VALUE CHAIN ANALYSIS AND ORGANISATIONAL PERFORMANCE OF BEER MANUFACTURING COMPANIES IN KENYA

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2014
DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university.

Signed: ________________________________ Date _______________________

Samuel O. Aguko
D61/79465/2012

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

Signed: ________________________________ Date _______________________

Onserio Nyamwange
Lecturer, Dept of Science
University of Nairobi
DEDICATION

To my late loving mother; a pious woman, the pillar of my life, who never lived to see her son’s incisiveness.

&

To my special boy, Jabari; for making me look at life in an introspective and honest way. Forever you will… my valiant Soldier!
ACKNOWLEDGEMENTS

First, I thank the Almighty God for the life and strength he gave me. His protection has seen me through trying moments. This research project would not have been a dream had it not been for the following people who contributed immensely. Mr Onserio Nyamwange, my supervisor who tirelessly guided me through to completion. Mr. Michael K. Chirchir, my moderator, for his constant advice and constructive criticism.

To my family; my wife, Mercy and my three adoring children, Allen, Kayla and Jabari; your support and kindness was overwhelming. Thank you for having faith in me and understanding that I had to be away from you to achieve this noble cause.

Finally, my special thanks go to my friend and colleague, Irene for her enduring support and constant advice. You made me make the right choices.
ABSTRACT

The main objective of this study was to determine the value chain activities, establish Key factors influencing these activities and how they contribute to performance in the beer brewing industries in Kenya. The study was guided by the following objectives: Determine the factors influence the value chain in the beer manufacturing industry, to determine how beer manufacturing firms in Kenya use value chain approach to assess performance and to establish the relationship between value chain analysis and organizational performance in the beer manufacturing industry in Kenya. The study adopted a cross sectional descriptive survey intended to establish the activities that constitute the value chain and extent in which these activities affect performance in the beer manufacturing industry in Kenya. The target population of this study was 50 value chain professionals; these were managers and heads of departments of five beer manufacturing firms in Kenya. Primary data was collected using semi structured questionnaire that was administered by drop and pick methods and through E-mail. Data from questionnaires was summarized, coded, tabulated and analyzed. Editing was done to improve the quality of data for coding. Coded data was then fed into the statistical package for social sciences (SPSS) version 21. Linear Regression Analysis was used to investigate on the relationship between the variables and the organizational performance of beer manufacturing companies in Kenya. From the study findings it was established that the main factors that influence the value chain in the beer manufacturing industry in Kenya were timely delivery times of products and services, waste reduction, well managed procurement costs, use of modern information technology, effective human resources management, efficient firm infrastructure and continuous improvement. The study recommends that value chain professionals in the alcoholic beverage industry embrace collaborative relationships with their suppliers so as to optimize their value chain costs. Technology was also viewed as one of the failures in achieving a sustainable value chain performance and indications from the findings of its crucial role in the implementation suggest that firms should also invest in information technology not only in their firms but also in partnership with suppliers so as to streamline operations in the value chain.
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<thead>
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<th>Abbreviation</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>COMESA</td>
<td>Commonwealth East and Southern Africa</td>
</tr>
<tr>
<td>EABL</td>
<td>East African Breweries Limited</td>
</tr>
<tr>
<td>IBM</td>
<td>Institute of Business Management</td>
</tr>
<tr>
<td>SAB</td>
<td>South African Breweries</td>
</tr>
<tr>
<td>GCC</td>
<td>Global Commodity Chain</td>
</tr>
<tr>
<td>GVC</td>
<td>Global Value Chains</td>
</tr>
<tr>
<td>IMA</td>
<td>Institute of Management Accountants</td>
</tr>
<tr>
<td>HR</td>
<td>Human Resources</td>
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<td>KRA</td>
<td>Kenya Revenue Authority</td>
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</table>
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Almost all industries are aware of the strategic importance of individual activities within their value chain in the current business environment. They thrive by concentrating on the particular activities within the value chain that allow them to capture maximum value for their customers and the firm. These firms also use the value chain approach to better understand which distribution channels along the value chain will yield the greatest performance. Through effective planning and execution, these firms and their customers adapt to the market’s demand such that when the firm purchases, produces and distributes the right products to the right channels in the right quantities at the right time, both the supplier and customer increases their revenue.

Since value chains are about linking producers with suppliers and final consumers, firms are always looking for partners that work to ensure their success. Many large companies are therefore insisting that their small and medium industrial suppliers help them improve supply chain costs thereby improving not only their performance, but also creating benefits that will ripple through to customer. However, planning value chains is becoming a challenge and as these value chains become more global and more complex, the degree of difficulty in managing them also increases. Trends in business and economic conditions as well as emerging technology have added to the complexity. Firms are under increased pressure to plan these more complex value chains faster and more frequently, to a greater level of detail, and to make better decisions and share them with more decision makers in the company (Oracle value chain planning, 2013).

In the beer industry, customers are always sensitive to services and prices and hence industry players seek to manufacture quality beers and maintain effective organizational performance. One central measure of this organizational performance is the creation and continued dominance in the market. Smith (2006) argues that many broad initiatives such as efficiency, technological advancement and limitation of the fixed costs of manufacturing beer is achieved through excellent performance that gives the firm an edge within the market.
1.1.1 Value Chain Analysis

The concept of value chain was first used in accounting analysis some years before Michael Porter suggested that it could be used in strategy analysis. Raikes, Jensen & Ponte (2000) came up with the French *filière* approach which highlighted and mapped out specific physical commodity flows within an industry though confining the analysis to domestic markets and ignoring dynamic adjustments to industry characteristics and relationships. The total value delivered by the firm is the sum total of the value built up all throughout the firm. According to Lynch (2006) value chain identifies where the value is added in an organization and links the process with the main functional parts of the organization.

Value chain is the sequential set of primary and support activities that an enterprise performs to turn inputs into value-added outputs for its external customers. As developed by Porter, it is a connected series of organizations, resources, and knowledge streams involved in the creation and delivery of value to end customers. Value systems integrate supply chain activities, from determination of customer needs through product/service development, production/operations and distribution, including (as appropriate) first-, second-, and third-tier suppliers. The objective of value systems is to position organizations in the supply chain to achieve the highest levels of customer satisfaction and value while effectively exploiting the competencies of all organizations in the supply chain. By understanding why a company can create value and whether it can continue to it in the future is a necessary first step in diagnosing a firm’s potential for achieving a competitive advantage in the marketplace (Hitt and Hoskisson, 2007).

According to Hill & Jones (2001) the term “value chain” refers to the concept that a company’s chain of activities for transforming inputs into outputs with purpose to deliver value to the customers. Therefore, a firm must understand how its products serves customer needs better than potential substitutes; the technology of production, distribution and sales; and the business’s costs (Porter, 1985). Value chain and supply chain are sometimes used interchangeably but there is a difference in the concepts; a supply chain is simply a transfer of product or service from one stakeholder to another in a chained manner whereas the value chain is the value addition at different stages of this transfer, making supply-chain management a subset of value-chain analysis.
The concept of value chain separates useful activities, which allow a firm to gain competitive advantage from the wasteful activities, which hinder the company from getting a lead in the market. Value-chain analysis comprises of a specific model of performance that depicts the discreet stages of organizational value creation. It helps firms identify how to create value for customers and to locate sources of competitive advantage. Emerging global trends have led to Global value chain which have become much more prevalent and elaborate and now contain activities that are tightly integrated and often managed on a day-to-day basis. Value chain analysis is thus the full range of activities which are required to bring a product or service from conception, through the different phases of production and delivery to the final consumers and to final disposal after use. Thus value chains analysis is the mapping and analyzing of value chains. Organizations have to create value by analysing their value chains and then exploring ways of adding value to the activities in the chains by improving performance to meet the needs of customers. The overall goal is to provide customers with superior value products and services which in turn translate to better financial performance of the firm. It is therefore important to understand how firms create value and then look for ways to add more value to it (Kaplinsky and Morris, 2001).

1.1.2 Organizational Performance

According to the Institute of business management (IBM), performance is the accomplishment of a given task measured against preset known standards of accuracy, completeness, cost, and speed. Hofer (1986) describes performance as a contextual concept associated with the phenomenon being studied, for example, for financial performance; performance is a measure of the change of the financial state of an organization. The main objective of any firm is not only to survive, but also to sustain its existence by improving performance. In order to meet the needs of the highly competitive markets, organizations must continually increase performance (Arslan & Staub 2013). Organizational performance is therefore firm specific since the strategic choices a firm makes dictates which performance measures it will implement. Critical factors to consider when analyzing performance of a value-chain include inputs, production, marketing, transportation and sale of the product.

There are four performance measures used to assess the success of value chains in a firm. These are efficiency, degree of responsiveness flexibility and quality. Efficiency is the utilization of resources in the value chain. It is measured in terms of production costs, profit,
return on investment and level of inventory; Degree of responsiveness is the time spent in the fulfillment of a request. It is measured through fill rate, product lateness, customer response time, lead-time, shipping errors and customer complaints. Flexibility is the degree of responsiveness of the value chain to a changing environment. It is measured through customer satisfaction and the flexibility in volume and lost sales. Quality consists of product and process quality. Product quality includes product safety and health, shelf-life, product reliability and convenience while process quality consists of the characteristics of production and marketing systems (Lusine, van der Vorst and van Kooten, 2007).

1.1.3 Beer Manufacturers in Kenya
Beer has been a part of the social fabric of cultures around the world for many years. Today, beer ranks as the third most popular beverage after water and tea. The challenges in the beer industry include increased competition within the market, limited resources and various regulations which seek to curb drunk driving. There have also been cases of bad competition where one firm tries to impede the sale of the other’s brand by having smear campaigns and even buying and destroying the competitors’ brands before they reach the consumers. Competition therefore requires a high degree of performance and strategies built on a foundation of multiple competencies. Abrahamsen and Williams (2005), asserts that customers choose on the basis of certain criteria that would enable them discriminate one firm from the other. Therefore, a good understanding of value chain will enable industry players to provide more innovative and cost effective services to the market in the campaign against poor performance.

In Kenya, the first commercial brewery dates back to 1922 when two brothers from the United Kingdom incorporated Kenya Breweries (KBL) Ltd. Seven years later, the first malted beer was brewed in Kenya and then in 1930, the first lager, Tusker was released into the Market. KBL was changed to East Africa Breweries Ltd, (EABL) in 1934. Indigenous Kenyans were not allowed to drink bottled beer in the pre-colonial era and it was not until 1947 that Africans were allowed to drink formal sector beer. Today, East African Breweries Limited (EABL) is the leading beverage alcohol company in Eastern Africa. Kenya's per capita beer consumption is around 12 litres a year. Beer industry in Kenya is thriving; producing high quality beer, which is recognized internationally. This is because of factors such as good climate for agriculture, availability of barley, affordable labour, big local market, and access to regional markets like COMESA and the East African Community.
However, with the recent implementation of alcoblow and regulations which seek to curb drunk driving on Kenyan roads, the alcoholic beverages industry also suffered another upheaval with some stakeholders arguing that 2014 is not the best time to make the leap and invest in alcoholic beverage logistics (EABL, 2013).

In 1922, two white settlers George and Charles Hurst founded Kenya Breweries. By 1990, most of the shareholders were Kenyan and the company was very successful. In 2002 EABL and SABMiller Plc. effected a share swap of their interests in their subsidiaries: Kenya Breweries Limited and Tanzania Breweries Limited. EABL acquired 20% of the equity of Tanzania Breweries. SABMiller Plc. acquired a 20% equity stake in Kenya Breweries. Tusker is the main brand of East African Breweries with over 30% of the Kenyan beer. The brand was first marketed in 1923, shortly after the founder of Kenya Breweries Ltd, George Hurst, was killed by an elephant during a hunting accident. It was in this year that the elephant logo, that is synonymous with Tusker Lager, was incorporated.

As part of its manufacturing excellence programmes, EABL has achieved key milestones in having their key beer brands being produced at all brewing sites, eliminating the need to export the brands across the markets. As a result, they now have Tusker Lager, Tusker Lite, Tusker Malt Lager, Guinness, Pilsner and Senator being brewed in Uganda and Tanzania. (EABL) has continued to carry out outstandingly profitable operations in the region. Despite its complex, multi business and multi-country nature, it is ranked among the top performing firms in the region. It was therefore deemed of importance to understand the sort of EABL's strategic planning system that makes this organization successful in a constantly changing environment. It is for this reason that the study is being done.

A new entry into the Kenyan beer market is Keroche, who own a brewery in Naivasha. The company launched three new brands in October 2008. It is the first, unique and only brewer of high quality and healthy Natural, Sugar free beer. Crown Beverages Limited, the most reputable bottler of natural mineral water in East Africa, also manufactures beer in Kenya currently. It has established itself as the face and name of the regional mineral water market through parallel brands that lead in different segments of the consumer market. The company was originally launched as Crown Foods, but changed its name in 2011 to Crown Beverages Limited, to better reflect the company’s offerings and capabilities in the beverage market. The change of name coincided with the acquisition of the company by SABMiller the world’s
second largest brewer by volume. Its popular beer brand is the Castle lager and Castle Milk Stout, the only beer that uses a dark roasted malt to extract a rich brew, giving consumers a premium, full flavor experience. In 2009, the big five breweries company launched the world Brew Bistro and Lounge offering a specialty crafted premium brews, brewed in-house, not for distribution but for consumption within their lounge. Another beer manufacturer in Nairobi is the Sierra Brewery, which is owned by Ozzbeco (K) Ltd. and is located next to the Panari Sky Hotel on Mombasa Road and which produces three beers that are commercially distributed: Sierra Blonde, Sierra Amber and Sierra Pale ale brands. Sierra brewery was built by NERB, a German engineering consultant. The brewery is a state of the art computer controlled operation and has only 4-5 people running the entire brewery and is the first boutique brewery and restaurant in East and Central Africa. (KRA, 2014)

In 2012, beer manufacturers in Kenya became increasingly competitive in their bid for volume share, with the competitive environment witnessing the introduction of a handful of new brands, such as Tusker Lite, Castle Lite and Pilsner Ice (which was actually a re-launch). Multinationals sought to increase their presence in the region through these new brands and by securing a controlling interest in local companies; for instance SABMiller owns Crown Beverages while others such as Heineken have opened regional offices within the country to oversee brand distribution. This is a response to the growing beer drinking population in the country, driven by increasing per capita incomes as well as population growth.

1.2 Statement of the Problem

Businesses today are dynamic and witness increased degree of competition. Operation managers are increasingly responding by reviewing their Operations strategies to adapt to these changes and to beat the competition. Good performance is achieved through cost reduction and delivery of products and services to customers at a lower cost than that of its competitors or if the firm’s products and services are of superior value and customers are willing to pay a premium. By analyzing its value chain, a firm is able to reveal those distinct activities that add value and develop ways to maximize it. Value chain analysis thus guides managers on the best strategies to apply to create superior value to the company’s products and services (Shank and Govindarajan, 1993).
Recent studies on similar topics have concentrated mainly on analyzing value chains and competitiveness in other industries. Locally, for instance Odero (2006) looked at the Value Chain and competitive advantage in the corporate banking industry in Kenya in which he explored the competitive factors in the banks value chain that brought out an advantage. He observed that for a bank to be competitive it must first assess its competitors’ goals and strategies to meet all existing and potential competition, then reassess each strategy regularly to determine how it has been implemented and whether it has succeeded or needs replacement by a new strategy to meet changed circumstances, new technology, new competitors and new economic environment. Ikundo (2007) in his studies of the perception of pharmaceutical producers and end users towards the role played by pharmaceutical users using value the chain concept in Kenya revealed that distributors were highly regarded by both producers and users because of the roles played in hooking up manufactures product to the users. Changwony (2012) researched on a value chain approach to stakeholder’s analysis and management of tea trade in Kenya and concluded that Warehouse operators were the most important Stakeholders within the supply chain with tea brokers being the least important while Musau (2003) in his studies on value chain management practices in manufacturing firms in Kenya revealed that value chain managements empower companies to be more competitive.

On the international front, Capon (2008) observes that firms seeking to have a better cost performance in the industry must strive to cut costs associated with the value chain activities, whereas one which wishes to outperform its competitors through quality will have to perform its value chain activities better than them. Desarbo, Jedidi and Sinha (2011) looked at customer value chains in a heterogeneous market and developed a statistical approach for performing Customer value chain analysis.

From the above studies, there appears to be little, if any studies on in-depth analysis of value chain in the Beer industry in Kenya and its relation on performance. Beer manufacturing industry therefore becomes critical for this study in order to bridge the inherent knowledge gap and understand the strategic direction in relation to value chain analysis and performance, hence the purpose of my study. This study therefore sought to address this knowledge gap by providing an answer to the following questions:

i. What factors influence the value chain in the beer manufacturing industry in Kenya?
ii. How are beer manufacturing firms in Kenya using value chain approach to assess performance?

iii. What is the relationship between value chain analysis and organizational performance in the beer manufacturing industry in Kenya?

1.3 Research Objectives

The main objective of this study was to determine the value chain activities, establish Key factors influencing these activities and how they contribute to performance in the beer brewing industries in Kenya. The specific objectives were to determine the factors influencing value chain in the beer manufacturing industry in Kenya; to determine how beer manufacturing firms in Kenya use value chain approach to assess performance and to establish the relationship between value chain analysis and organizational performance in the beer manufacturing industry in Kenya.

1.4 Value of the Study

This study identifies key performance indicators in the beer brewing industry. It will also seek to reveal the management approaches that the industry players should adopt in order to enhance or develop these performance indicators and create advantaged positions that improve their profitability.

This study will also help readers understand the useful strategic frameworks for value chain analysis and how beer brewing companies, just like most firms use the value chain approach to assess performance. It will also establish the link between value chain analysis and organizational goals, strategies and objectives; which are the key pillars of organizational performance.

To the potential investors, this study aims at providing an insight to how the beer brewing firms’ value chain operates and the essentials as well as strategies required to set up a successful enterprise. The study acted as a lead to firms reassessing their value chains to identify key competencies and capabilities required to succeed in any industry and the effectiveness of optimizing the value chain to create, gain or sustain their competitive advantage depending on industry and nature of the business.
Finally, the study will contribute to the body of knowledge and identify areas for further research. It will act as a source of reference material for future researchers and academicians who may opt to study related topics or even replicate the study to expand the body of knowledge. This study on value chain analysis and performance of beer brewing firms in Kenya may also prompt further research in the same or other industries.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of empirical literature on the concepts of value chain analysis and organizational performance. The specific areas covered include; concept of value chain and value chain analysis, value chain theories, value Chain Model, Value chain activities, factors influencing these activities and the relationship between value chain activities and performance.

2.2 Theoretical Foundation of the Value Chain

According to Hofer (1983), Performance is a contextual concept associated with the phenomenon being studied; for example, in the context of organizational financial performance; performance is a measure of the change of the financial state of an organization. Since the perception of these outcomes is contextual, the measures used to represent performance are selected based upon the circumstances of the organization(s) being observed. The measures selected represent the outcomes achieved, either good or bad (Carton, 2004). An organization’s performance is said to have competitive advantage over its rivals when it can not only attract and retain customers in the long-term, but also defend against competition. Successful organizational performance can be equated to successful value creation for common stockholders. Porter (1985) observes that a firm must have a competitive strategy if it has to maintain its performance and going concern and it must also establish a profitable and sustainable position against forces that determine industry competition.

Alchian & Demsetz (1972), Barney (2001), Jensen & Meckling (1976) and Simon (1976) assert that an organization is a voluntary association of productive assets, including human, physical and capital resources, for the purpose of achieving a shared purpose, profit. The stockholders providing these assets will only commit themselves to the organization so long as they are satisfied with the value they receive in exchange, relative to alternative uses of the assets. As a consequence, the essence of performance is the creation of value. So long as the value created by the use of the contributed assets is equal to or greater than the value expected by those contributing the assets, the assets will continue to be made available to the
organization and the organization will continue to exist. Therefore, value creation is the essential overall performance criteria for any organization.

### 2.3 Value Chain Analysis

The concept of Value chain emerged from the realization that continuous improvements in system design and performance could only occur when firms seek closer coordination and integration with suppliers and customers. Developing closer strategic relationships with customers and suppliers enables organizations to learn and adapt more effectively than if operating unilaterally. Marete (2010) argues that the purpose of a value chain is to attain full and seamless interaction among stakeholders to create a win-win situation. Understanding these relationships and their various impacts to the value of an organization’s products and services is a critical ingredient to the success of the organization.

In 1985, Porter developed the concept of value chain, which referred to relationships of upstream suppliers with downstream customers. The main idea then was to use it as an analysis tool for strategic planning. He described the value chain framework as an interdependent system or network of activities, connected by linkages which, if managed carefully, could be a vital source of good performance, (Pathania-Jain, 2001). Porter (1998) analyzed the value chain in five steps; First, he identified the various distinct value chain activities that the organization undertakes and categorized them as either primary or support activities.; He then grouped these activities by type i.e. whether direct, indirect or quality assurance. Porter then sought to establish the linkages of these activities within the value chain. Next, he carried out an assessment of the distinct activities or combinations of activities that have the potential to add value to the customer. Finally, he developed a strategy to apply changes to those activities that contribute to performance, which leads to competitive advantage of the firm. He concluded that the various activities performed by an organization contribute to its overall performance.

However, Shank and Govindarajan (1993) describe the value chain in broader terms than Porter. They state that the value chain for any firm is the value-creating activities all the way from supplier’s basic raw material sources through to the ultimate end-use product delivered to the final consumer’s hands. The industry value chain starts with the value-creating processes of suppliers, who provide the basic raw materials and components. It continues
with the value-creating processes of different classes of buyers or end-use consumers and culminates in the disposal and recycling of materials. This description views the firm as part of an overall chain of value-creating processes. With increased modernization and globalization, value chain has been modified and the application of ideas to development issues incorporated. As Gereffi and Korzeniewicz (1994) put it, people are now talking of global commodity chain (GCC). Subsequent approaches have focused predominantly on the value network of Porter in terms of the relationships and linkages between firms, rather than solely at value creating functions within a firm. GCC analysis further highlighted governance relationships between actors in the value chain.

Value chain Analysis describes the roles of the different players involved in production and the costs, benefits, opportunities and/or threats experienced by each of these players. It also describes the relationships between different players in the chain. Kaplinsky and Morris (2001) identified supply chains, fillieres, international production networks, global commodity chains (GCC), and global value chains (GVC) as the five traditional concepts involved in the analysis of value chains. Supply chains refer to the input-output structure of value-added activities, from raw materials to the finished product. As seen in the introduction chapter of this proposal, fillieres was a French word for chains of activities to primarily study agricultural export commodities. International production networks are global networks in multinational corporations whereas GCC emphasizes on internal governance structures of supply and demand which distinguishes between producer-driven and buyer-driven chains. Finally, GVC highlights the relative value of those activities that are required to bring a product or service from conception through the different phases of production, delivery to customers and final disposal after use. To map porter's value chain activities to business functional activities and understand the relationship to performance, it is important to classify the value chain activities into functional activities.

2.4 Value Chain Activities

The concept of value chain is based on the premise that every company is a collection of activities that are performed to design, produce, market, deliver, and support its product. The relevant “value” activities are defined as the physically and technologically distinct activities that a firm performs to achieve its objectives, Anandarajan and Arinze (1998). Porter (1985)
derives the concept of “margin” which is the difference between total value and the collective cost of performing the value activities. EABL has vast number of local partners across the value chain and has made significant investments in their supply chain. Porter (1985) first suggested the value chain as depicting how a customer value accumulates along a chain of activities that lead to an end product or service. He described the value chain as the internal processes or activities a company performs to design, produce, market, deliver and support its product. Porter’s value chain is developed mainly for an item or product manufacturing businesses and focuses on the added value that each activity contributes within a process. He divided the activities into two groups: The primary activities, which are typically directly involved in the logistic product flow and the support activities, which deals with more indirect activities.

2.4.1 Primary Activities

Primary activities in the value chain are five, namely; inbound logistics (which are activities relating to receiving, storing and disseminating inputs to the product, such as material handling, warehousing, inventory control, vehicle scheduling and returns to suppliers). At EABL, Beer is brewed in either the company’s owned or non-owned Breweries; with certain Breweries set up for certain functions.

Second activity is operations (which are all the processes within the manufacturing which transform inputs into the final product or service e.g. packaging, testing, printing and facility operations etc.). Third is outbound logistics (which involves distribution to the points of sale with activities such as warehousing of finished goods, material handling, delivery vehicle operations and transportation). Capon (2008) explains that outbound logistics are about rapid and accurate delivery of the product or service to the customer. EABL has no internal distribution but use third party to distribute its products. 88% of these distributors in Kenya have signed up to M-PESA Distributor Cashless Solution, which makes business easier, faster and more innovative.

The fourth activity is marketing and sales activities which involves selling, branding and promoting. A lot of emphasis has been put on quality marketing as well-trained sales force at EABL. Finally, we have service activities (which maintain and enhance the products or service's value and performance after being sold; activities here include customer support,
repair, training, spare parts supply and management). EABL has ventured out to the field of non-alcoholic beverages with products such as Malta to service a different type of consumer

**Summary of Porter’s Value Chain Primary Activities**

<table>
<thead>
<tr>
<th>Primary Activities</th>
<th>Inbound Logistics</th>
<th>Operations</th>
<th>Outbound Logistics</th>
<th>Sales &amp; Marketing</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Receipt of raw materials</td>
<td>- Transformation of inputs into final product</td>
<td>- Distribution of finished goods</td>
<td>- Advertising</td>
<td>- After sales support</td>
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<tr>
<td></td>
<td>- Storage</td>
<td>- Use of Labour</td>
<td>- Stock Control &amp; Inventory</td>
<td>- Promotional Activity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Stock Control</td>
<td>- Manufacturing Technologies</td>
<td>- Distribution of final product to buyers</td>
<td>- Persuading People to buy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Internal Distribution of Inputs</td>
<td></td>
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</tbody>
</table>

**Source:** Porter, M E (1985) “Competitive Advantage”

2.4.2 **Support Activities**

These feed into all the primary functions. The four generic support activities according Porter (1998) are procurement (which is the buying/sourcing of goods at the right price), technology development (which gives the firm speed, accuracy and quality), human resource development (develops the skills needed to steer the company well) and firm infrastructure (which allows managers to monitor the business environment).

The main objective of every firm is to secure the lowest cost for purchases of the highest possible quality. Therefore, procurement costs, if not well managed, may account for a significant portion of the total cost of production. Porter (1998) asserts that improved purchasing practices can strongly and positively affect the cost and quality of purchased inputs. EABL has chosen high quality ingredients to ensure higher quality beer and has put heavy reliance on this process.

Technology development is the optimal use of technology to improve products, services and their delivery to customers. Technology therefore cuts across both primary and support value
chain activities. If well managed, technology can be a powerful source of sustainable performance in the organization. Winter (1990) argues that well managed technology can simultaneously deliver both low cost and high quality goods and services. EABL brewery is set up for creating new products and has done so with new brands such as Tusker Malt, Tusker lite and recently introduced canned beer in almost all brands.

Human resource development is a critical activity that transcends all primary activities. A firm operating in a turbulent environment will require a flexible structure to facilitate development of a value chain good enough to provide a strategic match between the organization and its environment. Capon (2008), argues that the Human resource function is concerned with recruiting managing, training, developing and rewarding staff in a manner that helps the firm achieve the highest form of competence and enhance performance. Human resource activities impact on motivation, attitude and staff turnover, aspects that are critical to any firm. If these activities are effectively executed, human resource can be a key basis of performance for the firm.

**Summary of Porter’s Value Chain support Activities**

<table>
<thead>
<tr>
<th>Support Activities</th>
<th></th>
</tr>
</thead>
</table>
| Procurement                 | - Purchasing of Resources  
- Purchasing of inputs |
| Technology Development      | - Technology to support primary activities & operations |
| Infrastructure              | - Leadership Structure/Management  
- Planning/processes  
- Finance  
- Information Systems |
| Human Resource Management   | - Recruitment  
- Selection  
- Training  
- Reward & Motivation |

Firm infrastructures are activities that are required to perform the value added activities efficiently to drive the organization forward to meet the strategic plan and the objectives. They include general management, legal framework, planning, financing and accounting, public affairs and quality management. EABL have a very strong management with a good understanding for competition and staying on top of industry and is well positioned in the market with a good supply network.

2.5 Value Chain Analysis and Organizational Performance

Value chain is one of the most systematic approaches to examining the performance of firms. In almost all industries and organizations today, the growing integration of the global economy has provided the opportunity for substantial performance and increased profitability. Industries are realizing that they no longer have complete control over their market success since they rely heavily on the performance of their supply chain. Thus in order to survive, they must supply what customers want to buy, and they must survive competition. A firm’s overall performance is the difference between the value it offers to customers and its cost of creating that customer value. According to the Institute of Management Accountants, IMA (1986) value chain analysis helps firms assess performance in three areas; First, through identification of sources of profitability and understanding the cost of their internal processes; Secondly, by identifying opportunities for creating and sustaining superior differentiated products and finally understanding the relationships and associated costs among external suppliers and customers.

There are four areas of knowledge when assessing relationship between performance and value chain creation in organizations. First, value creation is situational and unique to the organizations; Different types of organizations have different concepts of what outcomes are valuable. Therefore, if performance is to be measured in terms of value created, samples of organizations that have homogeneous concepts of value must be selected. Value may be tangible or intangible, operational or financial. While public companies seek creation of shareholder value through increase in market value and dividends payment as their ultimate objective according to Blyth, Friskey, & Rappaport (1986), private companies’ value creation may be a combination of both financial and non-financial objectives. Where material owners are also the managers of an organization, value creation for shareholders is more likely to include non-financial outcomes, Jensen & Meckling (1976). Costs in public companies may be characterized as
agency costs, but when the owners are also the managers, they are actually a component of return to shareholders.

Second, performance is a multi-dimensional construct, which permits value to be created on differing dimensions. Cameron (1986), Dess & Robinson (1984), Murphy, Trailor, & Hill (1996) and Steers (1975) states that there are many dimensions to performance and positive performance in one dimension may simultaneously result in negative performance in another dimension. For instance, if resource accumulation and profitability are hypothesized as separate dimensions of performance, adding resources in the form of equity may result in a lower risk adjusted return on investment. This means that the company has performed well on one dimension, resource accumulation, while it has earned lower performance on the second construct, profitability. Examining each dimension separately, without consideration of the other dimension will lead to decidedly different conclusions than examining the counterbalancing effects of the two dimensions simultaneously. To equate these levels of performance, a measure that covaries with each dimension is needed.

Third, interpretation of Performance depends upon the Observer’s Perspective. Each organizational stakeholder will have a different perspective of what is valuable based upon their purpose for associating with the organization. Creditors may perceive value to be created by the organization’s ability to generate positive cash flow while equity investors may perceive value in expending company resources to create future opportunities, even if it diminishes cash flow and tangible company assets in the short term.

Fourth, timing plays an important role in value creation. Opportunities created in the present, which will be realized in the future, are valued in the present but are based upon individual assumptions about future actions and conditions. These assumptions about future outcomes vary based upon the perceptions of the observer. An ideal measure must take into account information on both historical performance and expectations of future performance which depend on the actions taken to date to create strategic alternatives and opportunities. Therefore, the value of the opportunities created relates to past actions and, accordingly, this value should be included in a performance measure as the risk adjusted present value of the opportunities.
2.6 Summary of the Literature Review:

From the above analysis, it can be seen that the value chain framework can be used as powerful tool for the strategic planning and for building the organizational model ensuring an effective organizational performance. To form a successful product for the firm, it is important to add value in each activity that the product, Porter (1988). The value added at each point along the chain determines the overall performance of the firm. Going through the chain of organization activities will add more value to the product and services than the sum of added cost of these activities. Therefore, firms gain marginal value for that product or service. If these activities run efficiently the company gains competitive advantage. Any disruptions and distortions along the chain affect the performance at the different points along the line, which ultimately affects production. The best possible value can be achieved in the product development process by adding value in each stage. For that it needs all, or a combination of value chain activities and a proper organization, capture communication and synchronization among all the functional units.

2.7 Conceptual Framework

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery times of products and services</td>
<td>Organizational performance</td>
</tr>
<tr>
<td>Procurement costs</td>
<td></td>
</tr>
<tr>
<td>Technology Development</td>
<td></td>
</tr>
<tr>
<td>Human Resource activities</td>
<td></td>
</tr>
<tr>
<td>Firm infrastructure</td>
<td></td>
</tr>
</tbody>
</table>

Source: author (2014)
It can be noted from the conceptual framework above that the successful performance of a company is measured by its profitability, which is closely connected to the efficiency of the performed activities. All the activities in an organization have a cost and generate a return. If rate of return is greater than the cost the activities, then there is value added to the organization. Performing economic activities efficiently leads to achieving the premium rate of return. Therefore timely delivery times of products and services, well managed procurement costs, optimal use of technology, effective execution of HR activities and efficient firm infrastructure leads to effective and efficient organizational performance measured in terms of profitability and competitive advantage over a firm’s competitors. According to Porter (1988), the efficiency of these activities depends on the finalization processes in the interrelated areas of the organization, strategy, and tactics. The platform of performing activities is the business organization. The pre-condition to accomplish the value added activities is the efficient organization. The efficient organization must have all the value added functions of business for the proper interrelations of value added activities.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology that was used in the study in order to meet the objectives. These include research design, data collection, distribution patterns of data and applied statistical techniques in investigating value chain and performance of beer manufacturing firms in Kenya and finally the analytical framework of data analysis.

3.2 Research Design

The study involved a cross sectional descriptive survey research design intended to establish the activities that constitute the value chain and extent in which these activities affect performance in the beer manufacturing industry in Kenya. Mugenda and Mugenda (1999) described descriptive research design as a scientific method which involves observing and describing the behavior of a subject without influencing it. It also concerned on what, who, where and how of a phenomenon.

3.3 Population of the Study

The population of this study included 50 value chain professionals; these were managers and heads of departments of five beer manufacturing firms in Kenya i.e EABL, Keroche, Crown Beverages in Ruiru, Sierra Brewery Ltd and the big five breweries company (See Appendix III).

3.4 Data Collection

The study relied on primary data. Primary data was collected using semi structured questionnaire that was administered by drop and pick methods and through E-mail. The questionnaire was in the form of Likert scale where respondents were required to indicate their views on a scale of 1 to 5. The likert scale reported how negatively or positively the value chain professionals were exposed to value chain Management.
The questionnaire contained 4 sections: Section A sought data on Background information of the firm; Section B sought data on the Factors that influence the activities that makes up the value chain in the beer manufacturing industry in Kenya.; Section C sought data on How beer manufacturing firms in Kenya use value chain approach to assess performance While the last section sought data on the Relationship between value chain analysis and organizational performance in the beer manufacturing industry in Kenya

3.5 Data Analysis

The completed questionnaires were edited for completeness and consistency, checked for errors and omissions and then coded to SPSS and analyzed qualitatively and quantitatively. Qualitatively the data was sought into themes, categories and patterns. This enabled the researcher to make general statements in terms of the observed attributes hence conceptualization according to Saunders (2007).

Data from questionnaires was summarized, coded, tabulated and analyzed. Editing was done to improve the quality of data for coding. Coded data was then fed into the statistical package for social sciences (SPSS) version 21. This version of SPSS has been selected for analysis since it offers a more user friendly interface and can easily be linked with Microsoft office utility programs. Descriptive statistics was used. Editing involved going through the questionnaires to see if respondents responded to questions and see if there were blank responses. Tabulation involved counting the number of cases that fall into various categories. Descriptive statistics such as mean, standard deviation was then generated, each for the Organizational performance.

Standard deviation represented the degree of variability in the responses. Linear Regression Analysis was used to investigate on the relationship between the variables and the organizational performance of beer manufacturing companies in Kenya. The coefficient of determination (R-Square) resulting from the linear regression was used to determine the goodness of fit. R-square greater than 0.7 indicated a very good fit (Gelman, 2008). P-values for the t-test statistics was used to determine the significance of the independent variables in the regression model. Those variables with a p-value less than 0.05 were significant in the equation. A simple regression model was used in determining the level of influence the independent variables have on dependent variable as shown below:

\[ Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \epsilon \]

Where;
Y = organizational performance of beer manufacturing companies in Kenya (Dependent Variable)

\[ \beta_0 = \text{Constant Term} \]
\[ \beta_1, \beta_2, \beta_3, \beta_4 = \text{Beta coefficients} \]
\[ X_1 = \text{Delivery times of products and services} \]
\[ X_2 = \text{Procurement costs} \]
\[ X_3 = \text{Human Resource activities} \]
\[ X_4 = \text{Firm infrastructure} \]
\[ X_5 = \text{ICT development} \]
\[ e = \text{Error Term} \]
CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents an analysis of data collected from the field on the value chain analysis and organizational performance of beer manufacturing companies in Kenya. Data was collected through questionnaires which were designed in line with the objectives of the study.

4.2 General Introduction

The study sought to establish the information on the respondents employed in the study with regards to the gender, age, their level of education and duration of service. These bio data points at the respondents’ appropriateness in responding to the study questions required for the study to be complete.

A total of 50 questionnaires were distributed and 43 were collected having been filled completely. This constituted a response rate of 86% which according to Mugenda & Mugenda (1993) a response rate of more than 80% is sufficient for a study. Data collected from the field was sorted and later analyzed using statistical package for social sciences (SPSS) software. The results are presented in tables and figures to highlight the major findings. They are also presented sequentially according to the research questions of the study. Mean scores, standard deviations analysis and regression analysis were used to analyze the data collected. The raw data was coded, evaluated and tabulated to depict clearly the results on value chain analysis and organizational performance of beer manufacturing companies in Kenya.

The respondents were asked to indicate their gender; this was expected to guide the researcher on the conclusions regarding the degree of congruence of responses with the gender characteristics on value chain analysis and organizational performance of beer manufacturing companies in Kenya. The results showed that majority of the respondent were male at 63% while female was 37%. The results indicate that majority of the value chain professionals of beer manufacturing companies in Kenya are men.

The researcher also sought to know the age category of the respondents. This was expected to guide the researcher on understanding the most active age group in regards to value chain analysis and organizational performance of beer manufacturing companies in Kenya. The
research found that 11.6% of respondents were aged between 31-35 years, 51.2% were aged 36-40 years, 25.6% were aged above 41-45 years and the rest of the respondents, 11.6% were aged between 46-50 years. From these findings, most of the respondents in beer manufacturing companies in Kenya belong to an age category of 36-40 years. This is the most active age group hence they are actively involved in running of the organizations, therefore they had rich experiences, could also appreciate the importance of the study.

The researcher also sought to know the designation of respondents in the study. The result indicate that 46.5% of the respondents were Procurement Manager, 18.6% of the respondents were Transport & Logistics manager, 16.2% were Distribution & Warehouse manager, 11.9% were Procurement officer and 6.9% were others which included Operations manager, marketing manager and Human resource manager. All these professionals were either directly or indirectly involved in the value chain practices while the rest stated that they carry out value chain practices in the capacity.

Respondents’ of the study were also asked to indicate their level of education. This was to help the researcher understand the level of education of the value chain professionals in beer manufacturing companies in Kenya. The study findings indicate that 30.2% of the respondents are first degree graduates, 52.3% are postgraduate degree holders and 18.6% had PHDs. All the value chain professionals in beer manufacturing companies in Kenya were found to be degree holders therefore, provided information based on the academic knowledge, skills and experience they have gain in value chain practices.

Finally, respondents were asked to indicate the number of years they had worked in the organization. This was expected to help the researcher know the kind of experience the value chain professionals had and how effective they would be able to give information about the institution. The results indicate that 18.6% of the respondents have been in the institution for less than 2 years, majority of the respondents (48.8%) had worked in the institution between 2 and 5 years, while 20.9% had worked between 6 and 10 years and 11.6% have been in the institution for over 10 years. The findings therefore indicated that majority of the value chain professionals had worked in the institution for a considerable period of time and thus were familiar about the value chain analysis and organizational performance of beer manufacturing companies in Kenya.
4.3 Value Chain in the Beer Manufacturing Industry in Kenya

The study sought to determine factors that influence the value chain in the beer manufacturing industry in Kenya. The respondents were asked to rate the extent to which value chain activities are practiced in their firm using a Likert scale of 1-5 where; 1=very low extent, 2=low extent, 3=Moderate, 4= high extent, 5= very high extent. Table 4.1 below shows the research findings.

Table 4.1: Value Chain in the Beer Manufacturing Industry in Kenya

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timely Delivery times of products and services</td>
<td>4.8372</td>
<td>0.37097</td>
</tr>
<tr>
<td>Use of modern information technology</td>
<td>4.1628</td>
<td>0.37372</td>
</tr>
<tr>
<td>Effective Human resources management</td>
<td>4.0465</td>
<td>0.34548</td>
</tr>
<tr>
<td>Efficient firm infrastructure</td>
<td>3.9302</td>
<td>0.23269</td>
</tr>
<tr>
<td>Waste reduction</td>
<td>3.7442</td>
<td>0.28961</td>
</tr>
<tr>
<td>Well managed procurement costs</td>
<td>3.4419</td>
<td>0.3356</td>
</tr>
<tr>
<td>Continuous improvement.</td>
<td>3.0000</td>
<td>0.28680</td>
</tr>
</tbody>
</table>

From the research findings it was established that the main factors that influence value chain in the beer manufacturing industry in Kenya were timely delivery times of products and services, use of modern information technology, effective human resources management and efficient firm infrastructure while to a moderate extent; well managed procurement costs and continuous improvement. These findings concur with studies by Cameron (1986), Dess & Robinson (1984), Murphy, Trailor, & Hill (1996) and Steers (1975) who states that there are many dimensions to performance and positive performance in one dimension may simultaneously result in negative performance in another dimension. Each organizational stakeholder will have a different perspective of what is valuable based upon their purpose for associating with the organization. Creditors may perceive value to be created by the organization’s ability to generate positive cash flow while equity investors may perceive value in expending company resources to create future opportunities, even if it diminishes cash flow and tangible company assets in the short term. For instance, if resource accumulation and profitability are hypothesized as separate dimensions of performance, adding resources in the form of equity may result in a lower risk adjusted return on
investment. This means that the company has performed well on one dimension, resource accumulation, while it has earned lower performance on the second construct, profitability. Examining each dimension separately, without consideration of the other dimension will lead to decidedly different conclusions than examining the counterbalancing effects of the two dimensions simultaneously. To equate these levels of performance, a measure that covaries with each dimension is needed.

4.4 Value Chain Practices in Beer Manufacturing Companies in Kenya

Respondents were asked to rate the implementation of the value chain activities in their respective firms. The findings shows that 12.5% of the respondents gave a moderate extent on the implementation of the value chain activities in their firms, whereas a majority of the respondents agreed to a great extent 50% that company(s) implements value chain activities in their firms.

Respondents were also asked to indicate the extent at which their firm’s practice the following value chain activities to assess performance. Descriptive statistics on table below shows that the respondents were asked to rate several factors that their firms practices pertaining value chain activities to assess performance. They were asked to rate them according to the extent to which they are practiced in their company(s) using a Likert scale of 1-5.

On delivery times of products and services, respondents strongly agreed on the process and system of receiving inputs, inventory management practices, resolving customer complaints, detection of counterfeits and poor quality and training of operations staff. Marete (2010) argues that the purpose of a value chain is to attain full and seamless interaction among stakeholders to create a win-win situation. Understanding these relationships and their various impacts to the value of an organization’s products and services is a critical ingredient to the success of the organization.

On procurement costs, respondents also strongly agreed that participatory/team based approach in making procurement decisions, adherence to service level agreements, resolving internal and external user queries and sensitizing internal users on full functionalities of its process was also agreed with a mean score of 4.4419. This is in line with Porter (1998) who asserts that improved purchasing practices can strongly and positively affect the cost and
quality of purchased inputs. EABL has chosen high quality ingredients to ensure higher quality beer and has put heavy reliance on this process. The table below shows the research findings.

**Table 4.2: Use of Value Chain Approach to Assess Performance**

<table>
<thead>
<tr>
<th>Value chain activities</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Delivery times of products and services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training of operations staff</td>
<td>4.4186</td>
<td>0.66306</td>
</tr>
<tr>
<td>The process and system of receiving inputs</td>
<td>4.3750</td>
<td>0.56787</td>
</tr>
<tr>
<td>Resolving customer complaints</td>
<td>4.1250</td>
<td>0.60712</td>
</tr>
<tr>
<td>Inventory management practices</td>
<td>4.0050</td>
<td>0.55712</td>
</tr>
<tr>
<td>Detection of counterfeits and poor quality</td>
<td>3.9839</td>
<td>0.71269</td>
</tr>
<tr>
<td><strong>Procurement costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participatory/team based approach in making procurement decisions.</td>
<td>4.4419</td>
<td>0.59589</td>
</tr>
<tr>
<td>Sensitizing internal users on full functionalities of its process.</td>
<td>4.4419</td>
<td>0.4753</td>
</tr>
<tr>
<td>Adherence to Service Level Agreements.</td>
<td>4.2558</td>
<td>0.68961</td>
</tr>
<tr>
<td>Resolving internal and external user queries</td>
<td>3.9302</td>
<td>0.70357</td>
</tr>
<tr>
<td><strong>Information technology (ICT) Development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explores opportunities of employing new techniques that meet the requirements and expectations of users</td>
<td>3.0000</td>
<td>0.91610</td>
</tr>
<tr>
<td>Quality checks of all new software’s before releasing to internal and external users.</td>
<td>2.9000</td>
<td>0.74311</td>
</tr>
<tr>
<td>Provides system and services which are cost effective, timely to both customers and staff.</td>
<td>2.8323</td>
<td>0.94587</td>
</tr>
<tr>
<td>Observes Service level agreements</td>
<td>2.6250</td>
<td>0.99029</td>
</tr>
<tr>
<td>Timely support of all other departments</td>
<td>2.5</td>
<td>0.65</td>
</tr>
<tr>
<td><strong>Human Resource activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support all internal department requirements.</td>
<td>4.4419</td>
<td>0.79589</td>
</tr>
<tr>
<td>Monitors compliance to SLAs in all levels.</td>
<td>4.3488</td>
<td>0.68604</td>
</tr>
<tr>
<td>Promptly resolves internal user’s queries.</td>
<td>4.2500</td>
<td>0.66986</td>
</tr>
<tr>
<td>Observes to service level agreement (SLA) with all users</td>
<td>4.1250</td>
<td>0.60712</td>
</tr>
<tr>
<td>Sensitizes internal and external functionalities of its process.</td>
<td>3.9839</td>
<td>0.71269</td>
</tr>
<tr>
<td><strong>Firm infrastructure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employing and reviewing safety precautions</td>
<td>4.1628</td>
<td>0.37372</td>
</tr>
<tr>
<td>Working tools meets the modern technology needs.</td>
<td>4.0465</td>
<td>0.54548</td>
</tr>
<tr>
<td>Training on the use of new tools and equipment</td>
<td>3.7442</td>
<td>0.48961</td>
</tr>
<tr>
<td>Providing tools that meet work requirements.</td>
<td>3.7442</td>
<td>0.55431</td>
</tr>
<tr>
<td>Regular checks and renovations</td>
<td>3.4419</td>
<td>0.93356</td>
</tr>
</tbody>
</table>
On Information technology (ICT) Development; timely support of all other departments, quality checks of all new software’s before releasing to internal and external users, exploring opportunities of employing new techniques that meet the requirements and expectations of users, providing system and services which are cost effective, timely to both customers and staff and observing service level agreements were all agreed to a large extent as value chain activities to assess performance. The standard deviations also support the findings due to the small figures. Trailor & Hill (1996) and Steers (1975) states that technology development is the optimal use of technology to improve products, services and their delivery to customers. Technology therefore cuts across both primary and support value chain activities. If well managed, technology can be a powerful source of sustainable performance in the organization.

Human Resource activities of value chain that are used to assess performance were also agreed on to a larger extent. These statements were: sensitizing internal and external functionalities of its process, monitoring compliance to SLAs in all levels, promptly resolving internal user’s queries and supporting all internal department requirements. Capon (2008), argues that the Human resource function is concerned with recruiting managing, training, developing and rewarding staff in a manner that helps the firm achieve the highest form of competence and enhance performance. Human resource activities impact on motivation, attitude and staff turnover, aspects that are critical to any firm. If these activities are effectively executed, human resource can be a key basis of performance for the firm.

Firm infrastructure also dictates the value chain performance, based on the respondent’s level of agreements, the statements on providing tools that meet work requirements, and regular checks and renovations were all strongly agreed on, while employing and reviewing safety precautions, working tools meets the modern technology needs and training on the use of new tools and equipment were moderately agreed on.

4.5 Relationship Between Value Chain Analysis and Organizational Performance

Respondents were asked to indicate the extent to which the organization experiences the following performance indicators as a result of implementation of value chain activities. The table below shows the research findings.
### Table 4.3: Relationship between Value Chain Analysis and Organizational Performance

<table>
<thead>
<tr>
<th>Performance indicators</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team work exists within the organization</td>
<td>4.4419</td>
<td>0.50511</td>
</tr>
<tr>
<td>The firm enjoys a good reputation with its stakeholders</td>
<td>4.4310</td>
<td>0.49589</td>
</tr>
<tr>
<td>Employees are clear about firm’s vision and strategy</td>
<td>4.3953</td>
<td>0.55971</td>
</tr>
<tr>
<td>Over the past few years, the firm has shown steady, measurable cost reduction while maintaining or improving quality</td>
<td>4.2558</td>
<td>0.58961</td>
</tr>
<tr>
<td>The firm is able to achieve objectives within their budgets</td>
<td>4.1628</td>
<td>0.47372</td>
</tr>
<tr>
<td>Operations</td>
<td>4.0465</td>
<td>0.54548</td>
</tr>
<tr>
<td>The firm adapts well to changes in the external environment</td>
<td>3.9302</td>
<td>0.45357</td>
</tr>
<tr>
<td>Employees are regularly provided with training in their areas of work</td>
<td>3.9111</td>
<td>0.43269</td>
</tr>
<tr>
<td>Employees are regularly provided with training in their areas of work</td>
<td>3.9302</td>
<td>0.43269</td>
</tr>
<tr>
<td>Employees are clear about the values and practices required for the firms to be successful</td>
<td>3.4419</td>
<td>.53356</td>
</tr>
<tr>
<td>Customers are satisfied with our firm’s performance</td>
<td>3.0000</td>
<td>0.58680</td>
</tr>
</tbody>
</table>

From the research findings on table 4.3 above, there is a lot of team work on these firms and employees are clear about the values and practices required for the firms to be successful. These firms are also able to achieve objectives within their budgets, operations, employees are regularly provided with training in their areas of work. Customers are moderately satisfied with the firms’ performance even though they enjoy a good reputation with their stakeholders. Over the past few years, most of the firms have shown steady, measurable cost reduction while maintaining or improving quality and they also adapt well to changes in the external environment. These findings confirm the research by the Institute of Management Accountants, IMA (1986) that value chain analysis helps firms assess performance in three areas; Firstly, through identification of sources of profitability and understanding the cost of their internal processes; Secondly, by identifying opportunities for creating and sustaining superior differentiated products and finally understanding the relationships and associated costs among external suppliers and customers.
4.6 Regression Analysis

The regression analysis is concerned with the distribution of the average value of one random variable as the other variables which need not be random are allowed to take different values. The regression model specifically connects the average values of y for various values of the x-variables.

The regression model was as follows:  
\[ y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon \]

Where:
- \( y \) = Organizational Performance
- \( \beta_0 \) = Constant Term
- \( \beta_1 \) = Beta coefficients
- \( X_1 \) = Delivery times of products and services
- \( X_2 \) = Procurement costs.
- \( X_3 \) = Human Resource activities
- \( X_4 \) = Firm infrastructure
- \( X_5 \) = ICT Development

Table 4.4: Strength of the model

<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>dimension0</td>
<td>1</td>
<td>.796(^a)</td>
<td>0.633</td>
<td>0.30202</td>
</tr>
</tbody>
</table>

\(^a\) Predictors: (Constant), Firm infrastructure, Human Resource activities, ICT Development, Procurement costs, Delivery times of products and services.

Source: Reseacher (2014)

Analysis in table 4.4 shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) \( R^2 \) equals 0.633 that is, Firm infrastructure, Human Resource activities, Delivery times of products and services, ICT Development and Procurement costs leaving only 1.5 percent unexplained. The P-value of 0.000 (Less than 0.05) implies that the model of Organizational Performance is significant at the 5 percent significance.
Table 4.5: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>5.976</td>
<td>5</td>
<td>1.494</td>
<td>16.377</td>
<td>.000^a</td>
</tr>
<tr>
<td>Residual</td>
<td>3.466</td>
<td>38</td>
<td>.091</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9.442</td>
<td>43</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Firm infrastructure, ICT Development, Human Resource activities, Delivery times of products and services, Procurement costs.

b. Dependent Variable: Organizational Performance

ANOVA findings (P-value of 0.00) in table 4.6 show that there is correlation between the predictor’s variables (Firm infrastructure, Procurement costs, ICT Development, Human Resource activities, Delivery times of products and services) and response variable (Organizational Performance). An F ratio is calculated which represents the variance between the groups, divided by the variance within the groups. A large F ratio indicates that there is more variability between the groups (caused by the independent variable) than there is within each group, referred to as the error term. A significant F test indicates that we can reject the null hypothesis which states that the population means are equal. The P value is 0.000 which is less than 0.005 significance level.

Table 4.6: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>6.165</td>
<td>.705</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery times of products and services.</td>
<td>-.348</td>
<td>.081</td>
<td>-.489</td>
<td>-4.289</td>
</tr>
<tr>
<td>Procurement costs.</td>
<td>-.436</td>
<td>.084</td>
<td>-.635</td>
<td>-5.187</td>
</tr>
<tr>
<td>ICT Development</td>
<td>.4537</td>
<td>.365</td>
<td>.547</td>
<td>4.376</td>
</tr>
<tr>
<td>Human Resource activities</td>
<td>.711</td>
<td>.108</td>
<td>.754</td>
<td>6.593</td>
</tr>
<tr>
<td>Firm infrastructure</td>
<td>-.286</td>
<td>.084</td>
<td>-.396</td>
<td>-3.420</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Organizational Performance
The established multiple linear regression equation becomes:

\[ Y = 6.165 - 0.348X_1 - 0.436X_2 + 0.711X_3 + 0.4537X_4 - 0.286X_5 \]

The study found that Firm infrastructure, Procurement costs, Human Resource activities, Delivery times of products and services have significant influence on Organizational Performance since Delivery times of products and services \( \beta = -0.348, t = -4.289, p = <.000 \):

Procurement costs \( \beta = -0.436, t = -5.187, p = <.000 \)*: Human Resource activities \( \beta = 0.711, t = 6.593, p = <.000 \)*: ICT Development \( \beta = 0.711, t = 6.593, p = <.000 \)*: Firm infrastructure \( \beta = 0.406, t = 5.445 \).
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction
This chapter presents summary of findings as discussed in chapter four and interpretations of the data analysis, conclusions and recommendations based on the findings.

5.2 Summary of the Findings
The main objective of the study was to investigate on the value chain analysis and organizational performance of beer manufacturing companies in Kenya. The findings indicated that majority of the value chain professionals had worked in the institution for a considerable period of time and thus were familiar about the value chain analysis and organizational performance of beer manufacturing companies in Kenya. From the study findings it was established that the main factors that influence the value chain in the beer manufacturing industry in Kenya were timely delivery times of products and services, waste reduction, well managed procurement costs, use of modern information technology, effective human resources management, efficient firm infrastructure and continuous improvement.

Respondents also indicated the extent at which their firms practice the following value chain activities to assess performance. On delivery times of products and services, respondents strongly agreed on the process and system of receiving inputs, inventory management practices, resolving customer complaints, detection of counterfeits and poor quality and training of operations staff. On procurement costs, respondents also strongly agreed that participatory/team based approach in making procurement decisions, adherence to service level agreements, resolving internal and external user queries and sensitizing internal users on full functionalities of its process. EABL has chosen high quality ingredients to ensure higher quality beer and has put heavy reliance on this process.

On Information technology (ICT) Development; timely support of all other departments, quality checks of all new software’s before releasing to internal and external users, exploring opportunities of employing new techniques that meet the requirements and expectations of users, providing system and services which are cost effective, timely to both customers and staff and observing service level agreements were all strongly agreed as value chain activities to assess performance. Technology therefore cuts across both primary and support value chain activities. If well managed, technology can be a powerful source of sustainable
performance in the organization. EABL brewery is set up for creating new products and has done so with new brands such as Tusker Malt, Tusker lite and recently introduced canned beer in almost all brands.

Human Resource activities of value chain that are used to assess performance were also strongly agreed. These statements were: sensitizing internal and external functionalities of its process, monitoring compliance to SLAs in all levels, promptly resolving internal user’s queries and supporting all internal department requirements. Human resource activities impact on motivation, attitude and staff turnover, aspects that are critical to any firm. If these activities are effectively executed, human resource can be a key basis of performance for the firm.

Firm infrastructure also dictates the value chain performance, based on the respondent’s level of agreements, the statements on providing tools that meet work requirements, regular checks and renovations, employing and reviewing safety precautions, working tools meets the modern technology needs and training on the use of new tools and equipment. Firm infrastructures are activities that are required to perform the value added activities efficiently to drive the organization forward to meet the strategic plan and the objectives.

5.3 Conclusions

From the research findings presented in chapter four and above summary of findings, the study concludes that firms in the alcohol beverage industry are moving towards collaborative relationships with their suppliers to improve on their value chain performance. Value chain professionals largely depend upon four major aspects. They are timely delivery times of products and services, procurement costs, Human Resource activities and firm infrastructure. Timely delivery times of products and services may include activities such as waste reduction, well managed procurement costs, use of modern information technology, effective human resources management, efficient firm infrastructure and continuous improvement.

Procurement costs included activities such as adherence to service level agreements, resolving internal and external user queries, sensitizing internal users on full functionalities of its process, value, contract management and pricing structures. Strategic partnership issues may be who to choose as a supplier and for what type of product or service.

Information technology (ICT) development include innovation, timely support of all other departments, quality checks of all new software’s before releasing to internal and external
users, exploring opportunities of employing new techniques that meet the requirements and
expectations of users, providing system and services which are cost effective, timely to both
customers and staff and observing service level.

Human Resource activities of value chain that are used to assess performance were also
strongly agreed. These statements were: sensitizing internal and external functionalities of its
process, monitoring compliance to SLAs in all levels, promptly resolving internal user’s
queries and supporting all internal department requirements. Firm infrastructure also dictates
the value chain performance, based on the respondent’s level of agreements, the statements
on providing tools that meet work requirements, regular checks and renovations, employing
and reviewing safety precautions, working tools meets the modern technology needs and
training on the use of new tools and equipment were all strongly agreed with a mean of 3.0.

5.4 Recommendations

The study recommends that value chain professionals in the alcoholic beverage industry
embrace collaborative relationships with their suppliers so as to optimize their supply chain
costs. This can be through establishing clear communication networks, joint risk assessment
and management and having strategic supplier partnerships with their key suppliers. Firms
should also establish trustworthy suppliers to ensure commitment and credibility in
transactions. Technology was viewed as one of the failures in achieving value chain
performance and indications from the findings of its crucial role in the implementation
suggest that firms should also invest in technology not only in their firms but also in
partnership with suppliers so as to streamline operations in the value chain.

5.5 Limitations

In this study the researcher had some limitations in data collection. Most of the respondents
who were interviewed did not have a clear sense about value chain professionals and it was a
bit difficult to explain the target of this research to the respondents. Some of them viewed the
requested data as confidential for them and somehow unreachable. Not all respondents
answered the questionnaire hence the result could be more realistic if the researcher got
responses from all respondents.
5.6 Suggestions for Further Study

This study focused on value chain analysis and organizational performance in alcoholic beverage industry only, further research on other industries should also be done. Further research also on effect of Information and Communications Technology (ICT) on value chain professionals should be investigated since from the findings ICT possibilities have been insufficiently used in achieving organizational performance.
REFERENCES


East African Breweries Limited (EABL) *Annual Report 2013*


Karl M. Rich Derek Baker Asfaw Negassa and R. Brent Ross, Concepts, applications, and extensions of value chain analysis to livestock systems in developing countries. International Association of Agricultural Economists Conference, 2009


Oracle Ltd, value chain planning, 2013


APPENDICES

APPENDIX I: LETTER TO THE RESPONDENTS

UNIVERSITY OF NAIROBI,
SCHOOL OF BUSINESS
MBA PROGRAM

Dear Sir / Madam,

I am a student at University of Nairobi pursuing degree in Masters of Business Administration. As part of course requirement I am expected to carry out a research project work of which I am researching on “value chain analysis and organizational performance of beer manufacturing companies in Kenya.” The purpose of this letter is to request you to assist me by responding to the questionnaire.

Yours faithfully,

SAMUEL ODONGOH AGUKO
APPENDIX II: RESEARCH QUESTIONNAIRE

This questionnaire aims at collecting information and data for academic use by the researcher. Your kind participation will go a long way in providing useful information required to complete this research. The information provided will be treated in confidence. You need not indicate your name. Please answer the questions precisely and objectively; the information will be treated confidentially.

Part One: Background Information:

1. Gender of the respondent
   - Female ( )
   - Male ( )

2. Age range in years
   - 18-25 years ( )
   - 26-30 years ( )
   - 31-35 years ( )
   - 36-40 years ( )
   - 41-45 years ( )
   - 46-50 years ( )
   - Over 50 years ( )

3. Level of education
   - Secondary ( )
   - Diploma ( )
   - 1st Degree ( )
   - Postgraduate ( )
   - PhD ( )

4. Period you have served in this organization
   - Less than 2 years ( )
   - 2-5 years ( )
   - 6-10 years ( )
   - Over 10 years ( )

5. What is your designation in the firm?
   - a) Procurement Manager
   - b) Transport & Logistics manager
   - c) Procurement officer
   - d) Distribution & Warehouse manager
   - d) Other (specify)..........................
Part Two

Section A: Factors that influence value chain in the beer manufacturing industry in Kenya.

6 How do you rate the implementation of the value chain activities in your firm?
Very small ( ) Small ( ) Moderate ( ) Great ( ) Very Great ( )

7 In value chain environment, the following factors that influence the activities that makes up the value chain. Rate them according to the extent to which they are practiced in your company.
Where; 1=very low extent, 2=low extent, 3=Moderate, 4= high extent, 5= very high extent

<table>
<thead>
<tr>
<th>No.</th>
<th>Factors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Timely Delivery times of products and services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Waste reduction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Well managed procurement costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4.</td>
<td>Use of modern information technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5.</td>
<td>Effective Human resources management</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6.</td>
<td>Efficient firm infrastructure</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7.</td>
<td>Continuous improvement.</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>


8 Please indicate the extent to which your firm practices the following value chain activities on a scale of 1-5;
Where (1 = to great extent, 2 = to very large extent, 3 = to large extent, 4 = to small extent, 5 = Not at all)
<table>
<thead>
<tr>
<th>Value chain activities</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Delivery times of products and services</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. The process and system of receiving inputs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Inventory management practices</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3. Resolving customer complaints</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Detection of counterfeits and poor quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Training of operations staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Procurement costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Participatory/team based approach in making procurement decisions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Adherence to Service Level Agreements.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Resolving internal and external user queries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Sensitizing internal users on full functionalities of its process.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Adhering to Service Level Agreements.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information technology (ICT) Development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Timely support of all other departments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Quality checks of all new software’s before releasing to internal and external users.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Explores opportunities of employing new techniques that meet the requirements and expectations of users</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Provides system and services which are cost effective, timely to both customers and staff.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Observes Service level agreements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Human Resource activities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Sensitizes internal and external functionalities of its process.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Monitors compliance to SLAs in all levels.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Observes to service level agreement (SLA) with all users</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Promptly resolves internal user’s queries.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Support all internal department requirements.

Firm infrastructure

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Providing tools that meet work requirements.</td>
</tr>
<tr>
<td>2.</td>
<td>Regular checks and renovations</td>
</tr>
<tr>
<td>3.</td>
<td>Employing and reviewing safety precautions</td>
</tr>
<tr>
<td>4.</td>
<td>Working tools meets the modern technology needs.</td>
</tr>
<tr>
<td>5.</td>
<td>Training on the use of new tools and equipment</td>
</tr>
</tbody>
</table>

Section C: Relationship between value chain analysis and organizational performance in the beer manufacturing industry in Kenya

9. Please indicate the extent to which your organization experience the following performance indicators as a result of implementation of value chain activities:
(Where 1 = Very small extent, 2 = Small extent, 3 = moderate extent, 4 = Great extent, 5 = Very great extent.

<table>
<thead>
<tr>
<th>No.</th>
<th>Performance indicators</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Employees are clear about the values and practices required for the firm to be successful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The firm is able to achieve objectives within their budgets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Employees are regularly provided with training in their areas of work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Customers are satisfied with our firm’s performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>The firm enjoys a good reputation with its stakeholders</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7.</td>
<td>Over the past few years, the firm has shown steady, measurable cost reduction while maintaining or improving quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>The firm adapts well to changes in the external environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Team work exists within the organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10.</td>
<td>Employees are clear about firm’s vision and strategy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Other, (Please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thank you for your response
Appendix III: List of Beer manufacturing companies in Kenya

<table>
<thead>
<tr>
<th>Item</th>
<th>Name of company</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>East African Breweries</td>
<td>Nairobi</td>
</tr>
<tr>
<td>2.</td>
<td>Keroche Industries</td>
<td>Naivasha</td>
</tr>
<tr>
<td>3.</td>
<td>Crown Beverages Ltd.</td>
<td>Nairobi</td>
</tr>
<tr>
<td>4.</td>
<td>The big five breweries company</td>
<td>Nairobi</td>
</tr>
<tr>
<td>5.</td>
<td>Sierra Brewery</td>
<td>Nairobi</td>
</tr>
<tr>
<td>6.</td>
<td>Mashwa Breweries</td>
<td>Naivasha</td>
</tr>
</tbody>
</table>

Source (KRA, 2014)