

**SERVICE OUTSOURCING AND SUPPLY CHAIN PERFORMANCE OF
CEMENT MANUFACTURING FIRMS IN KENYA**

BY:

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D61/79097/2015

**A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS IN
PARTIAL FULFILLMENT FOR THE DEGREE OF MASTERS OF BUSINESS
ADMINISTRATION OF THE UNIVERSITY OF NAIROBI**

OCTOBER, 2016

DECLARATION

DECLARATION BY THE STUDENT

This research project is my original work and has not been presented for a degree in any other University.

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DECLARATION BY THE SUPERVISOR

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

Signature.....Date.....

MR. MICHAEL K. CHIRCHIR

DEDICATION

I dedicate this research project to my parents, Mr. and Mrs. Machuki, my sister Edna Machuki and the entire family for their continued support and encouragement.

ACKNOWLEDGEMENT

I wish to attribute the successful completion of this research project to my family and colleagues who supported me emotionally, intellectually and materially. First and foremost, my gratitude goes to God from whom by faith, I drew my strength, hope and determination to keep going during difficult times. I am at loss for words to express my gratitude to my supervisor Mr. Michael Chirchir and my moderator Mrs. Salome Kinyua for their encouragement, patience, guidance, and keen interest throughout this work. Thank you for always reviewing my work on time despite your tight schedules.

I am also grateful to all lecturers and support staff at the University of Nairobi (UoN) MBA program, who mentored and enlightened me during the coursework. Your doors were always open for consultation with valuable comments.

ABSTRACT

Service outsourcing is a concept that has been widely adopted by many manufacturing firms in today's world. Globalization has been the main reason of outsourcing. Companies have therefore worked tirelessly in order to find out new ways of running their business without losing track of their main reasons for existence. This has therefore prompted them to outsource services and this includes having their non-core functions being performed by third parties. Through effective service outsourcing, cement manufacturing firms are able to reduce costs that are related with building internal competencies, increased quality, and improved response to the changing marketing demands, ability to concentrate on their core functions and the effectiveness and efficiency in the supply chains. Cement manufacturing firms outsource their non-core functions which include:- security guard, laundry, cleaning, catering, transport and logistics, information technology and customer care services. This study therefore sought to determine the relationship between service outsourcing and supply chain performance of cement manufacturing firms in Kenya. The research used a descriptive and cross sectional research design. Primary data was collected using questionnaires and administered to 53 heads of department in the cement manufacturing firms in Kenya. The data was analyzed using descriptive, regression and correlation analysis. The study established that cement manufacturing firms outsourced services in order to reduce their operating costs, concentrate on their main functions, increase quality and to improve response to the changing market demands. The study concludes that cement manufacturing firms outsource services and accrue various benefits including ability to concentrate on their main functions, risk sharing, cost reduction and increase in quality. The challenges in the study included lack of client focus, fear of exposing confidential data and lack of management support. The study then recommends that performance contracting for the case of service providers and a method of measuring supply chain performance be devised.

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ABBREVIATIONS AND ACRONYMS

EAPCC	East African Portland Cement Company
NSE	Nairobi Securities Exchange
GOK	Government of Kenya
ARM	Athi River Mining
IT	Information Technology
GDP	Gross Domestic Product
TC	Transaction Costs
RBV	Resource Based View
UON	University of Nairobi
SPSS	Statistical Package for Social Sciences

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Globalization has posed numerous challenges to businesses. This has forced many businesses to look for alternative means of running their operations without losing track of their main reasons for existence. It is an efficient cost cutting strategy if well utilized. Companies sometimes find it affordable to purchase goods than to produce them internally. Service outsourcing is one of the ways in which businesses use to lower costs associated with their non-core functions. This is important to organizations since they get the chance to concentrate on their main duties (Brown and Wilson, 2005).

In the past, the main functions of outsourcing were to cut costs (Johnson 2008 and Leavitt, 2007). With the growth of outsourcing as a function, the aims have changed. Kakabadse and Kakabadse (2000) assert that the main aim of outsourcing is no longer cost reduction but rather value addition. Value addition is evident in many organizations since they strive to ensure quick delivery of services, at the right place, at the right time and in the right qualities. Service outsourcing is still experiencing growth and study shows that it is responsible for the increase of GDP in the United States (Aron and Anand 2006). Some of the service outsourcing practices include: customer service support, transport and logistics services, laundry, cleaning, security guard services, information technology and catering services.

Supply Chain performance is incidental to the efficiency and effectiveness of the Supply Chains in delivering services to the end user. Many businesses are focusing on continual improvement

as a means of enhancing their core competitive advantage using Supply Chain Management. According to Lee and Billington (1992), discrete sites in any Supply Chain fail to increase efficiency and effectiveness if they pursue goals independently. All Supply Chain members should understand the measurements and offer minimum chances for manipulation (Schroeder, Anderson & Cleveland, 1986). In this respect, performance models and studies should be formulated so that business goals and the achievement of these goals can be measured. This will allow for the effectiveness of the techniques or strategies used to be easily accessed.

1.1.1 Service Outsourcing

Quinn (1999), defined outsourcing as the act of devolving the day to day performance of services to an outside party or agency. Outsourcing as a function cuts across all business processes including: product design; manufacturing; Information Technology; customer care; catering; procurement and many more services. According to Corbett (1999), outsourcing refers to a management strategy where business unit or organization devolves its non-core major functions to an efficient and specialized service provider.

Service outsourcing refers to the contracting of all service functions of an organization to third parties such as: news; medical; supply chain; financial and legal services (Brown and Wilson, 2005). Service outsourcing has become a key undertaking in today's business world. According to Johnson (2008) and Leavitt (2007), the main aim of outsourcing was to reduce costs. Service Outsourcing is an important aspect in business since all the activities that were initially performed in house are contracted to third parties (Karmarkar and Apte, 2007). This has allowed many organizations to focus more on their core functions while achieving quality, speed, flexibility, access to new talents and innovations in delivering value to the final consumers.

According to Brown and Wilson (2005), service outsourcing is a growing function. Some of the services that were studied and were to grow tremendously between 2008 and 2009 were the news services, supply chain, medical, legal and financial services. The Gartner group study approximated that the worldwide outsourcing market was set to grow by 8.1% in the year 2008. Aron and Anand (2006) cited external studies which projected the growth of global business process outsourcing from \$123.6 billion in the year 2001 to over \$230 billion in the year 2015. In the United States of America, a huge chunk of the service outsourcing practices are service related.

Studies by Karmakar and Apte (2007) revealed that 84% of the value added activities in the US GDP were service related. This therefore implies that service outsourcing has significant roles to play when it comes to countries and firms current and future economic activities. Some of the activities outsourced in manufacturing firms are Information Technology services, catering services, cleaning services, courier services and customer care services.

1.1.2 Supply Chain Performance

Supply chain performance can be defined as the extended supply chain practices in order to meet the end user requirements which include the on time delivery of the right products and services, at the right place, the right qualities and in their right quantities (Hausman, 2004). Positive supply chain outcomes are usually dependent on the efficiency and effectiveness of the supply chain systems. Van Hoek, Harrison & Christopher (2001) assert that, “to assess the supply chain performance, Supply Chain metrics must center on customer satisfaction”. Some of the metrics of customer satisfaction and service are; customer query time, flexibility and post transactional metrics of customer service.

Hausman (2004) asserts that supply chain performance is a broad area which encompasses the basic materials, finished products, subassemblies, distribution of the materials through various channels to the end consumer. The traditional functional lines of an organization which include: distribution; manufacturing; procurement; research and development and sales and marketing have also been included in the supply chain performance as they aim in achieving responsiveness in delivering services to the end customers. Supply chain effectiveness ensures increased customer satisfaction and the overall supply chain performance.

Supply chain management is usually comprised of four major activities which are: planning, sourcing, make or assemble and final delivery to customer (Stewart, 1995; Gunasekaran et. al., 2001). In order planning various metrics are used: the order entry procedures; order lead time (Christopher, 1992) and the consumer order path. In the appraisal of the supply link, we look at supplier appraisal which includes strategic level measures, tactical level measures and operational level measures. The areas of focus at the production level include; reliability, speed of delivery, product costs, quality, speed and flexibility (Mapes et. al., 1997; Slack et. al., 1995). The metrics here are the extent of capacity utilization, range of products, services or works and effectiveness and efficiency of scheduling techniques. In the evaluation of the delivery link, service delivery is usually the main issue since it impacts customer satisfaction.

1.1.3 Cement Manufacturing Firms in Kenya

Cement manufacturing firms have been in existence for decades in Kenya. Some have been newly formed while others are still in the process of formation. Cement is an essential building material used in the construction industry in Kenya. World Bank and OECD (1998) found out that industries in Kenya contribute 18% of Kenyas GDP. Initially, the Kenyan government relied

heavily on importation of finished products. In the early 1990s, import substitution industrialization strategy was introduced in the manufacturing sector. Its main aim was to enhance local manufacturing by blocking and discouraging manufacturing imports from abroad. With the growing knowledge, the government adopted export oriented industrialization in order to replace import substitution industrialization (World Bank and OECD, 1998).

After a period of slow growth in Kenya, the manufacturing sector picked up between 2004 and 2005 with the outputs increasing by 4.1% (World Bank, 2007). This was after the government had given incentives to the sector and demands for the products had risen. There are six (6) cement manufacturing firms in Kenya namely ARM cement, Bamburi cement, East African Portland cement, National cement, Mombasa cement and Savannah cement. Others are still in the process of formation including Cemtech in West Pokot and Dangote cement in Kitui. Common wealth network (2016) confirms that the manufacturing sector is of great significance to the Kenyan economy. In 2011, 254,000 people had been employed in the manufacturing sector and this translates to 13% of the total Kenyan employment and this contributed \$285,698 towards the GDP.

According to the East African cement producers association (2009), cement consumption in east Africa is continuously growing and this indicates economic growth and strength of the country. However, the performance of the manufacturing sector has been faced by various challenges that the government needs to look into in order to save the Kenyan citizens. Underdeveloped institutional frameworks, physical infrastructure and limited financial access have led to higher costs of carrying out the business and lowered the capital injection (Mars Group Kenya, 2011). Through government subsidies to the cement manufacturing firms, it will be easier for the firms to manufacture the products at lower costs and also sell to the end user at lower costs.

1.2 Research Problem

Service outsourcing is a function that has evolved due to globalization and dynamic business environment. The urge to meet the changing market demands prompt business organizations to reduce supply chain costs (Leavitt, 2007), concentrate on their core competencies (Brown and Wilson, 2005) and increase flexibility (Johnson, 2008). Service outsourcing will increase Kenya's GDP if emphasized in business organizations. Outsourcing a provider whose expertise will address a firm's weakness, analyzing performance data and cost cutting are some of the strategies that will ensure supply chain efficiency and increased productivity (Manpower Group, 2012).

Service outsourcing is increasingly being adopted by cement manufacturing firms in Kenya since they are able to concentrate more on their core functions (Brown and Wilson, 2005), while achieving speedy delivery of services, improved quality, flexibility and access to new talents and innovations in delivering value to the end user (Kakabadse and Kakabadse, 2000). The main challenges that cement manufacturing firms in Kenya are facing today is how to deliver the right products, in the right quality and quantity, at the right place and in the right time. Failure to address these challenges leads to lack of trust hence reduced customer loyalty and reduced market share. By looking at the practice in other industries, cement manufacturing firms in Kenya have turned to service outsourcing in managing some of their business aspects. This will enhance value creation and value addition (Kakabadse and Kakabadse, 2000).

Mazlan and Ali (2006), studied the relationship between outsourcing and supply chain management. They found out that outsourcing was a very significant tool in implementing supply chain management. Willi and Knolmayer (2007), studied the effect of outsourcing announcements on market values of Swiss firms. The study revealed that outsourcing

announcements on a company's market value can be contradictory and to some extent ambiguous. Hila and Dumitrascu (2014), researched on outsourcing within a supply chain management framework. They found out that outsourcing was a great business strategy and through its initiation, it could reduce costs, improve quality, capabilities and skills, and make a company concentrate on its strengths, enhance a company's competitive advantage and reduce lead time.

Locally, Ogolla (2013) studied the relationship between outsourcing and organizational performance. According to the study, outsourcing was significant in any organization since it helped in improving customer satisfaction, achievement of strategic goals and provision for effectiveness and efficiency improvement. Anyango (2014), studied outsourcing and the performance of state corporations in Kenya. From her research she concluded that outsourcing is not much adopted by the state corporations in Kenya but its initiation improved the quality of products, increased efficiency, low staff turn-over, customer satisfaction and enhanced innovation and creativity. Muriithi, (2014) studied outsourcing and performance of savings and credits society in Nairobi. The study revealed that outsourcing was practiced to a great extent by the SACCOs but the effect of outsourcing on performance was not significantly seen.

Other studies have been carried out to determine the relationship between outsourcing and performance. Zakkies (2015), studied the relationship between service outsourcing and the operational performance of healthcare NGO's in Nairobi, Kenya. The study established a substantial improvement in the operational performance, internal business processes and service delivery. Ngetich (2014) studied the outsourcing and supply chain performance of Kenya Medical Supplies Agency. The study found improved supply chain performance through outsourcing in Kenya medical supplies agency.

Kahindi (2010), studied the relationship between outsourcing and firm financial performance in the banking industry in Kenya. The study showed that the main aims of outsourcing were the need to focus on a firms' main functions, increase productivity and increased efficiency and effectiveness. The study also highlighted some of the activities that were outsourced by banks in Kenya. Debt collection, information technology, cleaning, automated teller machine, card services, transport and taxation and stationery services were some of the services that the study highlighted.

From the above studies, not much has been done on the relationship between service outsourcing and supply chain performance and the extent to which cement manufacturing firms outsource services. This research therefore sought to answer the following questions; to what extent do cement manufacturing firms in Kenya outsource services? What is the relationship between service outsourcing and supply chain performance of cement manufacturing firms in Kenya?

1.3 Research Objectives

This research therefore sought to achieve the following research objectives:-

1. To establish the extent to which cement manufacturing firms in Kenya outsource services
2. To determine the relationship between service outsourcing and supply chain performance of cement manufacturing firms in Kenya

1.4 Value of the Study

The findings of this study will be of significance to researchers, academicians and managers who will have interest in studying service outsourcing and how it is linked to supply chain management not only in cement manufacturing firms but also other fields and industries.

Cement manufacturing firms will also benefit from this study since they would know the challenges in outsourcing services and also the relationship that exists between supply chain performance and outsourcing. This will make a company a tool for benchmarking with other firms hence improved quality in production and also growth of the company.

The study is expected to be of help to other academicians who will want to pursue research as their area of interest since it will give them a basis of study and further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter will focus on the theoretical and empirical literature review. It will include a brief overview of various studies that have been carried out on service outsourcing and supply chain performance. Outsourcing, service outsourcing, supply chain performance, service outsourcing and supply chain performance are the areas that will be addressed by this study. This chapter will also identify the research gaps in the researches and provide a conceptual framework which will show the relationship that exists between the dependent and the independent variables.

2.2 Theoretical Literature Review

It is important to identify and explain the relationship between various studies. By having a proper understanding of various facts, it is significant to build a theoretical structure that will show relationships between them. This study will be guided by three theories:- transaction cost theory; resource based view theory and agency theory.

2.2.1 Transaction Cost Theory

Transaction cost theory is concerned with finding the actual costs of outsourcing the production of products or services inclusive of contract costs, transaction costs, search costs and coordination costs. Vaxevanou and Konstantopoulos (2014) assert that transactional cost theory has been the most used outsourcing theory in the past years. It is considered that this theory makes the best decision making tool in helping organizations to decide which of their functions can be outsourced hence prior preparations in implementing any changes in the organization that

arise with outsourcing services. Van Hoek (2000) states that through analysis of the transaction cost with the decision to “buy or make” predicts that a manager is likely to adopt any form of organization that will tend to lower the transactional costs.

This managerial decision is usually influenced by the various factors of investment and specialized assets (Williamson, 1996). When the investment in specialized assets is high, it implies that the uncertainties on the transaction will be high. This will reduce the likelihood of it being done within the organization. Many organizations have adopted building internal competencies with the hope that they can give feedback to any market queries faster than their vendors (Williamson 1985; Kaufmann; Carter, 2006). According to Fine (1998), an organization adopting this theory becomes overly dependent on the suppliers and hence losing the tactical knowledge. In this case, the supplier gains strength in knowledge and this creates an investment on his side which in turn creates opportunities.

Transaction cost theory is therefore an important tool in managerial decision making. Various researches have been done on TC and their findings and conclusions reported. Spiller (2010) analyses Williamsons TC approach and relates it to the transaction cost economics theory of regulation, Teece (2010) examines its influence on management theory and practice, De Figueiredo Junior (2010) concentrates on an interdisciplinary application which talks about governance and the impacts of transaction cost economics on public and private organizations and Tadelis (2010) studies the transactional cost theory of a firm and the decisions involved.

2.2.2 Resource Based View Theory

Resource based view theory focuses on the application of intangible and tangible resources at the disposal of a firm. It emphasizes on the internal resources of an organization in the strategy

formulation in order to achieve competitive advantage (Valmohammadi and Servati, 2011). Capabilities and resources can differ among various organizations and this differences remain stable (Barney and Hesterly, 1996). This theory is usually significant in the preparation stage in order to identify the activities that will be outsourced. In vendor selection, it is important since it allows for the supplier with the most extensive resources. In relationship management, this theory is commonly used in explaining the decisions that arise (Kutsikos and Mentzas, 2011).

Alvarez-Suescun (2010) proposed a model which could combine the transaction cost (TC) theory with the resource based view (RBV) theory with the view of interpreting the initiation of outsourcing process with respect to information technology operations. In the transition phase of any organization, this theory is the most effective for use. Roy and Aubert (2001) used this theory in creating a model which worked to identify the factors that affect the failure and success of outsourcing at the preparation stage. Barthelemy and Quelin (2006) also proposed resource based theory model that meant to interpret all the four stages of outsourcing including:- preparation; vendor selection; relationship management and reconsideration phases.

According to Teece (1986) if outsourcing acts to no good of the company i.e. by leaking its proprietary information, then it has to formulate measure that act towards reducing the loss of such knowledge. Contracting of goods, services and works can be done in a way which is secure in order to protect an organizations' information. Liebeskind (1996) states that all the internal methods to protect organizations' knowledge and information are better than those present between contracting organizations.

2.2.3 Agency Theory

Agency theory focuses on the relationship that exists between a firm's management and all the stakeholders (Jensen and Meckling, 1976). Outsourcing as an organizations practice can be used to explain the relationship that exists between an organization (principle) and its suppliers (agents). This theory suggests the application of continual reinforcement and monitoring in order to strengthen the ties between two organizations which will in turn solve any disputes that may arise (Barney and Hesterly, 1996).

This theory has been of significance to organization in the preparation stages where it checks all potential suppliers and what kind of relationships to build with them. According to Mitra (2009), this relationship aims at resolving disputes arising between the principal and the agent. This theory assumes that self-interests, goals and risk preference diverge between organization and the service provider. It has received several criticisms from various researchers because it presumes that social life is just a series of contracts ignoring the fact that social and authority relationships exists in economic transactions (Spencer, 2005).

2.3 Service Outsourcing practices

Bender (1999), affirms that the world is embracing the practice of outsourcing and firms too are adopting this phenomenon in order to expand into other global markets. Some of the services outsourced by firms are:- customer service support, transport and logistics services, laundry, cleaning, security guard services, information technology and catering services. They are discussed next.

Cleaning services are usually consumed by the residential and non-residential markets e.g. firms, offices, churches and organizations. In 2008, the non-residential market accounted for three

quarters of the total cleaning services (The Freedonia Group, 2010). They further found out that outsourcing cleaning services in non-residential markets aimed at cutting costs. Outsourcing of cleaning services is usually most adopted in manufacturing firms as a way to enhance sanitation, increases the companies operating flexibility and gives the company a chance to concentrate on its core functions.

Catering outsourcing is an outsourcing practice that is commonly being adopted by manufacturing firms. This is usually important in saving time and creating efficiency and effectiveness in the work practices. When lunch is served in manufacturing firms, it reduces the movement of employees to various food outlets in search of lunch services. According to the HM revenue and customs (2014), subsidized or free meals can be provided on the employer's grounds or building or in any canteen where food can be given to employees only. These subsidized services are provided to employees if the meals are given at a reasonable scale, the employer gives a subsidized meal voucher to staffs and when employees can get subsidized meals at a good scale on the employers' premises.

Information technology function is usually outsourced in many manufacturing firms since the costs related with building internal competencies are usually high. Manufacturing firms are usually motivated by the need to reduce costs related to IT outsourcing (Gilley and Rasheed, 2000). Various factors have been found to affect IT outsourcing decisions namely risk sharing on technology investment, access to expertise, fixed contract hence cost predictability, reduction in operating costs, political issues that hinder information systems efficiencies (Malhotra, 1995). According to Wang et al., (2008), IT capabilities are usually important in improving the value of business and through IT outsourcing, the performance of cement manufacturing firms have improved.

Customer services is a function commonly outsourced by many cement manufacturing firms as a way to ease the company of the funds they could have used in creating an effective customer care. It is a cost saving strategy and it is mostly used during economic downturns (Juras, 2008). Deloitte consulting group (2005), states that in the near future only 50% of outsourcing practices will be successful. The failures in the process will come about as a result of the clients who don't know that they do who don't understand their business and outsourcing practices and hence don't know how to manage and structure their outsourcing strategies. Many firms have concentrated on cost saving in fixed overheads i.e. salaries and forget the hidden costs that come with outsourcing e.g. cost of contracting, monitoring and appraisal of performance of the outsourcing provider (Ren and Zhou, 2008).

Security guard services are commonly outsourced in many manufacturing firms. Minieri associates (2009), states that each security program has its own objective e.g. minimizing the risk of losses that are caused by potential threats. Every firm wants its functions performed in the most cost effective manner. This is the main reason for contracting security services. They go ahead to confirm that reasonable long term cost savings arise from reviewing the security master plan prior to seeking new proposals for contract guard services. The outsourced guard services are appraised to check their successes and hence contracting. Through outsourcing, companies are able to save on costs associated with building internal competencies.

In cement manufacturing firms, overalls and dustcoats are the most used attires. Once in a while they have to outsource the laundry services in order to do the laundry. In order to concentrate on your main functions, it is significant to outsource some of these activities. According to Riesenberger and Koeller (2005), laundry service providers usually recycle water that is used in washing and hence in provision of this services, costs are reduced and hence efficiency and

effectiveness. Water reuse in laundry service providers assists in making use of the waste water, reduces water use, enhance energy saving and reduces pretreatment costs (laundry today, 2004).

According to Ogorelc A. (2007), it is the outsourcing of transport and other logistics services. These services are usually a major determinant of a firm's competitiveness, a firm's market share and its profitability. Transport services are needed in the whole supply chain since they act as a link between all the supply chain members (Szuster, 2010). He further states that the quality of transport affects the competitiveness of the supply chain. Through effective transportation management, the firm is able to get raw materials in good time and the end users are also get products in the appropriate time for their consumption.

2.4 Service Outsourcing and Supply Chain Performance

Handfield and Nichols (1999), state that every business function is a part of the broad supply network and supply chain. Service outsourcing and supply chain performance has been given increased focus since they have been confirmed to be performance and profit enhancers. Company therefore has various decisions to make with regards to supply chain management, outsourcing or both. Service outsourcing may improve an organizations operating flexibility as well as allow for the transfer of risks to other parties. Supply chain management makes use of resources in such ways that give firms direct involvement with each phase every function and processes. This gives a proper understanding of the processes and hence direct control for purposes of continual improvements.

Many firms have adopted strategies that lead to outsourcing of more services from the suppliers (McIvor, 2003). These strategies have resulted in organizations integrating all the systems and this in turn coordinates and manages best supplier networks and best production practices.

According to Logan, Faught and Ganster (2004), firms that know how to manage the outsourcing process can enhance their performance and hence achieving high levels of satisfaction. Service outsourcing of the noncore activities allows the company to increase its resource allocation and managerial attention to those functions that it does best. This therefore improves a company's' results hence improvements in the supply chains.

Bales et.al. (2004), states that a company that practices supply chain management and outsourcing can reap many benefits. Outsourcing therefore opens the doors to supply chain practice and makes supply chain management more efficient and effective. Gilley and Rushed (2000) affirms that through allowing expert organizations to perform the non-core functions of a company increases the performance of the outsourcing company. To support positive supply chain performance through outsourcing, Barthelemy and Adsit (2013), also affirm that firms outsource with the sole purpose of increasing their strategic focus, and concentrating on their core functions.

Ogola (2013), studied the relationship between outsourcing and organizational performance in the book publishing industry. His objectives of research were to establish the activities that were outsourced by book publishing industries in Kenya, to find out the benefits of outsourcing in the book publishing industry in Kenya, to investigate the challenges in of outsourcing in the book publishing industry in Kenya and to establish the relationship that existed between outsourcing and organizational performance in the book publishing industry in Kenya. She used descriptive statistics in her research and she found out that the book publishing firms in Kenya outsourced their services as a means of improving customer satisfaction, achieving strategic goals and providing efficiency and effectiveness. Firms are increasingly outsourcing in order to enjoy cost, process and time advantages.

Muriithi (2014), studied outsourcing and performance of SACCOs in Nairobi. His objectives were to determine the relationship that existed between outsourcing and performance of SACCOs in Nairobi and to establish the services outsourced by SACCOs in Nairobi. He used descriptive statistics in his research and he found out that outsourcing did not affect performance to a greater extent. From his findings, decrease in outsourcing of customer support practices led to reduced performance.

Anyango (2014), studied outsourcing and the performance of state corporations in Kenya. Her research was meant to establish the extent of outsourcing by state corporations in Kenya, to establish the performance levels of state corporations in Kenya and to determine the relationship that exists between outsourcing of state corporations in Kenya. From her research she concluded that outsourcing is not much adopted by the state corporations in Kenya but its initiation improves the quality of products, increased efficiency, low staff turn-over, customer satisfaction and innovation and creativity.

Mazlan and Ali (2006), studied the relationship between supply chain management and outsourcing. They aimed at establishing the possible links between supply chain management and outsourcing. From this research, they found out that outsourcing was a very significant tool in implementing supply chain management. This therefore explains the improved and increased customer supplier collaborations. Willi and Knolmayer (2007), studied the effect of outsourcing announcements on market values of Swiss firms. The research aimed at finding out the effects of announcing outsourcing contracts. The study revealed that outsourcing announcements on a company's market value can be contradictory and to some extent ambiguous.

Hila and Dumitrascu (2014), researched on outsourcing within a supply chain management framework. The study sought to investigate the concept of outsourcing within a supply chain management framework. They found out that outsourcing was a great business strategy and through its initiation, it could reduce costs, improve quality, capabilities and skills, and make a company concentrate on its strengths, enhance a company's competitive advantage and reduce lead time.

2.5 Summary of Literature Review

The table below gives a summary of literature review; it provides the authors, studies, the major findings and the research gaps.

Table 2.1: Summary of Literature Review

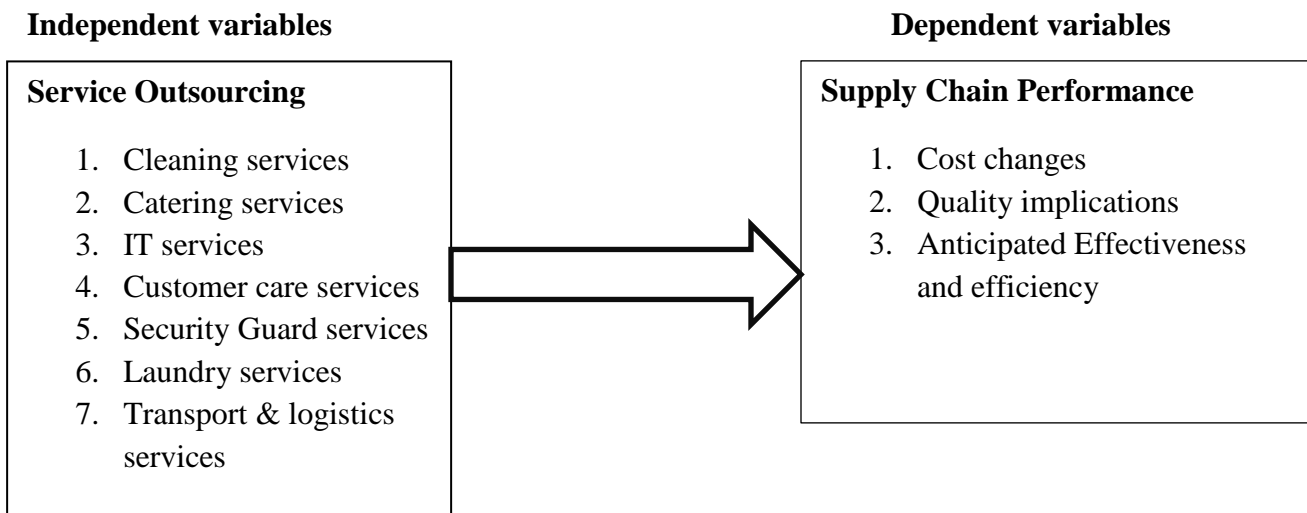
Author(s)	Study	Major Findings	Research Gap
Mazlan R. M. R & Ali N. K. (2006)	Relationship between outsourcing and supply chain management	Outsourcing is a very significant tool in the implementation of supply chain management	It focuses more on SCM and not supply chain performance
Willi F. S. & Knolmayer G. F. (2007)	The effect of outsourcing announcement on market value of Swiss firms: an event study	Outsourcing announcements on a company's' market value can be contradictory and to some extent ambiguous	It was only limited to Swiss firms hence doesn't apply in other parts of the world
Ogola P.A. (2013)	The relationship between outsourcing and organizational performance in the book publishing industry	Book publishing companies in Kenya outsourced their services as a means of improving customer satisfaction, achieving strategic goals and providing effectiveness and efficiency	The study was limited to the book industry hence not applicable to other industries
Muriithi B. M. (2014)	Outsourcing and performance of SACCOs in Nairobi, Kenya	Outsourcing did not affect performance to a greater extent	It was limited to SACCOs in Nairobi, not Kenya at large
Anyango B. J. (2014)	Outsourcing and the performance of state corporations in Kenya	Outsourcing is not much adopted by the state corporations in Kenya but its initiation improves the quality of products, increased efficiency, low staff turn-over, customer satisfaction and innovation and creativity.	It was limited to only corporations in Kenya and not other countries
Hila M. C. & Dumitrascu O. (2014)	Outsourcing within a supply chain management framework	Outsourcing was a great business strategy and through its initiation, it could reduce costs, improve quality, capabilities and skills,	It concentrates much on SCM rather than supply chain performance

2.6 Conceptual framework

Figure 2.1 would guide the study and determine the relationship that exists between the dependent and independent variables. It is expected that through service outsourcing, there will be changes in supply chain performance among the cement manufacturing firms in Kenya.

Figure 2.1: Conceptual framework

Service outsourcing practices



Research data (2016)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology that was used to carry out the study. It involved: the research design; population of the study; data collection and data analysis.

3.2 Research design

A descriptive and cross sectional research design was used to establish how service outsourcing impacts supply chain performance in cement manufacturing firms in Kenya. Any research study where information is gathered without changing or manipulating the environment is referred to as a descriptive study. This research design was appropriate since it shows the relationship between variables. Ramar and Kumar (2008) state that cross sectionals studies have been mostly used for effects of relationship studies.

3.3 Population of Study

The population of interest for this study was cement manufacturing firms in Kenya of which they were six in number (Appendix 2). All the cement manufacturing firms in Kenya were used in this study since the population was small.

3.4 Data Collection

Primary data was used in this study where the respondents were heads of departments or their equivalent. In Savanna cement ltd, there were 8 departments, Bamburi cement ltd, 10 departments, ARM cement ltd, 10 departments, EAPCC ltd, 10 departments, National cement ltd, 7 departments and in Mombasa cement ltd, 8 departments. This totaled to 53 departments.

The questionnaires were designed on a five point likert scale and administered using the “drop and pick up later” method (1 week). The likert scale was used since it is easy to understand and it is a universal method of survey collection.

The questionnaire had three sections as follows: Section A contained question on general information about cement manufacturing firms under study; Section B comprised questions on the extent to which service outsourcing has been implemented by the cement manufacturing firms in Kenya and Section C comprised questions on the relationship between service outsourcing and supply chain performance in cement manufacturing firms in Kenya.

3.5 Data Analysis

Descriptive statistics was used to analyze section A and section B of the questionnaire. Correlation and regression analysis was used to analyze section C of the questionnaire. The findings were presented in tables. The following regression equation was used to represent service outsourcing and supply chain performance:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + e.$$

Where: Y= supply chain performance; a= the Y intercept when x is zero; b₁, b₂, b₃, b₄, b₅, b₆ and b₇ are coefficients of the variables; x₁= cleaning services; x₂= catering services; x₃= IT services; x₄= customer care services; x₅= security guard services; x₆= laundry services and x₇= transport and logistics services and e= error term.

Table 3.1: Summary of Data Collection and Data Analysis

Objective	Data Collection	Data Analysis
General information	Section A of the questionnaire	Descriptive statistics
Extent to which cement manufacturing firms outsource services	Section B of the questionnaire	Descriptive statistics
The relationship between service outsourcing and supply chain performance	Section C of the questionnaire	Correlation and regression analysis

Research data (2016)

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter focused on the presentation, analysis and interpretation of data collected in the study using descriptive statistics. Frequencies and percentages were used to explain the responses to the questionnaires. Conclusions and recommendations were made based on the analyzed data.

This survey was carried out in six cement manufacturing companies in Kenya. The companies involved included Mombasa cement ltd, ARM cement ltd, Bamburi cement ltd, Savannah cement ltd, East African Portland cement company ltd and National cement ltd. A total of a thirty seven (N=37) top management respondents participated in this study.

4.1.1 Response Rate

From the data gathered, out of the 53 questionnaires that were administered, 37 of them were filled and returned, which represented a 70% response rate. This response rate was considered good to make conclusions and recommendations for the study. Mugenda and Mugenda (2003) asserted that a 50% response rate was adequate, 60% response rate was good and 70% response was rated very good.

This is supported by Bailey (1987) that a response rate of 50% was adequate, while a response rate greater than 70% was very good. Based on this assertion, the response rate in this case was 70% implying very good response rate.

The high response rate was attributed to the data collection methods, where the researcher pre-notified the potential respondents of the intended study, utilized a self-administered questionnaire where the participants completed and these were picked after a week and follow up calls made to clarify queries as well as prompt the participants to fill the questionnaires.

4.2 Demographic Data

The study sought to establish the demographic data of the respondents and the firm. The researcher began by a general study on the demographic data got from the participants which included;- the respondents designation, the level of education, duration taken in the firm, number of employees in the department and age of the firm.

4.2.1 Highest level of education

The study sought to establish the highest level of education and the findings are shown in the table 4.1 below:-

Table 4.1 Highest level of education

Level of education	Frequency	Percentage
Postgraduate level	10	27
University	21	56.8
Tertiary level	6	16.2
Total	37	100

Research data (2016)

From table 4.1, university level was the dominant qualification among the respondents with 56.8% followed by 27% postgraduate with only 16.2% of those with tertiary college level, this implied that majority of the respondent had a wide knowledge of the topic.

4.2.2 Duration taken in the firm

The study also sought to establish the duration that the employees had worked in the firm. The findings are represented in table 4.2 below:-

Table 4.2 Duration taken in the firm

Duration taken in the firm	Frequency	Percentage
1 – 5 years	31	83.8
6 – 10 year	6	16.2
Total	37	100

Research data (2016)

In terms of the duration for which the respondents had worked in the firm most of the respondents had served for a period of between 1-5yrs with 83.8% with only 16.2% of respondents having worked for 6-10yrs in firm. Most of the respondents had good experience in the firm and hence conversant with the firms' service outsourcing decisions and practices.

4.2.3 Number of employees in the departments

The study sought to find out the number of employees in the various departments. The findings are presented in the table 4.3 below:-

Table 4.3 Number of employees in the departments

No. of employees in department	Frequency	Percentage
Less than 5	14	37.8
5 – 10	8	21.6
10 – 20	10	27.0
Above 20	5	13.5
Total	37	100

Research data (2016)

Interest was also drawn to the number of employees in departments, 37.8% of the department indicated that they had less than 5 employees, 27% of the departments had between 10-20 employees, 21.6% between 5-10 and only 13.5% had more than 20 employees, this indicated that most departments had not expanded their operations hence the smaller size of their workforce.

4.2.4 Duration of existence of the cement manufacturing firm in Kenya

The study also sought to find out the number of years the cement manufacturing firm had been in existence in Kenya. The findings are presented in table 4.4 below:-

Table 4.4 Duration of existence of the cement manufacturing firm in Kenya

Age of the firm	Frequency	Percentage
Less than 10 years	0	0.0
10 – 30 years	23	62.2
61 – 90 years	13	35.1
Above 90 years	1	2.7
Total	37	100

Research data (2016)

The study findings indicated that 62.2% of the firms had been in operation in Kenya for between 10-30yrs. Similarly, 37.1% of the firms had been in operation in Kenya for between 61 and 90 years, while 2.7% of the firms had been operation in Kenya for more than 90 years. The long duration implied that most firms had a wide experience of implementing service outsourcing.

4.2.5 Respondent's departments

With a response rate of 70%, a total of 37 respondents drawn from various departments within the firms were interviewed. Majority of the respondents (16.2%) each were from human resource and finance department followed closely with those from the finance department. However, data was collected across nine departments as indicated in the table 4.5 and this clearly shows how reliable the data was.

Table 4.5 Respondent's department

Departments	frequency	percentage
Human resource	6	16.2
Quality assurance	4	10.8
Sales and Marketing	6	16.2
IT department	3	8.1
Store department	2	5.4
Production dept	5	13.5
Procurement dept	4	10.8
Finance dept	6	16.2
Supply chain manager	1	2.7
Total	37	100

Research data (2016)

4.3 Extent to which service outsourcing is implemented in cement manufacturing firms in Kenya

This section discussed the first objective which was to establish the extent to which cement manufacturing company in Kenya outsource services. The respondents were requested to show the extent to which service outsourcing is implemented in cement manufacturing firms in Kenya. A five point Likert scale of 1 (very low extent), 2 (low extent), 3 (moderate extent), 4 (great extent) and 5 (very great extent) was used.

Table 4.6 Extent of service outsourcing practices

EXTENT TO WHICH SERVICE OUTSOURCING IS IMPLEMENTED IN CEMENT MANUFACTURING COMPANIES			
Variables	N	Mean	Std. Dev
Transport and logistics services	37	3.8649	.71345
Security guard services	37	3.5135	1.07035
Laundry services	37	3.4054	1.27931
Catering services	37	2.6486	1.27402
Cleaning services	37	2.2432	1.29969
IT services	37	1.5946	0.68554
Customer services	37	1.4595	0.83648

Research data (2016)

The above (table 4.6) indicated that service outsourcing is practiced by cement manufacturing firms, leading with transport and logistics services with a mean of 3.8649, followed by security guard services (mean=3.5135), laundry services (mean=3.4054), catering services (mean=2.6486), cleaning services (mean=2.2432), IT services (mean=1.5946) and lastly customer care services (mean=1.4595) hence this help improve a firms' benefits.

This result concurs with Bender (1999), who affirms that the world is embracing the practice of outsourcing and firms too are adopting this phenomenon in order to expand into other global market. Hayes et al. (2000) investigated how information systems (IS) outsourcing announcements affected the market value of publicly traded contract-granting firms. They found that outsourcing announcements had an important positive effect on small firms'. However, its effect on large firms was not significantly seen.

4.4 Influence of service outsourcing to Supply Chain Performance

This section discussed the second objective which was to establish the relationship between service outsourcing and supply chain performance of cement manufacturing firms in Kenya.

Table 4.7 Does service outsourcing influence supply chain performance

	Frequency	Percentage
Yes	34	91.9
No	3	8.1
Total	37	100

Research data (2016)

When the respondents were asked whether service outsourcing has influence in supply chain performance, majority of the respondents (91.89%) accepted that it had influence on supply chain performance while 8.11% of the respondent stated that service outsourcing never influenced supply chain performance.

Table 4.8 To what extent does service outsourcing influence supply chain performance

	Frequency	Percentage
Larger extent	10	29.7
Moderate extent	15	43.3
Small extent	8	24.3
Very small extent	1	2.7
Total	34	100

Research data (2016)

Of those who indicated that service outsourcing had influenced in supply chain performance, 43.24% of them indicated that it was to a moderate extent, 29.73% to larger extent, 24.32% to smaller extent while 2.7% very small extent.

4.5 Relationship between service outsourcing and supply chain performance

The second objective of the study was to determine the relationship between service outsourcing and supply chain performance in cement manufacturing firms in Kenya. A regression analysis was conducted to determine how cleaning outsourcing, catering outsourcing, Information Technology outsourcing, customer care outsourcing, security guard outsourcing, laundry outsourcing and transport and logistics outsourcing impacted supply chain performance of cement manufacturing firms in Kenya. The statistical package for social sciences (SPSS) was used to enter, code and compute measurements of the multiple regressions for the study. The results of the model coefficients are provided below:-

Table 4.9 Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.280	0.797		2.860	0.008
	Cleaning services (x)	0.345	0.192	0.550	2.794	0.043
	Catering services(X2)	0.378	0.228	0.590	1.659	0.108
	IT services (X3)	0.327	0.290	0.006	2.024	0.049
	Customer care services (X4)	0.169	0.169	0.173	1.997	0.327
	Security guard services (X5)	0.187	0.220	0.245	0.848	0.004
	Laundry services (X6)	0.217	0.141	0.339	1.540	0.134
	Transport and logistics services(X7)	0.546	0.282	0.040	2.162	0.007

Research data (2016)

From the findings in table 4.15, the regression equation is:

$$Y=2.280+0.345X_1+0.378X_2+0.327X_3+0.169X_4+0.187X_5+0.217X_6+0.546X_7+E$$

Where Y is the supply chain performance,

X₁= Cleaning services

X₂= Catering services

X₃= IT services

X₄= Customer care services

X₅= Security guard services

X₆= Laundry services

X₇= Transport and logistics services

E= error

From the findings of the regression analysis table 4.4 if all factors (independents variables) were held constant supply chain performance of cement manufacturing firms in Kenya would be 2.280. An increase in cleaning services outsourcing would lead to an increase in the supply chain performance by 0.345, an increase in catering services outsourcing would lead to an increase in the supply chain performance by 0.378, an increase in IT outsourcing would lead to an increase in the supply chain performance by 0.327, an increase in customer care outsourcing would lead to an increase in the supply chain performance by 0.169, an increase in security guard

outsourcing would lead to an increase in the supply chain performance by 0.187, an increase in Laundry outsourcing would lead to an increase in the supply chain performance by 0.217 and finally an increase in transport and logistics outsourcing would lead to an increase in supply chain performance by 0.546.

At 5% level of significance the independent variables which are statistically significant (having P values of less than 5%) are: cleaning services outsourcing (4.3%), IT services outsourcing (4.9%), security guard services outsourcing (0.4%), transport and logistics services outsourcing (0.7%), the p values are further supported by corresponding z/t values where cleaning service outsourcing (2.794), Information Technology outsourcing (2.024), customer care service outsourcing (1.997) and transport and logistics service outsourcing (2.162) are greater than 1.96. the statistically insignificant variables (having P values of greater than 5%) are: catering service outsourcing (10.8%), customer care services (32.7%) and laundry services outsourcing (13.4%)

Model Summary^b

Table 4.10 Coefficient of determination, R²

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.888 ^a	0.789	0.553	0.54619	0.789	14.424	7	29	0.008

Research data (2016)

Table 4.10 above shows a model summary of regression analysis between independent variables. The value of R is 88.8%, the value of coefficient of determinant (R²) is 78.9%. This is a perfect model since it is capable of explaining 78.9% of the variability in supply chain performance(Y). Most models that can explain more than 40% of the variability can be taken as useful models. 78.9% of the variation in supply chain performance is explained by the variation of the

independent variables in the model. This is an indication that the model is a very good predictor overall since $R^2 > 70\%$. 21.1% is explained by other variables not in the model.

ANOVA^a

Table 4.11 Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	18.928	7	2.704	14.424	.008 ^b
Residual	5.072	29	0.175		
Total	24.000	36			

Research data (2016)

The probability value of $0.008 < 0.05$ at 95% confidence level indicates that the regression model is significant in predicting how the independent variables influence supply chain performance. The F calculated at 5% level of significance was 14.424 since F calculated is greater than the F critical (value = 2.17), this shows that the overall model is significant ($p \text{ value} = 0.8\% < 5\%$)

4.6 Suggestions towards service outsourcing and supply chain performance in cement manufacturing firm

Table 4.12 Suggestions towards service outsourcing and supply chain performance

	frequency	percentage
Tend to build internal competencies	2	5.4
Increase company profit	12	32.4
Help firm benefit from well-trained personnel	4	10.8
Ensure effective and procedural outsourcing	1	2.7
It is expensive for public firm hence leading to losses	3	8.2
No response	15	40.5
Total	37	100

Research data (2016)

When respondents were asked to give suggestion or recommendations towards outsourcing and supply chain performance in cement manufacturing firm, 32.43% indicated outsourcing services increases a firms' profit, followed by 10.81% who indicated that it helps a firm to benefit from well trained personnel while 40.54% did not respond, These results concur with Quelin and Duhamel (2003) who stated that the reasons why firms decided to outsource vary, even if the most mentioned motive is to focus on core competencies and/or achieve cost benefits. These two motives are often interlinked as one where managers use outsourcing in order to increase the use of capital investments by focusing on the firms' capital and human resources on its main functions.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses the summary of the key findings of the study. It draws conclusion from the research findings based on the objectives stated earlier on. Recommendations from the findings have also been discussed in this chapter. The main objective of this study was to determine the relationship between service outsourcing and supply chain performance of cement manufacturing firms in Kenya.

5.2 Summary of the Findings

The study established that cement manufacturing firms in Kenya outsourced services but the extent varied with each firm. Transport and logistics services, catering services, security guard services, laundry services and cleaning services were outsourced to a great extent in cement manufacturing firms in Kenya. Information technology services and customer care were not outsourced to a great extent in the firms.

The study also looked at the factors that led to the increased outsourcing in cement manufacturing firms. The need to reduce their operating costs, to increase quality, to get access to technical expertise, to respond to the changing market demands and the need to increase profits were the main factors behind outsourcing in the cement manufacturing firms in Kenya. East African Portland Cement Company was also part of the study but all the variables to be outsourced in the company were provided in house except for transportation and logistics management which they outsourced moderately. These factors assisted the firms in ensuring

effective supply chains that aim at providing goods and services to the end consumer at the right time, the right place, in the right quality and in the right quantities.

Through initiation of service outsourcing in the cement manufacturing firms, the firms have been able to accrue various advantages which include speedy delivery of goods to the end consumer, improved qualities, access to the right expertise, sharing risks with the vendors, ability to concentrate on their core functions, cost reduction and effectiveness and efficiency in the supply chains. From interviews carried out with the heads of departments in the various cement manufacturing firms, all confirm that service outsourcing is important to any organization which intends to focus on their core competencies, reduce costs and increase profits.

The study also looked at the relationship between service outsourcing and supply chain performance. From the research, service outsourcing and supply chain performance are related in the sense that through service outsourcing, effectiveness and efficiency in a firms operation are enhanced. This therefore enhances improved performance in cement manufacturing firms in Kenya.

5.3 Conclusion

The study concludes that cement manufacturing companies have been on the forefront in outsourcing services. The services outsourced included transport and logistics services, security guard services, cleaning services, catering services, information technology services, laundry services and customer care services. Most of the cement manufacturing companies embrace service outsourcing while a few focus on building internal competencies.

The study also showed that the need to acquire quality services, to concentrate on their main functions, to increase flexibility and the need to react to fluctuating market demands were some

of the reasons for outsourcing logistics services. This shows how effective services outsourcing can be when improving supply chain performance in cement manufacturing firms in Nairobi.

The study also shows that a number of benefits accrue for a firm that has adopted service outsourcing. They include:- increased quality of services, cost reduction associated with building internal competencies, increased flexibility, increased concentration on their main areas of focus and ability to react to the changing market demands. Sharing risks with the vendors is also an advantage to the cement manufacturing companies.

5.4 Recommendations from the Study

This study recommends that a clear method of measuring supply chain performance be devised in order to quantify the extent to which services outsourcing impacts supply chains. This will be significant to cement manufacturing firms as they will monitor the services which are cheap to outsource and those that can be provided in-house. Through having effective plans or method for evaluation, cement manufacturing companies will be able to reduce costs that are associated with outsourcing.

The study recommends that performance contracting of the service providers can be of great benefit to cement manufacturing firms. Service providers always aim at fulfilling the needs of the clients. If they are not closely monitored, they can provide substandard services to a given firm. Performance contracting therefore ensures that they have a limited period of service under which they have to act as per the terms of contract failure to which the contract is terminated by the cement manufacturing firm. This will ensure effectiveness and efficiency in the cement firms hence improved supply chain performance.

5.5 Limitations of the Study

The study was limited to six (6) cement manufacturing firms in Kenya. These findings therefore are not a real representation of the cement manufacturing firms in East Africa or Africa at large. The research design in this case ensured that all cement manufacturing firms in Kenya participated in the study.

The questionnaires were filled by heads of departments in the firms. It was difficult to convince the heads of departments that the research was for educational purposes and not any other purposes. They feared loss of information to the competitors which made them reluctant to release information about service outsourcing.

5.6 Suggestions for Future Research

The study recommends that service outsourcing is not only limited to the ones mentioned there above. Future research therefore should focus also on Business process outsourcing which would cover knowledge process outsourcing and legal process outsourcing since they are also services. This will ensure that that the supply chain are effective and efficient hence the firms overall supply chain performance.

The study emphasized more on service outsourcing in cement manufacturing firms in Kenya. The study recommends that comparative studies be carried out to check whether the concept of service outsourcing in other sectors will yield the same impacts on supply chain performance.

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APPENDICES

APPENDIX I: QUESTIONNAIRE

Please give answers in the spaces provided that matches your response to the questions.

SECTION A: GENERAL INFORMATION

1. Name of the cement Manufacturing firm

2. Which department are you in? _____

3. What is your highest level of education qualification? (Tick as applicable)

a) Post graduate level () b) University ()

c) Tertiary College () d) Secondary ()

4. Length of continuous service with the firm?

5. How many employees are there in your department?

a) Less than 5 () b) 10 – 20 ()

c) 5 – 10 () d) Above 20 ()

6. For how long has your firm been in existence in Kenya?

SECTION B: TO WHAT EXTENT IS SERVICE OUTSOURCING IMPLEMENTED IN CEMENT MANUFACTURING COMPANIES

1. To what extent is service outsourcing implemented in cement manufacturing companies?

Use 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, 5- Very great extent

Outsourced services	1	2	3	4	5
Cleaning services					
Catering services					
IT services					
Customer care services					
Security guard services					
Laundry services					
Transport and logistics services					
Others					

SECTION C: RELATIONSHIP BETWEEN SERVICE OUTSOURCING AND SUPPLY CHAIN PERFORMANCE

1. Does service outsourcing influence supply chain performance of cement manufacturing firms in Kenya?

a)Yes () b)No ()

2. If Yes to Question 1 above, kindly indicate to what extent

a)Large extent () b)Moderate extent ()

c)Small extent () d)No extent at all ()

3. Kindly indicate the extent to which you agree with the following statements concerning influence of service outsourcing on supply chain performance based on a 5-point scale by using a tick (√) or X to mark the applicable box where (5) = Very great extent (4) = Great extent (3) = Moderate extent (2) = Small extent (1) = Very small extent.

Cleaning services	1	2	3	4	5
The firm is able to concentrate on its main objective					
The firms is able to save cost that could be incurred when building internal competencies					
Catering services					
It improves sanitation in the cement manufacturing firms					
It assists the firm in concentrating on its main area of specialization					

It enhances saving by not investing in kitchen and laundry equipment					
IT services					
It facilitates integration of internal operations					
Effectiveness and efficiency has been achieved through IT outsourcing					
The firm is able to focus on its main area of specialization,					
Customer service support					
The firm is able to improve customer service by delivering quality products on time					
It allows the firm to focus on its main functions					
Security guard services					
Saves the company on having to invest in state of the art security equipment					
A firm benefits from well-trained personnel					
The firm is able to focus on its core competency					
It allows for safeguarding of the companies resources					
Laundry services					
It improves sanitation in the cement manufacturing firms					
It assists the firm in concentrating on its main area of					

specialization					
Transport and logistics service					
The firm is able to achieve faster delivery of services					
The organization reduces lead time and hence achieving flexibility					
The firm is able to respond to abrupt changes in demand					

4 a) Please give suggestions/recommendations towards service outsourcing and supply chain performance of cement manufacturing firms in Kenya.

b. In your opinion, what else may be of relevance to the study and the firm as far as service outsourcing is concerned?

APPENDIX 2: CEMENT MANUFACTURING FIRMS IN KENYA

1. EAST AFRICAN PORTLAND CEMENT COMPANY
2. BAMBURI PORTLAND CEMENT LTD
3. ATHI RIVER MINING LTD
4. MOMBASA CEMENT
5. NATIONAL CEMENT
6. SAVANNAH CEMENT

Source: Cemnet (2016) <http://www.cemnet.com/GCR/country/Kenya>, viewed; July, 2016