KNOWLEDGE PROCESS OUTSOURCING AND PERFORMANCE IN KENYA'S COMMERCIAL BANKS

ZEITUN MOHAMUD

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DECLARATION

This project is my original work and has not been submitted for a degree to any other University.

SIGNED..... **DATE**.....

ZEITUN MOHAMUD

D61/67869/2011

This project has been submitted for examination with my approval as University supervisor.

SIGNED..... **DATE**.....

X.N. Iraki, PhD
LECTURER
DEPARTMENT OF BUSINESS ADMINISTRATION
SCHOOL OF BUSINESS

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DEDICATION

This project is dedicated to my husband Abdirizack Mohamed for his encouragement and support and to my parents Mr. and Mrs. Mohamud Hassan for their inspiration, advice and guidance that made me what I am today: to you I will remain forever grateful

ABSTRACT

Knowledge Process Outsourcing embraces global businesses by providing them high-end processes like valuation research, investment research, intellectual property, research and design. Despite all the above favourable factors, the adoption of BPO and KPO has not picked up as expected. The management of various companies, especially the local ones are faced with a challenge due to lack of relevant reference point on the drivers and effect of KPO. The purpose of the study is to establish the effect knowledge process outsourcing on performance of commercial banks in Kenya. The research study adopted a descriptive research design. The target population for this study included the 44 commercial banks operating in Nairobi as at December 2014.The researcher used a questionnaire as the primary data collection instrument. Descriptive statistics analysis was employed to analyze the first three objectives on the effect of the factors on adoption of KPO among commercial banks. For the forth objective on the effect of KPO on performance of commercial banks, the study conducted a regression analysis. This study found that there is a linear relationship between human resources, organization related challenges and ICT factors and adoption of knowledge process outsourcing. This study revealed that to a great extent, the banks outsource research and development, animation and design, equity research, business and market research, training consultancy and intellectual property research for patent applications. This study concludes that business and market research had the greatest effect on the performance of commercial banks, followed by research and development, then training consultancy, animation and design and equity research in that order while intellectual property research for patent applications had the least effect to the performance of commercial banks. The study recommends that it is necessary using an intelligent KM system to manage the firm's knowledge as a strategic resource versus the threat of loss of strategic information. Managers need to learn how to manage outsourced resources based on specific performance metrics and less subjective results. Banks need to decide if the process or knowledge area needs to be optimized before outsourcing. When a company decides to outsource provision of a service, it must determine how risk should be allocated between parties to the contract meaning the principal and the agent.

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LIST OF ABBREVIATIONS

ATM -	Automated Teller Machine
BPO -	Business Process Outsourcing
GDP -	Gross Domestic Product
HR -	Human Resource
ICT -	Information Communication Technology
IT -	Information Technology
ITES -	Information Technology Enabled Services
KPO -	Knowledge Process Outsourcing
TCE -	Transaction Cost Economics
UK -	United Kingdom
US -	United States

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Globalization and rapid advancements in information and communication technologies have brought change and transformed the way the world economy operates. The business world of today does not bear any similarity to the way it used to operate in the last couple of decades. There are many new developments for example in the banking sector such as the use of ATM cards, credit cards and mobile banking that are all directed towards efficiency in the financial sector (Currie, 2008).

There is a paradigm shift in the way businesses now think. Globalization is integral to doing business, and process off shoring is at the core of this shift. Work can now be moved to the worker, rather than the reverse. This fundamental shift in where work can be performed has been made possible by advances in technology and international telecommunications. Cost competitiveness and time-to-market have become directly linked with outsourcing and even more so with off shoring (Pfannenstein & Tsai, 2013). This phenomenon has matured to the extent that off shoring is no longer simply about obtaining low-cost resources elsewhere; it is now about accessing specific types of talent and gaining entry points to serve new and broader markets.

The contribution of knowledge process outsourcing (KPO) sector to Kenya's economy and its success over the past few years has been evidenced by the superior, low cost expert services provided by its endowed workforce. In this industry lead by knowledge that vests in people, effectively managing them through favourable human resource initiatives becomes a crucial ingredient for its success (Kamau, 2011). Knowledge Process Outsourcing (KPO) enables banks to unlock their top-line growth

by outsourcing their core work to locations that have a highly skilled and relatively cheap talent pool.

1.1.1 Knowledge Process Outsourcing

Knowledge Process Outsourcing, a subset of the broader Business Process Outsourcing industry has become a catchphrase in the outsourcing industry. It is the delivery of high-level, knowledge intense transaction and contact centre processes by people who have domain-specific, vertical skills. Global companies are now incorporating off shoring as part of their forward-looking strategies rather employing it as a knee-jerk reaction to cost pressures. Encouraged by the early success of off shoring at the US in the 1990s in the ITO and BPO sectors, companies are increasingly exploring the value of sending high-end processes offshore, including ones that directly affect their revenue generation capabilities. Because of the success of the BPO approach and the improvement in outsourcing vendor's offerings, companies are now considering outsourcing activities that involve core processes and competitive knowledge.

Traditionally, outsourcing core processes requiring competitive knowledge would not be considered to be good candidates for outsourcing. This shift in thinking can be attributed to managers becoming more comfortable with the outsourcing model and the experiences gained from previous business process outsourcing efforts. Increased governance and improved offerings by outsourcing vendors also has stimulated the growth in companies considering outsourcing some of their core activities. Companies are now moving beyond outsourcing back-end process and moving to outsource core processes that require analytical thinking and judgment using proprietary competitive knowledge. Some examples are market research, financial

planning, business intelligence and risk management (Nelson Hall Report, 2012). The outsourcing of core processes that require competitive knowledge and higher specialized skills is known as Knowledge Process Outsourcing or KPO.

1.1.2 Factors affecting Knowledge Process Outsourcing Process

There is as such a dearth of academic research studies in the KPO sector (Beaumon & Sohal, 2011). Research on outsourcing has concentrated on particular support services, notably facilities management, logistics and IT provision. Some conclude that true costs and benefits are difficult to assess. Some evaluations of outsourcing, favorable (Nelson Hall Report, 2012) and unfavorable (Manson, 2011) are founded on ideology and management fashion. The literature does not seem to focus on the core issues in the field of KPO like what influences the process and its effect on the performance of the firm. Thus the management of various companies, especially the local ones are faced with difficulties due to lack of relevant reference point on the drivers and effect of KPO (Linder, 2010).

Outsourcing back-end or core processes is not without risk. A large percentage of organizations have failed when they tried to adopt an outsourcing model. Some of the reasons why companies abandon the model include human resource issues resulting in lower levels of service for internal and external customers and inferior quality of outputs; organization-related factors and cultural misalignment resulting in missed delivery times and also issues related to the ICT infrastructure (Evalueserve, 2005a). Knowledge Process Outsourcing is not immune to these factors and managers need to manage the complete process of outsourcing carefully to avoid failure when pursuing a KPO strategy.

A major problem that has been noted in knowledge outsourcing is the problem of staffing by the service provider. KPO requires people with higher education and/or specialized and differentiated knowledge and skills (Tomar, 2006). The BPO industry is already facing significant challenges regarding availability of trained manpower, high attrition rates and rising salaries. Given the specialized requirements for KPO resources, these issues will be compounded for KPO firms as they try to scale up.

1.1.3 Knowledge Process Outsourcing Performance

KPO and BPO are often conducted through offshore outsourcing as corporations seeking the most value for the least money source projects to countries where wages are lower. Because KPO jobs may bring in twice as much money to the economy as BPO, countries such as India are actively promoting development of this industry. With the increasing competitive nature of global businesses, process time for introducing products and services has shortened, and customers are demanding more quality in products and services provided. In this scenario enterprises are forced to adopt systems and business models that provide operational efficiency and add strategic value to their products and services (Bardhan, 2012).

Knowledge Process Outsourcing embraces global businesses by providing them high-end processes like valuation research, investment research, intellectual property, research and design, patent filing, development of automotive and aerospace industries, legal and insurance claims processing (Wright, 2011). It can enable enterprises to shorten design-to-market lead times, efficiently manage critical hardware, augment organizational effectiveness in business administration and provide research on markets, competition, products and services.

In the new knowledge economy, Kenya is set to become one of the preferred destinations for Knowledge Process Outsourcing in the near future. With its hoard of chartered accountants, doctors, engineers, lawyers and research analysts. The ongoing fiber optics network also provides a favourable highway for offshore ICT outsourcing. Kenya has also huge talent pool that attracts many multinational companies to set up research and development centers. The highly advertised Malili ICT city coming up in the plains of Konza is also going to position Kenya as a preferred destination for ICT based Knowledge Process Outsourcing by 2030. There have been various outsourcing activities arising from competition in the industry which include efficiency, better service and focus on core processes.

1.1.4 Commercial Banks in Kenya

The Companies Act, the Banking Act, the Central Bank of Kenya Act and the various prudential guidelines issued by the Central Bank of Kenya (CBK), governs the Banking industry in Kenya. The industry consist of forty three banks, fifteen micro finance institutions and forty-eight foreign exchange bureaus in Kenya. Thirty three of the banks, most of which are small to medium sized, are locally owned and thirteen are foreign owned. The banks have come together under the Kenya Bankers Association (KBA), which serves as a lobby for the banks' interests and addresses issues affecting member institutions.

The commercial banking sector in Kenya has seen tremendous growth in recent years. Much of the growth in the banking sector has been witnessed in branch network expansion, growth in capitalization and asset base and the expansion of some of the banks regionally. The banks have also been in the frontline of automating their functions to give their customers good service. Kenyan banks have engaged in

product innovation where internet banking and mobile banking have taken root in various local banks. As the Kenyan financial market is expanding, banks have realized that they are facing more and more competition from others thus forcing them to increase their marketing spend lower charges such as lending rates and increase their presence. The sector was not affected by the first round effects of recent financial global crisis as it had no exposure to the toxic assets at the heart of the crisis (CBK report, 2010).

1.2 Research Problem

Knowledge Process Outsourcing enable often lead to increased revenue and improved competitive advantages as a result of having access to a large pool of skilled professionals in knowledge intensive industries. The process can also lead to improved efficiency and cost savings and process efficiencies and allow companies to focus on increasing revenue growth (Clark, 2001). However, the literature does not seem to focus on the core issues in the field of KPO like what influences the process, and its effect on the performance of the firm. Thus the management of various companies, especially the local ones are faced with a challenge due to lack of relevant reference point on the drivers and effect of KPO (Barnes, 2012). Much like BPO, all signs indicate that KPO offshore outsourcing is going to continue to be a consideration for many companies. It is doubtful that a company will ever move all aspects of critical departments to an outsourcing provider. However, the potential benefits of streamlining the process and moving all minor related functions to a third-party company are difficult to ignore.

Kenya is positioning itself as a KPO hub in East Africa (CBK report, 2010). It has invested massively in ICT infrastructure as a strategic way forward in this new

opportunity. Kenya has also a growing population of educated people capable of handling high-end knowledge-based work and research. These include large pools of knowledge workers in sectors ranging from Law, Medicine, Pharmacy, Engineering, Research and Development. Developed countries like USA and European countries are said to be facing a shortage of highly trained and specialized professionals (Lacity et al, 2013). With the increase of universities and technical institutes in Kenya, there is no shortage of skilled manpower (Batt, 2010). Despite all the above favourable factors, the adoption of BPO and KPO has not picked up as expected according to Evalueserve (2010). This study will attempt to investigate the reasons why there is slow rate of growth of Knowledge process outsourcing in Kenya.

Locally, studies on outsourcing have been conducted. Murugu (2011) conducted a survey on competitive advantage through outsourcing in supply chain services which was a case study of HFCK and found that outsourcing goes a long way in enhancing the competitiveness of HFCK. Ndungu (2011) carried out a survey of the knowledge process outsourcing and competitiveness of manufacturing firms listed in the Nairobi Stock Exchange market and established that the KPO was adopted to a very little extent and therefore had an insignificant effect on the competitiveness. Njoroge (2012) carried out a research survey of business outsourcing practices amongst private manufacturing companies in Nairobi and established that knowledge process was among the most significant in enhancing the companies' competitiveness and performance. Kiptoo (2012) did research on implementation challenges of outsourcing in the transport industry and established that the major challenges were related to ICT readiness of the industry and HR competence. These reviewed studies have not focused on factors affecting adoption of knowledge process outsourcing and also the effect of the KPO on performance. It is in this light that the researcher aims at

filling the academic gap that exists by carrying out a research on factors affecting adoption of knowledge process outsourcing among commercial banks.

1.3 Research Objectives

1.3.1 General Objective

To establish the effect knowledge process outsourcing on performance of commercial banks in Kenya

1.3.2 Specific Objectives

i. To establish the effect of human resources factors on adoption of KPO among commercial banks
ii. To determine the effect of organization-related factors on adoption of KPO among commercial banks
iii. To assess how information communications and technology (ICT) infrastructure affects adoption of KPO among commercial banks
iv. To establish the effect of KPO on performance of commercial banks

1.4 Value of the Study

The study is expected to yield information which will be of much value to commercial banks for future improvement in the field of KPO as it endeavors to adopt outsourcing in various fields. In addition, this study also yielded information for direct use by other entities in the country which are faced with similar operating environment like that in commercial banks. The findings of this study will help in positioning knowledge process outsourcing as the next form of business process outsourcing. It will also shed some light on managerial challenges and opportunities faced by commercial banks in Kenya. It will also provide areas of further research in this evolving field.

Future investors in this field will also find a point of reference as they draw policies, procedures and strategies of entry. Managers and other stakeholders will also be able to understand better the challenges faced in this field and draw best approaches for overcoming them.

The study also contributes additional knowledge in the discipline of outsourcing by exploring additional factors promoting its use. To the academician and researchers, the study will be used for further research into areas such as outsourcing of services in companies. The study is also likely to establish areas of further research in the field of KPO.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of the related literature on the subject under study presented by various researchers, scholars, analysts and authors. The specific areas covered here are theoretical framework, business process outsourcing, knowledge process outsourcing and its evolution, benefits of knowledge process outsourcing, factors affecting adoption of KPO, conceptual framework and finally a summary.

2.2 Knowledge Process Outsourcing and Banking Sector

Established banking institutions are also outsourcing research and knowledge based activities. Knowledge Process Outsourcing (KPO) is the outsourcing of business, market, and/or industry research. KPO requires a significant amount of domain knowledge and analytical skills. KPO suppliers design surveys, collect new data, mine existing data, statistically analyze data, and write reports. Although the KPO market is currently small, industry analysts expect a huge growth in this sector over the next five years. For example, the Evalueserve (2007) evaluated the current offerings of the top 11 Indian suppliers and found that KPO is currently only 4 per cent of their revenues. However, this advisory firm predicts a rapid growth in KPO as suppliers cannibalize some of the onshore work and actively create demand for these services. Evalueserve (2007) estimated that the KPO market in 2007 was $3.05 billion and will grow annually by 39 per cent. They expect the KPO market to be $16 billion by 2010 or 2011 and will employ approximately 350,000 professionals globally. 17

The increase in KPO is directly related to offshore suppliers moving up the value chain (Gottfredson et al, 2005). Financial services providers have long leveraged

outsourcing and off shoring; low-value services such as janitorial work have been outsourced for quite some time. However, business services have traditionally been more location-bound due to inherent characteristics like intangibility and need for co-production. A variety of recent developments, such as innovations in information technology (IT) and newer managerial practices have enabled unbundling of design and consumption of these services. Firms can now unbundle their value chain, distribute unbundled discrete processes to optimal service teams/locations and then assemble serviced processes. This unbundling can be either vertical of processes that are input to firm's product/service in the market, or horizontal of corporate processes such as finance and accounting (Sako, 2006).

Banks associate outsourcing activities with high risks and possible high benefits. The benefits of KPO to banks depend heavily on leveraging capabilities by aligning structures and resources between exchange parties. Intensive cooperation is necessary to ensure that such benefits are attained. KMO is increasingly being used as a means of both reducing costs, achieving strategic goals, reducing turnaround time and accessing highly skilled professionals. Due to its IT-intensive business processes; the potential for KMO appears to be particularly high in the banking industry. This is further enhanced by the fact that most of the data in the banking sector are in digital form coupled with increased use of internet. Although there are good reasons to outsource, a number of potential obstacles and risks associated with KMO are also recognized. Such risks may be financial risks, strategic risks, performance risks and social risks (Kamau, 2011).

2.3 Theories of Knowledge Process Outsourcing

2.3.1 Resource-Based View

According to Barney (1991) the resource based view is based on the concept of productive resources. In this strategic theory, the firm is viewed as a collection of physical and intangible resources that enable it to compete with other firms. It makes the assumptions of resource heterogeneity and resource immobility. Resource heterogeneity is the assumption that the resources that firms possess and the strategies they pursue are idiosyncratic to the firm. Resource immobility is the assumption that all resources are not perfectly mobile, that is, all resources may not be bought and sold in open markets to create resource homogeneity between firms. Competitive advantage is gained through resources that are valuable, rare, imperfectly imitable, and without strategically equivalent substitutes. A conceptual understanding of these constructs is essential to understand the relationship of this theory to other theories. Value refers to the ability of a firm attribute to exploit specific opportunities and counter threats in the environment. Only when a firm attribute possesses value does it become a resource. To provide sustained competitive advantage, a resource must also have the remaining three qualities.

In terms of the outcomes of outsourcing, the resource should be able to provide the ability to generate above normal rents. Obtaining above normal returns requires that the outsourced product is distinctive or available at a lower cost than identical products. Sustained competitive advantage may not be possible through outsourcing according to the resource based view as this requires the resource to be rare, imperfectly imitable and non-substitutable. However, it has achieved a unique combination between the outsourced resource and other internal firm resources are

possible. The concept of core competences has been developed on the basis of the resource-based theory.

According to Barney and Hesterly (1996) the core premise of the resource-based view is that resources and capabilities can vary significantly across firms, and that these differences can be stable If resources and capabilities of a firm are mixed and deployed in a proper way they can create competitive advantage for the firm. The resource-based view in outsourcing builds from a proposition that an organization that lacks valuable, rare, inimitable and organised resources and capabilities, shall seek for an external provider in order to overcome that weakness. Therefore the most prominent use of the theory is in the preparation phase of the outsourcing process for defining the decision making framework and in the vendor selection phase for selecting an appropriate vendor. The theory has been also used to explain some of the key issues of the Managing relationship and Reconsideration phases.

2.3.2 Transaction Cost Economics

According to Conner (1991) transaction cost economics (TCE) looks at firms as avoiders of market costs by analyzing the relative efficiency of the market in comparison to internalization. This theory was pioneered by Coase in 1936 who predicted that a firm will tend to expand until the costs of organizing an extra transaction within the firm become equal to the costs of carrying out the same transaction by means of exchange on the open market or the costs of organizing in another firm. If the market is perfectly competitive, outsourcing may be more efficient than internalization. However, these conditions may not always exist. Williamson (1981) expanded on Coase's framework by identifying specific instances where firms can avoid market costs by internalizing.

This approach has two behavioral assumptions that pay more attention to "human nature as we know it" - bounded rationality and opportunism. Bounded rationality recognizes that agents possess limited abilities in formulating and solving complex problems and in processing information, and therefore they remain "intendedly rational, but only limitedly so" (Williamson, 1981). The agents are also simultaneously subject to opportunism, or self-serving with guile. All transactions in a market are associated with production costs, as well as additional costs due to incomplete contracts caused to bounded rationality and the risk of opportunistic behavior. These costs depend on the asset specificity, small numbers bargaining, and imperfect information. Asset specificity refers to the amount of dependence an asset has on an input or producer to which it is specific.

From the above, we note that only TCE addresses outsourcing directly, as it deals primarily with firm boundaries. TCE deals with both the antecedents as well as the outcomes of outsourcing. The antecedents to outsourcing according to TCE are asset specificity, small numbers bargaining, and imperfect information. All three of these have a negative relationship to outsourcing, that is, higher values of these constructs results in lower outsourcing activity. In terms of the outcomes of outsourcing, increase in outsourcing will result in lower production costs of the market, but increased coordination costs of sourcing the good from the market.

2.3.3 Contingency Theory

According to Drazin and Van de Ven (1985), most propositions in organizational research may be considered a contingency theory as long as they specify a relationship that holds during certain conditions. Structural contingency theories may therefore, vary greatly in terms of their constructs and predictions. However, all of

them deal with the concept of 'fit' between organizational variables and environmental variables. However this concept of fit may vary greatly as well and may be construed to mean moderation, mediation, matching, gestalts, profile deviation, and covariation, (Venkatraman, 1989).

Under this view, it is suggested that organizations that face a high degree of uncertainty in their environments, for example due to fluctuations in rents and/or prices, may seek to ensure some stability by entering into outsourcing contracts (Koberg & Ungson, 1987). This framework may be understood in context of resources with regards to outsourcing. An organization has selected, acquired and combined a set of resources that were available in the environment. However, these resources may not be sufficient for it to meet its goals. This causes the organization to perceive a gap between its present capabilities and its intended capabilities. This gap may be also caused by the dynamics of the external environment. The changing environment may expose new opportunities and threats to the firm. This again causes the perception of a gap between the present resources of a firm and those needed to exploit opportunities and counter threats. The organization seeks to achieve a fit between the resources of the firm and the competitive environment by acquiring the resources in the gap either through outsourcing or internalizing. Contingency theory would predict the decision to be a result of the fit between environmental and firm-level factors. If the environment is uncertain, the firm cannot predict whether the resource would be needed in the future. Therefore, from the perspective of contingency theory environmental uncertainty or dynamism is an antecedent to outsourcing. We posit that greater environmental uncertainty will lead to an increasing in outsourcing. As a consequence of outsourcing, the contingency theory implies greater organization-environment fit.

2.4 Factors affecting Banks Adoption of KPO

While KPO provides the benefits described above it comes with a number of significant risks that need to be managed in order to achieve the full benefit potential. Failure to manage these risks can result in costly mistakes and the abandonment the KPO model. Despite the dramatic rise in outsourcing in recent years, few empirical investigations of the subject have been conducted. Previous work on outsourcing has been primarily theoretical in nature and has relied mostly on anecdotal evidence to support assertions. Furthermore the conclusions of these works are inconsistent. Many intuitively appealing arguments have been offered both for and against outsourcing as a means of achieving sustainable competitive advantage (Gilley and Rasheed, 2000).

Although there are a good number of reasons to outsource, a number of potential obstacles are also recognized. There is evidence that knowledge outsourcing does not reduce costs as expected in some cases (Beaumont and Sohal, 2004). Main obstacles and problem of knowledge outsourcing include: loss of control, loss of critical skills, inadequate capabilities of service providers, loss of flexibility, failure to realize hidden costs of contract, difficulty in obtaining organizational support, indecisiveness on which activities to outsource, inadequate cost and benefit analysis systems and fear of job loss (McIvor and Humphreys, 2000).

2.4.1 Human Resources Factors

The increasingly visible landscape of KPO is opening up a world of opportunities for human resources of varied backgrounds in diverse fields, the fulcrum therefore for the growth and success of this eclectic sector rests on the human resource factor. Knowledgeable people who steer this industry are active drivers of the processes rather than passive riders, therefore the kind of skills and qualities preferred,

professionals required, training to be provided, compensation offered and work schedules and environment prevalent naturally become some of the areas of vital concern in this sector (Taylor and Tyler, 2009).

The staff turnover of employee who originally transferred to the outsourcer is a concern for many companies. Turnover is higher under an outsourcer and key company skills may be lost with retention outside of the control of the company. According to Kabagashi (2007). in outsourcing offshore there is an issue of staff turnover in the outsourcer companies call centers. It is quite normal for such companies to replace its entire workforce each year in a call center. This inhibits the build-up of employee knowledge and keeps quality at a low level. According to Stein, (2005), the outsourcer may replace staff with less qualified people or with people with different non-equivalent qualifications. In the engineering discipline there has been a debate about the number of engineers being produced by the major economies of the United States, India and China.

Kanerjee *et al* (2007) suggest that while in a BPO proficiency in English language and computer literacy are good starters, KPOs need specialized qualifications, more differentiated talent and an understanding of the client's functioning and industry segment. Moreover training new recruits to the desired level doesn't prove to be effective in terms of both time and costs involved. Another report by Evalueserve identifies decreasing supply-demand ratio, reducing cost arbitrage, rising attrition, gaps in skill-sets as important HR challenges in the information technology enabled services (ITES) sector. It observes that the demand-supply gap in the industry is compelling companies to hire undergraduates. The percentage of students opting for higher studies is already very low in India and the metamorphosis of college dropouts

into BPO coolies for the lure of easy money threatens to magnify into non-availability of qualified manpower 5 to 10 years hence (Evalueserve, 2005a).

2.4.2 Organization-Related Challenges

Service providers who form the major backbone of business process sourcing are faced with key challenges, ranging from; organizing and designing the work, facilitating employee transitions, managing performance, managing turnover and legal obligations (Lankford and Parsa, 2009). Another internal risk relates to the ability of management to manage KPO vendors in a remote location. Many managers are comfortable managing their own resources on an ad-hoc basis and usually lack a formal process that documents every decision made based on an analysis or specific parameters. Quality and performance metrics are usually non-existent and evaluated through a form-performance measurement process at the department or individual level. Managers will need to learn how to manage outsourced resources based on specific performance metrics and less subjective results.

In some cases, the outsourcing effort exposes inefficiencies and weak areas in the process and a decision needs to be made to outsource the process as is or to optimize it before outsourcing. Companies need to decide if the process or knowledge area needs to be optimized before outsourcing. Some organizations decide against outsourcing after improving their processes, since KPO vendors are not able to match the cost savings from the new improved process. Technology can also present some risks, including those related to the lack of sound networking, software applications and security infrastructure. The information technology department must be involved from the beginning to ensure the infrastructure, applications and data are in place and

well protected, and that the KPO vendor is using the data and applications as was contractually agreed (Batt, 2010).

Loss of control over the outsourced activity is also considered one of the most commonly cited inhibitors to outsourcing. Aligning employee behaviours with the organization's objectives often is facilitated by a performance-management process. In the outsourcing environment, it is impractical to apply the traditional performance-management process (Mayer and Nickerson, 2003).

Outsourcing could lead to communication problems with transferred employees. For example, before transfer staff have access to broadcast company e-mail informing them of new products, procedures etc. Once in the outsourcing organization the same access may not be available. Also to reduce costs, some outsource employees may not have access to e-mail, but any information which is new is delivered in team meetings. The physical location of the KPO vendor creates risk associated with the economic and political environment of the country where the KPO vendor is situated. Companies that outsourced to India found their operations affected by the recent terrorist attacks targeting U.S. and British workers. Several studies have been prepared by KPO consulting companies ranking countries for outsourced operations (Motari 2002). Those countries with higher political stability, language, time zone and culture alignment rank higher in the lists. Unlike in back-office processes, such as call centers or transaction processing, where large-scale operations numbering in many thousands of people are the norm, KPO will not command large-scale operations. KPO will therefore not be able to achieve the economies of scale enjoyed by IT or business process outsourcing.

2.4.3 Information Communications and Technology (ICT) Infrastructure

With the ever growing interest for outsourcing, organizations should have closer collaboration with their partners and their success depends on successful interaction of various teams and stakeholders based in different locations. Information and knowledge transferring and sharing without direct interaction among the concerned participants are necessary to have a successful partner's cooperation (Seshasai *et al.*, 2004). On one hand, knowledge sharing beyond one's organizational boundary in an extended network of participants will be inevitable. On the other hand, versus of organization's resistance to keep core competencies and their own knowledge, there are many retaining, utilizing and creating knowledge problems arising from extending the scope of outsourcing in firms (Zhao *et al.*, 2004).

The risk of loss of strategic information coupled with the threat of opportunistic behavior by another partners is a strategic challenge of outsourcing. The resource-based theory of the firm holds that, in order to generate sustainable competitive advantage, a resource must provide economic value and must be presently scarce, difficult to imitate, non-substitutable, and not readily obtainable in factor markets. Knowledge is an intangible resource for organization that could be as a strategic resource. Therefore, it is necessary using an intelligent KM system to manage the firm's knowledge as a strategic resource versus the threat of loss of strategic information (Gottschalk, 2005).

Bandyopadhyay and Pathak (2007) have investigated the effects of knowledge issues in success of outsourcing projects. They have argued that when a firm outsources in order to benefit from a set of complementary skills, the firm's management will have to be involved not only in the negotiation of the outsourcing contract, but also in

methods of operation and interaction between the two firms. Since the employees of the two firms would probably be mutually antipathetic, the management would have to establish the rules, forcing people to share each other's knowledge. They point out that firms outsourcing their knowledge-based processes for a quick return on investment might be in for a rude shock.

2.5 Knowledge Process Outsourcing and Organizational Performance

While the main benefits of BPO are improved efficiency and cost reduction, the main benefits of KPO are less tangible. Some companies can experience increased revenue and improved competitive advantages as a result of having access to a large pool of skilled professionals in knowledge intensive industries. However, cost still remains a significant benefit, since a skilled workforce abroad costs a fraction of what it would cost at home. Another benefit of KPO is converting fixed costs into variable costs, providing flexibility for companies to add or reduce personnel based on business cycles. Another attractive benefit is the continuous execution of work by taking advantage of different time zones (Zachariahs and Pandya, 2005a). As an example, a financial institution may request research on a specific equity one morning and have the off-shore vendor perform the service overnight to have it available the next business day.

Client organizations participating in the outsourcing marketplace have achieved sporadic success and realized that success at obtaining sustainable value from an outsourcing arrangement requires a thorough understanding (of the outsourced process/function) (Aron *et al,* 2005) and considerable governance related effort (in terms of monitoring and performance evaluation) (Mani *et al*. 2006). This realization also brought a services orientation to outsourcing in contrast to a task orientation (Lee

et al, 2003). As the practice of outsourcing evolves from standard, non-core functions and processes (e.g. infrastructure, payroll) to more complex and multidimensional processes, governance of such outsourced processes are bound to become exponentially complicated.

Knowledge Process Outsourcing can provide cost savings and process efficiencies and allow companies to focus on increasing revenue growth. KPO can also provide challenging and progressive positions for employees that want to move into supervisory and monitoring roles. At the same time KPO offers a great opportunity to outsource analytical-intense processes that contribute to the development of new products, evaluate new markets and offer new services. But KPO should not be considered as the only option. Companies must be able to look within their organizations and apply all their management know-how to find better, more innovative ways of doing business before outsourcing a knowledge function. The probability of failure is high due to the risks involved and a structured approach and program management should be used to execute this type of strategy. KPO is here to stay and organizations will succeed if the KPO strategy is used to augment their services and performance, and not just to cut costs (Clark, 2001).

2.6 Conceptual Framework

A conceptual framework can be defined as a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation (Reichel and Ramey, 1987). A conceptual framework is a research tool intended to assist a researcher to develop awareness and understanding of the situation under scrutiny and to communicate this. A conceptual framework is used in research to outline possible courses of action or to present a preferred approach to an idea or

thought. According to Bogdan and Biklen (2003) a conceptual Framework is a basic structure that consists of certain abstract blocks which represent the observational, the experiential and the analytical/ synthetical aspects of a process or system being conceived. The interconnection of these blocks completes the framework for certain expected outcomes.

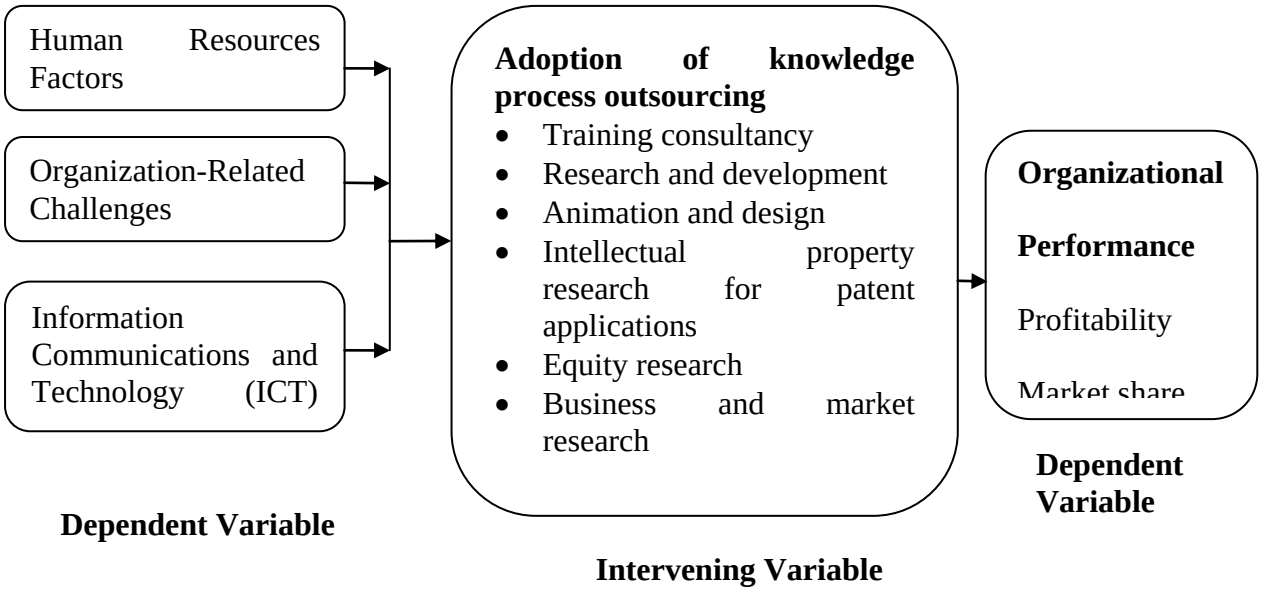

Figure 2. 1: Conceptual Framework

2.7 Summary

Most of the available literature on the subject is non-academic in nature based on observations/viewpoints of experts, vendor propositions obtained through newspapers, magazines, conference presentations, industry reports and websites. Moreover, literature available through different websites is mostly repetitive and conceptual and based on the collection of reports and whitepapers available on the websites of pioneers in KPO and a few consulting firms generating these reports.

From the above discussion it becomes sufficiently evident that an exhaustive search did not throw up any studies that examined exactly similar research objectives, used a

similar methodology and answered similar questions relating to each aspect covered or catered to similar number of KPOs in the geographical regions covered. Hence assuming no prior study has completely ventured into the area, the purpose of literature review has been to position the research topic in relation to sparse existing knowledge. The current research attempts to contribute to the nascent body of literature on factors affecting adoption of knowledge process outsourcing in the context of commercial banks and will possibly try to plug the gaps that exist.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter highlights the research design, the study variables, the study area, the study population, sampling techniques and sample size determination, construction of research instruments, pilot study, validity and reliability of the instruments, methods of data collection and data analysis.

3.2 Research Design

The research study adopted a descriptive research design. The method was chosen since it is more precise and accurate since it involves description of events in a carefully planned way (Babbie, 2004). This research design also portrays the characteristics of a population fully (Chandran, 2004). The research design was both quantitative and qualitative with the aim of determining the relationship between the factors of KPO adoption (independent variables) and organizational Performance (dependent variables).

3.3 Study Population

The target population for this study included the 44 commercial banks operating in Nairobi as at December 2014. The study adopted a census approach collecting data from all the operations managers in commercial banks in Nairobi since the population is not big.

3.4 Data Collection

The researcher used a questionnaire as the primary data collection instrument. According to Kothari (2004), a self-administered questionnaire is the only way to

elicit self-report on people's opinion, attitudes, beliefs and values. The questionnaire was divided into sections representing the various variables adopted for study. Each section of the chosen study included closed structured and open ended questions which sought the views, opinion, and attitude from the respondent which might not have been captured by the researcher. The questions were designed to collect qualitative and quantitative data. The open ended questionnaires gave unrestricted freedom of answer to respondents. The questionnaire was administered through drop and pick method to the operations managers in each bank. The researcher used assistants to distribute by hand the questionnaires to be completed by the selected respondents. Upon completion, the research assistants collected the questionnaires and ensured high completion rate and return of the completed questionnaires.

Secondary data involved data that was collected from other past records that had been collected and tabulated through graphs, charts and reports. This type of data was collected from reference materials, which had key information and was helpful to this research study. Collection of secondary data was obtained through desk research, which was either be from internal or external sources. The external sources included publication press, newspapers, libraries, and various research related organizations.

3.5 Validity and Reliability Test

According to Somekh, and Cathy (2005), validity is the degree by which the sample of test items represents the content the test is designed to measure. Content validity which was employed by this study is a measure of the degree to which data collected using a particular instrument represents a specific domain or content of a particular concept. Mugenda and Mugenda (2003) contend that the usual procedure in assessing the content validity of a measure is to use a professional or expert in a particular field.

To establish the validity of the research instruments the researcher sought opinions of experts in the field of study especially the lecturers. This facilitated the necessary revision and modification of the research instrument thereby enhancing validity

Reliability is increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures. The researcher selected a pilot group of 15 individuals from the target population to test the reliability of the research instruments. In order to test the reliability of the instruments, internal consistency techniques were applied using Cronbach's Alpha. The alpha value ranges between 0 and 1 with reliability increasing with the increase in value. Coefficient of 0.6-0.7 is a commonly accepted rule of thumb that indicates acceptable reliability and 0.8 or higher indicated good reliability (Mugenda, 2008). The pilot data was not included in the actual study.

3.6 Data Analysis

This includes analysis of data to summarize the essential features and relationships of data in order to generalise from the analysis to determine patterns of behaviour and particular outcomes. The data collected from the field was assessed and comparison made so as to select the most accurate and quality information from the feedback given by various respondents. This involved assessing and evaluating the questionnaires and other sources of both primary and secondary data.

Descriptive statistics analysis was employed to analyze the first three objectives on the effect of the factors on adoption of KPO among commercial banks. The quantitative data was coded to enable the responses to be grouped into various categories. The organised data was interpreted in terms of averages and standard deviation using assistance of computer packages especially SPSS (version 21) to

communicate research findings. A factor analysis was also conducted to establish the weighting of the factors.

For the forth objective on the effect of KPO on performance of commercial banks, the study conducted a regression analysis to establish the relationship between the variables. Tables and other graphical presentations such as bar charts, histogram, grouped frequency distributions and pie charts as appropriate were used to present the study findings for ease of understanding.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter discusses the interpretation and presentation of the findings. This chapter presents analysis of the data to establish the knowledge process outsourcing and performance in Kenya's commercial banks. The chapter also provides the major findings and results of the study.

4.1.1 Response rate

This research study had a sample size of 44 respondents who were operational managers. Out of this sample size, 36 questionnaires were filled and returned to the researcher which represents a sample size of 81.8% response rate. The response rate was adequate for this analysis and conforms to Babbie (2002) stipulation that any response of 50% and above is adequate for analysis.

4.2 Demographic Information

4.2.1 Gender

From the findings, 80.6% of the respondents were male while 19.4% were female. We can therefore infer that there are more male than female in the management staff in key departments of the business process outsourcing companies operating in Nairobi, Kenya.This implies that the banks has more male in the operations management team than females which may have resulted from the recruitment processes.

Table 4. 1: Gender

	Frequency	Percent
Male	29	80.6
Female	7	19.4
Total	**36**	**100.0**

4.2.3 Age bracket

According to the findings, 55.6% of the respondents were aged between 30-35 years, 22.2% of the respondents were aged between 36-40 years, 13.9% of the respondents were aged between 26-30 years while 8.3% of the respondents were aged between 40-45 years. This show that most of the managers are middle aged since there is a high rate of employees turnover in the banks.

Table 4.2: Age bracket

	Frequency	Percent
26-30 years	8	22.2
30-35 years	20	55.6
36-40 years	5	13.9
40-45 years	3	8.3
Total	36	100.0

4.2.4 Total Working Experience in Respective Profession

From the findings, 52.8% of the findings indicated that they had a work experience of between 2-4 years, 25.0% of the findings indicated that they had a work experience of between 4-6 years, 13.9% of the findings indicated that they had a work experience of between 1-2 years while 8.3% of the findings indicated that they had a work

experience of between 6-10 years. This shows that most of the respondents were operational managers for the banks for 2-4 years as most usually get promoted or transferred to other departments.

Table 4. 3: Total Working Experience in Respective Profession

	Frequency	Percent
1-2 years	9	25.0
2-4 years	19	52.8
4-6 years	5	13.9
6-10 years	3	8.3
Total	**36**	**100**

4.2.2 Level of Education

According to the findings, 58.3% of the respondents indicated that they had a degree, 30.6% of the respondents indicated that they had a postgraduate while 11.1% of the respondents indicated that they had a diploma .We can therefore infer that majority of the management staff were graduates of higher institutions of learning and therefore were able to relate what outsourcing meant due to the level of their education.

Table 4.4: Level of education

	Frequency	**Percent**
Diploma	4	11.1
Degree	21	58.3
Postgraduate	11	30.6
Total	**36**	**100.0**

4.3 Human Resources Factors

4.3.1 Effect of human resources factors

According to the findings tabled below, 44.5% of the respondents indicated that human resources factors affect the adoption of KPO in their company to a great extent, 30.6% indicated to a moderate extent, 16.7% indicated to a low extent while 8.3% indicated to a very low extent. We can infer that human resources factors affect the adoption of KPO to a great extent.

	Frequency	**Percent**
Very great extent	2	5.6
Great extent	14	38.9
Moderate extent	11	30.6
Low extent	6	16.7
very Low extent	3	8.3
Total	**36**	**100**

4.3 2 Aspects of human resources factors

According to the findings, the respondents indicated that professionals required, kind of skills and qualities preferred and training to be provided affected the adoption of KPO to a very great extent as indicated by a mean of 4.83, 4.82 and 4.81 respectively. The respondents indicated that compensation offered, work schedules, environment prevalent naturally and competence affected the adoption of KPO to a very great extent as indicated by a mean of 3.90, 3.70, 3.60 and 3.54 respectively. This is in line with Tomar (2006) who argues that a major problem that has been noted in knowledge outsourcing is the problem of staffing by the service providers. KPO

requires people with higher education and/or specialized and differentiated knowledge and skills. The BPO industry is already facing significant challenges regarding availability of trained manpower, high attrition rates and rising salaries. Given the specialized requirements for KPO resources, these issues will be compounded for KPO firms as they try to scale up.

Table 4. 5: Human Resources Factors

	Mean	**Stdev**
Competence	3.54	1.393
Kind of skills and qualities preferred	4.82	1.425
Professionals required	4.83	1.343
Training to be provided	4.81	1.333
Compensation offered	3.90	1.315
Work schedules	3.70	.962
Environment prevalent naturally	3.60	1.202

4.4 Organization-Related Challenges

4.4.1 Effect of organization-related challenges

According to the findings tabled below, 50% of the respondents indicated that organization-related challenges affect the adoption of KPO in their company to a great extent, 22.2% indicated to a moderate extent, 16.7% indicated to a low extent while 11.1% indicated to a very low extent. We can infer that organization-related challenges affect the adoption of KPO to a great extent.

	Frequency	Percent
Very great extent	2	5.6
Great extent	16	44.4
Moderate extent	8	22.2
Low extent	4	11.1
very Low extent	6	16.7
Total	**36**	**100**

4.4.2 Aspects of organization-related challenges

According to the findings, the respondents indicated that facilitating employee transitions, legal obligations and organizing and designing the work affected the adoption of KPO to a very great extent as indicated by a mean of 4.56, 4.52 and 4.50 respectively. The respondents also indicated that managing turnover, managing performance, inadequate capabilities of service providers, loss of critical skills, loss of control over the outsourced activity and ability of management to manage KPO vendors in a remote location affected the adoption of KPO to a great extent as indicated by a mean of 4.14, 4.13, 3.90, 3.82, 3.72 and 3.50 respectively. This concurs with, Batt (2010) who argues that in some cases, the outsourcing effort exposes inefficiencies and weak areas in the process and a decision needs to be made to outsource the process as is or to optimize it before outsourcing. Companies need to decide if the process or knowledge area needs to be optimized before outsourcing. Some organizations decide against outsourcing after improving their processes, since KPO vendors are not able to match the cost savings from the new improved process. Technology can also present some risks, including those related to the lack of sound networking, software applications and security infrastructure. The information

technology department must be involved from the beginning to ensure the infrastructure, applications and data are in place and well protected, and that the KPO vendor is using the data and applications as was contractually agreed.

Table 4. 6: Organization-Related Challenges

	Mean	Stdev.
Organizing and designing the work	4.50	1.096
Facilitating employee transitions	4.56	1.062
Managing performance	4.13	1.193
Managing turnover	4.14	1.305
Legal obligations	4.52	1.142
Ability of management to manage KPO vendors in a remote location	3.50	1.014
Loss of control over the outsourced activity	3.72	1.425
Loss of critical skills	3.82	1.234
Inadequate capabilities of service providers	3.90	1.342

4.5 Information Communications and Technology (ICT) Infrastructure

4.5.1 Effect of information communications and technology (ICT) infrastructure

According to the findings tabled below, 50% of the respondents indicated that information communications and technology (ICT) infrastructure affect the adoption of KPO in their company to a great extent, 19.4% indicated to a moderate extent, 16.7% indicated to a low extent while 13.9% indicated to a very low extent. We can infer that information communications and technology (ICT) infrastructure affect the adoption of KPO to a great extent.

	Frequency	Percent
Very great extent	4	11.1
Great extent	14	38.9
Moderate extent	7	19.4
Low extent	5	13.9
very Low extent	6	16.7
Total	**36**	**100**

4.5.2 Aspects of information communications and technology (ICT) infrastructure

According to the findings, the respondents indicated that lack of involvement of the information technology department from the beginning, software applications, security infrastructure and lack of sound networking affected the adoption of KPO to a great extent as indicated by a mean of 3.91, 3.88, 3.78 and 3.68 respectively. This is in line with Gottschalk (2005) who argues that the risk of loss of strategic information coupled with the threat of opportunistic behavior by another partners is a strategic challenge of outsourcing. The resource-based theory of the firm holds that, in order to generate sustainable competitive advantage, a resource must provide economic value and must be presently scarce, difficult to imitate, non-substitutable, and not readily obtainable in factor markets. Knowledge is an intangible resource for organization that could be as a strategic resource. Therefore, it is necessary using an intelligent KM system to manage the firm's knowledge as a strategic resource versus the threat of loss of strategic information.

Table 4. 7: Aspects of information communications and technology (ICT) infrastructure

	Mean	Stdev
Lack of sound networking	3.68	1.040
Software applications	3.88	1.173
Security infrastructure	3.78	1.029
Lack of involvement of the information technology department from the beginning	3.91	1.22

4.6 Adoption of knowledge process outsourcing

According to the findings, the respondents indicated that to a great extent, the banks outsource research and development as illustrated by a mean score of 4.42, animation and design as illustrated by a mean score of 4.37, equity research as illustrated by a mean score of 4.16, business and market research as illustrated by a mean score of 4.07, training consultancy as illustrated by a mean score of 4.01 and intellectual property research for patent applications as illustrated by a mean score of 3.92.

Table 4. 8: Adoption of knowledge process outsourcing

	Mean	Stdev
Training consultancy	4.01	0.905
Research and development	4.42	1.021
Animation and design	4.37	0.895
Intellectual property research for patent applications	3.92	1.061
Equity research	4.16	1.057
Business and market research	4.07	1.091

4.7 Organizational Performance

Regarding the trend of various aspects of bank performance for the last five years, the study found that the banks had registered an improvement in market share as shown by a mean score of 4.27, customer base as shown by a mean score of 4.22, profitability as shown by a mean score of 4.16, assets growth as shown by a mean score of 4.10 and product diversification as shown by a mean score of 3.54. However, the number of staff have relatively remained constant as shown by a mean score of 3.48.

Table 4. 9: Trend of various aspects of bank performance for the last five years

Indicators	Mean	Stdev
Profitability	4.16	0.899
Customer base	4.22	0.871
Number of staff	3.48	0.978
Product diversification	3.54	1.070
Assets growth	4.10	0.936
Market share	4.27	0.737

4.8 Factor Analysis

Table 4. 10: Communalitiesof Factor Variance

	Initial	Extraction
Competence	1.000	.928
Kind of skills and qualities preferred	1.000	.933
Professionals required	1.000	.838
Training to be provided	1.000	.922
Compensation offered	1.000	.709
Work schedules	1.000	.635
Environment prevalent naturally	1.000	.795
Organizing and designing the work	1.000	.588
Facilitating employee transitions	1.000	.899
Managing performance	1.000	.824
Managing turnover	1.000	.807
Legal obligations	1.000	.918
Ability of management to manage KPO vendors in a remote location	1.000	.845
Loss of control over the outsourced activity	1.000	.790
Loss of critical skills	1.000	.868
Inadequate capabilities of service providers	1.000	.807
Lack of sound networking	1.000	.739
Software applications	1.000	.705
Security infrastructure	1.000	.763
Lack of involvement of the information technology department from the beginning	1.000	.659
Training consultancy	1.000	.622
Research and development	1.000	.735
Animation and design	1.000	.716
Intellectual property research for patent applications	1.000	.771
Equity research	1.000	.671
Business and market research	1.000	.547
Profitability	1.000	.688
Customer base	1.000	.584
Number of staff	1.000	.595
Product diversification	1.000	.760
Assets growth	1.000	.786
Market share	1.000	.812

Extraction Method: Principal Component Analysis.

The above table helps the researcher to estimate the communalities for each variance.

This is the proportion of variance that each item has in common with other factors. For example ‘Kind of skills and qualities preferred’ has 93.3% communality or shared relationship with other factors. This value has the greatest communality with others, while ‘Business and market research’ has the least communality with others of54.7%.

Table 4. 11: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.685	24.015	24.015	7.685	24.015	24.015
2	3.837	11.991	36.006	3.837	11.991	36.006
3	2.762	8.631	44.636	2.762	8.631	44.636
4	2.150	6.719	51.355	2.150	6.719	51.355
5	1.865	5.829	57.184	1.865	5.829	57.184
6	1.740	5.436	62.620	1.740	5.436	62.620
7	1.586	4.955	67.576	1.586	4.955	67.576
8	1.343	4.198	71.774	1.343	4.198	71.774
9	1.293	4.042	75.816	1.293	4.042	75.816
10	.995	3.109	78.925			
11	.908	2.837	81.762			
12	.800	2.500	84.262			
13	.686	2.143	86.404			
14	.582	1.820	88.224			
15	.565	1.765	89.989			
16	.496	1.549	91.538			
17	.445	1.390	92.928			
18	.374	1.169	94.097			
19	.355	1.111	95.208			
20	.290	.908	96.115			
21	.248	.774	96.890			
22	.186	.580	97.470			
23	.165	.514	97.984			
24	.147	.458	98.442			
25	.105	.327	98.769			
26	.098	.306	99.075			
27	.076	.239	99.314			
28	.068	.213	99.526			
29	.056	.177	99.703			
30	.041	.129	99.832			
31	.034	.108	99.939			
32	.019	.061	100.000			

Extraction Method: Principal Component Analysis.

In the above table, the researcher used Kaiser Normalization Criterion, which allows for the extraction of components that have an Eigen value greater than 1. The principal component analysis was used and 9 factors were extracted. As the table shows, these nine factors explain 75.816% of the total variation. Factor 1 contributed the highest variation of 24.015%. The contributions decrease as one move from one factor to the other up to factor 9.

Table 4. 12: Component Matrix

	Component								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Competence	.488	.638	.416	.053	.091	.186	.019	.232	.101
Kind of skills and qualities preferred	.413	.761	.365	.137	.056	.080	.119	.081	.023
Professionals required	.552	.377	.526	.237	.136	.069	.138	.020	.127
Training to be provided	.437	.710	.425	.026	.143	.106	.041	.104	.033
Compensation offered	.023	.542	.486	.009	.345	.049	.002	.092	.222
Work schedules	.447	.141	.176	.034	.438	.055	.197	.195	.333
Environment prevalent naturally	.636	.044	.213	.024	.191	.376	.345	.140	.162
Organizing and designing the work	.561	.039	.223	.207	.077	.369	.098	.142	.086
Facilitating employee transitions	.779	.086	.006	.314	.063	.363	.169	.112	.091
Managing performance	.719	.025	.038	.328	.180	.231	.194	.129	.240
Managing turnover	.733	.174	.001	.145	.021	.359	.078	.249	.142
Legal obligations	.801	.089	.284	.022	.092	.033	.334	.167	.196
Ability of management to manage KPO vendors in a remote location	.763	.098	.339	.112	.013	.246	.047	.232	.099
Loss of control over the outsourced activity	.666	.052	.398	.371	.009	.023	.061	.167	.128
Loss of critical skills	.669	.255	.217	.112	.361	.218	.030	.305	.158
Inadequate capabilities of service providers	.202	.043	.230	.346	.356	.612	.264	.103	.104
Lack of sound networking	.424	.178	.127	.353	.221	.372	.112	.336	.270
Software applications	.507	.347	.003	.242	.387	.218	.108	.237	.066
Security infrastructure	.095	.415	.398	.515	.244	.028	.171	.168	.201
Lack of involvement of the information technology department from the beginning	.136	.242	.167	.255	.392	.068	.459	.296	.179
Training consultancy	.550	.057	.068	.442	.197	.027	.045	.051	.268
Research and development	.203	.266	.186	.027	.349	.334	.113	.307	.497
Animation and design	.255	.210	.252	.206	.078	.209	.654	.062	.139
Intellectual property research for patent applications	.251	.462	.002	.525	.323	.092	.206	.230	.104
Equity research	.259	.235	.461	.204	.373	.025	.247	.251	.176
Business and market research	.183	.104	.301	.440	.350	.099	.137	.214	.145
Profitability	.199	.165	.448	.351	.119	.020	.382	.256	.268
Customer base	.442	.236	.341	.221	.247	.137	.034	.063	.287
Number of staff	.236	.311	.460	.060	.063	.157	.296	.240	.230
Product diversification	.523	.466	.138	.164	.276	.227	.008	.304	.059
Assets growth	.319	.497	.118	.210	.239	.369	.139	.245	.326
Market share	.585	.581	.101	.085	.021	.071	.197	.232	.130

Extraction Method: Principal Component Analysis.
a. 9 components extracted.

The initial component matrix was rotated using Varimax (Variance Maximization) with Kaiser Normalization. The above results allowed the researcher to identify what variables fall under each of the 9 major extracted factors. Each of the 32 variables was looked at and placed to one of the nine factors depending on the percentage of variability; it explained the total variability of each factor. A variable is said to belong to a factor to which it explains more variation than any other factor.

Factor 1: Organization-Related Challenges

Organizing and designing the work

Facilitating employee transitions

Managing performance

Managing turnover

Legal obligations

Ability of management to manage KPO vendors in a remote location

Loss of control over the outsourced activity

Loss of critical skills

Inadequate capabilities of service providers

Factor 2: Human Resources Factors

Competence

Kind of skills and qualities preferred

Professionals required

Training to be provided

Compensation offered

Work schedules

Environment prevalent naturally

Factor 3: Information Communications and Technology (ICT) Infrastructure

Lack of sound networking

Software applications

Security infrastructure

Lack of involvement of the information technology department from the beginning

Factor 4: Adoption of knowledge process outsourcing

Training consultancy

Research and development

Animation and design

Intellectual property research for patent applications

Equity research

Business and market research

Factor 5: Performance

Profitability

Customer base

Number of staff

Product diversification

Assets growth

Market share

4.9 Regression Analysis

In this study, a multiple regression analysis was conducted to test the influence among predictor variables. The research used statistical package for social sciences (SPSS V 21.0) to code, enter and compute the measurements of the multiple regressions.

Table 4.13: **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.863[a]	0.746	.708	.1076

a. Predictors: (Constant), Human resource factors, organization related challenges, ICT

R-Square (coefficient of determination) is a commonly used statistic to evaluate model fit. R-square is 1 minus the ratio of residual variability. The adjusted $R^{2,}$ also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent variables. 74.6% of the changes in bank performance could be attributed to the combined effect of the predictor variables.

Table 4.14: ANOVA (Analysis of Variance)

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	821.593	6	205.398	13.97	.001[a]
Residual	324.723	29	1.6568		
Total	1146.316	35			

a. Predictors: (Constant), Human resource factors, organization related challenges, ICT
b. Dependent Variable: performance of commercial banks

The ANOVA table shows that the residual sum of squares (the sum of squared deviations from the least squares line) is 324.723, while the total sum of squares (the sum of squared deviations from the mean) is 1146.316. The probability value of 0.001 indicates that the regression relationship was highly significant in predicting how the various aspects of KPO affect bank performance. The F calculated at 5% level of significance was 3.671 since F calculated is greater than the F critical (value = 13.97), this shows that the overall model was significant.

Table 4. 15: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	**Std. Error**	**Beta**	**t**	**Sig.**
1	(Constant)	1.492	0.298		4.218	0.044
	Training consultancy	0.617	0.178	0.326	5.374	0.032
	Research and development	0.702	0.171	0.421	4.963	0.027
	Animation and design	0.596	0.563	0.123	3.916	0.038
	Intellectual property research for patent applications	0.483	0.073	0.384	4.115	0.019
	Equity research	0.573	0.265	0.283	3.386	0.022
	Business and market research	0.742	0.273	0.270	2.904	0.019

a. Dependent Variable: performance of commercial banks

As per the SPSS generated table above, the equation ($\mathbf{Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon}$) becomes:

$Y = 1.492 + 0.617X_1 + 0.702X_2 + 0.596X_3 + 0.483X_4 + 0.573X_5 + 0.742X_6$

The regression equation above has established that taking all factors into account (training consultancy, research and development, animation and design, intellectual property research for patent applications, equity research and business and market research) constant at zero performance of commercial banks will be 1.492. The findings presented also show that taking all other independent variables at zero, a unit increase in the training consultancy would lead to a 0.617 increase in the scores of performance of commercial banks and a unit increase in the scores of research and development would lead to a 0.702 increase in the scores of performance of commercial banks. Further, the findings shows that a unit increases in the scores of animation and design would lead to a 0.596 increase in the scores of co performance of commercial banks. The study also found that a unit increase in the scores of intellectual property research for patent applications would lead to a 0.483 increase in the scores of performance of commercial banks. The findings presented further show that taking all other independent variables at zero, a unit increase in the equity research would lead to a 0.573 increase in the scores of performance of commercial banks and a unit increase in the scores of business and market research would lead to a 0.742 increase in the scores of performance of commercial banks.

Overall, business and market research had the greatest effect on the performance of commercial banks, followed by research and development, then training consultancy, animation and design and equity research in that order while intellectual property

research for patent applications had the least effect to the performance of commercial banks. All the variables were significant ($p<0.05$).

4.10 Discussion

4.10.1 Human Resources Factors

This study found that there is a linear relationship between human resources factors and adoption of knowledge process outsourcing. The study revealed that professionals required, kind of skills ,compensation offered, work schedules, environment prevalent naturally and competence and qualities preferred and training to be provided affected the adoption of KPO to a very great extent. This is in line with Tomar (2006) who argues that a major problem that has been noted in knowledge outsourcing is the problem of staffing by the service providers. KPO requires people with higher education and/or specialized and differentiated knowledge and skills. The BPO industry is already facing significant challenges regarding availability of trained manpower, high attrition rates and rising salaries. Given the specialized requirements for KPO resources, these issues will be compounded for KPO firms as they try to scale up.

4.10.2 Organization related challenges

This study also found that there is a linear relationship between organization related challenges and adoption of knowledge process outsourcing. The study revealed that facilitating employee transitions, legal obligations and organizing, managing turnover, managing performance, inadequate capabilities of service providers, loss of critical skills, loss of control over the outsourced activity ,ability of management to manage KPO vendors in a remote location and designing the work affected the adoption of KPO .This concurs with, Batt (2010) who argues that in some cases, the outsourcing

effort exposes inefficiencies and weak areas in the process and a decision needs to be made to outsource the process as is or to optimize it before outsourcing. Companies need to decide if the process or knowledge area needs to be optimized before outsourcing. Some organizations decide against outsourcing after improving their processes, since KPO vendors are not able to match the cost savings from the new improved process. Technology can also present some risks, including those related to the lack of sound networking, software applications and security infrastructure. The information technology department must be involved from the beginning to ensure the infrastructure, applications and data are in place and well protected, and that the KPO vendor is using the data and applications as was contractually agreed.

4.10.3 Information Communications and Technology (ICT) Infrastructure

This study deduced that there is a linear relationship between ICT and adoption of knowledge process outsourcing. The study revealed that lack of involvement of the information technology department from the beginning, software applications, security infrastructure and lack of sound networking affected the adoption of KPO.This is in line with Gottschalk (2005) who argues that the risk of loss of strategic information coupled with the threat of opportunistic behavior by another partners is a strategic challenge of outsourcing. The resource-based theory of the firm holds that, in order to generate sustainable competitive advantage, a resource must provide economic value and must be presently scarce, difficult to imitate, non-substitutable, and not readily obtainable in factor markets. Knowledge is an intangible resource for organization that could be as a strategic resource. Therefore, it is necessary using an intelligent KM system to manage the firm's knowledge as a strategic resource versus the threat of loss of strategic information.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of key data findings, discussion of the findings, conclusion drawn from the findings highlighted and recommendation made there-to. The conclusions and recommendations drawn were focused on addressing the purpose of this study which was to establish the effect of knowledge process outsourcing on performance in Kenya's commercial banks.

5.2 Summary

This study found that there is a linear relationship between human resources factors and adoption of knowledge process outsourcing. The study revealed that professionals required, kind of skills ,compensation offered, work schedules, environment prevalent naturally and competence and qualities preferred and training to be provided affected the adoption of KPO to a very great extent.

This study also found that there is a linear relationship between organization related challenges and adoption of knowledge process outsourcing. The study revealed that facilitating employee transitions, legal obligations and organizing, managing turnover, managing performance, inadequate capabilities of service providers, loss of critical skills, loss of control over the outsourced activity ,ability of management to manage KPO vendors in a remote location and designing the work affected the adoption of KPO .

This study deduced that there is a linear relationship between ICT and adoption of knowledge process outsourcing. The study revealed that lack of involvement of the

information technology department from the beginning, software applications, security infrastructure and lack of sound networking affected the adoption of KPO.

This study revealed that to a great extent, the banks outsource research and development, animation and design, equity research, business and market research, training consultancy and intellectual property research for patent applications. Further, for the last five years, the banks had registered an improvement in market share, customer base, profitability, assets growth and product diversification.

Regarding the effect of KPO on performance of commercial banks, the study deduced that74.6% of the changes in bank performance could be attributed to the combined effect of the predictor variables. The findings presented also show that taking all other independent variables at zero, a unit increase in the training consultancy would lead to a 0.617 increase in the scores of performance of commercial banks and a unit increase in the scores of research and development would lead to a 0.702 increase in the scores of performance of commercial banks. Further, the findings shows that a unit increases in the scores of animation and design would lead to a 0.596 increase in the scores of co performance of commercial banks. The study also found that a unit increase in the scores of intellectual property research for patent applications would lead to a 0.483 increase in the scores of performance of commercial banks. The findings presented further show that taking all other independent variables at zero, a unit increase in the equity research would lead to a 0.573 increase in the scores of performance of commercial banks and a unit increase in the scores of business and market research would lead to a 0.742 increase in the scores of performance of commercial banks.

5.3 Conclusions

This study concludes that there is a linear relationship between human resources factors and adoption of knowledge process outsourcing. This is to mean that the increasingly visible landscape of KPO is opening up a world of opportunities for human resources of varied backgrounds in diverse fields, the fulcrum therefore for the growth and success of this eclectic sector rests on the human resource factor.

This study also concludes that there is a linear relationship between organizations related challenges and adoption of knowledge process outsourcing. Service providers who form the major backbone of business process sourcing are faced with key challenges, ranging from; organizing and designing the work, facilitating employee transitions, managing performance, managing turnover and legal obligations.

This study deduced that there is a linear relationship between ICT and adoption of knowledge process outsourcing. Information and knowledge transferring and sharing without direct interaction among the concerned participants are necessary to have a successful partner's cooperation.

This study finally concludes that business and market research had the greatest effect on the performance of commercial banks, followed by research and development, then training consultancy, animation and design and equity research in that order while intellectual property research for patent applications had the least effect to the performance of commercial banks.

5.4 Recommendations of the Study

From the findings and conclusion, the study recommends that it is necessary using an intelligent KM system to manage the firm's knowledge as a strategic resource versus the threat of loss of strategic information.

The study also recommends that the firm's management need to be involved not only in the negotiation of the outsourcing contract, but also in methods of operation and interaction of the firms involved. Managers need to learn how to manage outsourced resources based on specific performance metrics and less subjective results.

In some cases, the outsourcing effort exposes inefficiencies and weak areas in the process and a decision needs to be made to outsource the process as is or to optimize it before outsourcing. Banks need to decide if the process or knowledge area needs to be optimized before outsourcing. When a company decides to outsource provision of a service, it must determine how risk should be allocated between parties to the contract meaning the principal and the agent.

5.5 Limitations of the Study

The researcher encountered many limitations while conducting the research. One of them came when collecting the data. The respondents were supposed to be the management staff at the Kenya's commercial banks. These are senior employees who generally have very busy schedules. This made it difficult for the researcher to get the questionnaires to be filled in time and which finally resulted in some questionnaires not being returned regardless of the fact that the number of respondents was small. The researcher however made several visits and communicated through e-mail to contact persons to get favourable responses.

Another limitation is that the respondents were reluctant in giving some information about the Kenya's commercial banks which they viewed being confidential. The researcher however reassured the respondents that information obtained from them would be used for the purposes of the study only. The researcher also obtained a letter from the university as evidence.

5.6 Suggestions for Further Studies

From the study and related conclusions, the researcher recommends that a study should be carried out to establish the effects of knowledge issues in success of outsourcing projects. A study should also be carried out to find out the challenges facing knowledge process outsourcing among other companies other than commercial banks.

REFERENCES

Agarwal, A. (2004). Moving towards KPO. *The Economic Times*, 15 November, p.4.

Aron, R and Singh, J. V (2005). Getting offshore right. *Harvard Business Review, 7(4), 135-143.*

Babbie, E. (2002). *Survey research methods* (2nd ed.). Belmont: Wodsworth.

Barnes, P.C. (2005). Outsourcing: a review of trends and some management issues. *Management Services*, 49(4) Winter, pp. 42-44.

Barnes, P.C. (2012). Outsourcing: a review of trends and some management issues. *Management Services*, 49(4) Winter, pp. 42-44.

Batt, R. (2010). Strategic segmentation in front-line services: matching customers, employees and human resource systems. *International Journal of Human Resource Management*, 11, pp. 540-561.

Beaumont, N. and Sohal, A. (2011). Outsourcing in Australia. *International Journal of operations and production Management*, 24(7), 688-700.

Chandran, E. (2004). Research Methods. Nairobi: Starbright services limited.

Clark, A.E. (2001). What really matters in a job? hedonic measurement using quit data. *Labour Economics*, 8, pp. 223-242.

Currie, W. L. (2008). Knowledge process outsourcing in financial services: the vendor perspective. *European Management Journal*, 26(2), pp. 94-104.

Evalueserve, (2005a). *Human Resource Challenges: Reducing India's Competitive Edge in ITES Offshoring*?, Evalueserve, Available from: <http://www.evalueserve.com /Media-And-Reports.asp#> [Accessed 24 June 2008].

Gottschalk, P. (2005). *Strategic Knowledge Management Technology*, Idea Group Publishing, Hershey, PA, pp.43-86.

Karnik, K. (2005). Knowledge for competitive advantage. *The Economic Times*, 5 May, p. 2. Page | 93

Kothari, C.R. (2004). *Research Methodology: methods and techniques*. 2nd New Delhi: New Age.

Kotler, P. (2003). *Marketing Management*. 11th Edition Thomson press (I) ltd.

Lankford ,W. M. And Parsa, F. (1999). Outsourcing: a primer. *Management Decision***,** 37(4), 310-316.

Makhija, K. (2005). The knowledge processors. *Express Computer – Technology life*, 16(23) 27th December, pp. 29-30

Makhija, K. (2005). The knowledge processors. *Express Computer – Technology life*, 16(23) 27th December, pp. 29-30

Mani, D., Barua, A., and Whinston, A.B. (2006). Successfully Governing Business Process Outsourcing Relationships, *MIS Quarterly Executive* (5:1), pp 15-29.

Motari ,F.M. (2002). *Outsourcing of Logistics: the Practices of medium and large manufacturing firms*. Unpublished MBA project. Nairobi: University of Nairobi.

Mugenda, M., O., & Mugenda, G., A. (2003). *Research Methods.* Nairobi: Acts Press.

Ngechu, M. (2004). Understanding the research process and methods. An introduction to research methods. Nairobi: Acts Press.

Saunders, M., Phillip, L., & Thornhill, A. (2007). *Research methods for business students.* Harlow, England: Prentice Hall.

Taylor, S. and Tyler, M. (2009). Emotional labour and sexual difference in the airline industry. *Work, Employment and Society*, 14(1), pp. 77-95.

Tomar, L. (2006). Case study-Providing KPO services to a global investment bank. *Presented at KPO meet Outsourcing Ventures*, 14-15 September, Pune, India.

Wickramasinghe, V. and Kumara,S. (2009). Differential effects of competency due to BPO and KPO industry differences in ITES sector in Sri Lanka, *Career Development International*, 14 (2), pp. 169-185.

Wright, P. (2011). The impact of HR practices on the performance of business units. *Human Resource Management Journal*, 13(3), pp. 21-36.

Wright, P. (2011). The impact of HR practices on the performance of business units. *Human Resource Management Journal*, 13(3), pp. 21-36.

Zikmund, W. G. (2003). Business Research Methods, 7th Ed. United Kingdom: Thomson South Western.

APPENDICES

Appendix I: Research Questionnaire

Kindly answer the following questions by writing a brief answer or ticking in the boxes provided.

SECTION I: GENERAL INFORMATION

1) Gender Male [ ] Female [ ]

2) Age

Below 20years [ ] 21-25 years [ ] 26- 30yrs [ ]

30-35 yrs [ ] 36- 40 years [ ] 40- 50 years [ ]

Above 50 years [ ]

3) What is your total working experience in your respective profession? (Tick as applicable)

Below One Yr [ ] 1- 2 Yrs [ ] 2-4 Yrs [ ]

4-6 Yrs [ ] 6- 10 Yrs [ ] 10 -15 Yrs [ ]

Above 15 Yrs [ ]

4) Level of education

Certificate [ ] Diploma [ ]

Bachelors Degree [ ] Post graduate [ ]

SECTION I1: MAIN ISSUES

Human Resources Factors

5) To what extent do you think human resources factors affect the adoption of KPO in your company?

Very great extent [5] Moderate extent [3] Very low extent [1]

Great extent [4] Low extent [2]

6) What is the extent to which the following aspects affect the adoption of KPO in your company?

	Very great extent	Great extent	Moderate extent	Low extent	Very low extent
Competence					
Kind of skills and qualities preferred					
Professionals required					
Training to be provided					
Compensation offered					
Work schedules					
Environment prevalent naturally					

Organization-Related Challenges

7) To what extent do you think organization-related challenges affect the adoption of KPO in your company?

Very great extent [5] Moderate extent [3] Very low extent [1]

Great extent [4] Low extent [2]

8) What is the extent to which the following affect the adoption of KPO in your company?

	Very great extent	Great extent	Moderate extent	Low extent	Very low extent
Organizing and designing the work					
Facilitating employee transitions					
Managing performance					
Managing turnover					
Legal obligations					
Ability of management to manage KPO vendors in a remote location					
Loss of control over the outsourced activity					
Loss of critical skills					
Inadequate capabilities of service providers					

Information Communications and Technology (ICT) Infrastructure

9) To what extent do you think information communications and technology (ICT) infrastructure affect the adoption of KPO in your company?

Very great extent [5] Moderate extent [3] Very low extent [1]

Great extent [4] Low extent [2]

10) What is the extent to which the following affect the adoption of KPO in your company?

	Very great extent	Great extent	Moderate extent	Low extent	Very low extent
Lack of sound networking					
Software applications					
Security infrastructure					
Lack of involvement of the information technology department from the beginning					

Adoption of knowledge process outsourcing

11) To what extent do you outsource the following in your company?

	Very great extent	Great extent	Moderate extent	Low extent	Very low extent
Training consultancy					
Research and development					

Animation and design					
Intellectual property research for patent applications					
Equity research					
Business and market research					

Performance

12) What has been the trend of the following in your company for the last five years?

Indicators	**Greatly Improved**	**Improved**	**Constant**	**Decreasing**	**Greatly decreased**
Profitability					
Customer base					
Number of staff					
Product diversification					
Assets growth					
Market share					

END

THANK YOU