INVESTIGATION ON THE IMPACT OF VALUE CHAIN MANAGEMENT STRATEGY ON PERFORMANCE: A STUDY OF MAJOR OIL COMPANIES IN KENYA

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DECLARATION

STUDENT'S DECLARATION

I hereby declare that the work contained in this project is my original work and has not been previously, in its entirety or in part, been presented at any other university for a degree requisite.

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SUPERVISOR'S DECLARATION

This project has been presented with my approval as the supervisor of the student and Lecturer at University of Nairobi, School of Business.

Date: 15/11/2010
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First of all, I would wish to thank my dear family for financial support and encouragement and for their understanding when I was not there for them during the project period; I wouldn’t have made it this far without them.

I would wish to express my sincere gratitude to my supervisor Tom Kongere and my moderator Onserio Nyamwange for guidance, selfless dedication and encouragement in making this project a reality. I would also acknowledge the contribution of the rest of University of Nairobi fraternity to the success of this project.

Thank you all.

Most important of all I extend my gratitude to the Almighty God for providing me with strength, knowledge and vitality that helped make this project a reality.
DEDICATION

I dedicate this work to my family for their understanding and support during the study period.
ABSTRACT

The objective of this study was to determine the relationship between value chain management strategy and performance in the major oil companies in Kenya. This study was descriptive survey design. The target population of this study was the 47 registered and active oil companies in Kenya. Stratified random sampling technique was used to select the sample. Simple random sampling was used to select 51 respondents. The study was a survey where data was collected from the six major oil companies using a questionnaire which were self-administered through drop and pick. Descriptive statistics were used to analyze the data collected. These included the use of tables and percentages. In addition, the frequency of each identifiable factor was tabulated.

The study found that all the companies used value chain strategies to enhance their performance. The value chain activities used in the companies are such as operations procurement, services (maintenance), outbound logistics, human resource management and marketing and sales (demand). The factors that were important in enhancing performance of the companies were location of outlets, use of public relations by company, company vision and mission and good choice of advertising media and having best employees in the market. The companies had adopted some computerized value chain processes to gain performance and also collaborate with other companies in order to enhance performance. The study found that the value chain strategy affects performance to a great extent was restructuring.

The study concludes that cost advantage: by better understanding costs and squeezing them out of the value-adding activities was used to a great extent and that scheme for describing firms' competitive strategies according to their market scope i.e. focused or broad was used to a great extent. The study recommends that all the companies should ensure that they apply value chain strategies to enhance competitive advantage. The study also recommends that the oil companies should enforce the available value chain strategies to ensure that the companies enhance performance. The study also recommends that proper provide adequate skilled staff in all departments, inbound logistics, technology adoption and operations should be refined to facilitate value creation and thus increasing the performance of the major oil companies in Kenya.
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CHAPTER ONE: INTRODUCTION

This chapter provides the conceptual background of the study by introducing the idea of value chain and competitive advantage, the state of the oil industry in Kenya; it gives the statement of the problem and the general and specific objectives. The chapter also gives the significance an the scope of the study.

1.1 Background of the study

Understanding how firms vary is a central challenge for both the theory and the practice of strategic management (Nelson, 1991). In a changing economic and organizational setting, changes in the main competitive logic of firms are of meticulous interest (Prahalad and Hamel, 1994). Porter's value chain framework (1985) is presently the accepted language for both representing and analyzing the logic of firm-level value conception. Competition is at the heart of the success or failure of companies. Competitive strategy is the hunt for a good competitive position in an industry, the fundamental ground in which competition occurs. Competitive strategy aims to set up a profitable and sustainable position against the forces that establish industry competition.

Two central factors underlie the selection of competitive strategy. The first is the attractiveness of industry for long-term success and the factors that determine it. Different industries offer varied opportunities for continued profitability, and the intrinsic profitability of its industry is one necessary ingredient in determining the profitability of a company. The second vital factor is the relative competitive position in an industry. In most industries, a number of firms are much more profitable than others, in spite of of what the average profitability of the industry may be. Neither of the factors is adequate by it self to direct the choice of competitive strategy. A company in a very attractive industry may still not make attractive returns if it has selected a poor competitive position. On the other hand, a firm in an brilliant competitive position may be in such a deprived industry that it is not very profitable, and further efforts to augment its position will be of slight benefit (Prahalad and Hamel, 1994). Both factors are dynamic: industry attractiveness and competitive position vary. Industries become more or less attractive over time, and competitive position reflects an
endless battle amongst competitors. Even long periods of solidity can be suddenly ended by competitive moves.

1.1.1 The Value Chain

The value chain analysis is a concept that was first described and popularized by Porter (1985). The value chain categorizes the broad value-adding activities of a business into primary and secondary activities. The primary activities include: inbound logistics, operations (production), outbound logistics, marketing and sales (demand), and services (maintenance). The support activities include: administrative infrastructure management, human resource management, technology, and procurement (Henderson and Cockburn, 1994).

Porter (1985, 1991) believes that a firm’s activities, such as scheming, producing, marketing, delivering, and sustaining, should be examined independently from one another and even interdependently. Porter’s value chain analysis is the tool he uses to reveal the role made by each company activity to overall competitive advantage. The value chain also helps in accepting cost behavior. Value chain analysis begins with segregating a company’s value activities into primary activities and support activities. Value activities are the physically and technologically different activities a company performs.

Scott (1998) argues that all firms, whether industrial or service leaning have a value chain. Each part of the value chain requires a strategy to ensure that it contributes to value creation for the whole firm. For a piece of the value chain to have a strategy it implies that the individual manager is obvious about what capabilities the company requires to deliver efficient market impact. The goal of these activities is to offer the customer a level of value that exceeds the cost of the activities, thus resulting in a profit margin. Value chain analysis is hence a structured method of analyzing the effects of all the core activities of a company on cost and/or differentiation of the value chain. Value chain analyses can be applied in the supply chain to determine where the costs can be reduced or differentiation can be enhanced.

The firm's frontier or profit then depends on its effectiveness and efficiency in performing these activities, so that the amount that the customer is ready to pay for the products exceeds the cost of the activities in the value chain. It is in these activities that a company has the
opportunity to create superior value than competitors. A competitive advantage may be gained by reconfiguring the value chain to provide lower cost or superior differentiation.

1.1.2 Linkages between Value Chain Activities

Value chain activities are not isolated from one another. Rather, one value chain activity often affects the cost or performance of other ones. Linkages may be present between primary activities and also between primary and support activities. Bearing in mind the case in which the design of a product is distorted in order to reduce manufacturing costs and suggesting that inadvertently the new product design results in increased service costs; the cost decrease could be less than predictable and even worse, there could be a net cost increase.

Sometimes however, the company may be able to diminish cost in one activity and consequently benefit from a cost reduction in another, such as when a design change simultaneously reduces manufacturing costs and improves dependability so that the service costs also are reduced. Through such improvements the firm has the potential to widen a competitive advantage.

1.1.3 Outsourcing Value Chain Activities

A company may make a decision to concentrate in one or more value chain activities and subcontract the rest. The degree to which a firm performs upstream and downstream activities is described by its extent of vertical incorporation. A meticulous value chain analysis can help scrutinize the business system to ease outsourcing decisions. To decide which activities to outsource, managers must appreciate the firm's strengths and weaknesses in each activity, both in terms of cost and ability to differentiate. Managers may consider the following when selecting activities to outsource: Whether the activity can be performed cheaper or better by suppliers. Whether the activity is one of the firm's core competencies from which a cost advantage or product differentiation is derived (Lorenzoni & Baden Fuller, 1995).

The basic idea in outsourcing strategies is to transform the firm's value chain to reduce the assets required and the number of traditional functional activities performed inside the organization, resulting in a much different configuration of the corporate boundaries. This can challenge the firm to cautiously reconsider its core capabilities (Prahalad & Hamel, 1994).
Alliances and partnerships create leverage in strategic choreography, shaping the so-called “intelligent firm” (Quinn, 1992). In “networked organization” design, the key choice is which activities to perform within and which to entrust to the network (Khanna, 1998). The choice can free resources from traditional supply chains to focus on core competencies that foster the firm’s competitive advantage. One example is Dell’s de-emphasis of manufacturing in favor of web-enhanced direct allotment in business PCs in the 1990s.

1.1.4 Competitive Advantage

The goal of a great deal of business strategy is to attain a sustainable competitive advantage. Hence, a competitive advantage exists when the company is able to deliver the same benefits as competitors but at a lesser cost (cost advantage), or bring benefits that surpass those of rival products (differentiation advantage). A competitive advantage enables the company to produce greater value for its customers and higher profits for itself (Teece et al., 1997, Stalk and Hout, 1990). Competitive advantage is a strategically sound elucidation of how a firm’s competitive approach, using broad generic strategies, can generate and sustain a competitive advantage over its competitors. Competitive advantage comes from the value that a company can craft for its customers. Hence, a company must make a decision or center on the type of competitive strategy it wants to adopt – the generic strategies are cost leadership, differentiation, and focus. A cost leadership strategy entails a company choosing to be the lowest cost producer in its industry (Hamel and Prahalad, 1994). Being able to present the lowest prices can be the consequence of economies of scale, proprietary technology or superior access to raw materials. In a cost leadership strategy, a company’s products have to be viewed as suitable substitutes from its competitors. Otherwise, a company’s products that are priced lower may be perceived to be of lower quality by their customers and turn to competitor products (Hitt, Ireland and Hoskisson, 1996).

1.1.5 Value Chain and Competitive Advantage

To survive in today’s very competitive business environment, any company must attain a competitive advantage. A low cost/price strategy focuses on providing goods or services at a lower cost than the competition, or superior goods or services at the same price. This strategy requires a tight cost-control system, benefiting from economies of scale in production, and
experience curve effects (Hines, 1993). Value chain analysis can help a company determine which kind of competitive advantage to pursue, and how to pursue it.

There are two components of value chain analysis: the industry value chain and an individual organization's internal value chain. The industry value chain is composed of all the value-creating activities within the industry, starting with the first step of product import process and ending with the completed delivery of product and related services to the customer. There are five competitive forces interacting within a given industry: the intensity of rivalry among existing competitors, the barriers to entry for new competitors, the threat of substitute products and services, the bargaining power of suppliers, and the bargaining power of buyers. Analyzing these forces will show the company's basic attractiveness, expose the underlying drivers of average company profitability, and provide insight into how profitability will evolve in the future, given different changes among suppliers, channels, substitutes, competitors, or technology (Stalk and Hout, 1990). The internal value chain of a company consists of all physically and distinct activities within the industry that add value to the clients. The key to analyzing the value chain is understanding the activities within the industry that create a competitive advantage, and then managing those activities better than other competitors in the industry.

1.1.6 Oil Companies in Kenya

Prior to liberalization in October 1994, an important attribute of Kenya’s oil industry was a comparatively high level of government’s direct involvement, and an equally low level of private sector participation. Seven marketing and distribution companies were responsible for procuring and importing their own oil. In 1988 National Oil Corporation of Kenya Limited, which was incorporated in 1981 under the Companies Act (Cap 486) with main purpose of coordinating oil exploration actions in Kenya was mandated on behalf of the government to supply up to 30% of the country's crude oil requirements that would in turn be sold to oil marketing companies for refining and onward sale to consumers. The Kenya Pipeline Company Limited established by the government in 1978, Kenya Railways Corporation, and private transporters were concerned in transportation of petroleum products from Mombasa to other parts of the country and adjacent countries (Mecheo and Omiti 2003).
The general petroleum strategy in Kenya is to guarantee safe, reliable and least cost supply of petroleum products to the domestic economy. Consistent with this policy and in tandem with reforms in other sectors of the economy, the government liberalized the distribution and pricing of petroleum products, and at the same time partially deregulated petroleum supply (Report on Petroleum Sub-Sector in Kenya, 1994).

After liberalization many independent oil companies emerged. Currently there are 85 registered oil companies in Kenya of which 47 are active. There are six major oil companies that includes; Kenya Shell Ltd, Total Kenya Ltd, Kenol/Kobil (Kenya oil Ltd), Oil Libya Kenya Ltd, National Oil Cooperation (NOC) and GAPCO Kenya Ltd. Kenya Shell Ltd and Total Kenya Ltd are multinationals. The others are either local or regional companies.

The major oil companies control about 75% of the market share and own major oil installations within the country. For example Kenya Shell owns petroleum storage facilities in Nairobi and Mombasa, liquefied petroleum gas (LPG) filling plant in Nairobi and lubricants blending plant in Mombasa (Mecheo and Omiti 2003)

The major oil companies also have a distinct brand, which completely differentiates them from the others. For example Kenya Shell, Kenol/Kobil and Total have lubricants and LPG brands that belong to them independently. These brands offer them company identity and help them extend brand loyalty among their customers. Major oil companies also run a nationwide network of retail outlets. For example Kenol /Kobil Petroleum Limited have an elaborate retail network in Kenya, with over 180 service stations. The two companies are strong players in the market, commanding a market share of over 20% (Petroleum Insight – Magazine of the Petroleum Institute of East Africa 1st Quarter 2009).

Despite boost in the number of independent oil distribution companies in Kenya after 1994 liberalization, the major oil companies have maintained their position through acquisitions and mergers. In 2006 Kenya Shell Limited acquired the share holding of BP in Kenya increasing its market share from 15% to 25% in 2008. Oil Libya acquired Exxon Mobil share holding in Kenya in 2007. Recently Total Kenya acquired all the assets of Chevron in Kenya.
Despite the industry sourcing procedure by means of tender, the oil industry in the public eye is seen as an upright integrated affair in which oil majors hold sway, and consumer prices are often increased uniformly across the board, with the marketing companies operating more or less like an unofficial cartel. This is because oil marketers are involved in all aspects of the business from procurement of the raw material (crude oil) to its refining and marketing through owning filling and service stations. The distribution channel is also the same, which means more or less similar storage and handling costs (Petroleum Insight – Magazine of the Petroleum Institute of East Africa 1st Quarter 2007).

There are numerous challenges facing and disturbing the oil industry in Kenya. These include: unfettered high fuel prices, which have turned out to be unaffordable to many Kenyans, unequal supply of fuel and the increased cost of electricity. The other challenges are high distribution costs due to limited storage and pumping capacity in Kenya Pipeline forcing the oil companies to haul product by road from Mombasa. There is also low demand for oil in Kenya due to the country’s underdeveloped economy.

1.2 Statement of the Problem

The value chain is an essential tool for diagnosing competitive advantage and looking for ways to create and uphold it. The value chain disaggregates a company into its strategically pertinent activities in order to appreciate the behavior of costs and the existing and possible sources of differentiation. Linkages are many within the value chain (Prahalad and Hamel, 1994). To diagnose competitive advantage, an exact value chain must be distinct in accordance with industry organization. With liberalization of the Kenyan market in 1990’s, the market has seen entrant and egress of many players in diverse industries and the oil industry has not been spared. This has resulted in competitive pricing and many market “wars”, resulting in shrinking profit margins. To endure in this kind of market, firms must strive to have competitive advantage over opponent companies. Hence companies have to work towards managing their costs of doing business more professionally than before. In the oil industry fuel products allocation is one of the processes contributing to the general cost of the product. The challenges therefore hindering successful distribution of fuel products have to be well understood and addressed either by eliminating them or damping their effects.
Several studies have also connected Porter's work and value chain activities to firm competitive advantage Hines (1993). Hamel and Prahalad (1990) projected that companies adopt dissimilar strategies to obtain competitive advantage by propagating their offered value chain models. The value chain as an managerial infrastructure, human resource management, technology growth, and procurement has received praise from scholars like, (Porter and Miller, 1985; Bergeron et al., 1991, Clark, 1993) who also maintain on significance of value chain in the flow of information not only within the company but also with other organizations for competitive advantage.

Locally, studies have been done on value chain. Musau (2003) carried a research project on Value Chain Management, a survey of practices of large manufacturing firms in Kenya and established that most of them do outsource their non-core logistics. Mwangi (2003) did a survey with an aim of investigating perception of pharmaceutical producers and end users towards the role played by pharmaceutical distributors using the value chain concept in Kenya and found that the adoption of good value chain management practices definitely improved the performance of the company, while Ikundo (2007) did a survey of the value chain management practices by international relief and development Non-Governmental Organizations and found that the most widely used practice is restructuring. on the other hand Ouma (2008) conducted a study on the relationship between value chain and competitive advantage in the insurance industry in Kenya and found that those companies with good value chain practices had increased competence and Ouma (2009) did a study on the application of porter’s value chain model at the Kenya Revenue Authority (KRA) and established that the application of the porter’s value chain model enhance the performance of the organization. None of these studies had investigated the impact of value chain strategy on performance in the major oil companies in Kenya. Thus, this study aimed at filling this gap.

The study sought answers to the following research questions: What value chain management strategies are applied within the major oil companies in Kenya? What is the relationship between value chain management strategy and performance in the major oil companies in Kenya?
1.3 Research Objectives

i. To determine the relationship between value chain management strategy and performance in the major oil companies in Kenya.

ii. To establish the value chain management strategies applied within the major oil companies in Kenya.

1.4 Significance of the Study

This study would help strengthen the oil industry by providing information on what makes customers develop positive perceptions to service. The industry would use the information to be able to improve on their mode of delivery to strengthen their stand against possible competition.

The study would be invaluable to the oil companies’ management in that it would provide an insight into the various approaches towards value chain application and how value chain could be used to ensure competitive advantage and efficient utilization of resources.

The study would be useful to the government in policymaking regarding taxation and other regulatory requirements of the oil industry. This study would help improve on literature on the oil sector in Kenya, which may be used by other scholars in the future.
CHAPTER TWO: LITERATURE REVIEW

This literature review highlights the concept of value-chain and establishes as setting for the reader to understand the uniqueness and relationship between value chains, competitive strategy and application of the generic strategies in industry.

2.1 The Concept of Strategy

There is no solitary universally conventional definition of strategy. Different authors and managers use the word differently (Mintzberg et al, 2000). Quinn (1980) defines strategy as the outline or plan that integrates an institution’s major goals, policies and action sequences into a organized whole. He goes further to state that a well formulated strategy helps to assemble and assign an organization’s resources into a distinctive and viable posture based on its valid internal competencies and shortcomings, anticipated changes in the environment and dependent moves by intelligent opponents.

Organizations are open systems that receive inputs from the environment, convert them into outputs and release them back into the environment. Thus organizations are environment reliant and environment serving. Strategy therefore relates a firm to its environment (Porter, 1980). It is the connection between a company and its environment. Strategy can be formulated on three different levels, i.e. corporate, business unit and operational level. While strategy may be about competing and existing as a firm, one can say that products and not organizations compete. The business units extend products. The role of the organization then is to run its business units and products so that each is competitive and so that each contributes to the organization’s purposes (Porter, 1980). Strategy helps to position a company in the wider external environment. It also defines the duty of the company to its stakeholders (Johnson and Scholes, 1999). Strategy helps to define the specific business of the firm in terms of products, markets and geographical scope. Strategy can also be well thought-out as a firm’s game plan that enables the company to create competitive advantage (Pearce and Robinson, 2000). The company should look at itself in terms of what the competitions are doing. This is grave because companies in the same industry tend to compete for the same customers. Ansoff and Mc Donnell (1990) define strategy as a set of decision-making rules for direction of organizational behavior. This strategy is used as a
gauge to measure firm’s performance and to define its relationship with the external environment. Strategy needs to take into consideration both the immediate and remote environment. There is no single thorough definition of strategy. What emerges however is that strategy is defined by how a company relates to its environment. This has to take into account the interior capabilities of the company which define the firm’s competitive advantage. The accomplishment or failure of a firm’s strategy will depend on adroit formulation and effective implementation. However, all booming strategies have some universal elements. They are based on simple reliable and long term objectives. They are also based on a deep understanding of the competitive environment and objective evaluation of available resources (Grant, 1998).

2.2 Levels of Strategy

There are three levels of strategy namely, corporate, business unit and ready. Corporate strategy is concerned with the general purpose and span of the organization to meet the prospect of the owners or major stakeholders and append value to the enterprise. The corporate level involves the top management of the firm, i.e. the chief executive officer and the board. Business unit strategy is concerned about how to compete successfully in a fussy market. It involves the person in charge of the business unit e.g. the unit manager or the regional boss. Operational strategy is concerned with how the constituent parts of the organization in terms of resources, processes, people and their skills successfully deliver corporate and business-level strategic direction. This involves the day-to-day operations such as productions, efficiency and effectiveness. Thus while the corporate strategy is more concerned with the general direction to be taken by the whole firm and the business unit respectively, operational strategy is more concerned with the steps required to reach the target as per the direction taken. The decisions at the three levels need to be synchronized to facilitate efficient and flourishing realization of the overall objectives of the organization. The priorities of the firm are unwavering at the corporate level while the actual execution is done at both the business unit and operational levels (Johnson and Scholes, 2002).
2.4 Competition

Competition is a vibrant process through which industry structure itself varies through evolution and transformation. The heart of competition, then, is a dynamic process in which symmetry is never reached and in the line of which industry structure is repeatedly reformed (Grant, 1998). Competition is at the core of the achievement or failure of firms. Competition determines the aptness of a firm’s activities that can give to its performance, such as innovations, a unified culture, or good implementation (Porter, 1985). Competition is most powerful when there are many direct competitors and when industry growth is sluggish. Sometimes competition is lofty because the rivals have very diverse “personalities” and strategies. There are radically different ideas about how to compete and continually find themselves in new battles with one another (Bateman & Zeithaml, 1990).

The status of competition in an industry depends on five fundamental forces. These are threat of new entrants, bargaining power of buyers, threat of substitute products or services, bargaining power of suppliers and rivalry among existing firms (Porter, 1980). However, Andrew Grove has argued that Porter’s five forces model ignore a sixth force; the power, vigor and competence of complementors (Hill & Jones, 2001). Complimentors are companies that sell complements to the enterprise’s own merchandise offerings. The combined strength of these forces establishes the ultimate profit potential in the industry, where profit potential is calculated in terms returns in the long run or invested capital. The corporate strategist’s aim is to find a position in the industry where his or her company can best defend itself against these competitive forces or can influence them in its favour. Knowledge of the causal sources of competitive pressure provides the groundwork for a strategic agenda of action (Porter, 1987).

The competitive advantage of a company may be battered because the competitive forces may change and/or competitors manage to triumph over adverse forces. This process or corrosion may be speeded up by alterations in the macro environment such as new technologies, globalization or deregulation. The advantage may be temporary; though the speed at which erosion occurs will differ between sectors and over time. Organizations may then respond to this erosion of their competitive position, creating what has been called a cycle of competition (Johnson et al, 2005). Empirically, the intensity of competition varies
steadily along the five competitive forces (Thompson et al, 2005). It is significant to understand the speed at which these cycles of competition might move. If the process is relatively slow then there may be significant periods of time when competition in an industry settles down to a well-established pattern. On the other hand, where the pace of the cycle is very high, this is referred to as hectic competition. Hyper competition occurs where the frequency, boldness and fierceness of dynamic movements by competitors accelerate to create a situation of constant disequilibria and change (D’Alene, 1995 in Johnson et al. 2005).

2.5 Competitive Advantage

2.5.1 Resource based Theory of Competitive advantage

A resource-based view of strategic management examines the resource capabilities of the firms that enable them to generate above normal rates of return and a sustainable competitive advantage. (Amit and Schoemaker, 1993 Barney 1991). Resource capital can be defined as the value pretty assets and competencies of the firm. Examples of resource capital include superior distribution channels, lean cost structures, patented core competencies, non-appropriate talent, and customer loyalty. According to Barney, a preparation system may conceivably produce advantages, but only if it ‘enables a firm to recognize resources, and some of these resources and some of these resources might be sources of sustained competitive advantage’

2.5.2 Institutional Perspective of competitive advantage of Firm

The institutional capital can be defined as the firm’s potential to support value enhancing assets and competencies. Examples or measures of institutional capital strength include training programs that accelerate the acceptance of new capabilities within the firm’s operations, information technology systems that accelerate the diffusion and use of reserve capital, management development programs that encourage continuous resource improvement, decision sustain systems that encourage resource innovations, and inter firm alliances across different industries that facilitate new resource learning and knowledge sharing. (Oliver 1997). The institutional view suggests that the motives of human behavior extend beyond economic optimization to social reason and social obligation (Zukin and
DiMaggio, 1990). The institutional based view of strategic management views firms operate within a social framework of norms, values and taken for granted assumptions about what constitutes appropriate for acceptable economic behavior.

A firm’s sustainable advantage depends on the firms’ ability to manage the institutional context of the resources decisions. It proposes a process model of firm heterogeneity that combines the insights of a resource based view with institutional perspective from organization theory. The key achievement factor as per resource capital is the defense and procurement of rare inimitable assets and competencies. In contrast to that, the key success factor is the effective management of the firm’s resource decision context. Oliver (1997) comes up with the combined research approach to look on the matter combining both resource base and institutional theory of firm.

2.6 Value Chain Concept

The value-chain concept is a means of identifying each of the business actions or stages that altered inputs into outputs. Firms that optimize their value chain activities versus competition stand a better possibility of leveraging valuable capabilities into sustainable competitive advantage. Hence performing value chain activities in ways that would let a firm the capabilities to outmatch rivals is a potential source of competitive advantage. In order to understand the elements of the value chain, it is important to first understand the resources and abilities that create these underlying elements of the chain (Eisenhardt and Martin, 2000).

The Resource-Based View (RBV) model maintains that when firms have resources that are valuable, uncommon, inimitable and non-substitutable, they can achieve sustainable competitive advantage by implementing value-creating strategies that cannot be duplicated by competitors (Barney, 1991; Eisenhardt and Martin, 2000; Teece et al., 1997; Wernerfelt, 1984). Thus, the resource model holds that the differences in resources, which other firms may not be able to acquire or easily duplicate, and the particular way in which they are used within a firm, form the foundation of competitive advantage Teece et al (1997), Madsen and Walker (2003).

The traditional view has been that at the end of the chain is the customer and that the better the chain is at servicing this customer then more value will be created. Hence, understanding
what each link does and how fine it fills its role in the chain provides a vehicle for understanding each procedure or link, its strengths and weaknesses and how the chain might best be recast to exploit competitive positioning and therefore value Gottfredson, Puryear and Phillips (2005). Indeed, it seems that the development of value-chain thinking and value-chain management have not realized its full potential. One of the principal reasons is terminology. Some quite simple but powerful ideas have become lost and confused in the absence of some agreed definitions of basic concepts (Christopher and Towill, 2001).

2.7 Value Chain Strategies

2.7.1 Outsourcing strategy

Outsourcing is a business strategy whereby a company hires an independent outside company to do some of its non-core company work (Kotler, 2003). More companies prefer to own brand rather than physical assets; they are decapitalising. A few companies are moving toward hiring outside parties to provide almost all services (Kotler, 2003). Companies outsource a wide range of services all aimed at creating competitive advantages. These are accounting and financial services, human resource services, customer care services, security services, and cleaning services. This is because these services are non-core and repetitive in nature thus similar in almost all organisations. Furthermore they can be done by an outside company at cheaper cost or at the same cost but in better ways (Quinn and Hilmer, 1994).

Outsourcing is a managed process of transferring activities to be performed by others and its main advantage is conceptually based on two strategic pillars (Campbell, 2005): the use of domestic resources mainly for the core competencies of the company and the outsourcing of all other (support) activities that are not considered strategic necessities and/or whenever the company does not possesses the adequate competencies and skills.

Outsourcing is essential to companies. Successful companies share the same success factors; they have clear understanding of their core-activities (Barthelemy, 2003); have done adequate research and planning; and most importantly have developed clear objectives, goals and expectations of outsourcing activities (Elmuti, 2003). Another important ingredient for success is a good partner. Essentially in outsourcing agreements, the relationship between the companies and their partners are based on trust and contracts. So it is essential that the right
partners are selected based on criteria like credibility, expertise, and reliability (Elmuti, 2003). This will eventually lead to closer ties and relationships (Barthelemy, 2003). It is also important to get the right people involved in managing outsourcing efforts (Elmuti, 2003). Therefore adequate training, infrastructure and facilities are essential (Elmuti, 2003).

According to Nicholas and Amrik (2004) the paper reports that data pertaining to outsourcing collected from a survey administered in 2002 in Australia, the underlying assumption is that outsourcing is becoming popular for sound business reasons such as economics of scale and enabling the management and executives to concentrate on the core business activities of the organization. Outsourcing emerged as a popular operational strategy in the 1990’s and most of the current literature was developed during the same time.

2.7.2 Restructuring Strategy

Restructuring is the corporate management term for the act of partially dismantling efficient and therefore more profitable organizations. It generally involves selling off portions of the company and making severe staff reductions. Restructuring is often done as part of a bankruptcy or of a takeover by another firm, particularly a leveraged buyout by a private equity firm. It may also be done by a new CEO hired specifically to make the difficult and controversial decisions required to save or reposition the company and reorganizing a company for the purpose of making it more profitable.

According to Pearce and Robinson (2005), the process takes an internal focus- getting work done efficiently and effectively so as to make strategy work. It involves recasting how activities within their business are conducted with unprecedented attentions to marketplace.

Strategic restructuring and supplier development have become important elements in the competitive strategies of firms faced with the challenge of shaving their costs and increasing efficiency without compromising quality and customer service. According to Cascio (2003) organizational restructuring process involves employees and board members in discussions of decision-making, communication, and accountability. Based on those discussions, staff recommends possible models for organizational structure and decision-making. As Lin, Lee and Peterson (2006) posits, electronic support tools have an effect at different levels. Not only do they speed up certain processes that hinge on the processing or dissemination of
information, they also permit certain activities to be restructured and re-engineered, or carried out at lower cost, or with greater accuracy and reliability.

Modern companies which operate within increasingly competitive national and international markets are likely to be familiar with a wide gambit of change initiatives. Some of these changes have focused on lean production and just-in-time techniques (Fulmer, Gibbs and Goldsmith, 2000) some have involved the rearrangement of plant and materials in the form of cellular manufacturing; and others have focused on customer-supplier chains and quality systems in both service and manufacturing industries (Atebe, 2001). Furthermore, as this wave of bewildering change programmes continues to build momentum, national governments are developing their own initiatives to support and aid organizations in their search for new competitive forms of work organization.

Restructuring, Reengineering, outsourcing and empowerment are all terms that reflect the critical stage in strategy implementation, where managers attempt to rationalize and recast their structure, leadership, culture and reward systems to ensure a basic level of cost competitiveness, capacity for responsive quality and the need to shape each one to accommodate unique requirement of their strategy (Thompson and Strickland, 2003). Two critical considerations arise when restructuring an organization to emphasize and support strategically critical activities: First managers need to make the strategically critical activities the central building block for designing organization structure. Those activities should be identified and separated as much as possible into self-contained part of the organization. Second is that the remaining structure should be designed so as to ensure timely integration with other parts of the organization.

Organizations are organic communities operating in complex eco-systems which force them to evolve and innovate on a continuous basis in order to survive. Faced with these dynamic and ever-changing pressures of the operating eco-system in terms of emerging market-spaces, fiercer demands on cost controls, organizations and businesses are resorting to enhancing their competitiveness by restructuring or streamlining their operations (Atebe, 2001). Managers in most organizations in Kenya especially in the late 1990s have embarked on restructuring strategies of their organizations, these organization include, Kenya commercial Bank, Kenya airways and Kenya Re Insurance all aimed at increasing
organization’s efficiency and effectiveness. Restructuring involves the following, reengineering and even outsourcing of non-core business activities (Johnson and Scholes, 2002).

If we view restructuring under the cause-effect paradigm, it can be seen as the most natural response to the various external and internal stimuli which guide business. Although these adaptations are crucial components while an organization pursues to exploit opportunities, they produce wide-spread disruptions and confusions as is common with any change. And like every change, it provokes much skepticism and many questions (Holder-Webb, Lopez and Regier, 2005).

2.8. Generic Competitive Strategies

2.8.1 Cost Leadership

Cost leadership strategy focuses on achieving competitive advantage by having the lowest cost in the industry (Cross, 1999). In order to attain a low-cost advantage, an organization must have a low-cost leadership strategy, low-cost manufacturing, and a workforce committed to the low-cost strategy (Malburg, 2000). The organization must be keen to halt any activities in which they do not have a cost advantage and should judge outsourcing activities to other organizations with a cost advantage (Malburg, 2000). For an effective cost leadership strategy, a firm must have a large market share (Hooley et al, 1998). There are many areas to attain cost leadership such as mass production, mass allotment, economies of scale, technology, product design, input cost, capability utilization of resources, and access to raw materials (Malburg, 2000). Sy (2002) purports only one firm in an industry can be the cost leader and if this is the only dissimilarity between a firm and competitors, the best strategic choice is the low cost leadership role. A firm may create a cost advantage either by plummeting the cost of individual value chain activities or by reconfiguring the value chain. Once the value chain is defined, a cost analysis can be performed by assigning costs to the value chain activities. The costs achieved from the accounting report may need to be customized in order to allocate them properly to the value creating activities. Porter acknowledged 10 cost drivers related to value chain activities. These cost drivers are economies of scale, Learning, Capacity utilization, Linkages among activities, Interrelationships among business units, Degree of vertical integration, Timing of market
Firm’s policy of cost or discrimination, Geographic location, and Institutional factors (regulation, union activity, taxes, etc.). A firm develops a cost advantage by controlling these drivers better than do the competitors.

Reconfiguring the value chain also can track a cost advantage. Reconfiguration means structural alterations such as new production development, new distribution channels, or a different sales approach. For example, FedEx structurally redefined express freight service by acquiring its own planes and implementing a core and spoke system. Some of the ways that firms acquire cost advantages are by civilizing process efficiencies, gaining unique access to a large source of lower cost materials, creation optimal outsourcing and perpendicular integration decisions, or avoiding some costs altogether. If competing firms are incapable to lower their costs by a similar amount, the firm may be able to maintain a competitive advantage based on cost leadership, (Hlavacka et al., 2001). Firms that succeed in cost leadership often have the internal strengths of accessing the capital required which aid in making a significant investment in production assets. This investment represents a barricade to entry that many firms may not overcome. Each broad strategy has its risks, including the low-cost strategy, as other firms may be able to lower their costs as well. Moreover technology improves; the competition may be able to recover on its production capabilities, thus eliminating the competitive advantage. Additionally, several firms following a focus strategy and targeting various narrow markets may be able to achieve an even lower cost within their segments and as a group gain important market share, (Martin, 1999).

2.8.2 Differentiation

In a differentiation strategy, a company seeks to be exceptional in its industry along some scope that are widely valued by buyers. It selects one or more attributes that many buyers in an industry see as vital, and uniquely positions it or them to meet those needs. The means for differentiation are atypical to each industry. A differentiation advantage can occur from any part of the value chain. For example, procurement of inputs that are unique and not widely available to competitors can create differentiation, as can distribution channels that offer high service levels.
Differentiation stems from uniqueness. A differentiation advantage might be achieved either by changing individual value chain activities to augment exclusivity in the final product or by reconfiguring the value chain. Porter identified several drivers of uniqueness, which are policies and decisions, linkages among activities, timing, Location, Interrelationships Learning, integration, Scale (e.g. better service as a result of large scale) and institutional factors (Porter, 1985).

Many of these also serve as cost drivers. Differentiation often results in greater costs, resulting in tradeoffs flanked by cost and differentiation. There are several ways in which a firm can reconfigure its value chain in order to create uniqueness. It can forward integrate in order to perform functions that once were performed by its customers. It can backward put together in order to have more control over its inputs. It may execute new process technologies or employ new distribution channels. Ultimately, the firm may need to be creative in order to enlarge a novel value chain configuration that increases product differentiation. Differentiation can be based on the product itself, the delivery system by which it is sold, the marketing approach, and a broad range of other factors. A firm that can attain and sustain differentiation will be an above-average performer in its industry if its price premium exceeds the extra costs incurred in being unique. It is then rewarded for its uniqueness with a best price. However, a differentiator, therefore, must always seek ways of differentiating that lead to a price premium greater than the cost of differentiating. A differentiator cannot ignore its cost position, because its premium prices will be nullified by a markedly substandard cost position.

The logic of the differentiation strategy requires that a firm choose attributes in which to differentiate itself that are different from its rivals. A firm must truly be unique at something or be perceived as unique if it is to expect a premium price. Unlike cost leadership, there can be more than one successful differentiation strategy in an industry if there are a number of attributes that are widely valued by buyers.

2.8.3 Focus Strategy

Focus strategy refers to the way companies target a certain market in developing their competitiveness. In the focus strategy, a firm targets a specific segment of the market
(Rainbird, 2004). The firm can choose to focus on a select customer group, product range, geographical area, or service line (Martin, 1999). The focus strategy is quite different from the other strategies because it rests on the choice of a narrow competitive scope within an industry. In this strategy, a firm selects a segment from a group of segments in the industry and tailors its strategy to serving them to the exclusion of others. The firms optimize their competitive advantage in their target segments even though they do not possess an overall competitive advantage. Focus aims at growing market share through operating in a niche market or in markets either not attractive to, or overlooked by, larger competitors. These niches arise from a number of factors including geography, buyer characteristics, and product specifications or requirements. A successful focus strategy (Porter, 1980) depends upon an industry segment large enough to have good growth potential but not of key importance to other major competitors. Market penetration or market development can be an important focus strategy. Midsize and large firms use focus-based strategies but only in conjunction with differentiation or cost leadership broad strategies. But, focus strategies are most effective when consumers have different preferences and when the niche has not been pursued by rival firms (Davidson, 2001).

The cost focus a firm seeks a cost advantage in its target segment as opposed to differentiation focus where a firm seeks differentiation in its target segment. Both cost and differentiation variants of the focus strategy rest on differences between target segments and other segments in the industry. The target segments must either have buyers with abnormal needs or else the production and delivery system that best serves the target segment must differ from that of other industry segments.

Cost focus used differences in cost behavior in some segments, while differentiation focus exploits the unusual needs of buyers in certain segments. Such differences entail that the segments are poorly served by broadly-targeted competitors who serve them at the same time as they serve others (Baldwin and Johnson, 1996). The focuser can thus attain competitive advantage by dedicating itself to the segments exclusively. Breadth of target is clearly a matter of degree, but the heart of focus is the exploitation of a narrow target's differences from the balance of the industry.
2.9 The Value Chain and Generic Strategies

The essence of a firm's business-level strategy is choosing to perform activities differently or to perform different activities from rivals Hitt et al. (2001). Porter's theory of business-level generic strategy contain two elements: first, a scheme for describing firms' competitive strategies according to their market scope i.e. focused or broad, and second, their source of competitive advantage, i.e. cost or differentiation (Swink and Hearty, 1998). Each of the generic strategies involves a basically different route to competitive advantage, combining a choice about the type of competitive advantage required with the scope of the strategic target in which competitive advantage is to be achieved. Each implies different skills and requirements for success, which commonly translate into differences in organization structure and culture (Hitt et al, 2001). Competitive advantage can be attained through the value chain, a template that a company uses to understand its cost position and the existing and potential sources of differentiation. The value chain, which is divided into primary and support activities are composed of nine generic categories of activities, linked together in characteristic ways. Firms competing in the same industry sector are expected to have a equally configured value chain. However, the differences that exist in the value chain of the companies will determine the potential competitive advantage.

2.10 Value Chain Drivers and Technology

With the prior review of the value chain and the relationship with performance, it becomes vital to investigate the value chain drivers whose information influences the extent of achievement of the value production process as the final and most important deliberation. The process by which value is produced and delivered incurs cost. A company therefore needs to recognize the relationships between customer satisfaction, what results which levels of satisfaction and the cost incurred. Thus it is the value drivers, which influence the value created for customers (by offering a range of differentiated products and services) and, because of the competitive advantage created, value in terms of profitability, productivity for the organization is shaped (McGuffog, 1999).

Because technology is employed to some degree in every value creating activity, changes in technology can impact competitive advantage by incrementally varying the activities themselves or by making probable new configurations of the value chain.
2.11 Performance Measurement

Traditionally Performance measurement can be defined as the process of quantifying the effectiveness and efficiency of an action or a system (Neely et al., 1995). Sink and Tuttle (1989) claims that you cannot manage what you cannot measure. Corporate performance measurement and its application continue to grow and include both quantitative and qualitative measurements and approaches. The variety and level of performance measures depends significantly on the goal of the organisation or the individual strategic business unit’s characteristics. For example, when measuring performance, firms must consider existing financial measures such as return on investment, profitability, and market share and revenue growth at a more competitive and strategic level. Other measures such as customer service and inventory performance (supply, turnover) are more operationally focused, but may necessarily be linked to strategic level measures and issues. Overall, these difficulties in developing standards for performance measurement are traced to a variety of measurement taxonomies. Example taxonomic considerations include: management level to measure strategic, tactical, or operational; tangible versus intangible measures; variations in collection and reporting; an organization’s location along the supply chain or functional differentiation within companies (for example, accounting, versus marketing or operations). Similar to the performance measurement used, the performance measurement system may be unique to each individual organization, or unit within an organization, Porter (1985) reflecting its fundamental purpose and its environment. Several studies have investigated the universal principles of performance measurement (Adams et al., 1995; Gunasekaran et al., 2001).

Performance measurement systems are planned to monitor the implementation of organizations plans and establish when the plans are ineffective and how to improve them (Atkinson et al, 1997). They are used to focus attention on the organizations objectives, to measure and report performance and to understand how process performance affects organizational learning (Atkinson et al, 1997). Identifying operational problems, which can be solved by adjusting existing processes, and indicating more fundamental problems, which require an adjustment to strategies of the organization, are further uses of performance measurement (Argyris, 1997).
Performance measurement can also be referred to as monitoring and evaluation. Monitoring is aimed at ensuring that the activities of the project are being undertaken on schedule to facilitate implementation as specified in the project design. Any constraints in operationalising the design can be quickly detected and corrective action taken. Evaluation involves a systematic review or examination of the elements of success and failure in the project experience during the project life to learn how better to plan the project in future. This implies that evaluation is a continuous exercise during the project life and is very related to project monitoring. Monitoring provides the data on which the evaluation is based (Mbeche, 2000).

While accounting systems are used to measure performance because they are considered to be reliable and consistent and because they mesh with the primary objective of creating profits, there is a growing concern that concentration on financial measures is inadequate for strategic decision making and indeed for full internal management and control (Atkinson et al., 1997). Long-term survival is linked to organizations chosen strategy, and the strategy determines what must be measured. Measuring only short-term financial results can have dysfunctional consequences to its long-term survival (Brignal, 1993). Brignal indicates how measures across six dimensions related to strategy over an extended period were needed to implement strategy in a local government child-care organization.

2.12 Value Chain and Performance

Value chain analysis is a powerful tool for managers to identify the key activities within the firm which form the value chain for that organization and have the potential of a sustainable competitive advantage for a company. Therein, competitive advantage of an organization lies in its ability to perform crucial activities along the value chain better than its competitors.

The value chain framework of Porter (1998) is “an interdependent system or network of activities, connected by linkages”. When the system is managed carefully, the linkages can be a vital source of competitive advantage (Pathania-Jain, 2001). The value chain analysis essentially entails the linkage of two areas. Firstly, the value chain links the value of the organizations’ activities with its main functional parts. Then the assessment of the contribution of each part in the overall added value of the business is made (Lynch, 2003). In
order to conduct the value chain analysis, the company is split into primary and support activities. Primary activities are those that are related with production, while support activities are those that provide the background necessary for the effectiveness and efficiency of the firm, such as human resource management.

By subdividing an organization into its key processes or functions, Porter was able to link classical accounting to strategic capabilities by using value as a core concept. According to Hill and Jones (2007), the value chain model is a useful analysis tool for defining a firm's core competencies and the activities in which it can pursue a competitive advantage as follows: Cost advantage: by better understanding costs and squeezing them out of the value-adding activities. Differentiation: by focusing on those activities associated with core competencies and capabilities in order to perform them better than do competitors.

The value-chain concept has been extended beyond individual organizations. It can apply to whole supply chains and distribution networks. The delivery of a mix of products and services to the end customer will mobilize different economic factors, each managing its own value chain. The industry wide synchronized interactions of those local value chains create an extended value chain, sometimes global in extent. Porter terms this larger interconnected system of value chains the "value system." A value system includes the value chains of a firm's supplier (and their suppliers all the way back), the firm itself, the firm distribution channels, and the firm's buyers (and presumably extended to the buyers of their products, and so on).

2.13 Oil Industry Value Chain
The oil industry has three levels: upstream, midstream, and downstream which include the main segments in the supply chain. The upstream level includes the exploration, drilling, and production of crude oil and the midstream level includes the transportation and trading of crude oil to refineries. The downstream level refers to the cleansing of crude oil into finished product, the storage of crude oil, and the supply and marketing of finished products to wholesalers and retailers. Although the general production of oil is driven by global demand, the value chain is producer-driven and several of the companies are vertically integrated and have control over every level in the chain.
In Kenya crude oil is received at Kipevu oil jetty and transferred to the Kenya Petroleum refineries at Changamwe. After refining the products are transferred to Kenya Pipeline Company (KPC) or Mombasa depots where they are temporary stored and later transferred to upcountry depots or straight to consumers and retail outlets. Refined petroleum products in Kenya are also imported through tankers. On arrival at Mombasa, tankers offload products at Kipevu Oil Terminus (KOT) or Shimanzio Oil Terminus (SOT) to momentary storage tanks at KPC Mombasa terminal or the oil marketers’ terminals in Mombasa. From the depots product is transported to service stations and other consumer sites via trucks. Some oil companies have their own trucks while other use hired trucks. In some cases oil companies have devoted transporters and the trucks are branded. Others are just ad hoc trucks which are used on need basis (PIEA, 2006).

Kenya’s liberalized oil industry has witnessed intense rivalry principally due to lack of much differentiation in the products sold and a fairly low market growth rate. In the Kenya oil industry set-up, major suppliers peg prices to the Organization of Petroleum Exporting Countries (OPEC) and normally purchase oil products from the trading buying arms. This offers little flexibility in influencing supplier prices and power. In the Kenya oil industry set-up only industrial or commercial high volume players have strong influence on pricing. The independent oil companies are in this bracket as they purchase from the majors. Retail customers have hardly any bargaining power and they have to buy fuel at prevailing pump prices.

Oil products require a more careful analysis of delivery options in order to provide an optimal level of customer service. The field of transport has several aspects which can loosely be divided into a triad of infrastructure, vehicles and operations. Infrastructure includes the transport networks (roads, railways, airways, waterways, canals and pipelines ). Vehicles generally will cover the automobiles, buses and trains. Operations deal with the way the vehicles are operated on the network and procedures set for this purpose including the legal environment and the policies (Hoekstra and Romme, 1992). Fuel products are distributed using the pipeline and complemented by rail and trucks. In the absence of pipeline, fuel products used to be transported in bulk containers like drums. Over the recent past however this has been replaced with road and rail trucks carrying tanks. Oil companies today have
come up with service level agreements with contractors in an attempt to increase profitability and efficiency in transportation of fuels. Setting up of policies, rules and procedures to guide transporters and drivers has supported this.

The other aspect of value creation in the petroleum industry involves processing as a stage in product development. Processing involves forward logistics where the product is moved from form one point to the other in the supply chain. The processing also involves reverse logistics, where products are moved from their initial point in a supply chain backward through the supply chain.

Towers and Ashford (2001) pointed out that the second important element in physical distribution concerns storing products for future delivery. Marketers of tangible products, and even digital products, may have storage concerns. Storage is the other factor that affects value creation in the supply chain of the oil products in Kenya. Storage goes hand in hand with management of inventory, which involves all activities involved in developing and managing the inventory levels of products and raw materials so that adequate supplies are available and the costs of overstocks are low. Marginal order processing costs decreases with increased inventory ordered since the total cost is spreader over a larger quantity or units. Marginal inventory carrying costs increases with the quantity or number of units ordered because each unit remains longer in inventory. The intention of marketing is to give all those involved (and particularly the supplier at one end, and the retailer at the other) 'control' over the distribution chain. This removes one set of variables from the marketing equations. Petroleum companies have applied this strategy in trying to reach its customers for instance; it sells its fuel products directly to its corporate buyers as well as through value-added resellers. By doing this Petroleum companies increases its market coverage, lower channel costs and increase more customized selling.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction
This chapter presents the methodology components of the study, that is, research design, target population and sample selection, research instruments and data analysis. Consequently, the study was conducted in an objective, systematic manner of gathering information so as to attain the objectives.

3.2 Research Design
The research design used for this study was descriptive survey design. The method was an efficient way to obtain information needed to describe opinions and views of oil companies’ employees on the impact of value chain management strategy and performance of their company. The emphasis was on the sample since the aim is to make generalization on the impact of value chain. The advantages of selecting a descriptive survey upon other research design was because researcher needs to collect information from a fairly large sample population thereby many respondents can be questioned fairly quickly. In addition, survey design has less bias compared to other designs like in-depth case study [Gilbert, 2005].

3.3 Population
The target population of this study was the 47 registered and active oil companies in Kenya. The study focused on the section and particularly on the top, middle and lower level management staff who were directly dealing with the day to day management of the oil companies since they are the ones conversant with the relationship between value chain and performance in the major oil companies in Kenya.

Table 3.1: Target population

<table>
<thead>
<tr>
<th>Section</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top managers</td>
<td>20</td>
<td>11.8</td>
</tr>
<tr>
<td>Middle level managers</td>
<td>50</td>
<td>29.4</td>
</tr>
<tr>
<td>Supervisory level managers</td>
<td>100</td>
<td>58.8</td>
</tr>
<tr>
<td>Total</td>
<td>170</td>
<td>100.0</td>
</tr>
</tbody>
</table>
3.4 Sample Design and Sample size

Stratified random sampling technique was used to select the sample. According to Kerry and Bland (1998) the technique produce estimates of overall population parameters with greater precision and ensures a more representative sample is derived from a relatively homogeneous population. Stratification aims to reduce standard error by providing some control over variance. The study grouped the population into three strata i.e. top managers, Middle level managers and Supervisory level managers from each of the six major oil companies in Kenya. From each stratum the study used simple random sampling to select 51 respondents. According to Cooper and Schindler (2003), random sampling frequently minimizes the sampling error in the population. This in turn increased the precision of any estimation methods used.

Table 3.2: Sample Population

<table>
<thead>
<tr>
<th>Section</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top managers</td>
<td>20</td>
<td>0.3</td>
<td>6</td>
</tr>
<tr>
<td>Middle level managers</td>
<td>50</td>
<td>0.3</td>
<td>15</td>
</tr>
<tr>
<td>Supervisory level managers</td>
<td>100</td>
<td>0.3</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>170</td>
<td>0.3</td>
<td>51</td>
</tr>
</tbody>
</table>

3.5 Data Collection

The study was a survey where data was collected from the six major oil companies using a questionnaire. Self-administered drop and pick questionnaires were distributed among sampled employees currently employed by the major oil companies in Kenya.

In order to maximize the response of the respondents, the researcher made personal visits to the respondents’ place of work where he requested the respondents to participate by responding to the questionnaires. Where the respondents were unable to complete the questionnaires on the spot, the researcher left them for a period of one week for the respondents to fill them at their convenience.
The questionnaire was divided into two parts. The first part sought information on the company background. This was to enable the researcher to know the nature of the oil company, while the second part was on the relationship between value chain strategy and performance. Secondary data sources were employed through the use of information available in companies’ website and published financial reports or materials to supplement the data received from questionnaires and information from interviews.

3.6 Data Analysis
Data collected was first edited for accuracy, consistency, and completeness. Then, it was arranged to simplify coding and tabulation. Descriptive statistics were used to analyze the data collected. These included the use of tables and percentages. Statistical Package for Social Sciences (SPSS) package was then used to correlate and regress the data. In addition, the frequency of each identifiable factor in the transcripts was tabulated. This informed the researcher as to the perceived importance of the identifiable factor across the respondents.

The regression equation \( Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \):

Whereby

\[ Y = \text{firm performance} \]
\[ X_1 = \text{Restructuring} \]
\[ X_2 = \text{Outsourcing} \]
\[ X_3 = \text{collaboration} \]

3.7 Pilot test
The researcher carried out a pilot study of the research at the Shell a month before the project. The pilot test was to test the efficacy of the research in order to establish the validity, reliability and timeframe of the actual research. The researcher tested for face validity by giving experts to go through the proposal. The researcher intended to give out four questionnaires, which were filled by respondents from Shell. Analysis of the responses showed if the research was viable or not.
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents analysis and findings of the study as set out in the research methodology. The chapter presents the data analysis, interpretation and presentation there-to on the study to evaluate the relationship between value chain and performance in the major oil companies in Kenya. The data was gathered exclusively from questionnaire as the research instrument. The questionnaire was designed in line with the objectives of the study. To enhance quality of data obtained, Likert type questions were included whereby respondents indicated the extent to which the variables were practiced in a five point Likerts scale. The data has been presented in form of quantitative, qualitative followed by discussions of the data results.

4.1.1 Response Rate

The study targeted 51 respondents in collecting data with regard to the relationship between value chain and performance in the major oil companies in Kenya.

Table 4.1: Response Rate

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responded</td>
<td>43</td>
<td>84.3</td>
</tr>
<tr>
<td>Not responded</td>
<td>8</td>
<td>15.7</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From the table 4.1 above, 43 out of 51 target respondents filled in and returned the questionnaire contributing to 84.3%. This commendable response rate corroborated the researcher’s personal calls and visits to remind the respondent to fill-in and return the questionnaires.
4.2 General Findings

4.2.1 Name of Companies and Designations of the Respondents

The responses comprised top, middle level and lower level managers from the six major oil companies in Kenya which are Kenya Shell Ltd (established in 1900), Total Kenya Ltd (established in 1955), Kenol/Kobil (Kenya oil Ltd) (established in 1959), Oil Libya Kenya Ltd (established in 2006), National Oil Cooperation (NOC) (established in 1981) and GAPCO Kenya Ltd (established in 1999).

4.2.2 Nationality of the Major Oil Companies

The study sought to investigate whether the companies were locally owned or multinational.

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locally owned</td>
<td>14</td>
<td>33</td>
</tr>
<tr>
<td>Multinational</td>
<td>29</td>
<td>67</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From the table 4.2 above, 67% of the respondents indicated that their companies were multinational companies, while 33% of the responses indicated that their companies were locally owned. This implies that majority of the major oil companies operating in Kenya are multinational companies and that is likely to be a contribution to their being capable to apply value chain analysis to impact on their performance.

4.2.3 Ownership of the Major Oil Companies

The respondents were required to indicate whether the institutions were private owned, private/public, parastatal or public owned.
Table 4.3: Ownership of the Major Oil Companies

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private owned</td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td>Private/public</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Parastatal</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Public owned</td>
<td>21</td>
<td>49</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>100</td>
</tr>
</tbody>
</table>

From the results summarized in the table 4.3 above, the study found that 49% of the companies were publicly owned. 28% of the major oil companies were private owned companies, 15% of the respondents indicated that their companies were parastatals, while 8% of them indicated that their companies were private owned.

4.2.4 Company Size in Terms of Employees

The study further sought to investigate the size of the major oil companies in terms of employees.

Table 4.4: Number of Employees

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10 to 49</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>50-249</td>
<td>32</td>
<td>74</td>
</tr>
<tr>
<td>250 and above</td>
<td>7</td>
<td>16</td>
</tr>
</tbody>
</table>

Table 4.4 above shows that 74% of the companies had between 50 and 249 employees, 16% of the major oil companies employ above 250 employees, while 9% of the companies have 10 to 49 employees. This indicates that majority of the major oil companies employ between 50 and 249 employees.

4.2.5 Length of Operations

The respondents were required to indicate how long their institution had been in operation in Kenya.
Table 4.5: Years in Operations

<table>
<thead>
<tr>
<th>Number of years</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 5 years</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>6 to 15 yrs</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>31-60</td>
<td>28</td>
<td>65</td>
</tr>
<tr>
<td>above 60 yrs</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>100</td>
</tr>
</tbody>
</table>

From the findings presented in table 4.5 above, 65% of the respondents indicated that their companies had been operations in Kenya for a duration of 31-60 years, 16% of the respondents indicated that the companies had operated in the country for a period of above 60 yrs, 12% indicated that their companies had operated in the country for 6 to 15 years, while 7% of them indicated that their companies had been in operations in Kenya for 1 to 5 years. This is a clear indication that most of the major oil companies had operated in the country for at least 30 years.

4.3 Value Chain and Performance

4.3.1 Use of Value Chain Strategies to Achieve Performance

Table 4.6: Whether the companies used value chain strategies

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>41</td>
<td>95</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

The study required the respondents to indicate whether their companies used value chain strategies to enhance performance. From the findings summarized in the table 4.6 above, 95% of the respondents indicated that their companies used value chain strategies to enhance performance while 5% said that their companies don’t use value chain strategies.
### Table 4.7: Use of Various Value Chain Activities

<table>
<thead>
<tr>
<th>Activities</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inbound logistics</td>
<td>4.336</td>
<td>1.3422</td>
</tr>
<tr>
<td>Operations</td>
<td>3.894</td>
<td>1.2922</td>
</tr>
<tr>
<td>Outbound logistics</td>
<td>3.742</td>
<td>1.3677</td>
</tr>
<tr>
<td>Marketing and sales (demand)</td>
<td>4.271</td>
<td>1.3039</td>
</tr>
<tr>
<td>Services (maintenance)</td>
<td>3.438</td>
<td>1.1091</td>
</tr>
<tr>
<td>Administrative infrastructure</td>
<td>1.96</td>
<td>.7707</td>
</tr>
<tr>
<td>Human resource management</td>
<td>2.815</td>
<td>1.29904</td>
</tr>
<tr>
<td>Technology adoption</td>
<td>2.357</td>
<td>1.04147</td>
</tr>
<tr>
<td>Procurement</td>
<td>3.98</td>
<td>.99978</td>
</tr>
</tbody>
</table>

The study required the respondents to indicate the extent of use of various value chain activities in their company. From the table 4.7 above majority of the respondents indicated that the value chain activities used to a great extent were inbound logistics as shown by a mean score of 4.336, marketing and sales (demand) shown by a mean score of 4.271, operations shown by a mean score of 3.894 and outbound logistics shown by a mean score of 3.742. Majority of the respondents also indicated that the value chain activities used to a moderate extent were services (maintenance) shown by a mean score of 3.438 and human resource management shown by a mean score of 2.815 while those applied to a little extent were technology adoption shown by a mean score of 2.357 and administrative infrastructure management shown by a mean score of 1.96.

#### 4.4 Application of Value Chain Practices

On a scale of 1 to 5 where 1 was to no extent and 5 were to a very great extent, the respondents were requested to indicate the extent to which their companies applied various practices as evidence of value chain application practices.
Table 4.8: Application of Value Chain Practices

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide a range of price quality levels for products and services</td>
<td>1.452</td>
<td>7.4085</td>
</tr>
<tr>
<td>Conduct checks to ensure all operations conform to required procedures</td>
<td>3.417</td>
<td>1.5686</td>
</tr>
<tr>
<td>Conduct checks to ensure all flaws in the process are addressed</td>
<td>1.775</td>
<td>1.0365</td>
</tr>
<tr>
<td>Provide adequate skilled staff in all departments</td>
<td>3.523</td>
<td>1.1297</td>
</tr>
<tr>
<td>Ensure ability of operations staff to solve issues that may cause customer dissatisfaction</td>
<td>2.232</td>
<td>1.2418</td>
</tr>
<tr>
<td>Ensure ability of staff to meet targets</td>
<td>2.382</td>
<td>7.4085</td>
</tr>
<tr>
<td>Carry out regular surveys to identify customer needs</td>
<td>3.418</td>
<td>1.5686</td>
</tr>
<tr>
<td>Innovate technology</td>
<td>2.336</td>
<td>1.3422</td>
</tr>
</tbody>
</table>

From the findings in the table 4.8 above, majority of the respondents indicated that their company provide adequate skilled staff in all departments to a great extent as shown by a mean score of 3.523, their companies carry out regular surveys to identify customer needs to a moderate extent as shown by a mean score of 3.418 and that their companies conduct checks to ensure all operations conform to required procedures to a moderate extent as shown by a mean score of 3.417. The respondents also indicated that their companies ensure ability of staff to meet to a little extent as shown by a mean score of 2.382, adopt innovate technology to a little extent as shown by a mean score of 2.336, their companies ensure ability of operations staff to solve issues that may cause customer dissatisfaction to a little extent as shown by a mean score of 2.232 and companies conduct checks to ensure all flaws in the process are addressed to a little extent as shown by a mean score of 1.775 while others indicated that their companies provide a range of price quality levels for products and services to no extent as shown by a mean score of 1.452.

4.5 Factors Considered Important

On a scale provided the respondents were required to indicate the extent to which they consider these factors important.
Table 4.9: Extent to Which Various Factors are considered Important in enhancing company performance

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company vision and mission</td>
<td>3.482</td>
<td>1.41406</td>
</tr>
<tr>
<td>Best employees in the market</td>
<td>2.67</td>
<td>1.49230</td>
</tr>
<tr>
<td>Use of public relations by company</td>
<td>3.731</td>
<td>1.51529</td>
</tr>
<tr>
<td>Safety of petroleum facilities</td>
<td>2.46</td>
<td>1.61058</td>
</tr>
<tr>
<td>Location of outlets</td>
<td>3.817</td>
<td>1.59329</td>
</tr>
<tr>
<td>Good choice of advertising media</td>
<td>3.482</td>
<td>1.18426</td>
</tr>
<tr>
<td>Perception of customers</td>
<td>2.376</td>
<td>1.00266</td>
</tr>
</tbody>
</table>

From the results summarized in the table 4.9 above, majority of the respondents indicated location of outlets was considered important in enhancing the company performance to a great extent as shown by a mean score of 3.817 and that the use of public relations by company was considered important to a great extent as shown by a mean score of 3.731. The respondents also indicated that the factors that were important in enhancing performance to a moderate extent were company vision and mission and good choice of advertising media as shown by a mean score of 3.482 in each case and best employees in the market shown by a mean score of 2.67 while those that were rated important to a little extent were safety of petroleum facilities shown by a mean score of 2.46 and perception of customers shown by a mean score of 2.376.

4.6 Performance and Critical Value Chain Activities

The respondents were required to indicate the extent to which they agreed with the statement that achieving performance begins with an effort to develop deeper organizational expertise in performing certain competitively critical value chain activities, deliberately attempting to harness those capabilities that strengthen the firm's strategy and competitiveness.
Table 4.10: Agreement that Performance and Critical Value Chain Activities

<table>
<thead>
<tr>
<th>Extent of agreement</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>To a very great extent</td>
<td>2</td>
<td>4.9</td>
</tr>
<tr>
<td>To a great extent</td>
<td>13</td>
<td>29.4</td>
</tr>
<tr>
<td>To a moderate extent</td>
<td>24</td>
<td>56.9</td>
</tr>
<tr>
<td>To a little extent</td>
<td>4</td>
<td>8.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Majority of the respondents (56.9%) agreed to a moderate extent that achieving performance begins with an effort to develop deeper organizational expertise in performing certain competitively critical value chain activities, deliberately attempting to harness those capabilities that strengthen the firm's strategy and competitiveness, 29.4% of the respondents agreed to a great extent, 8.8% of the respondents indicated agreement to a little extent while 4.9% of them indicated agreement to a very great extent as shown in table 4.10 above.

4.7 Value Chain Drivers

The study posed a statement that value chain drivers are believed to enhance performance through the following ways and requested that respondents to pick the value chain drivers that had been incurred by their companies through value creation.

Table 4.11: Value chain Drivers

<table>
<thead>
<tr>
<th>Value chain Drivers</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offering a range of differentiated products and services</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td>Productivity</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>Specialization</td>
<td>8</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>43</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the table 4.11 above, 30% of the respondents indicated that their companies used offering of a range of differentiated products and services as value chain drivers to create performance, 28% of them indicated that their companies used performance, 23% of the respondents indicated that their companies used productivity, while 19% of them used specialization.
On whether the companies had adopted some computerized value chain processes to gain performance, the respondents unanimously agreed that their companies had adopted some computerized value chain processes to gain performance.

4.7.1 Collaboration with Other Companies to Create Performance

The study further sought to investigate whether the companies collaborate with other companies in order to create performance.

| Table 4.12: Collaboration with Other Companies to Create Performance |
|-----------------------------|-----------------|------------------|
| Response | Frequency | Percentage |
| Yes | 32 | 74 |
| No | 11 | 26 |
| Total | 43 | 100 |

From the table 4.12 above, 74% of the respondents indicated that their companies collaborate with other companies in order to enhance performance, while 26% of them indicated that their companies do not collaborate with other companies in order to create performance.

4.7.2 Adoptions of value chain strategies and performance

The study also sought to establish the extent to which the adoptions of the value chain strategies affected the companies’ performance.

| Table 4.13: Extent those Adoptions of the value chain strategies affects performance |
|---------------------------------|--------------------|-----------------|
| Adoptions of the business-level generic strategy elements | Mean | Standard Deviation. |
| Scheme for describing firms' competitive strategies according to their market scope i.e. focused or broad | 2.336 | 1.3422 |
| Restructuring | 3.894 | 1.2922 |
| Outsourcing their non core logistics | 3.042 | 1.3677 |
| Cost advantage: by better understanding costs and squeezing them out of the value-adding activities. | 1.96 | .7707 |
| Differentiation: by focusing on those activities associated with core competencies and capabilities in order to perform them better than do competitors. | 2.815 | 1.29904 |


The study also sought to establish the extent that adoptions of the value chain strategies affects performance. From the table 4.13 above, majority of the respondents indicated that the value chain strategy affects performance to a great extent was restructuring strategy as shown by a mean score of 3.894, those value chain strategies that affect performance to a moderate extent were outsourcing their non-core logistics shown by a mean score of 3.042 and differentiation: by focusing on those activities associated with core competencies and capabilities in order to perform them better than do competitors shown by a mean score of 2.815 while scheme for describing firms' competitive strategies according to their market scope i.e. focused or broad and cost advantage: by better understanding costs and squeezing them out of the value-adding activities affect the performance of the company to a low extent as shown by a mean score of 2.336 and 1.96 respectively.

4.8 Relationship between Value Chain Strategies and Performance

The study also sought to investigate the respondents’ agreement to the various statements that relate to the relationship between value chain strategies and performance.

Table 4.14: Agreement on the Relationship between Value Chain strategies and Performance

<table>
<thead>
<tr>
<th>Relationship between Value Chain Strategies and Performance</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption of good value chain management practices definitely improves the performance of the company</td>
<td>3.582</td>
<td>27.1</td>
</tr>
<tr>
<td>Companies with good value chain practices have increased competence in the market</td>
<td>2.397</td>
<td>2.1</td>
</tr>
<tr>
<td>It is the value drivers, which influence the value created for customers (by offering a range of differentiated products and services)</td>
<td>3.792</td>
<td>25</td>
</tr>
<tr>
<td>Because of the value created, performance in terms of productivity for the organization is created</td>
<td>4.441</td>
<td>54.2</td>
</tr>
<tr>
<td>Changes in technology can impact performance by incrementally changing the activities themselves or by making possible new configurations of the value chain.</td>
<td>1.775</td>
<td>1.0365</td>
</tr>
</tbody>
</table>
Value chain analysis is a powerful tool for managers to identify the key activities that have the potential of a sustainable performance for a company.

<table>
<thead>
<tr>
<th>Description</th>
<th>Mean Score</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance of an organization lies in its ability to perform crucial activities along the value chain better than its competitors.</td>
<td>2.232</td>
<td>1.2418</td>
</tr>
<tr>
<td>The delivery of a mix of products and services to the end customer will mobilize different economic factors, each managing its own value chain.</td>
<td>3.976</td>
<td>1.2312</td>
</tr>
</tbody>
</table>

From the results summarized in the table 4.14 above, the respondents were in agreement that because of the value created, performance in terms of productivity for the organization is enhanced as shown by a mean score of 4.441, the delivery of a mix of products and services to the end customer will mobilize different economic factors, each managing its own value chain shown by a mean score of 3.976, it is the value drivers, which influence the value created for customers (by offering a range of differentiated products and services) shown by a mean score of 3.792, adoption of good value chain management practices definitely improves the performance of the company shown by a mean score of 3.582 and value chain analysis is a powerful tool for managers to identify the key activities that have the potential of a sustainable performance for a company shown by a mean score of 3.523.

Majority of the respondents disagreed that the fact that companies with good value chain practices have increased competence in the market shown by a mean score of 2.397, performance of an organization lies in its ability to perform crucial activities along the value chain better than its competitors shown by a mean score of 2.235 and changes in technology can impact performance by incrementally changing the activities themselves or by making possible new configurations of the value chain shown by a mean score of 1.775.
4.9 Regression Analysis

Table 4.15: Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restructuring</td>
<td>0.397</td>
<td>0.099</td>
<td>0.003</td>
<td>0.718</td>
</tr>
<tr>
<td>Outsourcing</td>
<td>0.257</td>
<td>0.066</td>
<td>0.060</td>
<td>0.697</td>
</tr>
<tr>
<td>Collaboration</td>
<td>0.355</td>
<td>0.085</td>
<td>0.076</td>
<td>0.564</td>
</tr>
</tbody>
</table>

The table 4.15 above presents the correlation and the coefficient of the relationship between firm performance (dependent variable) and the independent variables (Restructuring, Outsourcing, and collaboration). From the findings, the study found that there was a positive but weak relationship between the dependent variable and the independent variables.

Of all the three independent variables, Restructuring had the highest relationship with the firm performance of 0.397 followed by collaboration with 0.355. Outsourcing had the weakest relationship with the firm performance of 0.257.

As aforementioned, of all three factors of value chain management practices, Restructuring had the highest coefficient of determination (strength of relationship between Restructuring and the firm performance) of 0.99 while collaboration and Outsourcing had the value of 0.085 and 0.066 respectively.

Table 4.16: Coefficient of Determination (R²)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.742(a)</td>
<td>.594</td>
<td>.172</td>
<td>.46316</td>
</tr>
</tbody>
</table>

Predictors: (Constant), collaboration, Outsourcing, Restructuring

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in
the dependent variable (performance) that is explained by all the three independent variables (Restructuring, Outsourcing and collaboration).

The Three independent variables that were studied, explain 59.4% of the firm performance as represented by the $R^2$. This therefore means the three independent variables contribute about 59.4% to the firms performance while other factors not studied in this research contributes 40.6% of the firm performance.

Therefore, further research should be conducted to investigate the other factors (40.6%) that contribute to the firm performance.

**Table 4.17: Multiple Regression Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.334</td>
<td>.311</td>
<td></td>
<td>4.285</td>
</tr>
<tr>
<td></td>
<td>Restructuring</td>
<td>.194</td>
<td>.164</td>
<td>-.193</td>
<td>-.876</td>
</tr>
<tr>
<td></td>
<td>Outsourcing</td>
<td>0.0196</td>
<td>0.0481</td>
<td>0.0327</td>
<td>0.4069</td>
</tr>
<tr>
<td></td>
<td>Collaboration</td>
<td>0.1911</td>
<td>0.0714</td>
<td>0.2325</td>
<td>2.7736</td>
</tr>
</tbody>
</table>

*Source: Author, 2010*

Dependent Variable: Value Chain Management employed by the Oil Companies leads to Performance

The researcher conducted a multiple regression analysis so as to determine the relationship between the firm performance and the value chain management practices. The regression equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3$) was:

$$Y = 1.334 + 0.194X_1 + 0.0196X_2 + 0.1911X_3$$

Whereby $Y = \text{Firm performance}$

$x_1 = \text{Restructuring}$

$x_2 = \text{Outsourcing}$

$x_3 = \text{Collaboration}$

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According to the regression equation established, taking all factors (Restructuring, Outsourcing, and collaboration) constant at zero, the performance of the major oil companies as a result of value chain management practices will be 1.334. The data findings analyzed also shows that taking all other independent variables at zero, a unit increase in restructuring practice will lead to a 0.194 increase in performance. A unit increase in Outsourcing will lead to a 0.0196 increase in performance; while a unit increase in collaboration will lead to a 0.1911 increase in performance. This infers that Restructuring contributed more to the performance of the oil companies followed by collaboration.
CHAPTER FIVE: SUMMARY OF FINDINGS CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of the findings from chapter four, and also it gives the conclusions and recommendations of the study based on the objectives of the study. The objectives of this study were to determine the relationship between value chain management strategy and performance in the major oil companies in Kenya and to establish the value chain management strategies applied within the major oil companies in Kenya.

5.2 Summary of the Findings

The study found that all the companies used value chain strategies to enhance their performance. On the extent of use of various value chain activities in the companies, the study established that the value chain activities used in the companies are operations, procurement, services (maintenance), outbound logistics, human resource management and marketing and sales (demand).

The study further established that the factors that were important in enhancing performance of the companies were location of outlets, use of public relations by company, company vision and mission and good choice of advertising media and having best employees in the market. It was also clear that that the companies provide adequate skilled staff in all departments, the companies carry out regular surveys to identify customer needs and the companies conduct checks to ensure all operations conform to required procedures.

On critical value chain activities and performance, the study established that achieving performance begins with an effort to develop deeper organizational expertise in performing certain competitively critical value chain activities, deliberately attempting to harness those capabilities that strengthen the firm's strategy and competitiveness. The value chain drivers are believed to enhance performance through differentiated products, productivity and specialization. The companies adopted computerized value chain processes and also collaborated with other companies in order in order to enhance performance.
On the extent that adoptions of the value chain strategies affects performance, the study found that the value chain strategy affects performance to a great extent was restructuring followed by outsourcing their non-core logistics and differentiation: by focusing on those activities associated with core competencies and capabilities in order to perform them better than do competitors.

On the relationship between value chain strategies and performance, the study found that because of the value created, performance in terms of productivity for the organization is enhanced. The delivery of a mix of products and services to the end customer will mobilize different economic factors, each managing its own value chain. The value drivers, which influence the value created for customers (by offering a range of differentiated products and services), adoption of good value chain management practices definitely improves the performance of the company and value chain analysis is a powerful tool for managers to identify the key activities that have the potential of a sustainable performance for a company.

5.3 Conclusions

The study concludes that all the major oil companies in Kenya use value chain strategies to enhance their performance. The main value chain activities practiced in the companies are operations, inbound and outbound logistics, procurement, and marketing and sales (demand). It was also clear that that the companies provide adequate skilled staff in all departments, carry out regular surveys to identify customer needs and the conduct checks to ensure all operations conform to required procedures.

The study also concludes that achieving performance begins with an effort to develop deeper organizational expertise in performing certain competitively critical value chain activities. The companies also collaborate with other companies in order to enhance performance. The value chain strategies that enhance performance are restructuring, outsourcing the non-core logistics and differentiation. The study further concludes that because of the implementation of the value chain strategies, value in terms of productivity, return on investment, profitability and market share is enhanced.
5.4 Recommendations

The study found that all the major oil companies in Kenya use value chain strategies to enhance performance. It is therefore recommended that all the companies should ensure that they apply value chain strategies to enhance their performance. This should involve restructuring, outsourcing and differentiation.

The study found that the companies conduct checks to ensure all flaws in the process are addressed. The study thus recommends that the oil companies should periodically check for the flaws on their processes and address them to achieve continuous improvement of their value chain activities and hence derive a competitive advantage and improved performance.

The study also recommends that the company should provide adequate skilled staff in all departments. Inbound logistics and operations should be refined to facilitate value creation and thus enhancing the performance of the major oil companies in Kenya.

The study also recommends that the companies should enhance their systems to cope well with the changes in technology that can affect performance by incrementally changing the activities themselves or by making possible new configurations of the value chain.

5.5 Limitations of the Study

The researcher encountered various limitations that tended to hinder access to information sought by the study. These included:

The researcher encountered problems of time as the research was being undertaken in a short period, which limited time for doing a wider research. However the researcher countered the limitation by carrying out the research across all the major oil companies in Kenya, which enabled generalization of the study findings.

The respondents approached were reluctant in giving information fearing that the information sought would be used to intimidate them or print a negative image about their companies. The researcher handled the problem by carrying with him an introduction letter from the University and assured them that the information they gave would be treated confidentially and it was to be used purely for academic purposes.
The researcher also encountered problems in eliciting information from the respondents as
the information required was subject to areas of feelings, emotions, attitudes and perceptions,
which could not be accurately quantified and/or verified objectively. The researcher
encouraged the respondents to participate without holding back the information they had, as
the research instruments did not bear their names.

Lack of sufficient funds limited the researcher from accessing all the oil companies in Kenya
to collect data for study. The researcher however limited himself to the major oil companies
in Kenya due to inadequacy of funds.

5.6 Areas of Further Study

The study has explored the relationship value chain management strategy and performance in
the major oil companies in Kenya and established that outsourcing, restructuring, offering a
range of differentiated products and collaboration affect the performance of the major oil
companies in Kenya. The study found that the factors studied in this research contribute only
59.4% of performance of the major oil companies in Kenya. The study therefore,
recommends that another comprehensive study should be done to explore the other factors,
which contribute, to 40.6% of performance of the major oil companies in Kenya.

The study also recommends that another study should be done to investigate the relationship
between value chain management strategy and performance of the companies in Kenya to
ascertain the relationship between the variables and the performance of companies in Kenya.
REFERENCES


Ouma P.A (2008), The relationship between value chain and competitive advantage in the insurance industry in Kenya. Unpublished MBA University of Nairobi

Ouma E P (2009), The application of porters value chain model at the Kenya revenue authority (KRA). Unpublished MBA University of Nairobi.

Petroleum Institute of East Africa (2005), Insight Magazine Quarterly publication The Point; Bulletin of the Institute of Economic Affairs (May 2005) Issue No 58


APPENDICES

Appendix I: Introduction Letter to the Respondents

June 2010

The Human Resource Manager,

Dear Sir/Madam,

RE: REQUEST TO COLLECT DATA FOR MBA RESEARCH PROJECT

I am a student at the University of Nairobi in a Masters of Business Administration degree program.

Pursuant to the pre-requisite course work, I would like to conduct a research project investigating on the relationship between value chain and performance in the major oil companies in Kenya. This will involve use of questionnaires administered to members of the management team.

I kindly seek your authority to conduct the research in your company through questionnaires and use of relevant documents. The results of this report will be used solely for academic purposes and a copy of the same will be availed to you on request.

I have enclosed an introductory letter from the University. Your assistance is highly valued.

Thank you in advance.

Yours faithfully,

Nicholas N Njau

REG. NO. D61/71635/2007
Appendix II: Questionnaire

SECTION A: GENERAL INFORMATION

1. Name of Institution_________________________________________________

2. Year of establishment in Kenya __________________________________

3. Is the institution locally owned or is it a multinational? Please Tick as Appropriate.
   - Locally owned □
   - Multinational □

4. Indicate whether your institution is; please Tick as Appropriate.
   - Private owned □
   - Private/public □
   - Parastatal □
   - Public owned □

5. Indicate below the best representation of your company size in terms of employees
   - Below 10 [ ]
   - 10-49 [ ]
   - 50-249 [ ]
   - 250 and above [ ]

6. How long has your institution been in operation? Please Tick as Appropriate.
   - 1-5 [ ]
   - 6-15 [ ]
   - 31-60 [ ]
   - 60> [ ]
SECTION B: VALUE CHAIN AND PERFORMANCE

1. Does your company use value chain strategies to enhance performance?
   Yes [ ]   No [ ]

2. To what extent does your firm employ the following practices?
   5 – To a very great extent, 4 – To a great extent, 3 – To a moderate extent, 2 – To a lesser extent, 1 – To no extent

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<thead>
<tr>
<th></th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
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<tbody>
<tr>
<td>Inbound logistics</td>
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<tr>
<td>Operations</td>
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<tr>
<td>Outbound logistics</td>
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<td>Marketing and sales (demand)</td>
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<td>Services (maintenance)</td>
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<tr>
<td>Administrative</td>
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<td>infrastructure management</td>
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<td>Human resource management</td>
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<tr>
<td>Technology adoption</td>
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<tr>
<td>Procurement</td>
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</tbody>
</table>

4. On the scale provided please indicate the extent to which you consider these factors important in enhancing your company performance?

<table>
<thead>
<tr>
<th></th>
<th>A very great extent</th>
<th>A Great Extent</th>
<th>Moderate Extent</th>
<th>A Low extent</th>
<th>Very low extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company vision and mission</td>
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<tr>
<td>Best employees in the market</td>
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</tbody>
</table>
5. Please indicate the extent to which your company applies these practices as evidence of value chain application practices the following variables.

**KEY**

5 – To a very great extent,
4 – To a great extent,
3 – To a moderate extent,
2 – To a lesser extent,
1 – To no extent

<table>
<thead>
<tr>
<th>Variable</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide a range of price quality levels for products and services</td>
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<tr>
<td>Conduct checks to ensure all operations conform to required procedures</td>
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<tr>
<td>Conduct checks to ensure all flaws in the process are addressed</td>
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<tr>
<td>Provide adequate skilled staff in all departments</td>
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<td></td>
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<tr>
<td>Ensure ability of operations staff to solve issues that may cause customer dissatisfaction</td>
<td></td>
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<tr>
<td>Ensure ability of staff to meet targets</td>
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<tr>
<td>Carry out regular surveys to identify customer needs</td>
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<tr>
<td>Innovate technology</td>
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</table>
6. Using the scale provided indicate the extent to which competition in the petroleum industry affects your institution in relation to the provided variables

**KEY**

5 – To a very great extent, 4 – To a great extent, 3 – To a moderate extent.

2 – To a lesser extent, 1 – To no extent

Performance

Market share

Customer Satisfaction

Competitive Position

Cash flow

7. Enhancing performance begins with an effort to develop deeper organizational expertise in performing certain competitively critical value chain activities, deliberately attempting to harness those capabilities that strengthen the firm's strategy and competitiveness. To what extent do you agree with this statement?

To a very great extent [ ]

To a great extent [ ]

To a moderate extent [ ]

To a little extent [ ]

To no extent [ ]

8. The value chain drivers are believed to create competitive advantage through the following ways. Tick the ones that have been incurred by your company through value creation.

Offering a range of differentiated products and services [ ]

Productivity [ ]

Specialization [ ]
9. Has your company adopted some computerized value chain processes to enhance performance?

Yes [ ]  No [ ]

10. Does your company collaborate with other companies in order to enhance performance?

Yes [ ]  No [ ]

11. What is the nature of performance derived from co-operation and collaboration of your company with other firms/companies?


12. To what extent do the adoptions of the following value chain strategies affect the performance? Use the scale of 1-5 where, 1-To no extent, 2-To a little extent, 3-To a moderate extent 4-To a great extent, 5-To a very great extent.

<table>
<thead>
<tr>
<th>Scheme for describing firms' competitive strategies according to their market scope i.e. focused or broad</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>Restructuring</td>
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<td>Outsourcing their non core logistics</td>
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<td>Cost advantage: by better understanding costs and squeezing them out of the value-adding activities.</td>
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<td>Differentiation: by focusing on those activities associated with core competencies and capabilities in order to perform them better than do competitors.</td>
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</tbody>
</table>
13. To what extent do you agree with the following statements that relate to the relationship between value chain strategies and performance? Use a scale of 1-5 where 1= strongly agree and 5 strongly disagree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
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<th>5</th>
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<tbody>
<tr>
<td>Adoption of good value chain management practices definitely improves the performance of the company</td>
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<td>Companies with good value chain practices have increased competence in the market</td>
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<td>It is the value drivers, which influence the value created for customers (by offering a range of differentiated products and services)</td>
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<td>Because of the value created, performance in terms of productivity for the organization is enhanced.</td>
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<tr>
<td>Changes in technology can impact performance by incrementally changing the activities themselves or by making possible new configurations of the value chain.</td>
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<tr>
<td>Value chain analysis is a powerful tool for managers to identify the key activities that have the potential of a sustainable performance for a company</td>
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<td>Performance of an organization lies in its ability to perform crucial activities along the value chain better than its competitors.</td>
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<td>The delivery of a mix of products and services to the end customer will mobilize different economic factors, each managing its own value chain.</td>
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</table>

THANK YOU!!