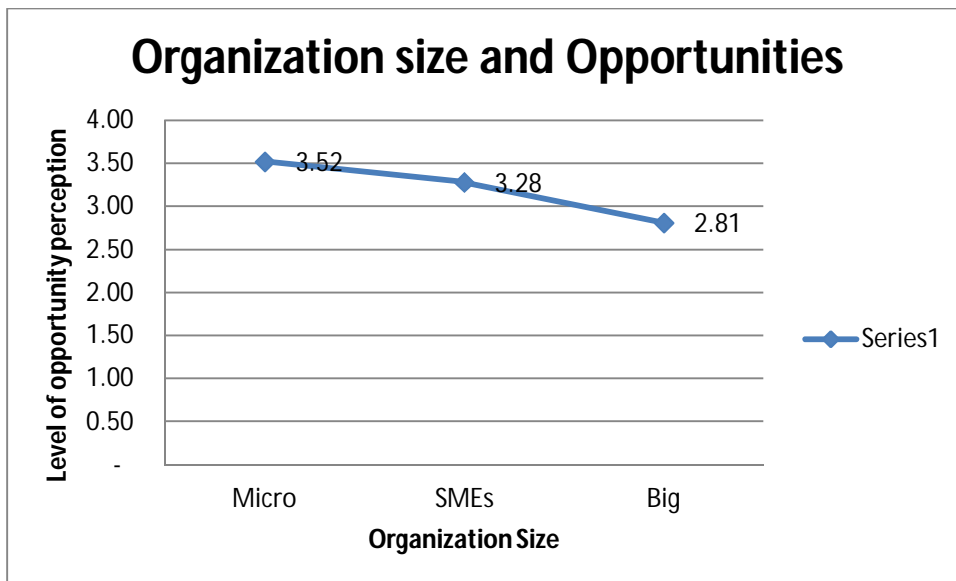
4.4.4 H1: **ICT firms in Kenya have a positive opinion about Konza ICT City**

The hypothesis on ICT firms in Kenya have a positive opinion about Konza ICT city can be examined by summarizing the findings of the research. Tabulation below: Table 6 shows a summary of findings.

Table 6   Summary of results on perceptions

Summary Of Results	Mean	
Level and form of involvement of ICT firms in Kenya in Konza ICT city project (Average for both form and level of involvement)		**2.76**
Level of involvement of organizations in Konza ICT City project	2.95	
Form of involvement of organizations in Konza ICT City project	2.57	
Level of perception of organizations towards Konza ICT City		**2.84**
Opportunities for organizations at Konza ICT City		**3.27**
Grand Average		**2.96**

On level and form of involvement of ICT firms in Kenya in Konza ICT city project, this had been broken down into level and form of involvement. On level of involvement, this scored an average 2.95 out of a possible 5, while on form of involvement, this scored 2.57 giving an overall average of 2.76 for this perception. On level of perception of organizations towards Konza ICT project, this was rated at 2.84 very close to level and form of involvement, while on opportunities for organizations was the highest with 3.27. The overall grand average for these was 2.96 against a maximum possible score of 5. The opinion is considered negative though not very strong but is significant.

In conclusion, ICT firms in Kenya have a weak negative opinion about Konza ICT City project.

4.5.0 Key informants profile

This section discusses details of the key informants and the organizations they represented. The respondents comprised of Deputy director of communication at Konza Technopolis Development Authority (KOTDA), Marketing director of ICT authority (A

merger of ICT board, Government Information Technology services (GITS), and eGovernment) which was gazetted on 16th August 2013, Director of computer society of Kenya and ICT manager of Tata Chemicals Magadi Limited (TCML) who is also a member of computer society of Kenya. Details of respondent's years of experience, size of the organization and organization's core business were captured. These respondents were purposefully selected by the researcher as they are knowledgeable persons in this field and would be able to clarify government's strategy and general views of ICT firms regarding the proposed Konza ICT city project. Other key informants who had been proposed but whose views were not captured are Ministry of information on communication who would have given views on governments policies regarding ICT, and the Director of KBPOCCS who would have given insights on current BPO status in Kenya. Out of the four respondents interviewed, 50% were ladies and 50% were men.

4.5.1 Qualitative perspective

This part of the interview guide discusses more qualitative findings gathered from the key informants discussed in the previous section. The findings were summarized and categorized as education in Kenya, awareness creation and collaboration. Government policies and infrastructure, opportunities at Konza and its location, Konza success perceived and BPO onshoring and offshoring services.

4.5.2 Education in Kenya, awareness creation and collaboration.

The government of Kenya has created awareness of Konza ICT city concept through various ways like publicity though media, awareness campaigns and has a body called ICT authority that deals with marketing Konza both locally and internationally as the preferred BPO and ITES destination. The country should be able to tap into the existing talent of graduates from local universities. However, respondents were of the opinion that there is a mismatch between education at our universities and the industry's job market demand. University education is not relevant to industry requirement. This will necessitate capacity building by having training institutions based at Konza and then employ after training thus creating job opportunities.

To become a knowledge based economy, collaboration between research institutions, organizations and universities will be ensured by having ICT research under universities. There is an American body that has been identified as a Master Delivery Partner (MDP) to supplement capacity of KOTDA and will be involved in vetting universities, research institutions and other organizations that will be based at Konza. Universities like University of Nairobi (UoN) and Jomo Kenyatta University of Agriculture and Technology (JKUAT) have been identified as potential participants, KEMRI and KARI as research institutes, Craft Silicon as one of the ICT firms and Safaricom on telecommunication front. Some respondent commented on need to have improved collaboration between ICT firms as currently the bodies that deal with this aspect are personalized. This would improve flow of information and more involvement of ICT firms in Konza.

4.5.3 Government policies and infrastructure

Infrastructure in Kenya has been a major concern and many might not want to be pioneers of Konza. Undersea fibre optic cables have greatly improved communication particularly in urban areas. This needs to be replicated in remote areas, and internet costs have not come down as expected. On water and sanitation, this was seen as one of the obstacles that could hinder people working and living in KTC. However the government has recently funded Thwake dam project under Tanathi Water Services Board (TAWSB) to harness water from Athi river and river Thwake to provide domestic water, irrigation and hydropower. Road network needs to be improved and in the KOTDA plan, there is an upgrade plan for dual carriage extension of Mombasa road upto to Konza and a plan to have an airport at Konza as well as high speed trains to Nairobi.

In order to nurture innovation, the Government should have supportive policies that favour local investors. NIS is key to having good policies that nurture innovation and the Government of Kenya should work towards acquiring one despite that we have ICT policies that most respondents felt were adequate. Locals should be encouraged to invest in ICT by being given incentives. The perception Kenyans have is that foreign investors

are favored. In order to have backward linkages, raw materials should be acquired locally and not imported. This should give a chance to local entrepreneurs to exercise their creativity, and more should be done on incubation programs for start up businesses which require government support and cheap finance that is readily available. Research labs should exist. We should have a government that has confidence in its own citizens. It should also be made easy to acquire licenses for business and registering a company. Costs for new business setup could be prohibitive. The government has proposed some incentives on Tax exemptions , VAT and duty free import of materials, fast company incorporation and restrictions of foreign ownership and employment. Labour costs at KTC will be fair as quality service delivery is one of the strategy to make Konza a preffered destination besides good English accent and a talented pool of university graduates. The government has fully acquired land at Konza and invested heavily making it unlikely to stall the Konza ICT City project due to land wrangles.

4.5.4 Opportunities at Konza and its location

Konza ICT city is a Greenfield making it easy to develop and has a good climate and thus is seen as an ideal location. The location is also seen as strategic due to proximity to an international airport, near a railway line, with a 10 kilometre buffer zone and in a less crowded area. The park will have low, medium and high class income class. People will wish to move from town to the less crowded serene environment, but this will be dependent on improved infrastructure. All respondents were quite optimistic that many jobs will be created.

There are opportunities for local ICT firms at KTC. Most ICT firms sell computer hardware and do not seem prepared to take up opportunities at Konza. They should engage in content development, innovative software development, and adopting computers as a media for education by having training programs. Software solutions for business applications in Kenya should be developed locally. Kenya currently is rated as one of the big user of computers in Africa and assembly of computers on a large scale should be seen as an opportunity that can be tapped by Kenyan ICT firms. This gap can

be addressed if we investment in ICT R&D. Respondents did not see offering of financial services at Konza as an opportunity for Kenyan investors, but consultancy was deemed as a likely opportunity.

4.5.5 Perceptions of success of Konza

All respondents perceived Konza will be successful unlike many failed government projects. This is due to the huge resources that the government has committed towards this project. There is local talent, and geographical location is ideal. Currently Konza is already oversubscribed by both local and foreign investors and local universities and research institutions will have affiliation with Konza. The government is facilitating local and foreign investors partnering to ensure participation by all in creating an ICT ecosystem. This will ultimately see Konza achieve the status of a STP a smart city, and not just a BPO and ITES business park and there is a high opportunity to create many jobs. Respondents cited success of India and other previously underdeveloped countries in this area and this gives confidence of succeeding as well. The likely obstacles that are foreseen is under funding of the project, security, and with a devolved government, allocation of resources could pose a challenge.

4.5.6 BPO-ITES onshoring and offshoring services

BPO and ITES industry will continue to flourish as outsourcing organizations continue to reap huge benefits in terms of cost savings accrued through outsourcing and by creating an opportunity to concentrate on their core business. Funds are freed to expand their investments which creates more business opportunities. They also have long term contracts which can be expensive to terminate. The government of Kenya has not outsourced it services and thus not able to deliver on its core business requirements as it has many employees which creates inefficiencies. Political reasons and bureaucracy in the government were given as reasons for unwillingness for the government to outsource. There is a lot of potential in outsourcing of services in the local market which is untapped, and the country has capabilities of giving good quality back office services. The existing BPO companies in Kenya have an underutilized capacity as they are not able to market themselves. This challenge is addressed by charging the ICT authority body

with the responsibility of creating awareness and to market Kenya as a preferred outsourcing destination as well as identify opportunities for investors. The government should ensure there are incentives for BPO firms that will be set up at Konza and be able to attract research institutions. There is an ICT policy enacted in 2009 which needs to be reviewed and BPO sector should have its own policy. There is a danger of Konza being just a BPO if there are no good policies, and since BPO and ITES is a government flag ship project in the economic pillar to achieve vision 2030, it should be given more attention by speedy improvement of infrastructure otherwise it could take longer to actualize the desired status.

4.6 Discussion of findings

Quantitative findings on level and form of involvement of ICT firms in Kenya in Konza ICT city project indicated that there was less involvement particularly by small ICT firms. ICT authority deals with marketing of Konza both locally and internationally as discussed in qualitative findings. This could suggest that despite having created awareness, identification of areas of participation for Kenyan ICT firms were not defined and hence the perception of less involvement. Kenyan ICT firms Collaboration with other institutions was high and Kenya ICT strategy 2006 emphasizes on collaboration and outsourcing for economic growth, and that people and institutions should work together. This view is reemphasized by Montoro-Sa´nchez et al., (2011) who state that for knowledge concentration in one area to be harnessed, partnering with universities and research institutions is paramount. ICT firms form of involvement indicated that ICT firms were willing to offer services at Konza. Kenya ICT strategy 2006 recognizes need to develop SMEs and create conducive environment for them to operate. ICT industry in Kenya largely comprises of SMEs which play an important role in the economic development of any country.

Despite huge investments by the government on ICT infrastructure, ICT firm's perception was that enough has not been done. Qualitative findings indicated that in urban areas much had been done on infrastructure and needed to be replicated in rural areas and that the cost of communication was still high. From the literature review, low

communication costs is given consideration when choosing an outsourcing destination as developed countries outsource to low cost areas as emphasized by Lacity & Rottman (2009). Studies by (Wanjiru, 2012) indicated that failure of Sameer park which was to be the first BPO centre in Kenya was due to poor infrastructure, weak BPO incentives, high operational costs and poor marketing strategies. The government needs supportive policies for business process outsourcing. This view was shared by ICT firms interviewed and key informants. Guidelines to decisions are embedded in policies as indicated in the literature review and as elaborated by David and Foray (1995), developed countries have policies that favor an innovative climate, and this is through adoption of NIS by OECD member countries.

ICT firms in Kenya see many opportunities in offshoring and onshoring in Konza ICT city. Qualitative findings indicated that the government will outsource its non core activities and embrace egovernment strategy. This will create a lot of opportunities for ICT firms in Kenya. Maskell et al, (2007), supports this by emphasizing the fact that organizations will continue to outsource their non core activities in order to reduce costs and improve their services. ICT authority has been charged with the responsibility of marketing Konza as the preferred BPO-ITES destination for both local and international investors. This will help create opportunities for ICT firms in Kenya as well. Konza ICT city will be a success as perceived by ICT firms and key informants. The location is strategic as it is in a Greenfield which is recommended for low cost expansion. The government is committed to improving communication infrastructure, road and rail infrastructure, water and sanitation in order to ensure success.

CHAPTER FIVE : SUMMARY, CONCLUSION AND RECCOMENDATIONS

5.1 Summary of findings

The objective of this study was to establish level and form of involvement, perceptions and opportunities of ICT firms in Kenya towards Konza ICT city project. The study was modeled on a mixed research design of descriptive cross-sectional and indepth interviews with four key informants. Both studies were carried out simultaneously, and triangulation was used to combine both qualitative and quantitative findings which complement each other. The population for the quantitative study was all ICT firms in Kenya and the sampling frame was acquired from soft Kenya directory which comprised of 550 ICT firms. Data collected was analyzed using content analysis techniques for qualitative study, and for the quantitative studies, analysis was done for each of the objectives using Excel's add-ins as a statistical analysis tool and to provide descriptive statistics and charts.

The study established that the government needed to improve on involvement of Kenyan ICT firms in Konza and improve on existing ICT policies. Kenyan ICT firms were quite optimistic about taking up ICT related opportunities at Konza whose location they deemed as strategically located. Communication infrastructure had been found to be inadequate and from the study, much needed to be done. Despite heavy investment in undersea cables, the cost of telecommunication needs to come down. However, ICT infrastructure in urban areas has greatly improved and this needs to be extended to rural areas. Water and sanitation could be of major concern to many who wish to live and work at Konza. The government has funded a project that will ensure that this is addressed. On transport infrastructure, the government has plans to invest on high speed trains from Konza to Nairobi, and extend the dual carriage way to Konza.

Most ICT firms indicated that they would offer offshoring services. This requires a lot of marketing in order to tap into this market. There is already enough potential locally, and with the government support, ICT firms could easily offer back office services to government institutions which are already aiming at being highly computerized through

e-government initiatives. With government support, onshoring services will have more potential than offshoring locally. Financial services offering at Konza did not seem to arouse much attention of the respondents and was not seen as a major opportunity. However from the KOTDA statistics this is the area with higher potential investors compared to BPO-ITES and telecommunication. Most organizations see a lot of opportunities at Konza in terms of training, software development, back office services and offshore services. The respondents also see Konza as strategically located despite very low indication of willingness to relocate to Konza. This could be attributed to low rating of transport network and no water and sanitation facilities. The respondents were quite optimistic that Konza will create many jobs. Large organizations did not seem as optimistic as the small firms regarding relocation and many opportunities arising from KTC.

Good policies are critical to fast economic growth. Respondents indicated that the government needs to improve on its ICT policies and should have a separate policy for BPO-ITES as indicated by a respondent during qualitative interview. Current ICT policy that includes STP will require to be reviewed as well. Land disputes are not likely to affect the project, as the land has been acquired by the government and are already doing construction work.

5.2 Conclusion

From the research findings, conclusions can be drawn from the study.

Perceptions by Kenya ICT firms on involvement confirm that government support is very critical for the success of Konza ICT city. Science and Technology Parks have helped to grow the economy of many countries through nurturing of good ideas and diffusion of innovation. Embracing ICT for economic development for this country could help generate more income than that from agriculture and other sectors. BPO and ITES industry is going to create many jobs and with the government's willingness to outsource its services, this could see improved service offering by the government which will lead to increased levels of efficiency.

Kenyan ICT firms have many opportunities at Konza, and with good policies as seen in other countries that have been successful in this sector, there should be no reason for failure. There are many opportunities at Konza ICT city like training, software development, back office services, telecommunication infrastructure and consultancy. Tax incentives and favorable labour costs need to be given due consideration as most investors look at incentives that would make them choose Kenya as a preferred BPO-ITES destination. Infrastructure development is critical for this sector to grow and must be given high priority.

Government policies should also consider supporting local industries in order to have backward linkages and Kenyans should be given first priority to supply local materials used from our locally available resources. This would give a clear indication that the government has confidence in its citizens and has willingness to create employment and eradicate poverty. Local investors should be encouraged to invest in ICT and any other opportunities available at Konza by being given incentives in order to have patronization of Kenyans in this emerging sector. Involvement of Kenyan ICT firms in Konza would help to grow the ICT industry in Kenya.

5.3 Recommendations

From the study, various recommendations can be deduced. Recommendations on faster policy enactment by the government, recommendations on further research and limitations of the study.

The government should fast track enactment of policies that will foster economic growth in ICT sector and should have policies that give due consideration to Kenyan ICT firms. It should also have a clear road map on services that it wishes to outsource so that potential Kenyan ICT firms can start to strategize on taking up these opportunities. Kenyan ICT firms should have a body that is more vibrant in ensuring dissemination of ICT related information is fast and effective in order to engage in local activities. A number of ICT firms did not seem versed with STP and Konza ICT city concept. BPO and ITES seems to be more emphasized, and there is need to clarify that this is more of a quick win for the government in job creation, but the bigger picture is in actualizing KTC

46

into a Science and Technology Park. This can be achieved by ensuring appropriate linkage between research institutions, universities and organizations.

5.3.1 Limitations of the study

The study focused on interviewing key informants and Kenyan ICT firms. The response rate was poor and thus difficult to conclusively deduce from the findings about perceptions of Kenyan ICT firms towards Konza ICT city. This was attributed mainly by the fact that selected firms from the sampling frame had been registered as ICT firms but a closer analysis and phone calls confirmed that most of them were not dealing with ICT. The response was through e-mail and this being a new concept my recommendation is that similar studies carried out be face to face or a guided questionnaire response in order to clarify the questions and to confirm that the firm is an ICT firm.

5.3.2 Recommendations for further research

Further research should be carried out after Konza becomes a reality to see if the objectives have been met. The study can also be extended to perceptions of universities in Kenya and research institutions on Konza ICT city. A study on nature of ICT industry in Kenya is also recommended.

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APPENDICES

APPENDIX 1   **Guide to qualitative interviews**

QUESTIONAIRE GUIDE

The interview guide will seek to achieve the following objective; To determine the perception of ICT firms in Kenya towards the proposed Konza ICT City, by examining the following areas;

1. Level and form of involvement of ICT firms in Kenya in Konza ICT City project
2. Perceptions of ICT firms in Kenya towards proposed Konza ICT City
3. Opportunities for ICT firms in Kenya in the proposed Konza ICT City

PART A

Part 1 : General Information on the interviewee and the organization

Date of interview	
Interviewers Name	
Name of the Organization	
Name of Interviewee	
Job Title	
Length of service	
Sex	
Size of the organization (Small, Medium, Large)	
Number of employees	
Organization's year of incorporation	

Part 2: Level and form of involvement of ICT firms in Kenya in Konza ICT city project

1. How instrumental has the Government been in engaging local ICT firms to take up opportunities at Konza
2. How supportive are the Government policies that foster innovation?
3. How are the Government incubation programs for start up organizations?

4. How will the Government ensure there is backward linkage between Konza and other institutions?

5. What training, software development and other opportunities do you think will be there for ICT firms in Kenya?

6. Describe local expertise in the country which will favor taking up opportunities at Konza?

7. How do you compare opportunities for both local and foreign investors at Konza?

8. How are linkages between the universities, R&D and institutions going to be ensured?

9. In your opinion do you think Kenya needs a National Innovation System? Please Elaborate

10. How has the government been instrumental in ensuring that the country has skills that will match the requirements at Konza?

11. Do local ICT firms have a body that interacts with the Konza ICT board ? If yes what role does it play.

12. How can you ensure there is flow of information between local ICT firms and Konza ICT board?

13. In your view what needs to be improved to ensure success of Konza ICT City?

14. What are some of the effective awareness campaigns targeting local ICT firms involvement in Konza ICT City project conducted by the Government?

15. In your opinion do you think the country is ready to setup a Science and Technology park? Please elaborate

Part 3: Perceptions of ICT firms in Kenya towards Konza ICT city

1. Is the infrastructure supportive of Konza ICT City? Consider the following:
    a. Water and sanitation
    b. Transport
    c. ICT Infrastructure

2. What do you consider as important for local ICT firms preparedness to take up opportunities at Konza?

3. In your opinion what opportunities are there for ICT firms in Kenya at Konza ?

4. Is Konza strategically located? Please elaborate.

5. What research institutions will be based at Konza?

6. Which universities will relocate to Konza?

7. If there are how are they being vetted and is there a regulatory body?

8. How shall the government ensure that the universities will give education that matches institutions around Konza City?

9. How will R&D firms collaborate with the universities and institutions to ensure seamless flow of knowledge

10. How do firms that wish to operate at Konza get vetted?

11. Do you think the land issues at Konza will stall the project? Please explain

12. In your opinion do you think there will be many jobs created? Please explain

13. Which countries are targeting Kenya as an outsourcing destination and why?

14. Is Business Process Outsourcing (BPO) sustainable business or are developed countries likely to stop off shoring?

15. Explain how labour laws are going to be enforced to ensure no exploitative tendencies?

16. In your opinion is Konza going to achive the status of a Science and Technology park or could it simply be a BPO centre? Elaborate

17. Given that a number of previous Government projects have not been successful, do you think Konza will be different? Explain

18. Elaborate on the country's legal and regulatory framework in line with innovation and if it supports this initiative.

19. What are the incentives offered by the government for both local and foreign investors? Explain if they are sufficient to attract investors.

20. Explain the government's BPO strategy and explain if it is supportive or not.

21. In your opinion are there social aspects that might affect local ICT firms moving to Konza? Describe them

Part 4: Opportunities for ICT firms in Kenya in the proposed Konza ICT City

1. What training programs can be undertaken by local ICT firms?
2. What capacity do local ICT firms have to develop software that meets international standards?
3. Explain if our University education matches the labour market
4. In your opinion, do the local ICT firms have capabilities to offer BPO services? Explain
5. Do we have local R&D oraganizations that meet the required standards for Konza? Explain
6. Are there standards set for firms joining Konza ICT City park and is there a regulatory body? Elaborate on these standards and the role of the regulatory body
7. In your opinion do you think local ICT firms meet these standards? Explain to what extent
8. Is the infrastructure adequate to support all firms at Konza? Explain
9. What opportunities are there for consultancy services ICT firms in Kenya?
10. Describe the various services that are likely to be offered.
11. Are there incentives being offered by the government? Are they adequate? Explain.
12. Do you think cost could be prohibitive for new business setups at Konza?
13. What are the incubation programs to support new upstart businesses?
14. Do you think the country has restrictive policies that could deter both local foreign investors? Elaborate

APPENDIX 2   Guide to quantitative response

PART B

Part 5: Level and form of involvement of ICT firms in Kenya in Konza ICT city project

Please indicate the level and form of involvement of your organization in Konza ICT City project by marking against a five point scale for the following questions.

Please use a [*] to mark in the appropriate cell against each question

Scale: Very low – 1, Low-2, Neutral-3, High-4, Very high-5

No.	Level of involvement of your organization in Konza ICT City project	Level of involvement					N/A
		1	2	3	4	5	
1	The organization is involved in a way on Konza ICT City project						
2	We have been involved in training in readiness to get opportunities at Konza ICT City						
3	Our organization has influenced decisions at Konza ICT city						
4	Our organization plans to have dealings with Konza						
5	Our organization collaborates with suppliers						
6	Our organization collaborates with customers						
7	Our organization collaborates with government institutions						
8	Any other, please specify						
No.	Form of involvement of your organization in Konza ICT City project	Level of involvement					N/A
		1	2	3	4	5	
1	Our organization is likely to offer software development services at Konza						
2	Our organization is likely to offer back office services at Konza						
3	Our organization is considering offering financial services at						

	Konza						
4	Our organization is considering offering offshore services at Konza						
5	Our organization is considering offering onshore services at Konza						
6	Our organization will interact with research institutions						
7	Our organization will interact with universities						
8	Any other, please specify						

N.A. – Not applicable

Part 6: Perceptions of ICT firms in Kenya towards Konza ICT city

Please indicate the level of perception of your organization towards Konza ICT City project by marking against a five point scale for the following questions.

Please use a [*] to mark in the appropriate cell against each question

Scale: Very low – 1, Low-2, Neutral-3, High-4, Very high-5

No.	Level of perception of your organization towards Konza ICT City	Perception level					N/A
		1	2	3	4	5	
1	The government has done enough on communication infrastructure						
2	The government has involved this organization in the Konza ICT City project						
3	Konza ICT city is going to create many jobs						
4	Our organization is prepared to take opportunities at Konza						
5	Our organization has trained its staff in anticipation of opportunities at Konza						
6	Konza ICT City is strategically located						
7	Our organization is likely to move to Konza						
8	Employees located at Konza city are likely to be paid well						
9	The government has supportive policies for Business Process Outsourcing						
10	The government has supportive policies for Science and Technology parks						
11	The transport network to Konza is adequate						
12	Water and sanitation facilities at konza are adequate						
13	Land disputes at Konza is not likely to affect the project						
14	Any other, please specify						

N.A. – Not applicable

Part 7: Opportunities for ICT firms in Kenya in the proposed Konza ICT City

Please indicate opportunities for your organization as a result of Konza ICT City Project by marking against a five point scale for the following questions.

Please use a [*] to mark in the appropriate cell against each question

Scale: Very low – 1, Low-2, Neutral-3, High-4, Very high-5

No.	Opportunities for your organization at Konza ICT City	Level of opportunity					N/A
		1	2	3	4	5	
1	Konza will create training opportunities for our organization						
2	Konza will require training of staff working at Konza from ICT firms in Kenya						
3	Our organization is likely to give onshoring services at Konza						
4	Our organization is likely to give offshoring services at Konza						
5	Our organization is likely to give consultancy services at Konza						
6	Our organization is likely to give to give financial services at Konza						
7	Konza ICT city will be a success						
8	Developed countries will continue outsourcing their services to developing countries						
9	Our organization is considering giving software development services at Konza ICT City						
10	Any other, please specify						

N.A. – Not applicable

APPENDIX 3   ICT Firms

##	ICT Firm	##	ICT Firm
1	Abacus Computer Systems Ltd.	51	Mitsumi Computer Garage Ltd
2	Abovenet Technologies	52	MobiWorld Technologies
3	AccessKenya Group	53	NaiCity – The Nairobi Online Business Directory
4	ADEPT TECHNOLOGIES	54	Nailab
5	Africa Online Kenya Limited	55	Nero Web Solutions
6	AITEC East Africa	56	*Newbry - Closed down*
7	Amiran Communications Ltd	57	Nexus Networx
8	ANDEST BITES	58	NorthWest Offshore Ltd
9	Arch-Link Consultants (ARCHITECTURE FIRM)	59	Office Mart Limited
10	Best Telecom Limited	60	One World Technology
11	Blueprint Technologies	61	Onpoint Tracking System
12	Blueweb Technologies	62	Openview Business Systems
13	Compulynx	63	Orange
14	Computer Technics Ltd	64	PC World
15	Computer Zone Consultants &Supplies Ltd	65	Pergamon Ltd
16	Copy Cat Ltd	66	Preciss Services (EPZ) Ltd
17	Deep Africa	67	Pricedata.net
18	Digital Horizons Ltd	68	Q-Line Technologies Ltd
19	Direct Communications Systems Ltd	69	Raidar Creative
20	Domains Kenya	70	Ravenzo Trading
21	East Africa Data Handlers Ltd	71	Rivotek Kenya Ltd
22	Ebits Online	72	Safaricom
23	eMANAGE AFRICA AND BPO	73	Simbanet (K) Ltd
24	Empire Microsystems Ltd	74	SKYWEB EVANS
25	Endeavour Africa Kenya	75	Smart Level BPO
26	Enterprise Information Management Solutions (EIM)	76	Software Technologies Ltd
27	Excel Excellence in Networking	77	Specicom Technologies Ltd
28	FLY TECH LTD	78	STRATEGIC SOURCING INTERNATIONAL (K) LTD
29	Footprint Computer Solutions Limited	79	Swift Global (K) Limited
30	G7 SYSTEMS KENYA	80	Swift Technologies Limited
31	Global Link Consultants Limited	81	Symphony
32	HP Kenya	82	Tecbytes Computer Solutions
33	I.Net Microsystems Kenya Limited	83	Techbiz Ltd
34	Imagine Brands	84	Telkom Kenya
35	Infocom Ltd.	85	Tetra Infotech LLC
36	Ingenuity Solutions	86	Virtualsat Ltd
37	Institute of Software Technologies	87	Wavelogic Solutions
38	Integrated Networks and Data Systems Ltd.	88	WebSoft Development
39	Isolutions Associates	89	ZeboTech Business Solutions

40	Jambo Telkom Limited	90	Zuku Fibre Services
41	KenCall	91	IBM
42	KENTECH DATA	92	Cellulant
43	Kenya BPO and Contact Centre Society	93	Source Code
44	Kenya Microcomputer Systems Ltd	94	Netcom
45	Kenyaweb.com	95	Seven Seas
46	Labos Technologies (K) Ltd.	96	Craft Silicon
47	LANTECH ENTERPRISES SOLUTIONS LTD	97	Next Technologies
48	Linksoft Communication Systems	98	Pantronics
49	Machines Technologies	99	Extra Byte
50	Mano Designs & Solutions Ltd	100	Adnet

APPENDIX 4   **Key informants**

1. Deputy director of communication at KOTDA
2. Marketing director of ICT authority
3. Director of Computer society of Kenya
4. ICT Manager of Tata Chemicals Magadi Limited

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME

Telephone: 020-2059162	P.O. Box 30197
Telegrams: "Varsity", Nairobi	Nairobi, Kenya
Telex: 22095 Varsity	

DATE...07/09/2013

TO WHOM IT MAY CONCERN

The bearer of this letter ...... KENNETH K. MUIRURI .....

Registration No........... D61/61485/2010 ....

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you

PATRICK NYABUTO
MBA ADMINISTRATOR
SCHOOL OF BUSINESS

APPENDIX 5   Letter of Introduction

University of Nairobi
School of Business
15th October 2013

Dear Respondent,

Re: Data collection

I am a postgraduate student at the University of Nairobi, school of business. I am undertaking a management research project on Perception of ICT firms in Kenya towards proposed Konza ICT City.

Your organization has been selected to participate in this study, which is a fairly new area of study. The respondent will be somebody involved in strategy formulation of your organization or an ICT manager. The information you provide will be purely for academic purposes, and will be treated with confidence. I am appealing to you to help in data collection and respond as soon as possible in the next one week to help me compile final report due in October 2013. A copy of the final report can be availed on request.

Attached is a letter from the University and an interview guide which has 4 sections. Use (*) to mark against each question as explained in the interview guide and kindly e-mail back your response. Your participation will be highly appreciated.

Warm regards

Kenneth K Muiruri ,
Tata Chemicals Magadi Limited