

**OUTSOURCING STRATEGIES ADOPTED BY
TELECOMMUNICATION VENDOR COMPANIES IN KENYA**

BY

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DECLARATION

This research project is my original work and has not been submitted for examination in any other university.

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This research project has been submitted for examination with my approval as the university supervisor.

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DEDICATION

I dedicate this project to my beloved husband Hillary Kiptoo, for the invaluable support, love and encouragement.

ABSTRACT

The rise in globalization has compelled companies to become more competitive. Outsourcing the non core business processes has become a major source of competitive advantage lately. Companies finding an edge in competitiveness are going for outsourcing. This research is aimed at studying the outsourcing strategies that have been adopted by various equipment vendor companies in the telecommunication industry in Kenya. To achieve the research purpose, five telecommunication equipment Vendor companies were selected for the study. Research questionnaires were sent to 30 employees in these organizations of which 26 responded leading to 87% response rate. The study found out that all the telecommunication vendor companies outsourced work. Outsourcing non core activities was the major reason for outsourcing. Outsourcing partners were found to be both local companies and others out of the country. It was found that the choice for formulating the strategy for outsourcing and selection of outsourcing partner is a challenging task and needs to be molded to the situation of the company. While outsourcing is a way to be cost effective and to maximize business performance, it also presents new management challenges such as continuous competency improvement. Lastly, the participating companies were all in full agreement regarding the benefits that outsourcing gave their productivity and overall business operations.

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ABBREVIATIONS

LTE	Long Term Evolution
CCK	Communications Commission of Kenya
KP&TC	Kenya Post and Telecommunications Corporation
GSM	Global System for Mobile Communication
3G	Third Generation
IT	Information Technology
ICT	Information Communication Technology
OEM	Original Equipment Manufacture
GNOC	Global Network Operation Center

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Increased expenditures and the growing number of players in the telecommunication industry has created many challenges to the telecommunication operators and hence the vendors - companies that manufacture and sell equipment which make the transmission of data and communication physically possible. Majority of people now own at least a mobile phone and the telecommunication operators, also known as mobile communication service/network providers which are companies that provide the telecommunication service that allows people to communicate by using their mobile telephone handsets, are competing amongst each other to offer better services at a lower price.

Most of the operators are aggressively striving to increase the revenue of their organizations. Operators are facing all kinds of external forces of increasing expenses resulting from increased employee salary, lower switching costs for the subscriber from one operator to another operator among other factors. In order to stand out from the competition and to have above average earning, mobile operators are looking for all possible ways to reduce their expenses.

One of the biggest costs for mobile operators is the mobile network expenses such as maintenance and transmission costs that typically make up 15% to 20% of operators' total operating expenses in mature markets (Jethro and Gustav, 2009). (Jethro and Gustav, 2009) adds that savings in these costs could translate into a one-to-three percentage-point improvement in the earnings before interest, tax, depreciation and amortization, or EBITDA for operators. In the best tradition of the value chain, any pain felt by the operators will undoubtedly get passed down the line to the vendor community. The telecommunication operators have had to introduce strategies of reducing their expenses. The telecommunication vendors are as well forced to find ways of reducing their cost so as to meet their customer, the operators', needs. Various organization strategies in reducing the expenses are introduced along the way. The most common one is outsourcing. Outsourcing is to engage with a third party in performing certain internal recurring function or operation of the company with having a contract in place.

1.1.1 Concept of Strategy

Strategy is a term that comes from the Greek word *strategia*, meaning "generalship." A strategy or general plan of action might be formulated for broad, long-term, corporate goals and objectives, for more specific business unit goals and objectives, or for a functional unit, even one as small as a cost center. Strategy sets the direction in which a firm wants to go. The leadership of every firm has to develop a strategy rooted in the

realities of the market and communicate it throughout the firm. Strategy calls for the formulation of a perspective on the market and the firm's position within it, taking into account its size, skills and market environment. Good strategy is a framework of ideas, developed by the leadership, which sets a course that the leadership wants for the firm by creating a common purpose. It involves making decisions about direction, communicating those decisions and allocating the resources to go in that direction.

Andrews (1980) argues that the pattern of decisions in a company that determines and reveals its objectives, purposes or goals, produces the principal policies and plans for achieving those goals, and defines the range of businesses the company is to pursue, the kind of economic and human organization it is or intends to be, and the nature of the economic and non-economic contribution it intends to make to its shareholders, employees, customers, and communities. Mintzberg (1994) declares that strategy has several meanings, all of which are useful. He says that strategy is a plan, a pattern, a position, a perspective and, can also be a ploy, a maneuver intended to outwit a competitor

1.1.2 Outsourcing Strategy

Outsourcing is a strategic decision of a company to use an outside organization to perform work that is typically done within that company. The decision to outsource is a major strategic one for most companies since it involves weighing the potential cost savings against the consequences of a loss in control over the product or service.

Successful outsourcing requires a strong understanding of the organization's capabilities and future direction. As King (1994) explains, decisions regarding outsourcing significant functions are among the most strategic that can be made by an organization, because they address the basic organizational choice of the functions for which internal expertise is developed and nurtured and those for which such expertise is purchased. These are the basic decisions regarding organizational design.

Outsourcing decisions affect the boundaries of the firm—what production takes place within the firm and what is purchased from outside the firm. Some common examples of outsourcing include manufacturing of components, computer programming services, tax compliance and other accounting functions, and payroll and other human resource functions. Outsourcing can be undertaken to varying degrees, ranging from total outsourcing to selective outsourcing. Total outsourcing may involve dismantling entire departments or divisions and transferring the employees, facilities, equipment, and complete responsibility for a product or function to an outside vendor. In contrast, selective outsourcing may target a single, time-consuming task within a department, such as preparing the payroll or manufacturing a minor component that can be handled more efficiently by an outside specialist. A relatively new trend in outsourcing is employee leasing, in which specialized vendors recruit, hire, train, and pay their clients' employees, as well as arrange health care coverage and other benefits. Off shoring happens when private firms or governments decide to import intermediate goods or services from overseas that they had previously obtained

domestically. It is therefore about sourcing decisions which involve imports and displacement of domestic production and associated jobs.

While Outsourcing involves moving production outside of a firm, Offshoring entails sourcing part of the purchased inputs outside of the country. The term 'outsourcing' includes both offshoring and domestic outsourcing which takes place when outside providers are located in the same country. Outsourcing does not necessarily imply that jobs and production are relocated to another country Garner (2004). Like traditional selection process, the outsourcing process includes all the steps of planning, selecting, and managing the service providers. In comparison with purchasing or contracting out, outsourcing, however, differs in the strategy that drives it. In general, it is a strategy that allows companies to focus their talent and resources on improving and expanding activities that generate revenue, minimizing the effort spent on maintaining the infrastructure that supports the core of the business while also exploiting the skills, technology of some suppliers to strengthen their core competency as well as maintain their non-core sector.

1.1.3 Telecommunication Industry in Kenya

The telecommunication sector in Kenya is well developed and key telecommunication operator players include Telkom Kenya (Orange, France Telecom), Safaricom (Vodafone), Bharti Airtel (formerly Zain, Celtel), Essar Telecommunication Kenya (Yu, formerly Econet). The two major players are Safaricom, the clear market leader in

the mobile services segment and Telkom Kenya, the country's incumbent fixed-line provider and the major player in the fixed line telecommunication segment. Telkom Kenya is revamping its infrastructure and services under the Orange brand with fresh capital from its new majority shareholder, France Telecommunication and has also re-entered the mobile market. A simplified and converged licensing regime introduced in 2008 has lowered the barriers to market entry and increased competition by allowing operators to offer any kind of service in a technology and service neutral regulatory framework.

The earliest telecommunications connections connecting Kenya to the outside world were the submarine cables linking Zanzibar, Mombasa, and Dar es Salaam laid by the Eastern & South African Telegraph Company in 1888. In 1968, Kenya became a member of the intelsat global satellite communications consortium, with extelcoms (and subsequently kenextel and ultimately KP&TC) responsible for operating earth stations to access intelsat's satellites. Kenya's first major earth station came into operation at Longonot northwest of Nairobi in 1970. There are now two such stations at Longonot, each accessing intelsat satellites in the Atlantic Ocean and Indian Ocean, with a third earth station in Nairobi and a fourth in Kericho. However, Kenya's telecommunications and broadband market has undergone a revolution following the arrival of three fiber-optic international submarine cables in 2009 and 2010 - Seacom, TEAMS and EASSy, ending its dependency on limited and expensive satellite bandwidth. Bandwidth prices had already fallen significantly following the

liberalisation of international gateway and national backbone network provision in 2005, but they have now fallen by more than 90%, enabling cheaper tariffs for telephone calls and broadband internet services. In parallel, the sector regulator, the Communications Commission of Kenya, has mandated price cuts on interconnection tariffs and proposed new competition regulations. A simplified and converged licensing regime introduced in 2008 has lowered the barriers to market entry and increased competition by allowing operators to offer any kind of service in a technology and service-neutral regulatory framework. The operators are developing new revenue streams from third generation (3G) broadband and mobile banking services, and the leading operator has begun LTE trials.

1.1.4 Telecommunication Vendor Companies

Telecommunication vendors are companies that manufacture and sell equipment which make the transmission of data and communication physically possible. This is composed of active/electronic infrastructure. The components of active infrastructure include base tower stations, microwave radio equipment, antennas, switches and transceivers. Some of the largest telecommunication vendors in the world are NSN (Nokia-Siemens), Ericsson, Huawei and Alcatel Lucent, to name a few. Telecommunication equipment vendors have to put all their efforts directed towards sustaining a competitive edge with the consistent delivery of innovative products. Telecommunication vendors must help network providers and associated hardware and

software businesses transition into a complex but ultimately more elegant and less expensive landscape in which voice, video and data co-exist.

For telecommunication vendors, competition has become very stiff and the message is very clear. To survive, they need to be flexible and think less about just selling fancy boxes but how they can be an ally to their carrier customers with services and advice that will help them meet their business and technology road map needs. This has made the vendors provide professional services and even managed services. The vendor business can now be divided into three main categories: Selling the standard boxes, customized high end service and the managed services.

As network operators continue to look for new ways to reduce operating costs, telecommunication equipment vendors are nearing a tipping point at which the managed and professional services they provide will deliver substantially more revenue than infrastructure sales. Driven by network operators' desire for cost savings, simplified network operations, and shorter time to market for new services, managed and professional services have become a rapidly growing business for telecommunication equipment vendors over the past five years. Today these services account for 35 percent to 48 percent of total revenues for leading vendors, and this figure is forecast to reach 60 percent within the next seven years.

1.2 Research Problem

For Wellenius (1993) “telecommunications is the enabling technology of the information economy”. Application and use of telecommunications continue to fundamentally change the root of modern economic development. This makes the telecommunication “revolution” qualify for what Freeman and Perez (1988) termed a “techno-economic paradigm”, which they referred to “as a combination of inter related products and processes, technical and organizational and managerial innovations, embodying a quantum jump in potential productivity”. What distinguishes a new paradigm, apart from the cluster of new products and systems is the dynamism of the relative cost structure of the sets of inputs which Freeman and Perez (1988) describe as the key factors. These inputs must satisfy conditions such as, perceived low and rapidly falling relative cost, almost unlimited availability of supply over long periods and potential for the use or incorporation of the new key factors in many products and processes throughout the economic system.

Early studies have reported domestic mindset, inexperience in managing from a distance and inexperience in managing geographically dispersed projects as reasons given by a few offshore bystanders for not considering offshore outsourcing. However a systemic enquiry into the causes of low level of outsourcing at a country level has been scarce. Barthelemy and Geyer (2005) empirically investigated the factors that influenced quasi outsourcing practice followed by firms in France and Germany and

found that asset specific IT activity, department size, internal organization, institutional environment and IT intensive sector as having significant impact on the outsourcing verses quasi outsourcing decision by client firms. However, such studies have not been extended to Kenya and especially the telecommunication sector.

Studies addressing service provider strategy formulation, factors that influence the choice of geography, service line and industry sectors have not received due attention in outsourcing research. Several scholars have examined the issue of country selection for client firms intending to outsource and suggested selection process and criteria that suits clients' desired objectives (Graf and Mudami 2005). However research studies addressing telecommunication equipment vendor as outsourcing client has been much less in extant literature. A study to understand factors that influence the choice of outsourcing in telecommunication industry within the Kenya context is not found in literature. It is against this background that this study seeks to determine the various outsourcing strategies that telecommunication vendors in Kenya are employing. This study will therefore seek to answer the question: What are the outsourcing strategies adopted by telecommunication vendor companies in Kenya?

1.3 Research Objective

The objective of this study was to examine the kind of outsourcing strategies adopted by vendor companies in Kenya.

1.4 Value of the Study

This study will describe and explain how companies outsource using various strategies. Though existing theories can be found related to certain aspects of outsourcing, there are other areas which lack research like outsourcing by telecommunication vendor companies in Kenya, therefore, this study will be exploratory and will contribute in adding knowledge in the area of outsourcing by telecommunication vendors specifically in Kenyan context. The study shall endeavor to describe the discovered patterns of outsourcing by telecommunication vendor companies in Kenya making the research descriptive. This will as well contribute knowledge on processes and procedures followed during outsourcing by the telecommunication vendor companies in Kenya's telecommunication industry.

Telecommunication Vendor companies globally, and in Kenya are responsible for their entire operation processes. In an attempt to reduce cost, provide better technical support and remain competitive, telecommunication vendors are resorting to outsourcing. Despite this strategy, the companies are now realizing that they are not getting the expected cost reduction, competitive advantage and more sales that the outsourcing intended to offer. The essence of this study relates to provide guideline assistance to the vendors on how to analyze to what extent outsourcing adoption will be of value and benefit to their companies and the impact of the adoption on stakeholders within the Kenyan telecommunication industry context.

Telecommunications businesses today is faced with increased competition as a result of new technologies, reduced budget and customer needs. The telecommunication vendors are turning to outsourcing not only to reduce their operating costs but also to transform business models to compete more effectively, a trend that will continue growing. This study's results will be of help to the telecommunication vendor companies in Kenya in choosing business models to adopt following the various outsourcing strategies that they implement.

While acknowledging the immense benefits that outsourcing models present, it is worth noting that there are inherent risks and drawbacks associated with their adoption. In Kenya and in did sub-Saharan Africa, cultural mismatch, community agitations, social obligations, diminishing local competence development and internet connectivity issues affecting deliverable and remote support are few of the risks. This study will thus add to some of the knowledge that we need to know concerning outsourcing risks and drawbacks within the telecommunication sector in Kenya

The significance of this study is in its relevance to managers in telecommunication industry organizations in seeking to go the way of outsourcing as it will guide them in their outsourcing decision making process. It presents the essential details they need to know about this strategy as applied in Kenya and the benefits and challenges associated with it.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In sub-Saharan Africa, especially Kenya, the rising cost of doing business is becoming a source of concern to telecommunication equipment vendors and stakeholders alike, with increase in expenditure and constant reduction in profit margin. With this situation, operators as well as vendors are now seeking innovative and cost effective ways of doing business, which have brought the desire for an outsourcing model that can help reverse the trend. The same logic that influences a company's make or buy decision also influences the desire to outsource, Ivanka et al., (2008). This chapter will cover literature review that will include outsourcing, outsourcing in the telecommunications industry and telecommunication industry and telecommunication development in Kenya.

2.2 Outsourcing as a Strategic Orientation

The concept of outsourcing extends from purchasing through make-or-buy decision to takeover of a business function from one organization to another. It is concerned with the transfer of activities such as work, responsibility and decision rights that have been performed internally to an external provider, Domberger (1998) and covers a wide range of an organization's functions. For this study, outsourcing is defined as an

outcome of a given function that was formerly part of an organization and that is now part of another organization function and whose relationship is bounded by a contract.

Following the increase in outsourcing as a result of the glaring global competition the scope of outsourcing has changed from the traditional concept to strategy, (Quinn & Hilmer 1994). According to Mazzawi (2002), Strategic outsourcing is concerned with creating value to align with the business processes that are changed to be in line with strategic goals. Consequently, management are employing the abilities of a team of combined local and foreign expertise in addition to the use of new technologies to improved service delivery to customers with the belief that outsourcing can result in cost saving and provide the much needed competitive edge. Furthermore, organizations are focusing on creating values by demanding particular competencies of individuals and outsourcing every business function that will enable them gain the competitive advantage with the exception of specialized functions, Quinn & Hilmer (1994). The main propelling element for this decision is basically centered on organizational restructuring and cost reduction.

Although the results of most early outsourcing drivers were unsatisfying, recent investigation shows that organizations are bettering their potentials with respect to managing outsourcing relationships, (Lacity et al., 1998). Despite the difficulties constantly being reported by organizations with regards to their outsourcing arrangements, Ross et al. (2003) agrees that outsourcing has developed as a crucial tool

in business management with its own set of peculiar management practices and challenges. Prahalad and Hamel (1990) propose that an organization needs to be fully aware of potentials and core competencies in order to successfully tap their resources.

2.2.1 Outsourcing Decision Consideration

Starting up any outsourcing decision making process demands much effort, hence Douglas and Scott (2005) declare that some fundamental considerations should be adhered to. They propose that the organization should set their strategic direction, highlight their core competence and determine its strategic objectives, produce a list of suppliers/vendors to consider and constitute a team for the outsourcing and governance process. It is worth emphasizing that the organization should consider the choice of partner – they should focus on partnering with the right vendors, institute an efficient governance system that foster's good relationship, and also handle employees' dealings with caution. Above all, the senior management must set the overall direction.

Outsourcing decisions, according to Justin et al (2006) should really be a strategy-driven process. First and foremost is to have a clear definition of the strategic objectives and target variables that can be used to evaluate the success of the strategic decision; this is the most vital for the success of an outsourcing move. Second is to define a suitable outsourcing model with a clear definition of objectives and variables that will help figure out the business gains and set goals. Validation of the outsourcing model should include some stakeholders, who are involved in the outsourcing projects

within the organization. This will strengthen the benefits and risks of the outsourcing decision and may consider benchmarking data for similar businesses. The next step would be to define requirements and partner selection criteria. This involves a clear definition of the requirements and specifications of parameters for the vendor selection criteria. Finally is to select the right vendor based on the selection criteria then followed by the initiation of negotiations procedure.

Quinn and Hilmer (1994) maintain that the idea of outsourcing hinges on the strategic end of the make-or-buy decision. They stress that the outsourcing decision should be grounded upon the strategic objectives and goals of an organization and the fundamental view of the aim of that organization. Barney (1991) backs the 'resource based view' where a company's competitiveness advantage rests on their resource portfolio. Others, view outsourcing decision from the strategic perspective and which rest on a clear focus on core competences (Prahalad et al., 1990). Thus, to successfully outsource business functions, top management needs to clearly state the basic indicators for such an action and which will enable them evaluate the strategic objectives related with the outsourcing activity. They need to lay down strong business case and work on it.

2.2.2 Selecting Outsourcing Providers/Vendors

There are several factors to be considered before engaging on outsourcing arrangement; these factors are worth considering since it will enable the intending company to make

informed decision that will help in picking the right provider. Ivanka and Gerard (2008) states that the provider must demonstrate competencies in terms of staff, use of technologies, innovation, industry experience and certifications. They must have a track record in terms of service quality attained, financial value created and demonstrate commitment to continual improvement. The other factor would be relationship dynamics in terms of vision and strategy, the cultural fit, relative size of contract in their portfolio and quality of relationship management. Quality of solutions is another factor to check especially the relevance of services to your requirements, risk management and performance benchmarks. Also consider overall capabilities in terms of financial strength, resources, management systems, scope and range of services.

2.3 Telecommunication Industry in Kenya

Kenya's earliest telecommunications connections to the outside world were the submarine cables linking Zanzibar, Mombasa, and Dar es Salaam laid by the Eastern & South African Telegraph Company in 1888. The subsequent history of Kenya's network was one of gradual but sustained expansion. By 1980, there were 73,932 direct exchange lines (DELs) in use in the public telephone network; just over 84% were connected to automatic switching equipment and 75% had direct long-distance dialing or subscriber trunk dialing capability. There were 1,228 telex lines in use and 50 leased data transmission circuits in use.

Kenya's first major earth station came into operation at Longonot northwest of Nairobi in 1970. There are now two such stations at Longonot, each accessing intelsat satellites in the Atlantic Ocean and Indian Ocean, with a third earth station in Nairobi and a fourth in Kericho. However, Kenya's telecommunications and broadband market has undergone a revolution following the arrival of three fibre-optic international submarine cables in 2009 and 2010 - Seacom, TEAMS and EASSy, ending its dependency on limited and expensive satellite bandwidth.

The official telecommunication regulatory body of the country is Communications Commission of Kenya (CCK). CCK is an independent regulator, whose objectives are to license and regulate telecommunications, radio communication and postal services. Its vision is to “enable access to reliable communications services by all Kenyans”, while its mission is to “ensure that the communications sector contributes to the country’s overall development through efficient and enabling regulation and public participation”.

In 2009, the Government recognized these rapid changes and developments in technology and introduced the Kenya Communications Amendment Act 2009, whose main objective is to advise the government on the adoption of a communication policy, which, among other things is meant to encourage competition in the provision of communication services. They are now responsible for facilitating the development of the information and communications sector and electronic commerce. Kenya's

mobile market has four key players - Safaricom, Bharti - the former Zain, Telkom Kenya now known as Orange/France Telecom and Essar Telecommunication Kenya also known YU.

The fair competition and equality of treatment regulations, part of the Kenya Communications Regulations of 2010, require dominant players in the industry to report to the regulator before revising pricing. This has seen mixed reactions from operators. In particular, Safaricom has termed the rules unfair but other operators feel the regulations would oversee further growth in the sector. The operators are developing new revenue streams from 3G broadband and mobile banking services, and the leading operator has begun LTE trials. With market penetration rates in Kenya's broadband and traditional banking sector still very low, the mobile networks have an opportunity to relieve the phenomenal growth rates seen in the voice sector in recent years.

Mobile telephony was first introduced in Kenya in 1992, and the technology has moved from the initial External Total Access Communications Systems (ETACS) to the second and third generation of Global System for Mobile communications (GSM) (RIA, 2006). Safaricom was Kenya's first GSM operator and began offering services in 1997. Subscriber growth, however, did not take off until 2000 when a competing GSM operator was licensed and Vodafone invested in network expansion. Kencell, the predecessor of Celtel, was the first licensed mobile operator and became the

second GSM operator in January 2000. Even with this limited liberalisation in the mobile market, the impact has been far-reaching, especially with respect to mobile penetration (RIA, 2006). A number of local institutions and groups have come to exert a significant influence on ICT policy and regulation. The more notable ones include the Telecommunications Services Providers Organization of Kenya -TESPOK, Kenya ICT Federation – KIF and Kenya ICT Policy Action Network - KICTANET. TESPOK represents the telecommunications service providers in Kenya. For example, TESPOK lobbied government regarding the establishment of the Kenya Internet exchange Point (KIXP) and the liberalisation of very small aperture terminals (VSATs). It also encouraged the government to establish the Ministry of Information and Communications and helped to set up Internet exchange points in other regional countries (RIA, 2007).

2.4 Outsourcing in the Telecommunications Industry

The telecommunications industry is a large global industry that touches almost every person in the world, both in a private and in a business context. It is also an industry undergoing rapid change driven by globalization of markets, technological shifts and price pressures Shaw, (2000); Marshall et al, (2007). In response to these pressures the players in the industry are rapidly consolidating and creating even larger organizations. In response to this consolidation trend, the suppliers are consolidating to match the global footprint of the operators and to have the financial strength and economies of

scale for Research & Development investments in products and services. However, not only is consolidation taking place but also a major shift among actors in the supply chain in the telecommunication industry. Agrell et al (2004) describes the development in the telecommunication industry and how outsourcing in various stages of the value adding chain is reshaping the industry. It focuses on the risks that OEM's (Original Equipment Manufacturer), in this case telecommunication equipment suppliers, faced when they outsourced the manufacture of major components and systems.

Marshall et al. (2007) describe the telecommunications market as characterized by short product life cycles not only concerning handsets but also on the infrastructure side. Transmission technologies are revised relatively often. In the last 15 to 20 years, two major shifts, 2G and 3G mobile telecommunication, took place and a third transmission technology, LTE has already been piloted. The knowledge and capabilities for operating a network are directly linked to the current technology and become more or less obsolete if this technology changes. Consequently it can be argued that by outsourcing network operation services, mobile network operators can avoid being locked in. In contrast, on the market they can match network operation services to their recent infrastructure and enhance the quality and reliability of their network.

With the increasing relevance of telecommunications in every sphere of human endeavor, deciding a telecommunication solution for the business now has not only

technical significances but also economical. In the telecoms sector, there is uncertainty on what constitute core competence. Quinn (1999) contends that core competencies are not products or things we know how to do well, but those thing the company is very good at, especially in things that require mental reasoning. Schniederjans et al. (2004) distinguishes between the following three outsourcing strategies:

Subcontracting limited work assignments involves short-term, work overflow beyond existing capacity being assigned to subcontractors or vendors. This is just a temporary assignment in much the same way as temporary staffs are hired to fill in for summer vacation assignment of fulltime staffs. This strategy is ideal with security issues or when cost prohibits more inclusion from a subcontractor.

Second is subcontracting project assignments. Whole IT projects are assigned to subcontractors or vendors. These assignments would entail a complete project where the management of the project would be delegated to the subcontractor and not under the control of the IT management of the hiring firm. This strategy is ideal when a company has unique skill or technology requirements too expensive for them to maintain but affordable for contractors to offer their clients.

Finally, total outsource assignment where all of the IT functions are subcontracted out to a subcontractor or vendor. Here a company may lease all its IT from a subcontractor but run the equipment with its own staff. This strategy is ideal when a

company may have a market that requires constant changes in IT or cannot afford to tie up capital in IT, Gottschalk and Solli-Saether (2006).

The main vendors of network equipment are active in the market for network operation services. While field services and spare part management are performed locally in the customer's country, most suppliers run a few Global Network Operation Centers – GNOC, for operation services in a narrow sense, serving the mobile networks of all customers in a region or a continent. Mobile telecommunications equipment manufacturers offer network operation services not only to customers with their own hard- and software products, but also to those who use equipment from rival suppliers or multi-vendor networks, Friedrich et al. (2009). In cooperation with capital investment groups, most suppliers also offer the full outsourcing of mobile networks, including the takeover of legal ownership.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Chapter three covers the research methodology including, research design, population of the study, data collection as well as data analysis.

3.2 Research Design

This study was carried out using a descriptive cross sectional survey design as well as co-relational research. It was a cross sectional survey because data was gathered from the telecommunication vendor companies in Kenya. The survey was conducted to investigate the major outsourcing strategies adopted by the telecommunication vendor companies.

It was also a co-relational research because it was concerned with assessing the relationship among the outsourcing strategies used by the telecommunication vendor companies and the impact they have on their performance and survival. No single strategy exists in isolation but various strategies are combined to affect the business operations as well as the state of outsourcing in a business. The study therefore explored how these various outsourcing strategies have been adopted by the telecommunication vendors.

3.3 Population of the Study

The study targeted the major telecommunication equipment Vendors in Kenya mainly Ericsson, Huawei, Nokia Siemens, Alcatel-Lucent and ZTE. These are the world leading vendors and the major equipment vendors for the service providers in Kenya. A sample of thirty employees within the vendor companies were considered for the study.

3.4 Data Collection

Data for the study was generated through the primary and secondary sources. Primary data was collected using questionnaires distributed amongst the representative sample of the whole population focusing on outsourcing strategies adopted by the telecommunication vendor companies in Kenya.

Secondary data was obtained from the previous studies done on outsourcing strategies within the telecommunication Industry and publications from various organizations and institutions that have interest in the telecommunications industry. The respondents were managers and employees from the equipment vendor companies in Kenya who have a clear understanding of the various outsourcing strategies adopted by the vendors.

3.5 Data Analysis

The filled questionnaires were checked for completeness and then coded and the data analyzed. Considering the qualitative nature of the data collected through

questionnaires, descriptive statistics was used. Frequency tables were used to summarize responses for further analysis and to facilitate comparison. This offered a systematic and qualitative description of the objective of the study.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results of the study. The study was aimed at determining the outsourcing strategies that have been adopted by telecommunication vendor companies in Kenya. The results of the data collected are presented in frequency tables. The study targeted the four major telecommunications vendor companies operating in Kenya namely Huawei, Alcatel-Lucent, Ericsson, Nokia-Siemens and ZTE. Of the thirty respondents targeted, twenty six responded. This translates to a response rate of 87%. The study targeted to survey people with more years of experience in the industry to ensure accuracy of results. 73% of respondents had more than 5 years experience in the industry. The broad parameters surveyed and analyzed include positions that are most likely to be outsourced, reasons for outsourcing, top outsourcing destinations, outsourcing partner selection among other factors.

4.2 Drivers for Outsourcing

This section presents the respondents' general views on how they view the various reasons for outsourcing by the telecommunication vendor companies in Kenya. The participants were required to rank the statements on how they thought each statement reflected the actual situation in their organizations with respect to outsourcing.

The responses received are presented on tabled 4.1 below;

Table 4.1 Drivers for Outsourcing

Reasons for outsourcing	Agree		Not sure		Disagree	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
To handle sudden spikes of work	14	54%	6	23%	5	19%
Availability of skills	9	35%	10	38%	6	23%
Outsourcing non core activities	22	85%	2	33%		0%
Cut down operational costs	20	77%	3	12%	1	4%
Work requires high degree of domain expertise	7	27%	10	38%	7	27%

Contrary to popular belief, the primary driver for outsourcing does not seem to be cost. While companies do want to take advantage of outsourcing at a lower cost, the priority is to outsource noncore tasks. 85% of the respondents agreed to this and none was in disagreement. Another 77% agreed on the reason for outsourcing being to cut down operational cost. 54% thought that the organizations went into outsourcing so as to handle sudden spikes of work. This is usually short term when projects start and then the outsourced employees are released when pressure of work reduces.

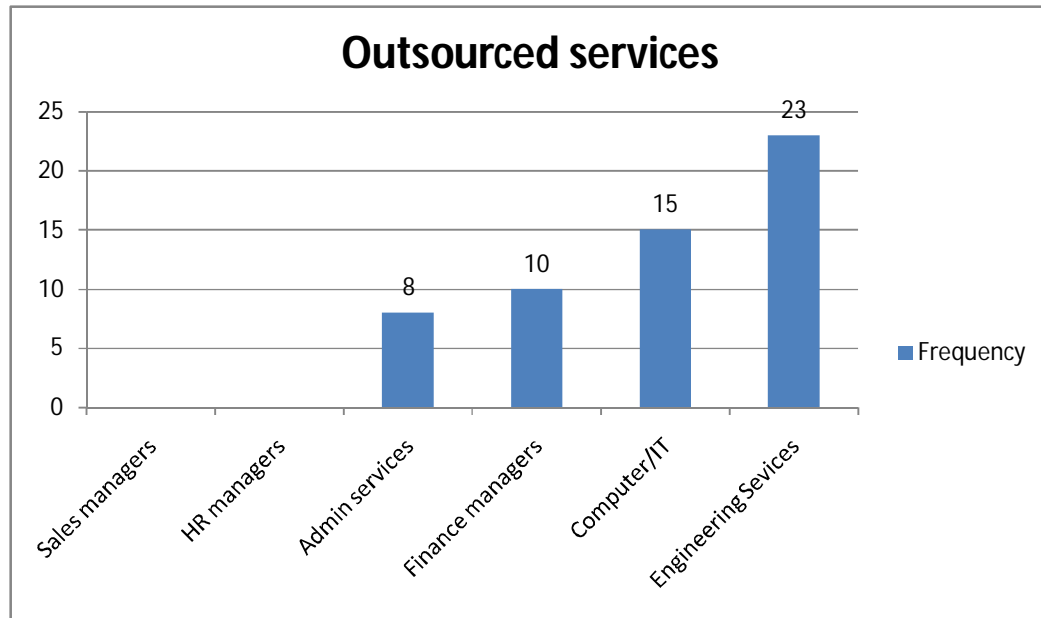
27% of those who responded disagreed that that domain expertise will be a reason for outsourcing. The respondents believed that most of the experts in various telecommunications sector can be found within the country. The same reasoning went for availability of skills. 23% disagreed that it should be a reason for outsourcing as Kenya has a lot of skilled personnel to handle most of the work. Some 38% of respondents remained neutral on availability of skills and domain expertise requirement as being reasons for outsourcing.

4.3 Outsourced Services

This section looked at the various departments in telecommunication vendor companies and the ones that outsourced their activities. The respondents were asked to identify the departments that had outsourced jobs. Those who said yes were further asked to say if the activities were outsourced to local or foreign destinations.

The responses received are displayed in Table 4.1 below:

Figure 4.1 Outsourced Services



Engineering services were outsourced in all the companies involved in the study. 88% of correspondents were sure about this. The industry has a lot of engineering services to offer to the operators including equipment installations, integration, network monitoring, planning and design, surveys. This was related to the many number of employees required to do the various services. The companies may not manage to employ all these people hence outsourcing.

The respondents surveyed also pointed out on rapid change of technology, different services and technological contracts with operators to be a contributing factor. All these require different areas of expertise that the company may not have at the time they win the jobs which are short term projects, forcing them to outsource resources to do the

jobs. The outsourcing of engineering services was done both locally and internationally depending on the type of work, availability of a resource and cost factors.

IT/ Computer works was the second most outsourced job at 58%. This was outsourced to both local and international destinations. The major reason for outsourcing this work was because it is a non-core activity to the companies. 38% of respondents mentioned finance department to have outsourced some of its activities. When asked about the outsourcing destination, they mentioned both local firms and other firms out of the country. Administration services such as air ticketing, transport management, cleaning, and front office are among those mentioned by 31% of interviewees to have been outsourced. The main reason is that they are non core activities. No one mentioned Sales and Human resource management to have been outsourced by all the people interviewed. This is because the people in these departments handle critical company information and the organizations only want their employees to handle these.

4.4 Outsourcing Destinations

This section presents some of the places where work was outsourced to. To check on local outsourcing, respondents were asked to state if their organizations outsourced any work to local companies in Kenya. 21 respondents said yes, 2 did not know and the rest did not respond to this question, as shown in Table 4.2.

Table 4.2 Local outsourcing

Statement	yes		No		I don't know	
Did your company outsource any work to third party companies in Kenya	21	81%	0	0%	2	8%

Among the activities mentioned to have been outsourced to local firms included telecommunication equipment installation works, Civil works, finance staff, administrative jobs like cleaning, transport - vehicles and drivers, IT and computer servicing, front office and security. Participants in the study were then required to rank the destinations where jobs and various employees were outsourced from outside the country. The responses received are in Table 4.3.

Table 4.3 Outsourcing Destinations

Statement	High		Moderate		Low	
	Frequency	percentage	Frequency	percentage	Frequency	percentage
India	13	50%	2	13%	6	23%
Pakistan	6	23%	4	15%	9	35%
Egypt	8	31%	6	23%	8	31%
Turkey	4	15%	4	15%	10	38%
America		0%	7	27%	14	54%
China	10	38%	2	8%	9	35%

The results of the study as shown on Table 4.4 indicated that 50% of work was offshored to India followed by china at 38%. Egypt and Pakistan also had a high number of workers in the Kenyan telecommunications industry recording 31% and 23% respectively. These destinations have clearly emerged as the most preferred destinations when it comes to off shoring engineering services or to setup captive engineering centers. The respondents attributed the reasons for this as cost arbitrage, good engineering education base, emerging local demand and a large talent pool. While India ranked as the top offshoring location, it has the advantage in terms of English language skills and cultural compatibility with Kenya, China which is the second ranked off shoring location lacked these advantages and some non-Chinese vendors feared them for the purpose of protecting Intellectual Property. America is not proffered at all by all the vendors as an outsourcing destination. It scored 0% for high and 54% for low off shoring destination.

Table 4.4 Outsourcing to Foreign Affiliates

Statement					I don't	
	yes		No		Know	
Did your company outsource job functions to its foreign affiliates?	21	81%	2	8%	2	8%

When asked if the company outsourced work to foreign affiliates, 81% of respondents said yes, 8% said No, another 8% did not know. Since the firms involved in this study are all multinationals, they tend to use workers globally and would use their employees from other affiliated countries first and only outsource outside the company if they cannot find the person internally.

4.5 Outsourcing Partner Selection

The study also sought the opinion of respondents on the various points that are considered when choosing an outsourcing partner. The respondents were asked to choose all the reasons they thought were taken into account during outsourcing partner selection.

The responses received are displayed in Table 4.5

Table 4.5 Outsourcing Partner selection

Statement	Frequency	Percentage
Domain expertise /Product knowledge.		
(1) Strongly Agree	19	73%
(2) Agree	6	23%
(3) Not Sure		
(4) Disagree		
(5) Strongly Disagree		
Ease of Communication		
(1) Strongly Agree	7	27%
(2) Agree	10	38%
(3) Not Sure	1	4%
(4) Disagree	4	15%
(5) Strongly Disagree	3	12%
Cost		
(1) Strongly Agree	16	62%
(2) Agree	6	23%

Statement	Frequency	Percentage
Customer references		
(1) Strongly Agree	8	31%
(2) Agree	9	35%
(3) Not Sure	4	15%
(4) Disagree	3	12%
(5) Strongly Disagree		
Proximity to production plant		
(1) Strongly Agree	4	15%
(2) Agree	6	23%
(3) Not Sure	8	31%
(4) Disagree	6	23%
(5) Strongly Disagree	1	4%
Proximity to customers		
(1) Strongly Agree	9	35%
(2) Agree	5	19%

(3) Not Sure	1	4%	(3) Not Sure	8	31%
(4) Disagree	2	8%	(4) Disagree	4	15%
(5) Strongly Disagree			(5) Strongly Disagree		
Vendor Infrastructure.			Ease of getting VISA		
(1) Strongly Agree	7	27%	(1) Strongly Agree	5	19%
(2) Agree	10	38%	(2) Agree	9	35%
(3) Not Sure	5	19%	(3) Not Sure	4	15%
(4) Disagree	1	4%	(4) Disagree	5	19%
(5) Strongly Disagree	1	4%	(5) Strongly Disagree	2	8%

The study revealed that Domain expertise at 73% was the primary driver for selecting a partner. 62% were of the opinion that cost factor was also a major driver in selecting outsourcing partners. Other factors considered by respondents to be taken into account during outsourcing partner selection were; communication language at 38%, availability of infrastructure by vendor scored 38%, ease of getting travel Visa was 35% and if the customer has any preferences, 35% said yes. 31% of respondents were not sure if proximity to customer and production plant would really be considered during outsourcing partner selection. This is because all these vendors do not have any production plant in Africa and all the equipment must be imported into the country.

4.6 Competency and outsourcing

On the question of whether the employees thought that the application of outsourcing had improved the competency level among staff, 73% of respondents disagreed, as evident in Table 4.6

Table 4.6 Competency and outsourcing

Statement					I don't	
	yes		No		Know	
Do you think that the application of outsourcing has improved the competency level among staff?	5	19%	19	73%	2	8%

Some commented that the outsourced staff were former employees of the company and so came with no added value. Others argued that outsourcing is majorly driven by the cost factor and got nothing to do with competency. Most employees that gave that negative rating cited other reasons as lack of skill transfer, amount of time being spent on training and a few quality concerns.

It was also observed that most telecommunication vendor companies had multiple outsourcing partners as a de-risking strategy. This gave them options to change in case they were not satisfied with services offered. Various positions were outsourced from different partners depending on their specialization.

To maintain accountability and to demonstrate value, the vendors are running project based engagements within these outsourced activities to maximize output. The Service Level Agreements in these cases were clearly based on projects, jobs performed and short time contracts.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study, 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 determine the outsourcing strategies adopted by telecommunications vendor companies in Kenya.

5.2 Summary of the Findings

It was revealed that all the telecommunication vendor companies in the country practiced outsourcing. Major reason for outsourcing was found to be, to outsource non core activities of the company in various departments. The other reasons why telecommunication vendor companies outsourced were to cut down operational cost and to handle sudden spikes of work. During sudden spike of work, there would be no time to train new employees in the domain to be deployed hence outsourcing due to availability of required skills. All departments outsourced work except human resources and sales departments. These departments handle important company confidential information and hence they are safer handled internally.

The study found out that India followed by Egypt and Pakistan are the most preferred outsourcing destinations when need to outsource out of the country arises. Major reasons for choosing these countries were the availability of skills, cost factors, good spoken English which is the national language in Kenya among others. Most non-core activities were outsourced to local third party companies in Kenya. Some of the activities outsourced locally were telecommunication equipment installation, civil works, IT and computer services, finance activities, security, cleaning services, transport and motor vehicles and front office. Product knowledge was found to be the main determining factor when choosing an outsourcing partner. Other factors that were taken into account were cost, ease of getting Visa and travelling and customer reference. Outsourcing was found not to improve the competency level of the staff as there was no skill transfer.

5.3 Conclusion

The telecommunication sector in Kenya is obviously a natural sector for outsourcing as it contains non core business functions or telecommunication services and there are many vendors that can provide these services conveniently. Product knowledge, Cost reduction and skill availability are key drivers for many outsourcing decisions which equally apply to outsourcing of telecommunications. Handling of sudden spikes of work is a very common factor on deciding to outsource skilled personnel to handle project activities. The only problem with this as found out during this study is that

there is never proper skill transfer to enable the local employees handle such work if need be in the future.

Based on the study conducted above, the issues emanating from the research and analysis of the conducted interviews, surveys, and outsourcing literatures indicated emphasis on availability of skills and cost reduction as the principal indicator to adopting outsourcing. Outsourcing demands a careful decision and execution process, backed by strong business objectives and strategy to carry it out. This makes outsourcing a means of business delivery and not just a goal.

While outsourcing presents a huge opportunity beyond doubt, it also comes with its share of challenges such as Intellectual Property security and communication. The more established telecommunication vendors have clearly defined processes and systems to handle these and that is what others in the industry need to look for.

5.4 Recommendations for Further Research and Policy Implications

When considering outsourcing, define the strategy, set goals, identify objectives and then communicate and discuss the strategy with the stakeholders. The organization must develop comprehensive revenue, cost and capital expense plan. Conduct risk analysis and identify the required support infrastructure. Define key performance metrics and deliver relevant training for competence development. Define the solution in detail, deploy a focused program to implement the solution and identify changes

required. Employ value-based pricing, develop service level agreements and assess vendors' skills and expertise.

Have in place a system for information sharing, about the facts of the collaboration as well as information on the partner and how to handle these aspects. This is to provide an organizational memory that ensures that all employees are capable of handling outsourcing partners as effective as possible. Clear roles and communication between the outsourcing partner companies. All the people involved need to understand their roles in the companies as well as the potential involvement and the factors that constitutes this. Knowing what aspects are specific to the country, domain or company can help the collaborating companies to see what is possible to change and what demands to be managed. Cultural differences should be used to create an effect that benefits both companies and create energy rather than create misunderstandings and inefficiency. A system for information sharing will help this process.

Many companies want a safe profit and therefore hesitate towards outsourcing, fearing that they may not achieve the set objective and thereby missing out on learning capabilities and additional money making opportunities. There needs to be more studies that define the strategies needed for companies planning to go into outsourcing. What extent of outsourcing is useful to start with, what knowledge needs to be gained to avoid the hazards of outsourcing? The potential of outsourcing can tap competitive advantage for many companies in the future.

No attention was paid to what the customer had to say about the outcomes of outsourcing. So our recommendation to researchers would be to consider the customers perspective for this same study.

REFERENCES

- Agrell, P.J., Lindroth, R. and Norrman, A. (2004) Risk, Information and Incentives in Telecommunications supply chain. *International Journal of Production Economics* **90**, 1-16.
- Andrews, Kenneth (1980). *The Concept of Corporate Strategy*, 2nd Edition. New York: Dow-Jones Irwin.
- Barney J., (1991), Firm Resources and Sustained Competitive Advantage, *Journal of Management*, 17(1):99.
- Barthélemy J, Geyer D. 2005. An Empirical Investigation of IT Outsourcing Versus QuasiOutsourcing in France and Germany. *Information & Management* 42(4): 533-542.
- Domberger, S. (1998), *The Contracting Organization: A Strategic Guide to Outsourcing*. Oxford: Oxford University Press.
- Douglas B. & Scott W., (2005). "The Black Book of Outsourcing": How to Manage the Changes, Challenges, and Opportunities, John Wiley & Sons, Inc., (USA) ISBN-13 978-0-471-71889-5.
- Freeman C. and Perez C. (1988), "Structural Crises of Adjustment, Business Cycles and Investment Behavior." Bosi et al, London: printers Publishers.

Friedrich, R. / Weichsel, P. / Miles, J. / Rajvanshi, A. (2009) 'Outsourcing Network Operations -Maximizing the Potential', Booz & Company, available online at: www.booz.com/global/home/what_we_think/reports_and_white_papers/ic-display/47372702.

Garner, C. Alan. (2004). "Offshoring in the Service Sector: Economic Impact and Policy Issues." *Economic Review*. 2004, 3: 5–33. Kansas City: Federal Reserve Bank of Kansas City.

Gottschalk, P and Solli-Saether, H (2006), „Enter Strategy“, in Gottschalk and Solli-Saether, *Managing Successful IT Outsourcing Relationships*, IRM Press

Graf M, Mudambi SM. (2005). The Outsourcing of IT Enabled Business Processes: a Conceptual Model of the Location Decision. *Journal of international management* 11(2): 253-268.

Ivanka M., & Gerard B., (2008), Outsourcing Best Practices Step-By-Step Guide on How to Manage the Changes, Challenges, Opportunities and Implement a Successful Outsourcing Process. Emereo Pty Ltd, ISBN: 1921523360

Jethro, M., and Gustav, S. *Networks get Outsourced*. (2009). [Online]. Available: <http://online.wsj.com/article/SB123791910117127841.html>.

- Justin S., Mario A. & Derek H.T., (2006), Outsourcing Decisions & Models –Some Practical Considerations for Large Organizations, IEEE International Conference on Global Software Engineering (ICGSE'06) 0-7695-2663-2/06
- King, William R. (1994) "Strategic Outsourcing Decisions." *Information Systems Management* 11, no. 4: 58.
- Lacity M. & Willcocks L. (1998). An Empirical Investigation of Information Technology Sourcing Practices: Lessons from Experience, *MIS Quarterly* 22, No. 3, 363–408.
- Marshall, D., McIvor, R. and Lamming, R. (2007) Influences and Outcomes of Outsourcing: Insights from the Telecommunications Industry. *Journal of Purchasing and Supply Management* **13**, 245-260.
- Mazzawi, E., (2002) "Transformational Outsourcing", *Business Strategy Review*, Vol. 13, 39-43.
- Mintzberg, Henry (1994). *The Rise and Fall of Strategic Planning*. Basic Books.
- Prahalad, C.K. and G. Hamel (1990) 'The Core Competence of the Corporation'. *Harvard Business Review*, 68 (3): 79-92.
- Quinn, J. B., & Hilmer, F. G. (1994). Strategic Outsourcing. *Sloan Management Review*, 35(4), 43–56.

Ross J. & westerman G. (2003), Preparing for Utility Computing: The Role of IT Architecture and relationship management ,<http://cs.nju.edu.cn/yangxc/utilitycomputin/ross.pdf>

Schniederjans, Marc J and Hamaker, Jamie L and Schniederjans, Ashlyn M (2004), „Needs Analysis and Alternative Information Technology Investment Strategies“, in Schniederjans, Marc J. and Hamaker, Jamie L. and Schniederjans, Ashlyn M., *Information Technology Investment Decision Making Methodology*, World Scientific Publishing Co., River Edge, NJ, pp. 389

Shaw, J.K. (2000) *Strategic Management in Telecommunications*, edn. Norwood, MA USA: Artech House Inc.

Wellenius B. (1993). “ Electronics and the Developing Economies: Introduction and Overview’. In wellenius B. et al(eds). *Developing the electronic Industry*. A World bank Symposium.

APPENDICES

Appendix 1: Research Questionnaire

1. Name of your Company:

Alcatel-Lucent ☐ Nokia-Siemens ☐ Ericsson ☐ ZTE ☐ Huawei ☐

2. Which Department are you?

Operations/Delivery ☐ HR ☐ Admin ☐ Pre/Sales ☐ Finance ☐

Any other (Specify) -----

3. How many years experience do you have in the telecommunications industry?

Less than 2 years ☐ 2 to 5 years ☐ 6 to 10 years ☐ More than 10 years ☐

4. What positions is your company most likely to outsource?

Sales managers ☐ HR managers ☐ financial services ☐ Admin services ☐

Engineering services ☐ Computer support/IT ☐

5. On the rating of three, (1) Agree, (2) Not Sure, and (3) Disagree, show your opinion by ticking in the table below, the reasons for outsourcing in your organization.

Factors	Agree	Not sure	Disagree
To handle sudden spikes of work			
Availability of skills			
Outsourcing non core activities			
Cut down operational costs			
Work requires high degree of domain expertise			

Any other factors -----

6. Did your company outsource any work to third party companies in Kenya?

YES ☐

NO ☐

I don't Know ☐

7. Which department work was outsourced to a local firm?

8. Which company was work outsourced to

9. Did your company outsource job functions to its foreign affiliates?

YES ☐

NO ☐

I don't Know ☐

10. Did your company outsource any work to third party firms outside the country?

YES ☐

NO ☐

I don't Know ☐

11. Which department work was outsourced to a foreign firm?

12. On a scale of three; High, Low, and Moderate, state which foreign destinations you outsource from most.

Outsourcing destinations	High	Moderate	Low
India			
Pakistan			
Egypt			
Turkey			
America			
China			

Any other countries

13. On a scale of five, (1) Strongly Agree, (2) Agree, (3) Not Sure, (4) Disagree and (5)

Strongly Disagree, rate the following factors in the table below by ticking.

Factors considered in outsourcing	(1)	(2)	(3)	(4)	(5)
partner selection	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
Domain expertise / Product knowledge.					

Ease of Communication					
Cost					
Infrastructure available with the vendor					
Customer references					
Proximity to production plant					
Proximity to customers					
Ease of getting VISA					

Any other factor, explain. -----

14. Have you ever been displaced from your job because your position was outsourced?

YES ☐

NO ☐

15. What happened as a result of your last displacement?

I was placed somewhere else in the company ☐

I was let go ☐

Other: Explain-----

16. Do you think that the application of outsourcing has improved the competency level

among staff? YES ☐

NO ☐

I don't Know ☐

Other: Explain-----

THANK YOU FOR YOUR PARTICIPATION