EFFECT OF SERVICE QUALITY MANAGEMENT PRACTICES ON OPERATIONAL PERFORMANCE OF PETROLEUM DISTRIBUTING FIRMS IN KENYA

BY

MUNYAO S. MOSES

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

2014

DECLARATION

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

Signed by: …….. Date: …….

Munyao S. Moses

D61/73281/2012

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

Signed by: …….. Date: …….

Stephen Odock

Lecturer, Department of Management Science,

School of Business,

University of Nairobi

ACKNOWLEDGEMENTS

I would like to appreciate my supervisor, Mr Stephen Odock for his patience, suggestions and guidance throughout the research project.

Secondly am grateful to all my friends and respondents for their inputs that was of great help for the successful completion of this research project

Finally, I wish to thank God Almighty for giving me strength and good health throughout the study period.

DEDICATION

I dedicate this research project to the Almighty God for his mercy and blessings in my life.

To my family members who stood by me all through the project. Special dedication to my daughters Michelle and Alicia .This is for you.

ABSTRACT

The desire of any service organization is deliver quality service that meets their customer expectations so as to remain profitable and in business. The service market has now become more competitive than ever before and meeting customer needs is a necessity. Petroleum distributing firms in Kenya are at a great task of perfecting their service delivery systems to ensure that their customers get quality product at the right time, right quantity and above all safely. Well managed service quality practices have the potential of transforming the operational performance of an organization. The objectives of the study were to determine the extent of adoption of service quality management practices by petroleum distributing firms in Kenya, the challenges they face in the implementation of these practices and the effect of these practices on the firms' operational performance. The study was carried out through a descriptive survey of 32 petroleum distributing firms in Kenya. Questionnaires were used to collect primary data. The collected data was analysed descriptive statistics while regression analysis technique was used to establish the relationship between the dependent and independent variables. The research findings were presented in tables. The findings indicated that petroleum distributing firms adopted various service quality management practices to a large extent. The findings also indicated that lack of visionary leadership and top management support were the biggest challenges the firms faced in their endeavour to implement service quality management practices. Further, the relationship between the explored seven aspects of SQMP and operational performance was found to be weak due to the fact that some control variables like size of the firm and number of years in operation were not considered .The main conclusion was that the adoption of service quality management practices by petroleum distributing firms was inevitable. The researcher recommends that policy makers should ensure organizations embrace service quality management practices for improved productivity and better returns from their investments. The researcher concludes by suggesting that similar research be carried out in other sectors of the economy and a further study in the petroleum distributing firms that incorporate the control variables left out in this study.

TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS

AGO - Automotive Gas oil

ANOVA – Analysis of Variance

DPK - Dual Purpose Kerosene

ERC - Energy Regulatory Commission

FO - Fossil Oil

GDP - Gross Domestic Product

KOSF - Kipevu Oil Storage Facility

KOT - Kipevu Oil Terminal

KPC - Kenya Pipeline Corporation

KPRL - Kenya Petroleum Refineries Limited

LPG - Liquidified Petroleum Gas

NOCK - National Oil Corporation of Kenya

PIEA - Petroleum Institute of East Africa

PMC - Petroleum Marketing Companies

PMS - Premium Motor Spirit

PSA - Production Sharing Agreements

SOT - Shimanzi Oil Terminal

SQMP- Service Quality Management Practices

SQP – Service Quality Practices

SPSS - Statistical Package for Social Sciences

TRM - Total Relationship Management

LIST OF TABLES

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The demand for quality services as asserted by Githagui and Ngugi (2013) is one of the most crucial areas that organisations need to pay attention in order to survive. Quality in a service organization is a measure of the extent to which a delivered service meets the customer's expectations. Delivering quality service means conforming to customer expectation in a consistent basis (Lewis & Booms, 1983). Service quality is considered a critical determinant of competitiveness that can help an organization to differentiate itself from other organizations and gain a competitive advantage. Superior service quality is a key to improved profitability and has been found to result in increased customer satisfaction, improved sales and profitability (Hasan & Kerr, 2003).

Literature provides three theoretical alternative conceptualizations of service quality namely the attribute theory, the interaction theory and the customer satisfaction theory (Chase & Bowen, 1991). The attribute theory assumes that service quality is a reflection of the attributes of the service delivery system and management has full control of the inputs defining these attributes. The customer satisfaction theory focuses more on the satisfaction of the needs and wants of the customers while the interaction theory delineates service quality as a gained experience that is shared by all involved parties or participates in the service encounter. Accordingly, the service quality as asserted by Hasan and Kerr (2003) emerges through the satisfaction of the needs and wants of both the customers and contact staff.

Petroleum is Kenya's major source of commercial energy and constitutes about 80% of the country's commercial energy requirements (Wanjiku, 2011). The petroleum industry is one of the prime movers in the country's vision 2030. Petroleum products do not have any close substitutes and this makes their prices to have a very significant impact on the level of inflation. The demand for petroleum products on average stands at 2.5 million tons per year and is on an increasing rising trend. According to Wahome (2006) statistics from PIEA, the demand for petroleum products is rising at an annual rate of 5.8 %. This means petroleum distributing firms should be more aggressive in their service delivery, which is the ability to deliver right volumes, right time and right quality at right location.

1.1.1 Service Quality Management

There are numerous definitions as well as standpoints concerning service quality and its management. Various scholars define service quality in different ways. Parasuraman, Zenithaml and Berry (1988) state that service quality is determined by the differences between customer's expectations of services provided and their evaluation of the services they receive. Gefen (2002) defines service quality as the subjective comparison that customers make between the quality of the service that they want to receive and what they actually get. Bitner, Booms and Mohr (1994) define service quality as 'the consumer's overall impression of the relative inferiority / superiority of the organization and its services'. Service quality is an attitude related but not equivalent to satisfaction that results from comparisons of expectations and performance (Bolton & Drew, 1991). Thus, service quality can be defined as an assessment of how well a delivered service conforms to the client's expectations.

Service quality management is about ensuring customers, both internal and external, get what they want. By understanding what customers perceive as service quality, it will be easy for a company to ensure that it meets these expectations and even exceed them. According to Babakus (2004), service quality management entails the combined effect of service performances which determines the extent or the level of contentment and satisfaction of the service user. Thus, service quality management entails monitoring and maintenance of end-to-end services for specific clients or classes of clients. Parasuraman et al. (1988) concurs with Babakus (2004) by pointing out that service quality management involves meeting and exceeding the expectations of customers. It entails the assessment of how well a delivered service conforms to the client's expectations in order to improve the service, to quickly identify problems, and to better meet and hence customer satisfaction.

Service quality management practices (SQMP), refer to a set of management practices that are geared to the improvement of firm performance. These practices are top management support and commitment, employee's involvement, customer focus, employee training and development, quality information and product/service design (Jin, 2005). The adoption of SQMP enables an entity to put in place a framework that facilitates the delivery of goods and services to the expectation and requirements of the customer and in a better way than its competitors. This can position such an entity at competitive advantage over its competitors and hence better returns from its investments.

1.1.2 Operational Performance

Operational performance of a firm is a measure against standard or prescribed indicators of productivity, capacity utilization, effectiveness, efficiency, cycle time, waste reduction and regulatory compliance. According to Johnston and Clark (2001) operational performance refers to measurable aspects of the outcomes of an organizations process such as reliability, production cycle time, and inventory turns. Terziovski, Feng and Samson (2007) define operational performance as performance related to an organizational internal operations such as productivity, product quality and customer satisfaction. Hasan and Kerr (2003) describe operational performance variables as productity and quality, scheduling and delivery. Measures of productivity and quality are productivity, efficiency, cost of quality and errors and defects. Measures of scheduling and delivery are lead time, timeliness of delivery and vendor relations.

Firm operational performance and improvement as pointed out by Mahmoud and Carlos (2010) can be accomplished by building a strong culture around operational excellence, training and equipping the workforce on the techniques and tools of process improvement, deploying real-time visibility process management technology, putting in place appropriate measures as well as controls.

1.1.3 Service Quality Management and Operational Performance

Service quality management practices can affect the operational performance of a firm. The core values of service quality management according to Alemu, Helo, Takala and Fentahun (2011) represent how to encourage and motivate the employees to the best way to improve their capabilities, commitment and productivity. To meet and exceed

customer expectations, firms must be effective and efficient in their service delivery. A timely delivery of defect or error free products enhances customer loyalty and goes a long way in retaining as well as attracting new customers. Satisfied customers will definitely increase their purchases and this translates to increased throughputs. Operational performance objectives like dependability, flexibility and reduced costs are key ingredients in defining an effective service quality management process.

The adoption of service quality management practices as indicated by Lakhal, Pasin and Liman (2006) makes it possible for an entity to put in place a plan or a framework that enables it deliver goods as well as services that correspond to the needs and wants expressed by customers in a faster, better, safer, easier processing and cheaper way than the competitors through the participation of all an organisation's workforce and under the leadership of top management. A growing number of organizations make use of service quality management as a strategic foundation not only for improving firm performance but also as a mechanism for generating a competitive advantage.

1.1.4 Petroleum Industry in Kenya

The petroleum industry plays a very significant role in determining a number of economic variables in the country. Petroleum products do not have any close substitutes and this makes their prices to have a very significant impact on the level of inflation, the level of employment and poverty reduction within the Kenyan economy. Petroleum is Kenya's major source of commercial energy and constitutes about 80% of the country's commercial energy requirements (Wanjiku, 2011). According to Owino (2000) nearly 67% of Kenya's energy needs are provided by petroleum products and the country spends

an average of 4% of the Gross Domestic product (GDP) in importation of petroleum products annually.

Kieyah (2011) indicates that the petroleum industry in Kenya comprises of a number of institutions that together form the current industry structure. The top most organs in the petroleum industry in the country is the Ministry of Energy that is charged with the responsibility of managing the energy resources in Kenya. The Government of Kenya has also established a number of state corporations that play a significant role in refining and distribution of petroleum products. The Kenya Petroleum refineries limited (KPRL) and Kenya Pipeline Corporation (KPC) are examples of such state corporations. There also exists a state corporation that is involved in the marketing of petroleum products, the Kenya National Oil Corporation (NOCK).

To complete the structure of the petroleum industry in Kenya are the multinational and local petroleum marketing companies that avail petroleum products to the market. The various petroleum products include: Automotive Gas Oil (AGO), Premium Motor Spirit (PMS), Fuel Oil (FO), Dual Purpose Kerosene (DPK), Jet A1, Liquedified Petroleum Gas (LPG). The products are received from petroleum tankers from Shimanzi Oil Terminal (SOT), Kipevu Oil Terminal (KOT) into Kipevu Oil Storage Facility (KOSF), Kenya Petroleum Refineries Limited (KPRL) and individual markers Terminals from where it is distributed into the hinterland.

One of the major challenges facing the petroleum industry in Kenya is the constantly increasing international crude oil prices that have impacted on the prices of locally sold petroleum products. According to Owino (2000), the Government of Kenya has made a number of steps towards eliminating on overdependence on foreign oil. This led to the commissioning of oil prospecting exercises in Kenya that have since been successful with oil finds in a number of locations in the Northern parts of the country. This discovery, though is a positive move towards self-reliant on petroleum products, is not complete without the implementation of service quality management practices (SQMP).

Petroleum distributing firms should have in place a SQMP framework that will ensure that these products are availed to the customer in the right quantity, quality, at the right time and in the right manner to the expectation and satisfaction of the customer. In addition, implementation of SQMP with the industry players ensures that effective guidelines and procedures are followed to mitigate increasing oil prices henceforth not exploiting consumers, and with the aid of the ERC, positive results will be achieved and challenges overlooked effectively.

1.2 Research Problem

According to Nilsson, Johnson and Gustaffson (2001) service quality management has the potential of transforming the operational performance of an organization. They further argue that service quality is the degree to which a service meets key customer requirements. Customization and the level of reliability of the requirements are very important aspects of service quality management in organizations. Service quality is considered a critical determinant of competitiveness that can help an organization to

differentiate itself from other organizations and gain a competitive advantage. The adoption of service quality management practices makes it possible for an entity to put in place a plan or a framework that enables it deliver goods as well as services that correspond to the needs and wants expressed by customers in a faster, better, and cheaper way than the competitors (Lakhal et al., 2006).

Petroleum is Kenya's major source of commercial energy and is mainly used in the transport, commercial and industrial sectors as well as for domestic purposes. Petroleum products are either imported as crude oil to be processed at the KPRL or in refined form for direct consumption. Petroleum product customers expect a distribution system that is reliable in transporting their products to their point of convenience without failure and served as per their expectations. Petroleum distributing firms should be willing and ready to help customers and provide prompt service and solve customer issues. They should have adequate petroleum products storage, loading and distribution facilities.

Studies on quality management have diverse views and findings. For instance, studies conducted by Jin (2005) on service quality management practices on customer satisfaction in Korean hotel industry established that there exists a direct relationship between SQMP and performance. A study by Sampio (2014) on the relationship between quality approaches and their impact on Portuguese companies' quality performance examined the positive relationships between TQM practices and performance measures and the selected indicators are productivity, conformance to customer requirements and product/service quality. Al-refaie, Ghnaimat and Ko (2011) examined on the effect of

quality management practices on organisational performance in Jordan concluded that organisations that adopt a quality management strategy focus on achieving and sustaining high quality output using management practices as the inputs and quality performance as the outputs. Omollo (2011) carried out a study on the effect of service quality management on the financial performance of commercial banks in Kenya. The study revealed that service quality management was important in ensuring better financial performance.

A study by Doreen (2013) on service quality and operational performance in tour operators in Kenya found that despite significant level of implementation of various quality components, firms are still unable to attain high operational performance. A related study by Rachilo (2013) on internal service quality management and operational performance among commercial banks in Kenya, established that various service measures contributed to operational performance. These studies have not addressed service quality practices in relation to operational performance of petroleum distributing firms in Kenya. This leaves a research gap that needs to be addressed. This study sought therefore to bridge this gap by attempting to answer the following questions: To what extent have petroleum firms in Kenya adopted service quality management practices? What is the relationship between service quality management practice and operational performance of petroleum distribution firms in Kenya? And what are the challenges affecting implementation of SQMP by petroleum distributing firms in Kenya?

1.3 Research Objectives

The general objective of this study was to establish the relationship between service quality management practices adoption and operational performance. The specific objectives were:

i. To determine the extent of adoption of service quality management practices by petroleum distributing firms in Kenya.

ii. To determine the challenges affecting implementation of service quality management practices by petroleum distributing firms in Kenya.

iii. To determine the relationship between service quality management practices and operational performance in petroleum distributing firms in Kenya.

1.4 Value of the Study

The findings of this study intend to make a significant contribution to the known knowledge on quality management. Academicians and researchers are able to find more information on service quality management that will assist in addressing some of the gaps that exist in this area.

The findings of this study are of great benefit to policy makers in the petroleum industry in Kenya. It will shed more light on appropriate service quality management practices that can be employed by these organizations. It enables them to better understand the relationship between service quality management practices and operational performance. Firms in the petroleum industry can get a wider knowledge on service quality management practices that are common among them. The other firms that are in the

service industry can benefit from the findings of this study. They can benchmark themselves for best practices in service quality management from the petroleum distributing sector and implement the same in their own firms.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter discusses relevant literature on the topic of study and in line with the research objectives. The chapter begins with the theoretical foundation of the study followed by a discussion on service quality management practices. The chapter also discusses the challenges of implementing SQMP. The chapter concludes by reviewing empirical literature on the relationship between SQMP and operational performance as well as related studies in Kenya.

2.2 Theoretical Review

The literature according to Chase & Bowen (1991) offers three alternative conceptualizations of service quality that is the attribute theory, the interaction theory and the customer satisfaction theory.

2.2.1 Attribute Theory

The attribute theory assumes that service quality is a reflection of the attributes of the service delivery system and management has full control of the inputs defining these attributes. Mok, Sparks and Kadampull (2009) point out that when the delivery of a service does not match the prior normative standards or the expectations that are held by the clients, they may opt to engage in the attribution process in order ascertain or make sense of what might have taken place. Hasan and Kerr (2003) observe that the value of customer attribution largely depend upon the range and the kind of information that is

available to the customer concerning the cause of the problem including the frequency of the problem, the clients' perception on the preventability of the problem among others.

According to Brent (1989), quality of an output more often than not depends on an individual's personal judgment as well as evaluation regarding some set of attributes of the output. The quality of the output more often than not is formed from the perceptions of an individual concerning the output and is rooted within the individual's personal frame of reference. More often than not, the attribute theory provides that service quality is assessed by comparison to other similar items or events, so that static terms of 'good or bad quality', as fixed measures, have no firm meaning over time. As such, Juran and Gryna (1988) point out that there is really only either better or worse quality and the comparison basis is often contained within one's past personal experiences and prejudices. This personal history is expressed as expectations: when positive expectations are met, then quality is judged to be acceptable; when expectations are exceeded then quality is judged to be excellent.

2.2.2 Customer Satisfaction Theory

The customer satisfaction theory approach as noted by Hasan & Kerr (2003) delineates service quality as the difference between the expectations and perceptions of the customer in regard to a certain service and the reality perceptions. The theories present more emphasis or primary significance on the perceptions of the customer as opposed to the technical aspects of production which is the case in the attribute theory. Therefore, customer satisfaction theory focuses more on the satisfaction of the needs and wants of the customers. As a result, a large number of entities try as much as possible not only to

meet the expectations of their customers in their daily activity but also exceed them in their long term plan. This requires firms to develop an operational process that is customer focused while at the same time committing considerable amount of resources that positions clients and meeting their various expectations since they are crucial assets to the financial of an enterprise.

Customer satisfaction according to according to Oliver (1980), can be determined by subjective (e.g. customer needs, emotions) and objective factors (e.g. product and service features). The heart of the satisfaction process is the comparison of what was expected with the product or service's performance. Customers usually form expectations prior to purchasing a product or service. As suggested by Atkinson (1988), the consumption of or experience with the product or service produces a level of perceived quality that is influenced by expectations. Under the customer satisfaction theory therefore, it is perceived that if performance exceeds expectations, satisfaction increases, but if perceived performance falls short of expectations, the disconfirmation is more.

2.2.3 Interaction Theory

According to Klaus (1985) as quoted by Hasan and Kerr (2003), the interaction theory approach delineates service quality as a gained experience that is shared by all involved parties or participates in the service encounter. Accordingly, the service quality as asserted by Hasan and Kerr (2003) emerges through the satisfaction of the needs and wants of both the customers and contact staff. Bolton and Saxena-Iyer (2009) observe that conventionally, interaction has been considered as a defining characteristic of all

services. This has been attributed to the fact that services are characterized by simultaneous production and consumption, thereby requiring customer–firm interaction.

Human social behaviour is organized by symbolic designations of all aspects of the environment, both physical and social. Among the most important of these designations are the symbols and associated with meanings about how people are to enact roles and, in general, to comport themselves in relation to others which call forth expectations about how they are to behave (Hasan & Kerr, 2003). It is well known that customer firm relationships entail the exchange of social resources, such as assurance and responsiveness, as well as economic resources. As a result there is need for organisations to put in place mechanisms that can enable it to deliver services to customers in the most efficient and effective manner (Bolton & Saxena-Iyer, 2009).

2.3 Service Quality Management Practices

Jin (2005) defined Service quality management as a holistic management philosophy that focuses on continuous improvement in all functions of a service organization, and it can be achieved only if the service quality concept is utilized from the delivery of service to the after service. Service quality management is most commonly seen as a set of management practices improvement of firm performance. These practices are top management support and commitment, employee's involvement, customer focus, employee training and development, quality information and product/service design.

2.3.1 Top management Commitment

Top management plays a decisive role in paradigm shifts in critical areas such as quality management, product development and innovation. When top management is committed

to quality it will assign a higher priority to quality, provide adequate resources to the implementation of quality management efforts, and invest in human and financial resources and make quality a dimension in performance evaluations for everyone in the organization (Saraph, 1989). Management should spearhead product and service innovations aimed at meeting and exceeding the requirements and expectations of customers better than the competitors. New product and service design should be thoroughly reviewed before production in order to avoid problems happening during production and implementation. In order to become a successful organization it is necessary to put the customers first in every decision made.

Douglas and Fredendall (2004) also argue that visionary leadership from the top management of a firm is very important in creating an organization that has both internal and external aspects of cooperation. This visionary leadership from the top management requires a lifetime commitment to quality. This will also be very significant in creating a culture of better service quality management in an organization. They further assert that top management needs to support holistic thinking that will support sustaining structures, which ultimately increase customer satisfaction through high levels of quality management programs. In addition, visionary leadership is very important in developing holistic organizational cultures and gaining employee commitment.

2.3.2 Employee Involvement

Employee involvement has the potential of providing the foundation for quality efforts and strategy development, and ensures that practices implemented conform to quality requirements within an organization (Mendes, 2012). Accepting total quality

management as a managerial philosophy brings significant human resources implications in organizations. In most cases, low success rates of many service quality management programs are attributed to lack of lack of emphasis on employee involvement issues such as leadership, training, participative management, rewarding and appraisal systems and decision-making process. The more organizations apply employee involvement initiatives, the more positive results they will gain, and the more profitable and competitive they will become, through higher employee satisfaction, and quality of life at work, among other factors (Farzad, Kamran & Mostafa, 2012).

Sohal, Samson and Ramsay (1998) also argue that employees are in the best position both to recognize problems and to find improvements, if they are interested, and sufficiently empowered to take steps to make improvements. Empowering and creating awareness among employees about quality challenges will assist in facilitating their participation towards continuous quality improvement. They further indicate that strategies of service quality management that involve people require more than aesthetic changes, implying high commitment in doing things differently, such as training employees in multiple skills, organizing workers in teams, instituting suggestion systems and solving mechanisms like quality circles.

2.3.3 Customer Focus

Customer focus is a term used to cover all the components which contribute to maintaining an efficient relation with clients. The success of all organizations is based on the capacity to manage the expectations of clients, facilitating loyalty and investments. Customer focus doesn't imply being only aware of an organization's clients, but also

refers to the actions that need to be taken in order to ensure they will continue to clients for a longer time. One of the most significant components of customer focus is customer service. It is considered as the most efficient way to add value to products and services. In most cases, clients have many available options, so the decisive factor for them to come back or not is the quality of service they get from the organization (Sureshchandar, Rajendran & Anantharaman, 2002).

Customer focus Organizations depend on their customers and therefore should understand current and future customer needs and should also meet customer requirements and strive to exceed customer expectations through enhanced quality management (Robinson, 1999). There are a number of benefits that accrue to organizations that are customer focused: increased revenue and market share obtained through flexible and fast responses to market opportunities; increased effectiveness in the use of the organization's resources to enhance customer satisfaction; improved customer loyalty leading to repeat business; applying the principle of customer focus typically leads to: researching and understanding customer needs and expectations; ensuring that the objectives of the organization are linked to customer needs and expectations; communicating customer needs and expectations throughout the organization; measuring customer satisfaction and acting on the results; Systematically managing customer relationships as well as ensuring a balanced approach between satisfying customers and other interested parties (Parasuraman, Berry & Zeithaml, 1991).

2.3.4 Employee Training and Development

Investment in education and training is very important for service quality management success. Employees should be regarded as valuable, long term resources worthy of receiving education and training throughout their career. Their active involvement quality improvement activities, employees acquire new knowledge, see the benefit of the quality disciplines and gain a sense of accomplishment by solving quality problems (Zhang, Waszink & Wijngaard, 2000). According to Zeithaml, Bitnerand and Dwayne (2008), employees are the reflection of the quality of service customers can derive due to their frequent contacts with the customers.

When employees are well trained and empowered, they present a better picture of the organization to these customers. Employees usually serve as representatives of both the organization and their services to the customers at the service delivery point. The quality of the service and the satisfaction the customer may derive will be an assessment of the entire service experience. Employees who are adequately trained have the potential of providing a positive impact to customers. Since employees have a major role to play in determining whether a customer would enjoy the experience, it is important for organizations to focus on training employees in service quality (Zeithaml, Bitnerand & Dwayne, 2008).

2.3.5 Quality Information and Analysis

Service quality management cannot be possible without proper communication of the necessary information to all the stakeholders in an organization. Information from all quarters must be utilized to ensure that the organization is able to provide products and

services that meet high quality standards. It is important for organizations to come up with appropriate systems of ensuring that relevant quality management information is collected and analyzed. This will assist in ensuring that decisions made in the organization are based on relevant and timely information (Lai & Cheng, 2005).

2.3.6 Reward and Recognition

Reward and recognition activities stimulate employee commitment to quality improvement. Organization need to implement an employee compensation system that strongly links quality and customer satisfaction with pay and the company's quality support initiatives (Brown, Hitchcock & Willard, 1994).

According to Geralis and Terziowski (2003) organizations that are keen on improving the quality of their products need to invest in empowering their employees. This empowerment can be achieved through several ways such as training but also through reward and recognition. When employees are adequately rewarded and recognized for the effort they make, they are motivated to do more for the sake of improving the service quality.

2.3.7 Product/Service Design

Product or service design is a very important aspect of service quality management. It is always significant to consider the needs of customers whenever an organization considers designing a product or a service. Involving customers in product design is one way of assuring customers that the quality they desire will be delivered. The needs of customers are very dynamic and only those organizations willing to address them will be able to succeed over their competitions. This success can only be made possible if there is

efficient and appropriate product design that addresses the needs of customers (Wang, Hing-Po & Yang, 2004).

During product or service design it is important for organizations to ensure that quality is maintained. It also requires that organisations continuously seek for ways of ensuring that the quality of their products is enhanced in order to keep up with the competition. Other than involving the customers in product or service design, it is also significant to involve other stakeholders such as employees who are in constant contact with customer since they also understand the quality issues that need to be addressed. Service quality improvement can improve the profitability of the organization (Stevenson, 2002).

2.4 Challenges in Implementation of Service Quality Management Practices

The implementation of SQMP in firms is not without challenges. Lack of employee commitment is one of the challenges. Customers often equate employees with the service they are delivering. Non committed employees in service delivery may lead to the customer forming an opinion about the service provider. Employees that are treated as valuable resources by their employers, will in turn treat their customers as valuable, and evolve and lead to a committed workforce and customer satisfaction (Camison, Flor, Cruz & Kuster, 1996).

Another challenge is leadership. Leading is one of the primary functions of management, but the complexities of leadership as a theoretical concept continue to elude scholars. Sureshchandar, Rajendran and Anantharaman (2001a) suggest that top management

commitment to service quality management is a prerequisite for effective and successful implementation of high quality services. Lack of visionary leadership with a clear understanding of the concepts of service satisfaction, quality, and values is needed to stimulate the entire organization toward accomplishing a service quality management vision, is a great challenge. Awareness, knowledge, and understanding of basic service quality management principles are prerequisites for top executives in committing to service quality improvement (Nwabueze, 2001).

Lack of training, inadequate perception of service quality management practices by most employees, resource constraints and the employee resistant to change, are major challenges to the implementation of SQMP (Keating & Harrington, 2003). The implementation of SQMP is not without costs. Employees require training to acquire knowledge on SQMP so that they can impact on to the customer positively this require funds and it became a bigger challenge in a resource constrained situation coupled with lack top management commitment on resources allocation towards training. Employee's reluctance to change from old ways of doing things is a major setback in implementation of SQMP. All these challenges should be addressed fully by any firm aspiring to excel and petroleum distributing firms in Kenya are not exceptional.

2.5 Empirical Review

This details a review of studies on service quality management practices and operational performance and related studies in Kenya.

2.5.1 Service Quality Management Practices and Operational Performance

A number of researchers have established that there is a very close positive relationship between SQMP and performance of an organisation. For instance Abdullah and Tali (2005) study on SQMP influence on firm performance towards customer satisfaction in Malaysian firms found that a significance relationship existed between the two. Jin (2005) conducted a study on service quality management practices on customer satisfaction in the Korean hotel industry and established that there exists a direct relationship between SQMP and performance. In a related study Lagrosen and Lagrosen (2003) established that service quality management leads to improved business performance. Earlier on Huarng and Chen (2002) had also confirmed that service quality management had an impact on business performance. Brah, Wong and Rao (2000) also showed that there is positive association between service management practices implementation and business performance of the organization.

These studies were conducted outside the Kenyan environment. Some studies were general while the specific ones were not conducted in the petroleum industry. These studies were on the general firm performance and did not focus on the operational performance. Further, it is worth noting that empirical studies on SQMP and firm performance are currently inclined to the developed world, and this indicates the evidence of substantial association between SQMP and firm performance, in developing countries like Kenya, is not conclusive.

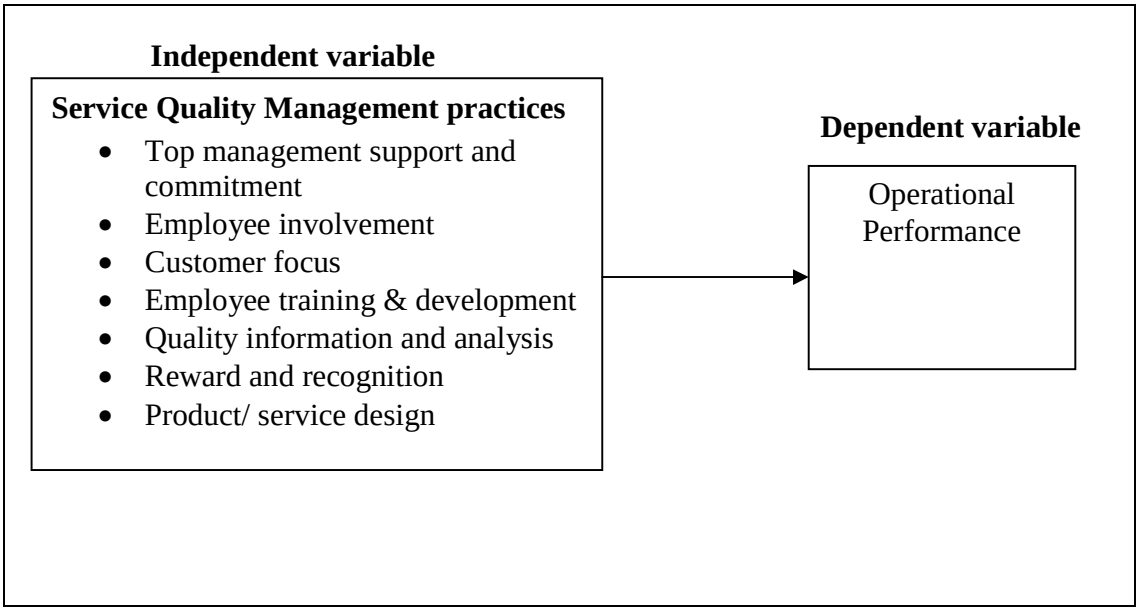
2.5.2 Related Studies in Kenya

Doreen (2013)'s study on the relationship between service quality and operational performance on tour operators in Kenya found that despite significant level of implementation of various quality components, firms are still unable to attain high operational performance. However the study provides useful information on service quality improvement and its effectiveness in improving operational performance. A study by Rachilo (2013) on internal service quality management and operational performance among commercial banks in Kenya, established that various service measures contributed to operational performance. The study was a descriptive survey of 22 banks in which 66 respondents participated.

A similar study by Tanui (2008) looked at quality management practices by pharmaceutical manufacturing companies in Kenya. The study sought to establish the extent of implementation of service quality practices and the challenges in their implementation by these companies. The findings revealed that top management was more supportive to quality management practices than lower level management. Momanyi (2012) carried out a study on the service quality management initiatives in the public sector in Kenya. The study considered a sample of 9 ministries. The study established that ministries that had adopted quality management initiatives realised overall improvement in areas of speed of service, quality of service and customer service and productivity.

These studies were conducted in various sectors of the Kenyan economy but none was on the petroleum sector. The petroleum industry is so vital to the economy since petroleum products lack close substitutes. It is in this regard that a study on effect of SQMP on the operational performance of major petroleum distributing firms in Kenya and the challenges of their implementation is inevitable. This study sought to determine the relationship between the service variables which lack in the other studies as is guided by the conceptual framework in fig 2.1.

Figure 2.1: Conceptual Framework



CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter gives the details of the methodology that was used in this study. The chapter gives details on research design, the population of the study, data collection, data analysis and presentation.

3.2 Research Design

The research design was a descriptive cross sectional survey of all petroleum distributing firms in Kenya. A single cross sectional design that involved a single round of data collection from the sample population was used to investigate associations between SQMP and operational performance. The design was appropriate for this study since it allowed the researcher to use both qualitative and quantitative data in trying to establish the service quality management practices on operational performance of petroleum distributing firms in Kenya.

3.3 Population of the Study

The population of this study was petroleum distributing firms commonly known as Petroleum Marketing Companies (PMC), which are registered with the ministry of energy to trade in the importation and distribution of petroleum products. According to Ministry of energy and the Petroleum Institute of East Africa (PIEA), the registered PMC are 30. Adding KPC and KPRL, the population of the study was 32, (Appendix III). In this study, the entire population was considered hence was a census study.

3.4 Data Collection

In this study, primary data was used. The data was collected through a structured questionnaire that was in form of five point Likert scale, administered using 'drop-and-pick-later' method. An introduction letter (Appendix I) accompanied the questionnaire. The questionnaire contained four sections. Section A sought to capture general information of the respondent. Section B sought information on the extent of adoption of SQMP by petroleum distributing firms and section C solicited data on challenges affecting implementation of SQMP. Section D contained questions on the effect of SQMP on operational performance in petroleum distributing firms in Kenya. The target respondents in the study were terminal managers, retail outlets dealers, operations superintendent and supervisors, planning and logistic officers and operations managers. One respondent was considered from each firm.

3.5 Data Analysis

The data was first checked for completeness, consistency and accuracy. It was then edited, coded and tabulated. The data was fed into a computer using the Statistical Package for Social Sciences (SPSS) for analysis. Descriptive statistics that is the mean and the standard deviation were used to analyse data for the first and second objectives that is to determine the extent of adoption of service quality management practices by petroleum distributing firms in Kenya and to determine the challenges affecting implementation of service quality management practices by petroleum distributing firms in Kenya. Regression analysis was employed in order to achieve objective three that is to determine the relationship between service quality management practices and operational

performance in petroleum distributing firms in Kenya. The following regression model was used: $\mathbf{Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + €}$

Where:

Y = Operational performance index (Dependent variable).

a = Constant

b_1, b_2, b_3, b_4, b_5, b_6 and b_7 are the coefficients

X_1= Top management and commitment

X_2 = Employee Involvement

X_3 = Customer focus

X_4= Employee training and development

X_5= Quality information and analysis

X_6= Reward and recognition

X_7= Product/Service design

€ = Error term.

The multiple correlation coefficients R, was used to test the strength of the relationship between the independent variables and the dependent variable. The strength of the model was tested using R^2 at 5% level of confidence so as to test the significance of the model in explaining the relationship between SQMP dimensions and operational performance of petroleum distributing firms.

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

4.1 Introduction

The purpose of this study was to establish the effect of service quality management practices on operational performance of petroleum distributing firms in Kenya. The study sought to achieve three objectives: To determine the extent of adoption of service quality management practices by petroleum distribution firms in Kenya; to determine the challenges affecting implementation of service quality management practices by petroleum distributing firms in Kenya and to determine the relation between service quality management practices and performance in petroleum distributing firms in Kenya. Data was successfully collected from all the 32 targeted firms thus providing a response rate of 100%.

4.2 General Information

The general information sought in this study were the numbers of years the firms have been in business and if they have a service quality management department.

4.2.1 Duration in Business

The researcher sought to find out the numbers of years a petroleum distributing firm has been in operations in Kenya. The duration can determine the firms experience and resources it has for its operations. The findings are presented in table 4.1.

Table 4.1: Duration in Business

Duration (years)	Frequency	Percent
1 - 5	6	18.8
6 - 10	8	25.0
11 – 15	5	15.6
16 – 20	7	21.9
Above 20	6	18.8
Total	**32**	**100.0**

Source: Research data

It is evident from the research findings in table 4.1 above that 25% of the petroleum firms have been in business for 6-10years; 21.9% of the firms have been in business for 16-20 years; 18.8% of the firms have been in business for 1-5 years and 11-15 respectively whereas 15.6% of the firms have been in business for 11-15 years. This is an indication that most of the firms have been in business for a relatively long duration hence were in a position to provide relevant information on service quality management and operational efficiency.

4.2.2 Service Quality Management Department

The researcher sought to find out whether a firm had a service quality management department. The existence of a service quality management department in firm can help in the implementation of service quality management practices. The study results are as presented in table 4.2.

Table 4.2: Existence of a Service Quality Management Department

Response	Frequency	Percent
Yes	18	56.3
No	14	43.8
Total	**32**	**100.0**

Source: Research data

On the availability of a service quality department within the petroleum distributing firms in Kenya, the study results as shown in table 4.2 reveals that 56.3% of the firms have a service quality department whereas 43.8% of the firms do not have a service quality department. This implies that majority of the firms have a service quality department hence their ability to provide relevant responses for this study.

4.3 Extent of Adoption of Service Quality Management Practices

The researcher further sought to investigate the extent to which petroleum distributing firms have adopted service quality management practices like top management support and commitment, employee involvement, customer focus, employee training/development, quality information and analysis, reward and recognition and product/service design in their operations. The respondents were required to indicate the extent to which they agreed with the perceived extent of adoption of service quality management practices. The responses were subjected to descriptive statistics and the findings are presented in table 4.3.

4.3.1 Top Management Support and Commitment

The researcher sought information on the extent to which the top management of the petroleum distributing firms were supportive and committed to the operations of these firms. The findings are presented in table 4.3

Table 4.3: Top Management Support and Commitment

Top management activity	Mean	Std. Deviation
Employees are encouraged by top management to consider customer needs and expectations	4.44	.759
Active involvement of top management in quality improvement	4.34	.653
Evaluation of top management for service quality performance	4.09	.928
Management provides the necessary resources to carry out activities efficiently	4.00	.880
Dissemination of management service quality objectives to all employees	3.59	1.012
Average	**4.09**	**0.846**

Source: Research data

It can be observed from the study results in table 4.3 above that encouragement of employees by top management to consider customer needs and expectations has a mean of 4.44 and a standard deviation of 0.759. This implies that most of the respondents agreed that top management encourage employees to consider customer needs and expectations. Active involvement of top management in quality improvement has a mean of 4.34 and a standard deviation of 0.653 which confirms that most respondents agreed that top management are actively involved in quality improvement. Evaluation of top

management for service quality performance has a mean of 4.09 and a standard deviation of 0.928 an indication that most of the respondents agreed that top management of petroleum distributing companies are evaluated for service quality performance. Management provides the necessary resources to carry out activities efficiently have a mean of 4.0 and a standard deviation of 0.880. This means that majority of the respondents concurred that the necessary resources to carry out activities efficiently. However, the respondents were not sure whether the management disseminates service quality objectives to all employees. This is supported by a mean of 3.59 and a standard deviation of 1.012.

4.3.2 Employees' Involvement

The extent to which employees were involved in the operational activities of the firms was sought in this section and the findings presented in table 4.4.

Table 4.4: Employees' Involvement

Employee involvement	Mean	Std. Deviation
Employees are encouraged to be totally involved in quality improvement	4.19	.859
Management lets employees participate in achieving organisational goals	4.09	.689
Existence of bottom-up, top-down and horizontal communication among all staff	4.03	.897
Employees get feedback on their quality performance and are encouraged to give comments	4.00	.880
Employees are responsible for the tasks they perform and inspect their own work	3.75	1.078
Average	**4.02**	**0.881**

Source: Research data

The findings from the study reveal that encouragement of employees to be totally involved in quality improvement has a mean of 4.19 and a standard deviation of 0.859. This is an indication that most of the respondents agree that employees are encouraged to be totally involved in quality improvement. Management lets employees participate in achieving organisational goals has a mean of 4.09 and a standard deviation of 0.689. This implies that majority of the respondents agree that the management of petroleum distributing firms in Kenya let employees participate in achieving the goals of the organization. The study reveals that existence of bottom-up, top-down and horizontal communication among all staff has a mean of 4.03 and standard deviation of 0.897 implying that the firms have a bottom-up, top down and horizontal communication among all staff. Providing feedback on quality performance to employees has a mean of 4.0 and standard deviation of 0.880. This confirms that most of the firms provide employees with feedback concerning their quality performance. However, the study reveals that employees being responsible for their work and inspect their work has a mean of 3.75 indicating that this is not the case among the petroleum distributing companies in Kenya.

4.3.3 Customer Focus

The respondents were required to give information on the extent to which petroleum distributing firms were committed to addressing and meeting customer needs. The findings were presented in table 4.5.

Table 4.5: Customer Focus

Customer focus activity	Mean	Std. Deviation
The firms carry out studies to determine customer needs and wants	4.22	.870
The firms carry out studies to evaluate customer satisfaction	4.22	.751
The firms have a system for collecting and addressing customer complaints	3.97	1.121
The firms encourage their customers to give feedback on quality and delivery performance	3.97	.967
Integration of customers in product/service development process	3.84	1.167
Average	**4.04**	**0.975**

The findings from the study as tabulated in table 4.5 established that carrying out studies to determine customer needs and wants has a mean of 4.22 and standard deviation of 0.870 indicating that most firms carry out studies to determine customer needs and wants. It was also evident that carrying out studies to evaluate customer satisfaction has a mean of 4.22 and standard deviation of 0.751 a confirmation that the firms carry out customer satisfaction studies. However the study established that three aspects of customer focus: having a system for collecting and addressing customer complaints; encouraging customers to give feedback and integration of customers in product/service development have a mean less than 4 but very close to 4. This is a confirmation that these activities were carried out though not to very significant level.

4.3.4 Employee Training and Development

The researcher sought the views of the respondents on what extent their firms adopted employee training and development programs. The findings were presented in table 4.6.

Table 4.6: Employee Training and Development

Employee training/development activity	Mean	Std. Deviation
Employees are trained on team working	3.94	1.014
The firms provide continuous training for managerial staff	3.91	.963
The companies offer continuous training for non managerial staff	3.66	1.125
Training needs are always evaluated and addressed	3.50	1.016
The firms often measure employee satisfaction based on the training received	3.41	1.132
Average	**3.68**	**1.05**

Source: Research data

It can be observed from the research findings tabulated in table 4.6 above that training of employees in teamwork has a mean of 3.94 and standard deviation of 1.014. This mean is close to 4 an indication that a sizable number of firms train employees to work in teams. Providing continuous training for managerial staff has a mean of 3.91. This indicates that a number of firms provide this form of training. Offering continuous training for non-managerial staff has a mean of 3.66. This implies that few firms provide training to no-managerial staff. Evaluating training needs has a mean of 3.5, an indication that that this activity is not very common among the firms. Measuring employee satisfaction based on training received has a mean of 3.41 implying that most of the firms do not measure employee satisfaction based on the training they have received.

4.3.5 Quality Information and Analysis

The respondents were required to give their views on the extent to which quality information and analysis activities were carried out in their firms .The findings are given in table 4.7.

Table 4.7: Quality Information and Analysis

Quality information and analysis	Mean	Std. Deviation
Harnessing of information to improve key process and services	4.06	.759
The firms collect and analyse data related to their activities	3.84	.847
Use of quality data to evaluate supervisory and managerial performance	3.72	1.085
Quality data and information is timely and readily available	3.66	.971
Availability of quality data and information to all staff	3.34	1.066
Average	**3.72**	**0.946**

Source: Research data

The study established that harnessing of information to improve key processes and services has a mean of 4.06 and a standard deviation of 0.759. This means that most petroleum distributing firms in Kenya harness information with the aim of improving key processes and services. Collection of data related to firm activities has a mean of 3.84 and standard deviation of 0.847; use of quality data to evaluate supervisory and managerial performance a mean of 3.72 and use of timely and readily available quality data a mean of 3.66. This is an indication that these activities are carried out by the firms though to a limited extent. However, the study established that there is no availability of quality data and information to all staff as supported by a mean of 3.34.

4.3.6 Rewards and Recognition

The researcher sought respondents views on the extent to which various reward and recognition practices were being carried out in their firms. The findings are presented in table 4.8.

Table 4.8: Rewards and Recognition

Rewards and recognition	Mean	Std. Deviation
Existence of reward system to appreciate employee contributions	3.69	1.256
Reward policy and criteria is known to all employees	3.56	1.243
Employees are well motivated	3.44	1.268
Employee's remuneration is proportional to work knowledge and contribution	3.37	1.362
Average	**3.52**	**1.282**

Source: Research data

The findings in table 4.8 show that petroleum distributing firms have generally a weak reward and employee recognition system. Appreciation of employee contribution with corresponding reward had the highest adoption level with a mean of 3.69. The knowledge of the reward policy and its criteria to employees came second with a mean of 3.56 followed by employee motivation with a mean score of 3.44. The least practiced was the employee remuneration proportionality to knowledge and contribution which had a mean of 3.37.

4.3.7 Product and/or Service Design

The respondents were required to give their views on the extent to which various product and /or service design practices had been adopted in their firms. The findings were presented in table 4.9.

Table 4.9: Extent of Adoption of Product or Service Design

Product/service design	Mean	Std. Deviation
New product/service is tested before its offered to customers	4.03	.967
The companies carry out thorough review of new product/service design before the product/service is produced or offered	3.84	.920
Customer requirement are factored in the development of a new product/service design	3.84	1.051
Product/service design and development involves everybody	3.13	1.157
Average	**3.71**	**1.024**

Source: Research data

The findings as tabulated in table 4.9 indicate that the testing of new product/service by petroleum distributing firms before offering to customers was highly adopted with a mean of 4.03 and standard deviation of 0.967. It was followed by the practice of factoring in customer requirement in the development of a new product/service design and carrying out thorough review of new product design before production both with a mean of 3.84. The least practiced was the involvement of everyone in the product/service design which had a mean of 3.13 and standard deviation of 1.157.

4.3.8 Summary of Service Quality Management Practices

Here, the researcher sought to rank the summary of the various types of service quality management practices. The findings of the study are presented in table 4.10.

Table 4.10: Summary of the Extent of Adoption of Service Quality Management Practices

Service quality management practices	Mean	Rank
Top management support and commitment	4.09	1
Customer focus	4.04	2
Employees' involvement	4.02	3
Quality information and analysis	3.72	4
Product/service design	3.71	5
Employee training and development	3.68	6
Rewards and recognition	3.52	7

Source: Research data

It is apparent from the data tabulated in table 4.10 that top management support and commitment with a mean score of 4.09 is ranked first. This implies that majority of the petroleum distributing firms in Kenya have adopted top management support and commitment as part of their service quality management practices. It is also apparent from the study results that customer focus with a mean score of 4.04 is ranked in the second position. Employee's involvement (mean = 4.02) comes third followed by quality information and analysis, product/service design, and employee training and development with the mean scores of 3.72, 3.71 and 3.68 respectively. Rewards and recognition is ranked last with a mean score of 3.52, an indication that it is the least adopted service quality management practice among the surveyed petroleum distributing firms in Kenya.

4.4 Challenges Affecting Implementation of Service Quality Management Practices

The researcher also sought to establish the challenges that petroleum distributing firms in Kenya face in implementation of service quality management practices. The challenges were rated on 1-5 scale and were ranked based on the effect each challenge had on the implementation of service quality management practices by petroleum distributing firms. The study results are presented in table 4.11.

Table 4.11: Challenges of Implementing Service Quality Management Practices

Challenge	Mean	Std. Deviation	Rank
Lack of visionary leadership	4.22	.832	1
Lack of top management support	4.16	.954	2
Lack of employee commitment	4.13	.942	3
Inefficient transport rail and road networks	4.06	.948	4
Lack of enough resources	4.00	1.047	5
Employee resistance to change	4.00	.916	5
Inadequate information on service quality management practices which hinder successful implementation	4.00	1.047	5
Long lead time to import petroleum product	3.91	.893	6
Setbacks related to costs of implementation	3.63	1.129	7

Source: Research data

From table 4.11, it is apparent that the findings indicate that lack of visionary leadership was the biggest challenge to the implementation of service quality management practices with a mean of 4.22 and standard deviation of 0.832. This was followed by lack of top management support with a mean score of 4.16; lack of employee commitment with a

mean of 4.13; inefficient transport rail and road networks with a mean of 4.06; lack of enough resources in a firm, lack of enough resources, the resistance to change by employees and lack of adequate information all with a mean of 4.0. Long lead to import petroleum product has a mean of 3.91 and the one considered as the least challenge is setbacks related to costs of implementation of the service quality management practices with a mean score of 3.63 and a standard deviation of 1.129.

4.5 The Relationship Between SQMP and Operational Performance

Here, the researcher sought to determine the relationship between service quality management practices and operational performance. The service quality management practices were rated on a 1 - 5 scale for various operation performance indicators. The average responses obtained for each of the aspects of the extent of adoption of service quality management practices and composite operational performance are presented in table 4.12.

Table 4.12: Average Responses of each Aspect of Service Quality Management Practices and Corresponding Composite Operational Performance

Respondent	Y	X_1	X_2	X_3	X_4	X_5	X_6	X_7
1	3.5	4.6	4.2	5	4	3.4	2.5	3
2	3.7	5	4.6	5	4.6	4.6	4	4.75
3	4.2	4.6	4.6	4.6	4.2	4.4	4	4
4	4.9	4.8	4.6	4.8	2.8	4.4	3.75	4.75
5	3.5	3	2.8	3	2.8	2.8	3.5	2.25
6	3.7	4.8	4.8	5	5	5	5	5
7	3.4	3.8	4	3.8	3.2	3.6	3.75	4
8	4.3	4.2	4.2	4.2	4.2	4.2	4.25	4.25
9	4.3	3.8	4.2	4.4	3.8	3.8	3.75	4
10	4.8	4.8	4.8	4.8	4.6	3.4	5	4.5

11	3.7	3.2	3.6	2.8	3.4	2.6	1.5	3.75
12	3.8	3.2	2.8	3	3.6	3.6	4.75	3
13	3.8	3.2	2.8	2.2	3.4	3.8	3.75	3.5
14	3.9	3.8	3.2	4.6	4	4	3.75	3.75
15	4.9	4.6	4.6	4.4	4.6	4	2.75	4
16	4.5	5	5	4	4.8	5	5	5
17	4.2	4.2	4.2	4.4	4.6	4.4	5	4.75
18	4.3	4.4	4.4	4.8	4	4	4	3.75
19	3.8	4.4	4	3.6	3	4	4.25	3
20	3.6	3.4	4.2	3.2	3.4	2.8	2.25	3
21	4.2	3.8	4.6	4.2	4	4.4	3.5	4.75
22	3.7	3.6	3.2	2.8	3	2.8	3	2.75
23	4.8	3.8	4	4.8	4.8	3.8	4	4.25
24	4.5	4.4	4.4	4.4	4.4	4.8	4.25	4
25	3.4	3.6	3.4	4	2.8	2.4	2	3
26	3.8	4.6	4.4	3.8	2.8	3.6	1.5	3
27	3.5	3.8	3.8	3.8	3.2	3.2	3.25	2.75
28	4.6	4.6	3.8	4.6	4.8	4	4.25	3.75
29	4.9	3.6	3.8	3.2	3.2	3.8	3.5	4
30	4.5	4.4	3.6	4.6	3.6	4	3.5	3.5
31	4.4	4.8	4.6	4.4	4	4.2	3.5	3
32	4.5	3	3.4	3.2	1.6	2.8	1	3.5

Where:

Y = Operational performance index

$\mathbf{X_1}$ = Top management support and commitment

$\mathbf{X_2}$ = Employees' involvement

$\mathbf{X_3}$ = Customer focus

$\mathbf{X_4}$ = Employee training/development

$\mathbf{X_5}$ = Quality information and analysis

$\mathbf{X_6}$ = Rewards and recognition

$\mathbf{X_7}$ = Product/Service design

The researcher applied the regression model to determine the relationship between service quality management practices and operational performance. The results are as presented in the following parts.

Table 4.13: Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.518[a]	.269	.055	.47410	.269	1.259	7	24	.312

a. Predictors: (Constant), Product/Service design, Top management support and commitment, Rewards and recognition, Employee training or development, Customer focus, Quality information and analysis, Employee involvement

As shown in table 4.13 above, the value of Adjusted R Square is 0.055, which is 5.5%. The value is very small implying that the considered aspects of service quality management practises are insignificant in determining operational performance of petroleum distributing firms in Kenya. This further implies that the other 94.5% is due to other factors that were not considered in this study. It is also apparent from the table that the significance value is 0.312, which is quite high compared to the critical value of 0.05. This implies insignificance relationship between the independent and the dependent variables. From the table also, the correlation coefficient value is 0.518 which is fairly small, an indication of a weak relationship between the SQMP's and the operational performance.

Table 4.14: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B		Correlations		
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
1	(Constant)	2.605	.606		4.296	.000	1.353	3.856			
	Top management support and commitment	.059	.332	.075	.177	.861	-.627	.745	.347	.036	.031
	Employee involvement	-.001	.290	-.002	-.005	.996	-.599	.597	.386	.000	.000
	Customer focus	.054	.191	.084	.281	.781	-.341	.448	.350	.057	.049
	Employee training or development	-.054	.177	-.087	-.303	.765	-.420	.312	.304	-.062	-.053
	Quality information and analysis	.077	.252	.109	.306	.762	-.444	.598	.418	.062	.053
	Rewards and recognition	-.013	.134	-.027	-.095	.925	-.290	.265	.258	-.019	-.017
	Product/Service design	.268	.200	.407	1.343	.192	-.144	.681	.496	.264	.234

a. Dependent Variable: Operational performance index

Source: Research data

The regression equation established from the data in table 4.14 above is as follows: $\mathbf{Y = 2.605 + 0.059X_1 - 0.001X_2 + 0.054X_3 - 0.054X_4 + 0.077X_5 – 0.013X_6 + 0.268X_7}$. The equation is not relevant because all the seven aspects of SQMP considered were found

insignificant in the determination of operational performance of the petroleum distributing firms in Kenya since all had significance values above 0.05.

Table 4.15: Correlations Between Operational Performance and SQMPs

SQMPs	Top management support and commitment	Employees' involvement	Customer focus	Employee training/development	Quality information and analysis	Rewards & recognition	Product/ Service design
P	0.347	0.386	0.350	0.304	0.418	0.258	0.496
R	0.026	0.015	0.025	0.045	0.009	0.077	0.002
Significance at 0.05	Significant	Significant	Significant	Significant	Significant	Not significant	Significant

Further, the findings from correlation matrix (Appendix IV) and as presented in table 4.15, reveal that all the SQMPs except rewards and recognition had significant correlation coefficient with operational performance. Product/service design had a significant coefficient of 0.002 followed by quality information and analysis, employee involvement, customer focus, top management support and commitment, employee training and development with values of 0.009, 0.015, 0.025, 0.026 and 0.045 respectively. Rewards and recognition had an insignificant correlation coefficient of 0.077.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings from the study; conclusions and the recommendations for further study. The study aimed to explore the effect of service quality management practices on operational performance of petroleum distributing firms in Kenya. The study had three objectives: To determine the extent of adoption of service quality management practices by petroleum distribution firms in Kenya; to determine the challenges affecting implementation of service quality management practices by petroleum distributing firms in Kenya and to determine the relationship between service quality management practices and operational performance in petroleum distributing firms in Kenya.

5.2 Summary of the Findings

5.2.1 The Extent of Adoption of Service Quality Management Practices by Petroleum Distribution Firms in Kenya

It was found out from the study that to large extent, majority of the petroleum distribution firms in Kenya have adopted the practices of service quality management. Out of the thirty two surveyed firms, eighteen of them had a service quality management department. This is an indication that majority of the petroleum distribution firms in Kenya have a service quality department. The study findings revealed further that as part of the adoption of service quality management practices, the top management encourage employees to consider customer needs and expectations. Most respondents agree that top

management are actively involved in the improvement of service quality. It was also found out that top management of petroleum distributing companies are evaluated for service quality performance and the management provides the necessary resources to carry out activities efficiently. The study participates were however not sure whether the management disseminates service quality objectives to all employees. Moreover, most of the respondents agreed that employees are encouraged to be totally involved in quality improvement. Management of petroleum distributing firms in Kenya let employees participate in achieving the goals of the organizations. Also, the firms have a bottom-up, top down and horizontal communication among all staff and most of the firms provides employees with feedback concerning their quality performance.

The findings indicate that most firms carry out studies to determine customer needs and wants as well as customer satisfaction studies. It was found out that three aspects of customer focus that is having a system for collecting and addressing customer complaints, encouraging customers to give feedback and integration of customers in product/service development were carried out by petroleum though not to very significant level. The study also ascertained that a sizable number of petroleum distributing firms in Kenya train employees to work in teams; they provide continuous training for managerial staff and they provide training to no-managerial staff. Evaluating training needs was found not very common among the firms. Also, most of the petroleum distributing firms in Kenya do not measure employee satisfaction based on the training they have received.

The study further established that most petroleum distributing firms in Kenya harness information with the aim of improving key processes and services. The study results also revealed that to less extent, the petroleum distributing firms in Kenya collect data related to firm activities; they use timely and readily available quality data and they use quality data to evaluate supervisory and managerial performance. On the other hand, the study established that there is no availability of quality data and information to all staff as supported by a mean of 3.34. Concerning rewards and recognition, the study established that petroleum distributing firms have generally a weak reward and employee recognition system. Appreciation of employee contribution with corresponding reward had the highest adoption level with a mean of 3.69. The knowledge of the reward policy and its criteria to employees came second with a mean of 3.56. The least practiced was the employee remuneration proportionality to knowledge and contribution which had a mean of 3.37. Pertaining product/or service design, it was established that testing of new product/service by petroleum distributing firms before offering customers was highly adopted by petroleum distributing firms in Kenya. It was followed by the practice of factoring in customer requirement in the development of a new product/service design and carrying out thorough review of new product design before production. The least practiced was the involvement of everyone in the product/service design.

In ranking the summary of service quality management practices, top management support and commitment was ranked first with a mean score of 4.09 implying therefore that majority of the petroleum distributing firms in Kenya have adopted top management support and commitment as part of their service quality management practices. Customer

focus with a mean score of 4.04 was ranked in the second position. Employee's involvement comes third followed by quality information and analysis, product/service design, and employee training and development with the mean scores of 3.72, 3.71 and 3.68 respectively. Rewards and recognition was ranked last with a mean score of 3.52, an indication that it is the least adopted service quality management practice among the surveyed petroleum distributing firms in Kenya.

5.2.2 The Challenges Affecting Implementation of Service Quality Management Practices by Petroleum Distributing Firms in Kenya

The study established that lack of visionary leadership was the biggest challenge hindering the implementation of service quality management practices by petroleum distributing firms. This was followed by lack of top management support wile lack of employee commitment was ranked in the third position. Inefficient transport rail and road networks; lack of enough resources in a firm, lack of enough resources, the resistance to change by employees and lack of adequate information as well as long lead to import petroleum product were ranked in the fourth, fifth, sixth, seventh and eighth positions respectively while setbacks related to costs of implementation was ranked the least challenge affecting implementation of service quality management practices by petroleum distributing firms in Kenya.

5.2.3 The Relationship between Service Quality Management Practices and Operational Performance in Petroleum Distributing Firms in Kenya

The study derived the regression equation model which indicates that operational performance of petroleum distributing firms in Kenya would be at 2.605 when holding top management support and commitment; employees' involvement; customer focus;

training/development; quality information and analysis; rewards and recognition and product/service design to a constant zero and by holding all other relevant factors constant. The regression equation however, does not explain fully the relationship between service quality management practices and operational performance in petroleum distributing firms in Kenya since the value of Adjusted R Square was found to be 0.055, which is very small while significance value was 0.312 implying therefore that the seven aspects of the extent of adoption SQMPs are insignificant in explaining the operational performance of petroleum distributing firms in Kenya. Thus, apart from the seven aspects there are other factors that affect the operational performance of petroleum distributing firms in Kenya. Finally, despite the insignificant relationship, from the correlation matrix, the correlation coefficients for six out of the seven SQMPs were found to be significant.

5.3 Conclusions

The study findings are in line with the observations made in the literature. The findings that the adoption of service quality management practices by petroleum distributing firms in Kenya is inevitable and is already effected by many of the firms concur with Jin (2005)'s assertion that the practices of service quality management are inevitable since they provide entities with holistic management philosophy that focuses on continuous improvement in all functions of a service organization. The practices as stated by Jin (2005) are top management support and commitment, employee's involvement, customer focus, employee training and development, quality information and product/service design. As revealed by the study, top management support and commitment is the most adopted service quality management practice by petroleum distributing firms in Kenya. This corresponds to Saraph (1989)'s argument in the reviewed literature that top

management plays a decisive role in paradigm shifts in critical areas such as quality management, product development and innovation. When top management is committed to quality it will assign a higher priority to quality, provide adequate resources to the implementation of quality management efforts, and invest in human and financial resources and make quality a dimension in performance evaluations for everyone in the organization.

The findings on the challenges affecting implementation of service quality management practices by petroleum distributing firms in Kenya correspond with the assertions made in the literature. For instance, the findings that lack of visionary leadership affects implementation of service quality management practices by petroleum distributing firms in Kenya is in agreement with the argument put forward in the literature review by Nwabueze (2001) that lack of visionary leadership with a clear understanding of the concepts of service satisfaction, quality, and values is a great challenge in stimulating the entire organization toward accomplishing a service quality management vision.

The study results that lack of top management support as another challenge affecting the implementation of service quality is also consistence with the Rajendran and Anantharaman (2001a)'s suggestion that top management commitment to service quality management is a prerequisite for effective and successful implementation of high quality services. The findings that lack of employee commitment; lack of enough resources in a firm; lack of enough resources; resistance to change by employees and setbacks related to costs of implementation are in line with Keating and Harrington (2003)'s observation that

inadequate perception of service quality management practices by most employees, resource constraints and the employee resistant to change, are major challenges to the implementation of SQMP.

5.4 Recommendations

The researcher recommends that service quality management practices, especially top management support and commitment, employee's involvement, customer focus, employee training and development, quality information and analysis, rewards and recognition and product/service design, should be adopted by every firm, in the petroleum industry and other industries that comprise the Kenyan economy due to their positive impact on operational performance. The firms should also be in the front run in addressing the challenges which affect the implementation of service quality management practices in order to reap the full benefits of these practices.

The researcher further recommends that policy makers like the ERC and MOE should ensure that all petroleum distributing firms in Kenya fully adopt service quality management practices as one way of ensuring that the government gets maximum revenue from these firms and this will lead to better and improved lives of Kenyans.

5.5 Limitations of the Study

The study was faced by a number of limitations. Firstly, the study adopted a descriptive cross sectional survey that involved a single round of data collection that affected the study effectiveness and accuracy. Secondly, the researcher faced some resistance from some of the respondents as they feared that the information they gave would be used by

competitors to fight them business wise. This was however resolved through the issuance of the introduction letter and explanation that the information would be confidential. Thirdly, the researcher also faced challenges in terms of resources such as finances for commuting to the different firms and time in the sense that, a lot of time was needed for going to the firms, meeting with managers, convincing them to fill the questionnaires and finally going back to pick them.

5.6 Suggestions for Future Research

The study only covered petroleum distributing firms in Kenya. Petroleum industry is just one of the many sectors in our economy, meaning that a wide knowledge gap exists and there is need to carry out similar research in these sectors. The adoption and implementation of service quality management practices in all sectors of Kenyan economy will go a long way in improving service delivery; better customer satisfaction hence improved GDP.

Since the explored seven aspects of SQMPs were found to be insignificant in explaining the operational performance of petroleum distributing firms in Kenya, a study should be carried out among the petroleum distributing firms in Kenya to explore other factors such as firm size and years of operation that may enable determine fully the factors that affect the operational performance of petroleum distributing firms in Kenya.

The same study may be replicated across different industries in order to establish the effect of service quality management practices on operational performance and compare

the results since the business environment is dynamic, turbulent and varies from industry to industry.

REFERENCES

Abdullah, M. J. & Tali, J. J. (2005). The influence of soft factors on quality improvement and performance. *Journal of Quality Management, 20*(7), 795 - 826.

Alemu, M., Helo, P., Takala, J. & Fentahun, M. (2011). Effects of quality management practices and concurrent engineering in business performance. *International Journal of Business and Management, 6*(3), 45-62.

Al-Refaie, A., Ghnaimat, O., & Ko, J. H. (2011). The effects of quality management practices on customer satisfaction and innovation: a perspective from Jordan. *International Journal of Productivity and Quality Management, 8*(4), 398-415.

Atkinson, A. (1988). Answering the eternal question: What does the customer want? *The Cornell Hotel and Restaurant Administration Quarterly, 29*(2), 12-14.

Babakus, E. (2004). Linking perceived quality and customer satisfaction to store traffic and revenue growth. *Decision Sciences, 35*(4), 713–737.

Bitner, M., Booms, B., & Mohr, L. (1994). Critical service encounters: the employee's view. Journal of Marketing, *58*(4), 95-106.

Bolton, R. N. & Drew, J. H. (1991). A longitudinal analysis of the impact of service changes on customer attitudes. *The Journal of Marketing, 55*(1), 1-10.

Bolton, R., & Saxena-Iyer, S. (2009). Interactive services: A framework, synthesis and research directions. *Journal of Interactive Marketing, 2*(3), 91–104.

Brah, S., Wong, J. & Rao, B. (2000). TQM and business performance in the service sector: A Singapore study. *International Journal of Operations & Production Management, 20*(11), 1293-1312.

Brent, C. J. (1989). *Quality management for health care delivery.* Illinois: The Hospital Research and Educational Trust of the American Hospital Association.

Brown, M. G., Hitchcock, D. E. & Willard, M. L. (1994). *Why TQM Fails and what to do about It.* Irwin: Burr Ridge Ltd.

Camison, C., Flor, M., Cruz, S. & Kuster, I. (1996). Quality practices and perceptions of Valencian hospitality enterprises: An empirical analysis. *International Journal of Quality & Reliability Management, 13*(7), 79-92.

Chase, R. & Bowen, D. (1991). *Service quality in the service delivery system: A diagnostic framework in service quality.* Lexington: Lexington Books.

Doreen, I. (2013). *Service quality and operational performance of Tour operators in Kenya,*(Unpublished MBA research project.).University of Nairobi,Nairobi,Kenya

Douglas, J. T. & Fredendall, L. D. (2004), Evaluating the deeming management model of total quality in services. *Decision Sciences, 35*(3), 393–422.

Farzad, E., Kamran, N. & Mostafa, E. (2012). Investigating relationship between employees' involvement and quality improvement in manufacturing SME. *Elixir International Journal*, *48*(2), 9621 - 9625.

Gefen, D. (2002). Customer loyalty in e-commerce. *Journal of the association for information systems, 3*(1), 27- 51.

Geralis, M. & Terziowski, M. (2003). A quantitative analysis of the relationship between empowerment practices and service quality customers. *Total Quality Management & Business Excellence*, *14(*1), 45-62.

Githagui, N. & Ngugi, P. K. (2013). Determinants of effective implementation of total quality management in thermal power plants in Kenya: A case of Iberafrica. *International Journal of Arts and Entrepreneurship, 1*(2), 367-382.

Hasan, M., & Kerr M. (2003). The relationship between total quality management practices and organisational performance in service organisations. *The TQM Magazine, 15*(4), 286-291.

Huarng, F. & Chen, Y. T. (2002). Relationships of TQM philosophy, methods, and performance. *Industrial Management & Data System*, *102*(4), 226-234.

Jin, L. (2005). *The effects of service quality management practices on customer Satisfaction.* Paichai: Paichai University Press.

Johnston R, & Clark, M. (2001). *Service operations management.* New Jersey: Prentice Hall Publishers.

Juran, J. M. & Gryna, F. M. (1988). *Quality planning and analysis: From product development through usage* (2nd ed.). New York: McGraw-Hill Book Company.

Keating, M. & Harrington, D. (2003). The challenges of implementing quality in the Irish hotel industry. *Journal of European Industrial Training*, *27*(9), 441-453.

Kieyah, J. (2011). *Petroleum Industry in Kenya.* Amsterdam: The Amsterdam Centre for Law and Economics.

Klaus, G. (1985). *Quality epiphenomenon: The conceptual understanding of quality in face-to-face service encounters.* Lexington: Lexington Books, 17-33.

Lagrosen, S. & Lagrosen, Y. (2003). Management of service quality: Differences in values, practices and outcomes. *Managing Service Quality, 13*(5), 370-381.

Lai, K. & Cheng, T. C. (2005). Effects of quality management and marketing on organizational performance. *Journal of Business Research, 58*(4), 446-456.

Lakhal, L., Pasin, F., & Liman, M. (2006). Quality management practices and their impact on performance. *International Journal of Quality and Reliability management, 23*(6), 625-646.

Lewis, R. C., & Booms, B. H. (1983). The marketing aspects of service quality. *Emerging perspectives on services marketing, 65*(4), 99-107.

Mahmoud, M., & Carlos, F. (2010). Performance management in service operational settings: A selective literature examination, benchmarking. *An International Journal, 17*(2), 214 – 231.

Mendes, L. (2012). Employees' involvement and quality improvement in manufacturing small and medium enterprise (SME): A comparative analysis. *African Journal of Business Management, 6*(23), 6980-6996

Mok, C., Sparks, B., & Kadampull, J. (2009). *Service quality management in hospitality tourism and leisure.* New York: Routledge.

Momanyi, W. (2012). *A survey of service quality management initiatives in the public sector: A case study of selected ministries in Kenya.*(Unpublished MBA research project.).University of Nairobi,Nairobi,Kenya.

Nilsson, L., Johnson, M. & Gustaffson, A. (2001). The impact of quality practices on customer satisfaction and business results. *Journal of Quality Management, 6*(1), 5-27.

Nwabueze, U. (2001). An industry betrayed: The case of total quality management in manufacturing. *The TQM Magazine, 13*(6), 400-409.

Oliver, K. (1980). *Theoretical bases of consumer satisfaction research: Review, critique and future direction.* Chicago: American Marketing Association.

Omollo, K. (2011). *Effect of Service quality management on the financial performance of commercial Banks in Kenya.*(Unpublished MBA research project.).University of Nairobi,Nairobi,Kenya

Owino, K. (2000). Petroleum Industry since liberalization. *Institute of Economic Affairs Bulletin Issue No. 41.*

Parasuraman, A., Berry, L.L. & Zeithaml, V.A. (1991). Perceived service quality as a customer-based performance measure: an empirical examination of organizational barriers using an extended service quality model. *Human Resource Management, 30*(3), 335-360.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64*(1), 14 - 40.

Rachilo, G. (2013). *Internal Service Quality Management and Operations Performance among Commercial Banks in Kenya.*(Unpublished MBA research project.).University of Nairobi,Nairobi,Kenya

Robinson, S. (1999). Measuring service quality: current thinking and future requirements. *Marketing Intelligence & Planning, 17*(1), 21-32.

Sampio, P. (2014). Relationship between quality approaches and their impact on Portuguese companies. *International Journal of Quality & Reliability Managemen*t *16(*2), 277 – 330

Saraph, B. (1989). The effects of organizational context on quality management. *Total Quality Management Journal, 37*(9), 1107 - 1124.

Sohal, A. S., Samson, D. & Ramsay, L. (1998). Requirements for successful implementation of total quality management. *International Journal of Technology Management, 16*(46), 505 - 519.

Stevenson, W. (2002), *Production and operations management* (7th ed.). New York: McGraw-Hill.

Sureshchandar, G., Rajendran, C., & Anantharaman, R. (2001a). A conceptual model for total quality management in service organizations. *Total Quality Management, 12*(3), 343 - 363.

Sureshchandar, G.S., Rajendran, C., & Anantharaman, R.N. (2002), "The relationship between management's perception of total quality services and customer perceptions of service quality. *Total Quality Management, 13*(1), 69-88.

Tanui, P. (2008).A survey of quality management practices of pharmaceutical manufacturing companies in Kenya,(Unpublished MBA research project.).University of Nairobi,Nairobi,Kenya

Terziovski, M., Feng, M. & Samson, D. (2007). Relationship of ISO 9001:2000 quality system certification with operational and business performance: A survey in Australia and New Zealand-based manufacturing and service companies. *Journal of Manufacturing Technology Management, 19*(1), 22 – 37.

Wahome, M. (2006). *Growth in great lakes economies stretches demand for fuel.* (Unpublished MBA research project.).University of Nairobi,Nairobi,Kenya

Wang, Y., Hing-Po, L. & Yang, Y. (2004). An integrated framework for service quality, customer value and satisfaction: evidence from China's telecommunication industry. *Information Systems Frontiers, 6*(4), 325- 340.

Wanjiku, C. (2011). *Impact of petroleum consumption on economic growth in Kenya.* (Unpublished MBA research project.).University of Nairobi,Nairobi,Kenya

Zeithaml, V., Bitnerand, M. J. & Dwayne, G. (2008). Services Marketing (5th ed.). New York: Routledge.

Zhang, Z., Waszink, A. B., & Wijngaard, J. (2000). An instrument for measuring TQM implementation for Chinese manufacturing companies. *International Journal of Quality & Reliability Management*, *17*(7), 730 - 755.

APPENDICES

Appendix I: Introduction Letter

UNIVERSITY OF NAIROBI
MOMBASA CAMPUS

Telephone: 020 2059161
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsities

Tel: 020 2059161
Mombasa, Kenya

DATE: 30TH July, 2014

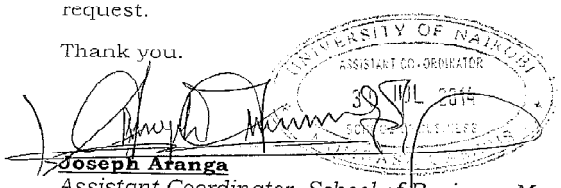
TO WHOM IT MAY CONCERN

The bearer of this letter, **Munyao Samuel** of Registration Number **D61/73281/2012** is a Master of Business Administration (MBA) student of the University of Nairobi, Mombasa Campus.

He is required to submit as part of his coursework assessment a research project report. We would like the student to do his project on ***Effect of Service Quality Management Practices on Operational Performance of Petroleum Distributing Firms in Kenya.*** We would, therefore, appreciate if you assist him by allowing him to collect data within your organization for the research.

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

Thank you.



Joseph Aranga
Assistant Coordinator, School of Business-Mombasa Campus

Appendix II: Research Questionnaire

Section A: General Information.

1. Name of the company.…….....

2. Duration in Business:

□ 1-5 Years □ 6-10 Years □ 11 - 15 Years

□ 16-20 Years □ 21 and above Years

3. Do you have a service quality management department?

□ Yes □ No

Section B: Extent of Adoption of Service Quality Management Practices

Please indicate with a tick the extent to which you agree with the following statements

Use the following scale:

1= Strongly Disagree; 2= Disagree; 3=Not Sure; 4= Agree; 5=Strongly Agree

Top Management Support and Commitment

	Description	**1**	**2**	**3**	**4**	**5**
1	Management provides the necessary resources to carry out activities efficiently.					
2	Top management is actively involved in quality improvement.					
3	Management service quality objectives are disseminated to all employees.					
4	Top management is evaluated for service quality performance.					
5	Management encourage employee to consider customer needs and expectations.					

Employee's Involvement

	Description	1	2	3	4	5
1	Employees are encouraged to be totally involved in quality improvement.					
2	Management let employees participate in achieving organisational goals.					
3	Employees are responsible for the tasks they perform and inspect their own work.					
4	Employees get feedback on their quality performance and are encouraged to give comments.					
5	There is bottom-up, top-down and horizontal communication among all staff.					

Customer focus

	Description	1	2	3	4	5
1	Customers are integrated in product/service development process.					
2	Your firm carries out studies to evaluate customer satisfaction.					
3	Your firm carries out studies to determine its customer needs and wants.					
4	Your firm has a system to collect customer complaints and address them.					
5	Your firm encourage its customer to give feedback on quality and delivery performance.					

Employee Training/Development

	Description	1	2	3	4	5
1	Your firm provides continuous training for its managerial staff.					
2	Company offers continuous training for its non managerial staff.					
3	Training needs are always evaluated and addressed.					
4	Firm measures employee satisfaction on the training received.					
5	Employees are trained on team working.					

Quality Information and Analysis

	Description	1	2	3	4	5
1	Your firms harness information to improve its key process and services.					
2	Quality data and information is available to all staff.					
3	Your firm collects data and analyse data related to its activities.					
4	Quality data and information is timely and readily available.					
5	Quality data are used to evaluate supervisory and managerial performance.					

Rewards and Recognition

	Description	1	2	3	4	5
1	Company has reward system to appreciate employee contributions.					
2	Reward policy and criteria is known to all employees.					
3	Employees are well motivated.					
4	Employee's enumeration is proportional to work knowledge and contribution.					

Product/Service Design

	Description	1	2	3	4	5
1	Company does thorough review of new product/service design before the product/service is produced/offered.					
2	Product/service design and development involves everybody.					
3	New product/service is tested before its offered to customers					
4	Customer requirement are factored in the development of a new product/service design					

Section C: The Challenges Affecting the Implementation of Service Quality Management Practices

Please indicate with a tick the extent to which you agree with the following statements.

Use the following scale:

1= Strongly Disagree; 2= Disagree; 3=Not Sure; 4= Agree; 5=Strongly Agree

	Challenge Description	**1**	**2**	**3**	**4**	**5**
1	Lack of employee commitment hinders the success of service quality management practices implementation.					
2	Long lead time to import petroleum product adversely affect the implementation of service quality management practices.					
3	Inadequate information on service quality management practices hinders their successful implementation.					
4	Lack of enough resources in a firm can be a source of unsuccessful implementation of service quality a management practices in that firm.					
5	Implementation of service quality management practices cannot be successful without top management support.					
6	Resistance to change on the part of employee can be a cause of failure in implementing service quality management practices.					
7	Lack of visionary leadership is a hindrance to the implementation of service quality management practices.					
8	Inefficient transport rail and road networks are causes of failure in implementing of service quality management practices by petroleum distributing firms in Kenya.					
9	The cost of implementation of service quality management practices is a setback in their implementation in a firm.					
10	Other(s).Please specify					

Section D: The Effects of Service Quality Management Practices on Operation Performance

Please indicate with a tick the extent to which you agree with the following statements

Use the following scale:

1= Strongly Disagree; 2= Disagree; 3=Not Sure; 4= Agree; 5=Strongly Agree

	Description	**1**	**2**	**3**	**4**	**5**
1	Service quality management practices improve firm productivity					
2	Service quality management practices implementation enhances firm's efficiency.					
3	Implementation of service quality management practices reduces the cost of quality.					
4	Service quality management practices implementation enhances firm's capacity utilization.					
5	Implementation of service quality management practices reduces operations cycle time.					
6	Service quality management practices adoption reduces the lead time of importation of petroleum products.					
7	Timeliness in delivery can be improved by implementation of service quality management practices.					
8	Service quality management practices implementation reduces errors and defects in service delivery.					
9	Implementation of service quality management practices leads to improved vendor relations.					
10	Service quality management practices implementation ensures waste reduction in service delivery.					

END

THANK YOU FOR TAKING YOUR TIME TO ANSWER THIS QUESTIONNAIRE!

Appendix III: List of Petroleum Distributing firms in Kenya

NO	COMPANY
1	HASS PETROLEUM
2	GAPCO KENYA LIMITED
3	BANODA OIL LIMITED
4	KENOL KOBIL LIMITED
5	VIVO KENYA LIMITED
6	RIVA OILS KENYA LIMITED
7	MULOIL KENYA LIMITED
8	MOGAS INTERNATIONAL LIMITED
9	ROYAL PETROLEUM LIMITED
10	ADDAX KENYA LIMITED
11	RIVA PETROLEUM DEALERS LIMITED
12	BAKRI INTERNATIONAL ENERGY KENYA LIMITED
13	OILCITY SERVICES LIMITED
14	REGIONAL OIL KENYA LIMITED
15	PETRO OIL KENYA LIMITED
16	GULF ENERGY LIMITED
17	TOTAL KENYA LIMITED
18	NATIONAL OIL CORPORATION OF KENYA
19	FOSSIL FUELS LIMITED
20	OILCOM KENYA LIMITED
21	JADE PETROLEUM LIMITED
22	HASHI ENERGY LIMITED
23	DALBIT KENYA LIMITED
24	INTOIL OIL KENYA LIMITED
25	GALANA OIL KENYA LIMITED
26	LIBYA OIL KENYA LIMITED
27	GLOBAL PETROLEUM PRODUCTS KENYA LIMITED
28	ESSAR PETROLEUM EAST AFRICA LIMITED
29	ENGEN LIMITED
30	TROJAN INTERNTIONAL LIMITED
31	KENYA PETROLEUM REFINERIES LIMITED
32	KENYA PIPELINE COMPANY

Appendix IV: Correlation Matrix

		Operational performance index	Top management support and commitment	Employee involvement	Customer focus	Training or development	Quality information and analysis	Rewards and recognition	Product/Service design
Pearson Correlation	Operational performance index	1.000	.347	.386	.350	.304	.418	.258	.496
	Top management support and commitment	.347	1.000	.809	.775	.594	.697	.421	.482
	Employee involvement	.386	.809	1.000	.677	.537	.611	.270	.634
	Customer focus	.350	.775	.677	1.000	.619	.568	.374	.519
	Training or development	.304	.594	.537	.619	1.000	.660	.668	.596
	Quality information and analysis	.418	.697	.611	.568	.660	1.000	.693	.706
	Rewards and recognition	.258	.421	.270	.374	.668	.693	1.000	.505

	Product/Service design	.496	.482	.634	.519	.596	.706	.505	1.000
Sig. (1-tailed)	Operational performance index	.	.026	.015	.025	.045	.009	.077	.002
	Top management support and commitment	.026	.	.000	.000	.000	.000	.008	.003
	Employee involvement	.015	.000	.	.000	.001	.000	.068	.000
	Customer focus	.025	.000	.000	.	.000	.000	.018	.001
	Training or development	.045	.000	.001	.000	.	.000	.000	.000
	Quality information and analysis	.009	.000	.000	.000	.000	.	.000	.000
	Rewards and recognition	.077	.008	.068	.018	.000	.000	.	.002
	Product/Service design	.002	.003	.000	.001	.000	.000	.002	.

N	Operational performance index	32	32	32	32	32	32	32	32
	Top management support and commitment	32	32	32	32	32	32	32	32
	Employee involvement	32	32	32	32	32	32	32	32
	Customer focus	32	32	32	32	32	32	32	32
	Training or development	32	32	32	32	32	32	32	32
	Quality information and analysis	32	32	32	32	32	32	32	32
	Rewards and recognition	32	32	32	32	32	32	32	32
	Product/Service design	32	32	32	32	32	32	32	32

Appendix V: Proposal .Correction Form

UNIVERSITY OF NAIROBI

SCHOOL OF BUSINESS

PROPOSAL CORRECTION FORM

Student Name Munyao Samuel

Registration Number D61/73381/2012

Department Management Science

Specialization Operations Management

Title of Project Proposal Effect of Service Quality Management Practices on Operational Performance of Petroleum Distributing Firms in Kenya

The student has done all the corrections as suggested during the Proposal Presentation and can now proceed to collect data.

Name of Supervisor Odock S.O Signature [signature] Date 28/3/2014

UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
DEPT. OF MANAGEMENT SCIENCE
P. O. Box 30197 - 00100
NAIROBI