

**OUTSOURCING AND SUPPLY CHAIN PERFORMANCE AMONG MOBILE
TELEPHONE SERVICE PROVIDERS IN KENYA**

**PRESENTED BY
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**A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILLMENT
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DECLARATION

I declare that this research project is my original work and has not been submitted to any other University for assessment or award of any degree.

Signature.....*K. S. Smith*..... Date.....*11/08/12*.....

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This research project has been submitted with my authority as the university supervisor.

Signature.....*Ombati Thomas*..... Date.....*08/11/2012*.....

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DEDICATION

To my mum Miss Maimah L. Grant and my dad Mr. Peter A. Smith

ABSTRACT

This study aimed at establishing the relationship between outsourcing and supply chain performance among mobile phone service providers in Kenya. Supply chain performance was measured by use of four variables namely: Operation System Responsiveness, Logistic Process Responsiveness, Supplier Network Responsiveness and Competitive Advantage. Each of the four independent variables was captured as the average response to the factors identified as determining the performance of each of the variables.

According to the regression analysis, Supplier Network Responsiveness had the greatest impact on outsourcing having a coefficient of 0.61273. The Operating System Responsiveness had the greatest negative effect on how much is outsourced with a coefficient of -0.54204. The regression was significant and the variation in Operation System Responsiveness, Logistic Process Responsiveness, Supplier Network Responsiveness and Competitive Advantage strongly explained the variation in Outsourcing.

It was found from the study that supply chain system responds rapidly to changes in product volume demanded by customers and to changes in product mix demanded by customers, it effectively expedites emergency customer orders, rapidly reconfigures equipment to address demand changes, rapidly changes manufacturing processes to address demand changes and rapidly adjusts capacity to address demand changes. The supply chains respond rapidly to unexpected changes in demand, warehouse capacities rapidly adjust to changes in demand, transportation carriers are rapidly varied, the supply chains also rapidly accommodate special or non-routine customer requests and shipment deliveries are effectively done.

However, the findings are limited to the mobile companies in Kenya for the time that the research was done. Further, the research heavily depended on qualitative data which might have been highly biased towards the opinion of the respondents.

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ACRONYMS AND ABBREVIATIONS

CEO	Chief Executive Officer
ICMR	IBS Centre for Management Research
ILECs	Incumbent Local Exchange Carriers
KPI	Key Performance Indicator
MENA	Middle East and North Africa
SC	Supply Chain
SCC	Supply Chain Council
SCOR	Supply Chain Operations Reference
SCP	Supply Chain Performance
SPSS	Statistical Package for the Social Sciences
VP	Vice President

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Contemporary organizations are experiencing a combination of growing business complexity and changing customer preferences, coupled with strong pressure from the capital markets. These developments are exerting pressure on organizations to act in order to remain competitive. Companies have been forced to reassess their strategic direction and operating models. As a result of this reassessment, companies must now decide on which among their activities along the value chain are to be kept in-house and which ones should be outsourced to a third party. This development has made outsourcing a key business lever for players today (Jaruzelski, Katz and Ribeiro, 2004).

Chamberland (2003) defines outsourcing as the transfer of an organization's regular business activities to an external organization to take the responsibility of providing the same services back to the organization. He further argues that under outsourcing, the service provider (the firm contracted to provide the service) has to own and manage the business process. In their opinion, outsourcing includes the transfer of people, facilities, equipment and technology to the service provider for management.

Dynamic supply chains believe in continuously improving performance. This has become a critical issue for many suppliers, manufacturers, and the related retailers who intend to achieve and sustain competitiveness. In practice, supply chain based companies such as Dell and Toyota, have used different performance management tools to support their supply chain strategies (Cai, Xiangdong and Zhihui, 2008). Outsourcing has also emerged as one of the preferred ways of improving the performance of the supply chain in organizations.

The role of outsourcing in Supply Chain Performance can be considered from the strategic, tactical, and transformational perspectives. Strategically, outsourcing improves business processes; gains access to world class activities and share the risks of doing business. Tactically, outsourcing controls operating costs and makes capital funds

available for other uses. The transformational roles of outsourcing include bringing faster and newer solutions to customers, responding to shorter product cycles and tackling competitors (ICMR, 2012).

It has been argued that as much as outsourcing is a hot trend in the modern business world, it equally has its limitations that companies should be aware of. The most common limitations of outsourcing include loss of managerial control, because it is more difficult to manage outside service providers than managing one's own employees; hidden costs such as legal costs of putting together a contract and other related costs that are difficult to calculate or prepare for; there would be a threat to security and confidentiality. If a company is outsourcing processes like payroll, medical transcriptions or other confidential information, great caution must be exercised; possible loss of flexibility in reacting to changing business conditions, lack of internal and external customer focus and sharing cost savings may also be a disadvantage of outsourcing. Other limitations of outsourcing may include unfavorable contract lengths, loss of competitive edge, problems in contract renewal, and contractual misunderstandings (Harmozi, 2003).

1.1.1 Outsourcing

As companies seek to enhance their competitive positions in an increasingly global market place, they are discovering that they can cut costs and maintain quality by relying more on outside service providers for activities viewed as supplementary to their core business (Sinderman 1995). The global imperative for outsourcing accelerates as firms evolve from sellers of product and services abroad to setting up operations in foreign countries and staffing those operations with host country or third party nationals (Greer et al., 1999).

Outsourcing means finding new suppliers and new ways to secure the delivery of raw materials, goods, components and services. It means using the knowledge, experience and creativity of new suppliers, which you did not use previously (Rothery & Robertson, 1995). According to Momme (2001) outsourcing is the practice of seeking outside organizations to take over activities and services previously carried out within an

organization. Outsourcing increases the flexibility of organizations in many ways. A company is able to focus on its core competencies without being burdened by the demands of bureaucratic dictate. Key employees are herewith released from performing non-core or administrative processes and can invest more time and energy in building the firm's core businesses. The key to this is, knowing which activity drives customer intimacy, Product leadership or operational excellence. Focusing on these activities may help a company create a competitive edge (Kakumanu & Partanova, 2006).

1.1.2 Supply Chain performance

Neely et al. (1995) defines performance as the process of quantifying the effectiveness and efficiency of action. Effectiveness is the extent to which a customer's requirements are met and efficiency measures how economically a firm's resources are utilized when providing a specified level of customer satisfaction. According to Lysons et al (2006), a supply chain is a network of organizations that are involved through upstream and downstream linkages, in the different processes and activities that produce value in the form of products and services in the hands of the ultimate customer.

Therefore, supply chain performance is the extent to which the end customers are satisfied and how well a firm manages the costs along the supply chain (Poole, 1989). As an indispensable management tool, supply chain performance measurement provides the necessary assistance for performance improvement in pursuit of supply chain excellence. According to Stevens (1989), performance of a SC is characterized by its ability to remain responsive without losing the integration through its chain.

Supply Chain Performance can be measured in the context of the following supply chain activities/processes: plan, source, make/assemble, and delivery/customer. These activities are considered at various levels of management – strategic, tactical, and operational levels (Stewart, 1995; Gunasekaran et al., 2001). Many metrics used in supply chain performance evaluation have been designed to measure operational performance, evaluate improved effectiveness, and examine strategic alignment of the whole supply chain management (Beamon, 1999). However, since many measurement systems lacked strategy alignment, a balanced approach and systemic thinking, they had difficulty in

systematically identifying the most appropriate metrics. To address this problem, the Balanced Scorecard (BSC) and Activity Based Costing (ABC) methods have been used to evaluate supply chain performance (Shepherd and Günter, 2006).

The other model that has been developed is the Supply Chain Operations Reference (SCOR). This model has been developed to facilitate construction of a systematic supply chain performance measurement and improvement tool; it has often been recognized as a systematic approach for identifying, evaluating and monitoring supply chain performance. In the SCOR model, a balanced performance measurement system at multiple levels, covering five core supply chain processes (Plan, Source, Make, Deliver, and Return), was developed (Lockamy and McCormack, 2004). Outsourcing is also considered as one of the ways through which organizations can be able to improve their supply chain performance.

1.1.3 The Mobile Telephone Industry in Kenya

Mobile phone technology has reduced communication costs in many parts of the developing world from prohibitive levels to amounts that are, in comparison, virtually trivial. Nowhere has this transformation been as acute as in sub-Saharan Africa, where networks of both fixed line communication and physical transportation infrastructure are often inadequate, unreliable, and dilapidated. While mobile phone calling rates remain high by world standards, the technology has allowed millions of Africans to leap-frog the land-line en route to 21st century connectivity (Jack and Suri, 2010).

The adoption of mobile phones has occurred at perhaps the fastest rate and to the deepest level of any consumer-level technology in history. The cumulative forces of this development are important thus making it difficult to compare directly across innovations. It is however informative to note that mobile phones have been adopted more than five times as fast as fixed line telephone services, which took 100 years to reach 80 percent of country population in Kenya (Jack and Suri, 2010).

In Kenya, the first mobile phone companies were publicly owned, and began operations in the mid-1990s on a small scale and mobile telephone services were expensive and strictly controlled by the government. Over time, mobile phones in Kenya have eclipsed landlines as the primary means of telecommunication: while the number of landlines had fallen from about 300,000 in 1999 to around 250,000 by 2008, mobile phone subscriptions had increased from virtually zero to nearly 17 million over the same time period. Assuming an individual has at most one cell phone, 47% of the population, or 83% of the population 15 years and older, have access to mobile phone technology (Jack and Suri, 2010).

Currently there are four mobile telephone service providers operating in Kenya. They are: Safaricom Limited, Yu, Airtel and Orange. Safaricom and later Airtel formerly Zain have brought a new dimension to the mobile phone industry, with the introduction of money transfer business. It's interesting to note that by February 2009, there were more than 4.5 million accounts for M-Pesa more than the total number of accounts in the banking sector. This transfer service now enables the sender and receiver to transact business at their convenient time and location as opposed to the traditional methods of using mainstream banks which operate in exclusive locations (19% penetration, urban) any time of day. Through technological innovation both companies have brought financial transactions services to the people and the sharing of airtime through electronic transfer (Waburi 2009).

From the point of operating costs, businesses are now able to send and receive data through a click of a button on their phone. Increased internet use has been achieved through the introduction of the 3G operating system. News updates via text messages on local and international news, sports scores, horoscopes, movie listings, inspirational quotes and election updates are other benefits the subscriber can get. This service ensures people get news updates without necessarily having to watch television, listen to radio or read newspapers (Waburi 2009).

The mostly outsourced service in the mobile telephone industry in Kenya is Network Management and customer care. According to Okuttah (2010), Essar Telecom Kenya

Ltd, which operates under the brand name Yu became the latest company to turn to outsourcing by letting go its customer care department to its a sister company Aegis following in the footsteps of rivals Telkom Kenya and Zain. Under the deal, Aegis, which is a top BPO firm in India, will take full control of Yu's customer care operations in a move that will see Essar reduce its staff numbers and cut its wage bill. The mobile telephony companies in Kenya are delegating the running of their customer care and network management facilities in order to cut costs in a market where operators are sliding deeper into losses. Apart from outsourcing its Network management to Nokia Siemens, Zain Kenya has also outsourced the operation of its customer care outlets and customer care services. Telkom Kenya, on the hand, has outsourced its customer care operations to local BPOs Horizon and Kencall in an effort to keep its employee costs low.

1.2 Statement of the Research Problem

Most mobile telephone service providers in Kenya have been outsourcing their network management processes and customer services with a view to cut operational costs and remain viable. The trend to outsource customer care operations was initiated by Telecom Kenya and Zain, Essar. Telecom Kenya working under the brand name 'Yu', entered into an agreement with an Indian business process operation firm Aegis to take care of its customer service operations with a view to reduce operational costs in a market that offers very low margins (Okuttah, 2010). In addition to the above, Telkom Kenya had earlier entered into an agreement with two local business process-outsourcing firms: Kencall and Horizon in a bid to have its customer care operations run by them. On the other hand, Zain Kenya had outsourced its network management and customer care operations to Nokia Siemens with a view to reduce its expenses on employees. Telecom operators in Kenya are now outsourcing some of their non-core operations to cut back on the operational costs. This is aimed at improving their revenues through cost reduction (Okuttah, 2010). Motorola (2004) argue that the wireless communication industry cannot be stagnant since there has been a lot of technological improvement. They indicate that short time to market; more customers that are demanding, global competition and

converging shorter timescales are some of the drivers of managed services and outsourcing.

Friedrich et al (2009) also advised on a number of activities that mobile operators can outsource from outside the organization. Their study established that demand changes, the need for better cost control and ability to manage large workforces were the major reasons why many mobile firms outsourced some of their functions. Kimari (2010) conducted a study into the sources of sustainable competitive advantage in the mobile telephone sector in Kenya. Mukhwana (2010) also conducted a study to investigate the impact of supply chain management practices on performance with a specific reference to Safaricom Ltd. His study focused only on one of the leading telephone service providers thus locking out the others in the industry. The study established that supply chain management plays an important role in enhancing the profitability of an organization. Petronilla (2009) conducted a study on the challenges of Outsourcing Strategy by Mobile phone operators in Kenya. The study revealed that despite the many benefits telecommunication companies currently derive from outsourcing, there are a number of challenges that come with it. These challenges include cost, knowledge and required skills, government policies, loss of control in areas of business and economic down turn. The studies of Kimari, Mukhwana and Petronilla also indicate that there is research taking place in the area of supply chain management within the mobile telephone industry in Kenya. Existing research in the outsourcing literature primarily addresses issues related to supplier selection, supplier management, supplier relationships, procurement strategy, outsourcing risks and benefits (Anderson and Katz, 1998; Bozarth, Handfield, and Das, 1998; Chamberland, 2003; Embleton and Wright, 1998).

As extensively as the idea is being practiced, there's no known study that has addressed the issue of outsourcing and supply chain performance in the mobile telecommunication industry in Kenya? This study will therefore seek to address this gap by looking at outsourcing and supply chain performance among the four mobile telephone service providers in Kenya. This study seeks to address the question: what is the relationship

between outsourcing and supply chain performance among mobile telephone service providers in Kenya?

1.3 Research Objective

The objective of this study is to establish the relationship between outsourcing and supply chain performance among mobile telephone service providers in Kenya.

1.4 Hypotheses of the Study

The null hypothesis assumes that there is no relationship between outsourcing and supply chain performance among mobile service providers in Kenya.

The alternative hypothesis assumes that there is a relationship between outsourcing and supply chain performance among mobile service providers in Kenya.

1.5 Value of the Study

The findings of this study will be of importance to the following groups of people:

Mobile telephone service providers in Kenya will be able to understand the impact of outsourcing on the performance of their supply chains. .

The study will be of help to scholars and academicians who may wish to use its findings as a basis for further research on this subject.

This study will also benefit mobile phones companies in Liberia by assisting them to assess the impact of outsourcing on their supply chain performance.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Outsourcing is fraught with danger for the unwary executive or corporate counsel. Simply stated, it is the "make or buy" decision as applied to the information systems and technology functions of a company. The key question involved "Should a company hire its own systems staff, acquire its own facilities, develop its own systems, maintain its own hardware, develop its own documentation, contract for its own telecommunications network, etc.? Or should it contract such services to an outside specialist organization that has already achieved the economies of scale to allegedly attract the best full-time systems professionals and get the most processing power and development capabilities and tools for the least per unit cost?(Reid, 1996).

For years, telecom operators have been outsourcing a variety of network functions, including the designing and building of new network technologies. As operators complete much of the work needed to upgrade to faster technologies, and business cases for last-mile fiber connections remain unclear, operator attention has turned again to outsourcing the other operations of their traditional businesses. For the same reason, outsourcing providers are also concentrating more of their efforts on developing operations and maintenance services beyond core equipment provision (Friedrich et al, 2009).

Most Telecom operators, looking for ways to cut costs and concentrate on their core businesses have either outsourced or consider outsourcing activities from three primary areas: site operations, maintenance, and administration. It is however clear that telecom operators do not consider outsourcing core network functions, core network operations or network administration activities such as capacity management, network planning, and end-to-end performance management since they assist them to differentiate themselves from competitors (Friedrich et al, 2009).

2.1.1 Outsourcing Trends

According to Dole (1998), to compete in today's information age companies must re-evaluate the way they do business in the light of rapid, unrelenting change in the

marketplace. The need to improve productivity, quality and flexibility has led companies to examine their organizational structures and to realize that creating the greatest value does not require them to own, manage, and directly control all of their assets and resources. Rather, strategic alliances and partnerships with those who provide expertise in a particular area may be the most effective way to gain results.

Currently, in the simplest of forms, outsourcing takes place when an organization transfers the ownership of a service or function that used to be done in-house to a supplier. The degree of transfer of control is the defining characteristic of outsourcing. It concerns 'the transfer of routine and repetitive tasks to an outside source'; 'having an outside vendor provide a service that you usually perform in-house'; and 'paying other firms to perform all or parts of the work' (Zineldin and Bredenlow 2003).

Historically, outsourcing was used when an organization could not perform to world-class standards in all aspects of its work due to many factors, including: incompetence of staff and/or management; lack of capacity within the organization, financial pressures and/or technological pressures. In its most basic of forms it started from the outsourcing of a single service such as canteen management, buildings management, or computing. In addition, outsourcing was applied in overhead functions or activities with no potential for competitive advantage and business processes where an end user could create a competitive advantage through partnerships with vendors specializing in a particular area (Dole 1998). Now, outsourcing is used to build on core competencies and organizations recognize that serving the customer is critical: 'Anything that distracts us from this focus will be considered for outsourcing (Greaver 1999).

Friedrich et al. (2009) argue that the trend toward telecom operators outsourcing their network and field services operations is growing. Many operators have already engaged in the practice, and most of those who haven't are quite willing to consider doing so. The reason is simple: to reduce their operating expenses spending levels as they prepare to focus on their core business and pursue investments in strategic growth. Meanwhile, as their business environment becomes more competitive, the large telecom equipment manufacturers that currently provide the majority of outsourcing services will be pushed

to upgrade their offerings through higher service-level guarantees and process innovation. And as more specialized vendors emerge, they are introducing a healthy level of competition into the market, offering best-of-breed services in a number of critical areas. With these trends already in place, operators and vendors alike would be wise to consider their longer-term outsourcing strategies.

2.2 Outsourcing Decision Making

The decision to outsource can be made subjectively or objectively (Atkin and Brooks, 2005). Hatkins (1996) notes that vision; function and economics drive the need for outsourcing. Apparently, the decision for outsourcing is vitally derived from the fact that it is able to support functions that can be completed faster where better quality can be guaranteed at cheaper and reasonable cost.

McCarthy (1996) identifies several primary reasons why a firm may consider outsourcing: outsourcing allows companies to refocus their resources on their core business, outsourcing lets companies re-examine their benefit plans, makes them more efficient and saves time and money while improving efficiencies, companies outsource to improve the benefit plan service level to their employees by making the information more consistent and more available, to reduce costs over the longer term.

According to Arnold (2000) the core competencies should never be outsourced. To hand over core functions to a third-party supplier is to hand over the things that make a company what it is and what differentiates it from others, in essence what makes the company profits. Non-core competencies take up time, energy and workspace, and help management to lose sight of what is most important in the organization (Greaver 1999). Non-core activities can be farmed out to specialists if they conduct them better, more cheaply or both.

Oates (1998) defines core competencies as 'the central things that organizations do well.' The corollary of this is that activities regarded as 'non-core' are being outsourced. Furthermore, the trend towards economic and business globalization has facilitated the outsourcing of various activities to overseas locations (off-shoring). Key supply chain

activities are increasingly being outsourced to third-party organizations. Furthermore, in the increasingly knowledge-based economies of developed countries, shared knowledge – which one can acquire by outsourcing – is a potentially important element of competitive capability.

Key outsourcing decisions for large-scale deals are typically strategic decisions made by Chief Executive Officers (CEOs), with planning and implementation then passed down to the functional units. Often, smaller deals within established operating guidelines can be finalized by the regional or functional unit heads, usually at the VP level—e.g., local field maintenance. Another key player in this process is the procurement organization that usually supports finalization and execution of outsourcing decisions. One area where there is consensus involves the criteria used for choosing outsourcers. The technical expertise and financial stability of the vendor are at the top of the list (Jaruzelski, 2004).

Given that the quality of the network and issues around the skill base are the key concerns for Service Providers, it is no surprise that the need for technical expertise emerges as the most important criteria. In fact, almost 75% of the interviewees rank technical expertise as their number one criterion. As one executive said, nobody wants to pay an outsourcer to “learn from us.” The second area of focus is the financial stability of the outsourcer. Financial stability is usually associated with vendor size rather than profitability in spite of the fact that profitability is the key enabler for ensuring that a vendor meets its obligations in an outsourcing arrangement (Jaruzelski, 2004).

Once the decision to outsource is made, Service Providers deploy specific contractual arrangements to maximize benefits and minimize risks. For many participants, the most important elements of an outsourcing deal are the financial benefit and the duration of the contract. Wire line and wireless providers alike want to see a value proposition that implies a clear and proven path to achieve 10% to 20% savings. This level of savings is a necessary condition for an activity to be considered for an outsourcing arrangement (Jaruzelski, 2004).

Reid (1996) gives steps that organizations can follow in their efforts to outsource some of the functions. The first step will include organizing a top management Steering

Committee to plan, monitor, and oversee the search for and transition to outsourcing. This will be followed by identifying and engaging an expert team to guide you and your organization during the outsourcing decision, selection, and contracting processes. The team should include a small group of independent experts with specialization in outsourcing. It will also require that the entity identifies critical internal resources, such as a particular competent data processing director or chief information officer, who will stay on your company's staff internally to help manage and administer the relationship between the outsourcer and your company.

This will be followed by identifying what is good and bad about current installation in terms of: service; capability; performance; uptime; costs; user satisfaction; backlog; on-time, on-target systems delivery; controls. It will also be important to use your expert team, identify several outsourcing alternatives. Developing a rigorous request for proposal will also be of much significance. The proposals are then evaluated and contracts negotiated. After this the implementation will be carried out followed by frequent monitoring and evaluation to ensure contract performance Reid (1996).

Behara et al. (1995) emphasize the factors that need to be considered in outsourcing decision in the context of a specific firm's situation as follows: impact on company competitiveness, identifying services to be outsourced, the number of suppliers to be used, ability to return to in-house operations if required, supplier reliability and service quality, coordination with the supplier and evaluating performance, flexibility in the products offered by the supplier, providing the latest or advanced technology and expertise.

2.3 Benefits of Outsourcing

Various forms of organizational benefits and advantages have been related to the idea of outsourcing. Since outsourcing has attracted many parties to explore the possible benefits and profits it may bring, outsourcing benefits, drivers and advantages have been carefully scrutinized and clearly explained by many researchers (Jennings, 2002).

To summarize from Lankford and Parsa (1999), outsourcing is claimed to reduce costs, expand services and expertise, improve employee productivity and morale, and create a more positive corporate image by allowing the organization to refocus their resources on their core business, buy technologies from vendors that would be too expensive for them to reproduce internally, re-examine the organizations' plans, make them more efficient and save time and money while improving efficiencies, and improve the plans' service level to their employees by making the information more consistent and more available.

Nevertheless, the cost efficiency advantage could be gained only if the right tasks are contracted out (Behara et al, 1995). Outsourcing helps companies to improve competitive pressures, improve quality and efficiency, increase the access to functional expertise, and raise the potential for creating strategic business alliances and reduce internal administrative problems (Fill and Visser, 2000).

2.4 Risks Associated With Outsourcing

Outsourcing is not simple or easy to create, develop and support, and it can have both positive and negative effects on key areas of the supply chain (Mason et al. 2002). There are many implementation problems and the failure rate is often quoted to be as high as 70 per cent (Zineldin and Bredenlow 2003). In addition, it can adversely affect employees and many transitions have been unsuccessful. Even with these problems recent studies have indicated that 85 per cent of all companies outsource at least one function or service (Logan 2000).

The risks which are associated with outsourcing have been classified by Gavin and Matherly (1997) into three main and overlapping aspects; people, process and technology. The 'people' problems ranged from the risk of employees' emotional or psychological stress, reduction of loyalty to loss of internal expertise. Malhorta (1997) agreed to this by adding that the declining in the morale and performance of the remaining employees may also be one of the results of outsourcing. The 'process' meanwhile consists of two categories; incompatibilities between the service provider and the organisation, and the inability of organisations to sufficiently analyse their decision to outsource.

Baret and Baldry (2003) also identified other risks associated with outsourcing which include: lack of control over suppliers, confidentiality of data or security issues, loss of in-house expertise or capability, personal problem-loyalty to user, new or different management problems, risk of selecting a poor supplier/supplier market being incompetent, personal problem-shift from user to supplier/those leaving versus those staying; unions/redundancies.

2.5 Supply Chain Performance

The supply chain performance items represent a broad range of supply chain characteristics including cycle times, delivery accuracy, delivery timeliness, and return costs. When measured in aggregate, these measures provide an indication of the level of supply chain performance across an organization (Neely et al, 1995). One of the most critical tasks during the planning phase is developing performance measurements and reporting methods. The outsourcing organization must take initiative to design measures that support the company's business goals for the outsourcing strategy.

Absence of efficient Performance Measurement system will also directly contribute to the downfall of outsourcing initiatives. Hence, it is essential to measure the project performance periodically as documented in planning process and share the outcomes with the team. This helps in understanding limitations if any and also helps in improving the performance through further innovation in the business processes. The ultimate goal of outsourcing is to continuously improve the performance in order to assure smile on the face of the ultimate customer (Lankford and Parsa, 1999).

Improving supply chain performance is a continuous process that requires both an analytical performance measurement system, and a mechanism to initiate steps for realizing key performance indicators (KPI) goals. The mechanism to achieve KPI goals can be referred to as "KPI accomplishment", which connects planning, and execution, and builds steps for realization of performance goals into routine daily work. To measure supply chain performance, there are a set of variables that capture the impact of actual working of supply chains on revenues and costs of the whole system. These variables as drivers of supply chain performance are always derived from supply chain management

practices. After identifying KPIs, managers have to achieve improvement in them, through continuous planning, monitoring and execution. According to the results of selected KPIs' accomplishment, managers create current reports on KPIs, to compare multiple plans of supply chain management. In this performance management cycle, there are many challenges, both in performance measurement and its improvement (Cai et al, 2008).

Different researchers have suggested different measures of supply chain performance. Stevens (1990) suggests the performance measure of SC in terms of inventory level, service level, throughput efficiency, supplier performance and cost. Neely et al. (1995) in his work suggests quality, time, flexibility and cost as a few categories of performance measures and also points out need of a generally applicable systematic approach to performance measurement. Narasimhan and Jayaram (1998) use the customer responsiveness and manufacturing performance as the measure for SCP.

Spekman, Kamauff, and Myhr (1998) use cost reduction and customer satisfaction as the SC measures. Beamon (1998) identifies several qualitative SCP measures: customer satisfaction, flexibility, information and material flow integration, effective risk management, and supplier performance. Beamon (1999) develops a performance evaluation framework for manufacturing SCs, where resources, output and flexibility are considered necessary components for SCP. The supply chain operations reference model (SCOR) developed by the Supply Chain Council (Stewart, 1997) provides a useful framework that considers the performance requirements of member firms in a SC.

The SCOR model views activities in the SC as a series of interlocking inter organizational processes with each individual organization comprising four components: plan, source, make and deliver. The SCOR model provides an indication as to how effective a firm uses resources in creating customer value. It considers the performance expectations of member firms on both input and output sides of SC activities (Lai, Ip, & Lee, 2001)

Gunasekaran (2004) indicate that there are three levels of supply chain measures. Strategic level measures include lead time against industry norm, Quality level, Cost saving initiatives, and supplier pricing against market. Tactical level measures include the efficiency of purchase order cycle time, booking in procedures, cash flow, quality assurance methodology and capacity flexibility. Operational level measures include ability in day to day technical representation, adherence to developed schedule, ability to avoid complaints and achievement of defect free deliveries. Wu, Li, Chu and Sculli (2005) contended that effective use of outsourcing enables an organization to focus on a limited set of strategically important tasks and will in turn lead to continuous enhancement of its core competencies.

Outsourcing of a company's noncore competencies should result in cost reduction and shorter lead times. To so achieve, a company needs to concentrate on its own capabilities and core competencies and use outsourcing as a means for efficient exploitation of available resources (Dekkers, 2000). The extensive use of outsourcing strategy has enabled companies to achieve outstanding performance (McIvor, 2003).

In conclusion, the growth of outsourcing has led outsourcing strategies to become an increasingly important component of firm success (Gottfredson et al., 2005). While the purported goal of outsourcing in supply chains is to derive a competitive advantage, it is not clear whether the outsourcing decisions of firms are always strategically aligned with their overall competitive strategy. There is outsourcing congruence across all five competitive priorities (cost, flexibility, innovativeness, quality and time) to be positively and significantly related to supply chain performance. We also find the level of supply chain performance in a firm to be positively and significantly associated with the firm's business performance.

2.6 Empirical Review

Jaruzelski et al (2004) conducted a study on the outsourcing trends in Northern America telecommunications firms. The study focused on the evolution of the value chain and the potential impacts of outsourcing on the North American telecommunications industry. As a part of the study, senior executives from major Service Providers and industry experts

across North America were interviewed to examine the drivers and trends for outsourcing in telecommunications, with a specific focus on network-related functions. The study covered more than 80% of the domestic wire line and wireless markets, and included incumbent local exchange carriers (ILECs), long-distance carriers, wireless carriers, and smaller players. A Booz Allen team interviewed senior business leaders (approximately 80% of executives were Vice Presidents (VPs) or higher level across key functional areas of the organization typically involved in making outsourcing decisions in network operations, finance, procurement, and corporate strategy. The study established that as companies continue to reevaluate business models in the face of a tough economic environment, outsourcing will become an increasingly important competitive lever for Service Providers in North America.

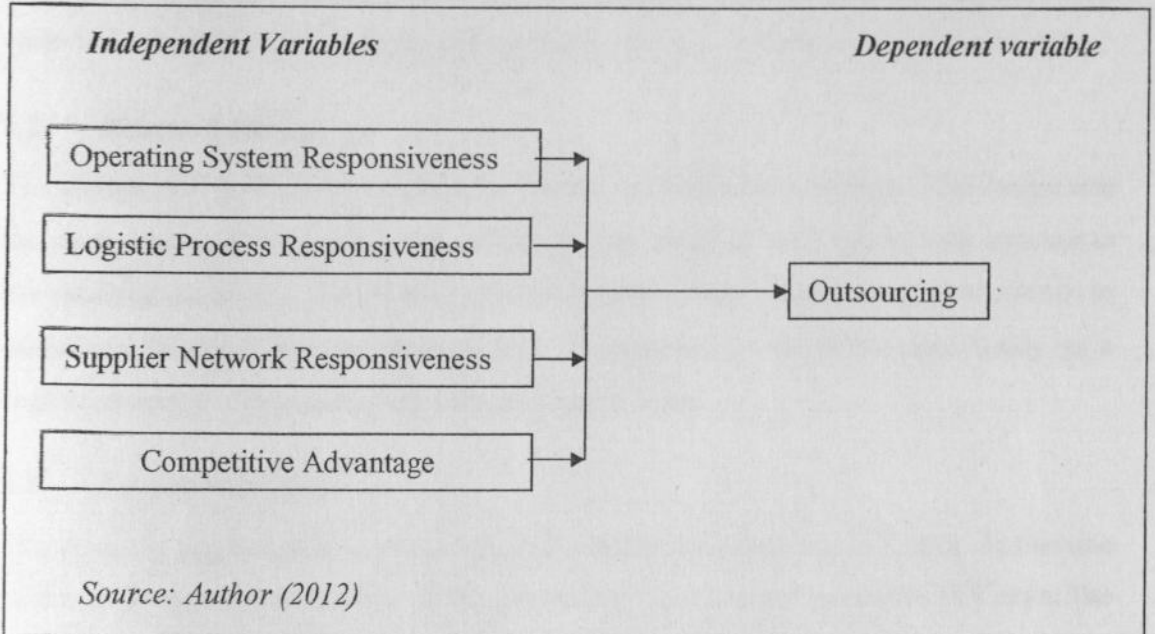
Another study was conducted by Bernas (2009) on benefits of outsourcing in telecommunications infrastructure to operators. The study argues that the need for outsourcing services within the Telecom sector in Nigeria and other parts of Africa has been growing steadily over the years and also with the coming of the global recession, there is the need for telecom companies to ensure financial stability. According to a survey conducted by a European group called MENA (Middle East and North Africa), Telecom markets face lower capital expenditure due to financial crisis. The study concluded that outsourcing leads to lower operation cost in the provision of Telecom services and it will be easy for operators to be proficient in their core areas of operation. It also improves response system for Value Added Services and Social provisions.

2.7 Conceptual Framework

According to Miles and Huberman (1994), a conceptual framework “lays out the key factors, constructs, or variables, and presumes relationships among them .The conceptual framework of this study is based on five independent variables associated with supply chain performance which are: operational system responsiveness (OSR), logistical process responsiveness (LPR), supplier network responsiveness (SNR) and competitive advantage (CA). The dependent variable of this study is expenditure on outsourcing

expressed as percentage of total costs. The figure below shows the relationship between the dependent and the independent variable.

Figure 1: Conceptual Framework



CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter gives the methodology that was used to accomplish the research objective and question. Here included also are the research design, target population, data collection, the instrument validity and reliability test, data collection, and data analysis.

3.2 Research Design

The design of this study was descriptive survey and hypothesis testing. The design was the most convenient since it ensured that the data obtained gave appropriate answers to the research question. Descriptive survey method is used when a researcher intends to describe a situation or a condition as it is. The researcher offered the opportunity for a logical structure of the inquiry into the problem of study.

3.3 Target Population

The research targeted all the mobile telephone companies operating in Kenya. At the time of the study there were 4 mobile phone companies fully licensed to operate in Kenya. The four companies included Safaricom, Orange, Airtel and Yu (Waburi 2009).

3.4 Data Collection

This study used primary data that was collected by use of a questionnaire (see Appendix I). The questionnaire included both open, close ended questions and Likert scales. The drop and pick later method was used to administer the questionnaire. The researcher targeted procurement managers and/or procurement officers from supply chain departments.

3.5 Data Analysis

The data collected was organized and analyzed using the MS Excel 07. Descriptive statistical analysis was employed in order to enable the researcher to summarize, organize, evaluate and interpret the data ascertaining the relationship between outsourcing and supply chain performance among mobile service providers in Kenya.

Regression analysis was done to establish the impact of outsourcing on supply chain performance.

DISCUSSIONS

The regression model

$$Y = \beta_0 + \beta_1(OSR) + \beta_2(LPR) + \beta_3(SNR) + \beta_4(CA) + \epsilon$$

Where:

Y – Percentage of Outsourcing

OSR – Operational System Responsiveness

LPR = Logistical Process Responsiveness

SNR = Supplier Network Responsiveness

CA – Competitive Advantage

β_i = Sensitivities of Y To the Variables

ϵ = The Error Term

The T-statistics were used to measure the significance of the constants of regression. The significance of the whole regression was tested using the F-test. The strength of the level to which the independent variables explain the variation in the dependent variables was assessed using the coefficient of determination. The analysis of the data was done using MS Excel 07.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

The objective of the study was to establish the relationship between outsourcing and supply chain performance among mobile telephone service providers in Kenya. Of the four licensed mobile telephone service providers, three provided responses to the questionnaires making a response rate of 75%. Qualitative data was analyzed through quantitative analysis. Tables, means, frequencies and percentages were used to present the data. The findings and analysis are presented in the two sections of this chapter. The first section provides a detailed analysis of the variables used to establish the relationship between supply chain performance and outsourcing. The second part provides a discussion of the finding.

4.2 Analysis of the Variables

Table 1 provides the analysis of the responses to the variables relating to the operating system's responsiveness of their supply chain. All the three analyzed companies showed that they use outsourcing in their operations and as a result they indicated that the supply chain operating system respond rapidly to changes in product volume demanded by customers (mean 5.000) and rapidly changed manufacturing processes to address demand changes (mean 4.667). However, the systems showed possible weaknesses in responding rapidly to changes in product mix as demanded by customers (mean 4.333), effectiveness expediting emergency customer orders (mean 4.333), rapid reconfiguration of equipment to address demand changes (4.333) and rapidly adjustment in capacity to address demand changes (mean 4.333). The grand mean of these factors was 4.500 showing that generally there was higher responsiveness of the supply chain systems to customer needs.

Table 1 Operating System Responsiveness Factors

OPERATION SYSTEM RESPONSIVENESS (OSR)	MEAN	SD
Responds rapidly to changes in product volume demanded by customers	5.000	0.000
Responds rapidly to changes in product mix demanded by customers	4.333	0.577
Effectively expedites emergency customer orders	4.333	0.577
Rapidly reconfigures equipment to address demand changes	4.333	0.577
Rapidly changes manufacturing processes to address demand changes	4.667	0.577
Rapidly adjusts capacity to address demand changes	4.333	0.577
GRAND MEAN	4.500	

Source: researcher (2012)

Table 2 provides the analysis of the responses concerning the responsiveness of the supply chain system with regard to logistics. The results show that the logistical process responds rapidly to unexpected demand change and effectively delivers expedited shipments. The logistic process response to unexpected demand changes and the effectiveness in delivery of shipments both scored means of 4.667. However, the logistic process response was weaker in terms of rapid variation in transportation carriers to address demand changes, rapid accommodation of special or non-routine customer requests and rapid adjustment of warehouse capacities to address demand changes. These variables scored means of 4.333, 4.333 and 4.000 respectively. The grand mean of the logistic process responsiveness factors was 4.400 which showed the systems had comparatively low responsiveness to customer needs.

Table 2 Logistic Process Responsiveness Factors

LOGISTIC PROCESS RESPONSIVENESS (LPR)	MEAN	SD
Responds rapidly to unexpected demand change	4.667	0.577
Rapidly adjusts warehouse capacity to address demand changes	4.000	0.000
Rapidly varies transportation carriers to address demand changes	4.333	0.577
Rapidly accommodates special or non-routine customer requests	4.333	0.577
Effectively delivers expedited shipments	4.667	0.577
GRAND MEAN	4.400	

Source: Researcher, (2012)

Table 3 shows the analysis of the responses of the supplier network to the changes in the needs of the customers. The grand mean was 4.111 which showing that the supplier networks were comparatively more responsive to the changing needs of customers. However, it was indicated that major suppliers consistently accommodated requests (mean of 4.667) and the major suppliers changed product volume in a relatively short time (Mean of 4.333). The areas with comparatively lower scores were those to do with major suppliers changing product mixes in a relatively short time (mean 3.667), major suppliers having outstanding on-time delivery record with the companies(mean 4.000), major suppliers effectively expediting emergency orders(mean 4.000) and major suppliers providing quick inbound logistics (mean 4.000).

Table 3 Supplier Network Responsiveness Factors

SUPPLIER NETWORK RESPONSIVENESS (SNR)	MEAN	SD
Major suppliers change product volume in a relatively short time	4.333	0.577
Major suppliers change product mix in a relatively short time	3.667	0.577
Major suppliers consistently accommodate our requests	4.667	0.577
Major suppliers have outstanding on-time delivery record with us	4.000	0.000
Major suppliers effectively expedite our emergency orders	4.000	0.000
Major suppliers provide quick inbound logistics to us	4.000	0.000
GRAND MEAN	4.111	

Source: Research (2012)

Table 4 Competitive Advantage Factors

COMPETITIVE ADVANTAGE OF THE FIRM (CA)	MEAN	SD
Offer prices as low or lower than our competitors	4.667	0.577
Compete based on quality	4.667	0.577
Offer products that are highly reliable	4.667	0.577
Offer products that are very durable	4.333	0.577
Offer high quality products to our customers	4.333	0.577
Deliver customer orders on time	4.333	0.577
Provide dependable delivery	4.333	0.577
Provide customized products	4.333	0.577
Alter our product offerings to meet client needs	4.667	0.577
Cater to customer needs for “new” features	4.667	0.577
We are first in the market in introducing new products	4.333	0.577
We have time-to-market lower than industry average	4.333	0.577
We have fast product development	4.333	0.577
GRAND MEAN	4.462	

Source: Research (2012)

The competitive advantage factors were analyzed and findings are as presented in Table 4 above. The Grand Mean was 4.462 which showed high competitiveness among the companies. The highest rated areas of competitiveness were offering prices as low as or lower than competitors, competing based on quality, offering products that are highly reliable, altering product offerings to meet client needs and catering for customer needs for “new” features. Each of these factors scored a mean of 4.667. The following areas scored comparatively lower: offering products that are very durable; offering high quality products to our customers; delivering customer orders on time; providing dependable delivery; providing customized products; being first in the market in introducing new products; having time-to-market lower than industry average and having fast product development. Each of these factors scored a mean of 4.333.

Table 5 Regression Analysis of the Variables

	COEFFICIENTS
CONSTANT	0.04094
Operating System Responsiveness (OSR)	-0.54204
Logistic Process Responsiveness (LPR)	0.022596
Supplier Network Responsiveness (SNR)	0.61273
Competitive Advantage (CA)	0.01749
R-Square	1
F	0
P(F)	1
DW	1.29

Source: Research (2012)

The regression model is:

$$Y = 0.04094 - 0.54204(OSR) + 0.022596(LPR) + 0.61273(SNR) + 0.01749(CA)$$

Table 5 shows the results after the regression analysis. The constant term was found to be 0.040904 (or 4.0904 %) with an infinite T-Value. The coefficient of OSR was -0.54204 showing a negative relationship between Outsourcing and OSR. The coefficient of the LPR was 0.022596; that of SNR was 0.61273, while that of CA was 0.01749. The coefficient of determination was 1.000 with an F-test value of 0.000 (p=1). The study therefore confirmed the alternative hypothesis that there is a relationship between outsourcing and supply chain performance among mobile telephone companies in Kenya.

4.3 Discussion of Findings

From the analysis it can be deduced that Operation System Responsiveness (OSR) is highly effective among the mobile companies. This is evident due to the fact that the supply chain system responds rapidly to changes in product volume demanded by customers and to changes in product mix demanded by customers. The supply chain also effectively expedites emergency customer orders, rapidly reconfigures equipment to address demand changes, rapidly changes manufacturing processes to address demand changes and rapidly adjusts capacity to address demand changes. This shows that the

operations of the supply chains of the mobile companies have a high level of performance given that the grand mean was 4.500.

The Logistic Process Responsiveness (LPR) was also high given that the supply chains respond rapidly to unexpected changes in demand; warehouses capacity rapidly adjusts to address changes in demand; transportation carriers are rapidly varied to address demand changes; supply chains rapidly accommodate special or non-routine customer requests; and deliveries of expedited shipments effectively done.

Supplier Network Responsiveness (SNR) also was highly rated. From the analysis, major suppliers rapidly change product volumes and consistently accommodate supplies requests. Moreover, major suppliers have an outstanding on-time delivery record, effectively expedite emergency orders and provide quick inbound logistics. However, the suppliers were slow when it came to changing product mix.

The findings depict that Competitive Advantage of the firms (CA) was high and was indicated by the ability to offer prices equal to or lower than competitors, ability to have quality-based competition, the ability to offer products that are highly reliable, durable and of high quality to customers. Further, the competitiveness of the companies was demonstrated by timely delivery of customer orders, provision of dependable deliveries, and provision of customized products. It was also found that the companies easily alter product offerings to meet client needs; they accommodate customer needs for "new" features and have fast product development.

The regression analysis showed that the level of outsourcing in the companies was heavily affected by Supplier Network Responsiveness which had a regression coefficient of 0.61273 and Operating System Responsiveness which had a coefficient of -0.54204. This means that an improvement in the supplier network response was a key factor that led to more outsourcing. The higher the responsiveness of the supplier network, the higher the outsourcing activities. The factors that drove the responsiveness of the supplier network were speed of changes in product volume, consistency in accommodation of companies' requests, delivery record, expediting of emergency orders and quick

provision of inbound logistics. Outsourcing was also significantly affected by Operating System Responsiveness but in a manner inverse to the effect of Supplier Network Responsiveness. The effect was such that when responsiveness increases, outsourcing reduces and vice versa. These factors within the operating system responsiveness were: response to changes in product volume as demanded by customers; response to changes in product mix as demanded by customers; expedition of emergency customer orders; reconfiguration of equipment to demand changes; changes in the manufacturing processes to address demand changes; and adjustment of capacity to address demand changes.

The findings of this study agree with the findings by Mazlan and Ali (2006) who concluded from their study that there is a link between Supply Chain Management and outsourcing and found a very strong relationship between them. The study also agrees with Sukati, et al (2008) who found that Supplier Network Responsiveness and Operating System Responsiveness greatly affected the decision to outsource in companies in the consumer goods industry in Malaysia.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the findings of this study. The first section provides a summary of the findings. The other sections provide the conclusions of the study, the limitations of the study, suggestions for further research and recommendations for quality and practice in that order.

5.2 Summary of findings

This study was done to find out the relationship between outsourcing and supply chain performance. Supply chain performance was measured by use of four variables namely: Operation System Responsiveness, Logistic Process Responsiveness, Supplier Network Responsiveness and Competitive Advantage. Each of the four independent variables was captured as the average response to the factors identified as determining the performance of each of the variables.

The variables were found to have a significant relationship and the independent variables explained the variation in the dependent variable. This shows that the variables were strongly related and that the decisions to outsource were dependent upon the identified factors. According to the regression analysis Supplier Network Responsiveness had the greatest impact on outsourcing having a coefficient of 0.61273. The Operating System Responsiveness had the greatest negative effect on how much is outsourced with a coefficient of -0.54204.

An analysis of each of the variables revealed that supply chain system responds rapidly to changes in product volume demanded by customers and to changes in product mix demanded by customers. The supply chains also effectively expedites emergency customer orders, rapidly reconfigures equipment to address demand changes, rapidly changes manufacturing processes to address demand changes and rapidly adjusts capacity to address demand changes. The supply chains respond rapidly to unexpected changes in

demand, warehouse capacities rapidly adjust to changes in demand, transportation carriers are rapidly varied, the supply chains rapidly accommodate special or non-routine customer requests and shipment deliveries are effectively done.

Suppliers were found to rapidly change product volumes, consistently accommodate supplies requests, have an outstanding on-time delivery record, effectively expedite emergency orders and provide quick inbound logistics. However, the response of the suppliers to changes in product mix was not fast. The competitiveness of the companies was indicated by the ability to offer prices equal to or lower than competitors; have quality-based competition; offer products that are highly reliable, durable and of high quality to customers. Further, the competitiveness of the companies was demonstrated by timely delivery of customer orders, provision of dependable deliveries, and provision of customized products.

5.3 Conclusions of the Study

The study found that the amount of outsourcing among mobile firms was strongly related to Operation System Responsiveness of the supply chain, Logistic Process Responsiveness of the supply chain, Supplier Network Responsiveness and Competitive Advantage gained from the outsourcing. However, the main positive influence came from Supplier Network Responsiveness while the most negative response came from Operation System Responsiveness.

The study also established that the supply chains of the companies were highly responsive to customers' changing needs, logistical responsiveness and supplier network responsiveness.

5.4 Recommendations for Quality and Practice

Arising from this study, the recommendation is that, before engaging in outsourcing, the company with that intention should assess the impact of the outsourced services and/or goods on the performance of the supply chain. This is because the outsourced services can affect the operating system, the supplier network, the competitiveness and the

logistical responses of the supply chain which may in turn affect the performance of the company.

The supply chains of the studied companies were found to change with volume and demand coupled with appropriate changes in warehousing. To improve efficiency of supply chains of companies it is recommended that companies should ensure that the warehousing facilities in their supply chain system is up to the task before deciding to incorporate such a system. A company should choose a supply chain system that accommodates changes in demanded volumes of products and product mixes.

Companies should also focus on using a supply chain system that responds rapidly to changes in products in the market. That is a new product coming into the market should quickly reach the consumer due to the speed with which the supply chain accommodates such a commodity. Firms should also focus on supply chain systems that deliver products in a timely manner and quickly adjust to changes in the product mix.

The nature of outsourcing that companies should focus on is that which should ensure quality-based competition coupled with reliable products being offered to the market. Companies should therefore form alliances with firms that will enable them achieve the offer of high value of services or products to the consumers at reasonable price. The alliances in the supply chain system should also enable altering of products with ease.

5.5 Suggestions for Further Research

This study can be repeated with a wider population of study across a mix of industries in Kenya so as to get findings that are applicable to all industries in Kenya where outsourcing is evident. The study can also be done using secondary data instead of relying on primary data. The assumption is that the weaknesses of the Likert scale concerning objectivity will be settled by the use of secondary data. There should be a study to make the study applicable across time by conducting a time series cross-sectional study instead of the onetime study that was done by this survey.

5.6 Limitations of the Study

This study focused on the mobile companies in Kenya only. The limitation arising from this is that the findings may not be applicable to other companies in other industries in Kenya because these findings are specific to the companies in the Kenyan mobile communication industry. The findings may also not be universalized to companies out of Kenya.

The primary data collected by the Likert scale may have biases of the respondent reflected in the results. This might therefore lead to results being dependent upon the attitudes of the respondent of the companies that responded. There is a possibility that if the respondents were different, the results might be different.

The results of this study might be limited to the time they were collected. The dynamic nature of supply chain management could lead to changes soon after the data was collected. The picture might be different after the data collection. The findings might therefore not be expressly applicable across time even with the same companies.

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APPENDICES

Appendix I: Research Questionnaire

SECTION A

1. Name of company (Optional).....

2. Years in operation

1-5 years

6-10 years

Above 10 years

3. Are you involved in outsourcing at the moment?

Yes

No

SECTION B

By use of a Tick (✓) indicate the extent to which you agree with the following statements about your company

1. A very great extent 2. Great extent 3. Medium extent 4. Small extent 5. Very small extent

OPERATION SYSTEM RESPONSIVENESS (OSR)	1	2	3	4	5
Responds rapidly to changes in product volume demanded by customers					
Responds rapidly to changes in product mix demanded by customers					
Effectively expedites emergency customer orders					
Rapidly reconfigures equipment to address demand changes					
Rapidly changes manufacturing processes to address demand changes					
Rapidly adjusts capacity to address demand changes					

LOGISTIC PROCESS RESPONSIVENESS (LPR)	1	2	3	4	5
Responds rapidly to unexpected demand change					
Rapidly adjusts warehouse capacity to address demand changes					
Rapidly varies transportation carriers to address demand changes					
Rapidly accommodates special or non-routine customer requests					
Effectively delivers expedited shipments					

SUPPLIER NETWORK RESPONSIVENESS (SNR)	1	2	3	4	5
Major suppliers change product volume in a relatively short time					
Major suppliers change product mix in a relatively short time					
Major suppliers consistently accommodate our requests					
Major suppliers have outstanding on-time delivery record with us					
Major suppliers effectively expedite our emergency orders					
Major suppliers provide quick inbound logistics to us					

COMPETITIVE ADVANTAGE OF THE FIRM (CA)	1	2	3	4	5
Offer prices as low or lower than our competitors					
Compete based on quality					
Offer products that are highly reliable					
Offer products that are very durable					
Offer high quality products to our customers					
Deliver customer orders on time					
Provide dependable delivery					
Provide customized products					
Alter our product offerings to meet client needs					
Cater to customer needs for "new" features					
We are first in the market in introducing new products					
We have time-to-market lower than industry average					
We have fast product development					

Appendix II: Letter of Introduction



UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME

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Nairobi, Kenya

DATE 7/24/12

TO WHOM IT MAY CONCERN

The bearer of this letter Kamuk S. Smith

Registration No. Dei/CO886/2011

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

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

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

Thank you.



JIMMACULATE OMANG
MBA ADMINISTRATOR
MBA OFFICE, AMBANK HOUSE