THE RELATIONSHIP BETWEEN SERVICE QUALITY MANAGEMENT AND ORGANIZATION PERFORMANCE OF SHIPPING AGENTS IN KENYA

BY

NGOKO TABITHA KERUBO

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

2015

i

DECLARATION

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

Signed by: Date:

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

Signed by: Date:

Job Mwanyota Lecturer, Department of Management Science, School of Business, University of Nairobi

DEDICATION

I dedicate this research proposal to the Almighty God for His mercy and blessings in my life. Special dedication to my parents for their support and encouragement.

ACKNOWLEDGEMENTS

I would like to appreciate my supervisor, for his patience, suggestions and guidance throughout the research proposal. 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.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
LIST OF FIGURES	viii
LIST OF TABLES	ix
ABBREVIATIONS AND ACRONYMS	X
ABSTRACT	xi
CHAPTER ONE INTRODUCTION	1
1.1 Background of the study	1
1.1.1 Service Quality Management	2
1.1.2 Organization Performance	3
1.1.3 Service Quality Management and Performance	5
1.1.4 Shipping Agency in Kenya	6
1.2 Research problem	7
1.3 Research objectives	
1.4 Value of the study	
CHAPTER TWO	
LITERATURE REVIEW	
2.0 Introduction	
2.1 Theoretical Foundation	
2.1.1 Attribute Theory	
2.1.2 Customer Satisfaction Theory	11
2.1.3 Interaction Theory	
2.2 Service Quality Management Models	
2.2.1 The Gap Model	
2.2.2 SERVQUAL Model	14
2.3 Service Quality Management Practices	
2.3.1 Leadership	

2.3.2 Employee Involvement	16
2.3.3 Customer Focus	16
2.3.4 Continuous Improvement	17
2.3.5 Process Management	
2.3.6 System Process	19
2.3.7 Incentives and Recognition	19
2.4 Empirical Review on Service Quality Management and Organization Performance.	20
2.5 Conceptual Framework	22

CHAPTER THREE	24
RESEARCH METHODOLOGY	24
3.0 Introduction	24
3.1 Research Design	24
3.2 Population of the Study	24
3.3 Data Collection	25
3.4 Data Analysis	25

CHAPTER FOUR
DATA ANALYSIS, FINDINGS AND DISCUSSIONS
4.1 Introduction
4.2 Respondent and Firm Profile
4.2.1 Respondents Profile27
4.2.2 Work Experience
4.3 Organization Profile
4.3.1 Ownership Status
4.3.2 Length of Service
4.3.3 Number of Employees
4.3.4 Market share
4.3 Service Quality Management Practices
4.3.1 Top Management Commitment
4.3.2 Employee Management
4.3.3 Customer Focus
4.3.4 Continuous Improvement

4.3.5 Process Management	
4.3.6 System Process	
4.3.7 Incentives and Recognition	
4.4 Summary of Service Quality Management Practices	
4.5 The Relationship between SQMP and Organization Performance	

CHAPTER FIVE	43
SUMMARY, CONCLUSION AND RECOMMENDATIONS	43
5.1 Introduction	43
5.2 Summary	
5.3 Conclusion	44
5.4 Suggestions for Further Research	45
5.4 Limitations of the Study	46
REFERENCES	47
APPENDICES	
APPENDIX 1	52
APPENDIX II	57
APPENDIX III	59

LIST OF FIGURES

Figure 2.1 Conceptual Model	
Element 1 Orange altin States	20
Figure 4.1 Ownership Status	

LIST OF TABLES

Table 4.1 Position Held by respondents	
Table 4.2 Respondents length of service	27
Table 4.3: Length of service in operation	
Table 4.4: Number of employees.	29
Table 4.5: Proportion of market share	30
Table 4.6 Top Management Commitment	31
Table 4.7 Employee Management	32
Table 4.8 Customer Focus	
Table 4.9 Continuous improvement	
Table 4.10 Process Management.	
Table 4.11 System Process	
Table 4.12 Incentives and Recognition	36
Table 4.13 Summary of the Extent of Adoption of Service Quality Management	Practices.36
Table 4.14 Regression Model Summary	37
Table 4.15 Analysis of Variance (ANOVA)	
Table 4.15 Coefficients Of the regression model	40
Table 4.16 Residuals Statistics	41

ABBREVIATIONS AND ACRONYMS

ЕТА	Estimated Time of Arrival
ETD	Estimated Time of Departure
FONSABA	Federation of National Association of Shipbrokers and Agents
KSAA	Kenya Ships Agents Association
SERVQUAL	Service Quality
SPSS	Statistical Package for Social Sciences
SQM	Service Quality Management
TQM	Total Quality management

ABSTRACT

Service quality management has been known as a method to improve the organizational performance. Several organization types have implemented service quality management, i.e. manufacturing and service companies. Many studies have been done in this area exploring the effects of quality management on firm performance. Those researches varies in terms of organizational background, service quality management practices, performance measures, analysis tools used, and research models. The objectives of the study were to examine the extent of adoption of service quality management by shipping agents in Kenya and to analyse the relationship between service quality management and performance of shipping agents in Kenya. The study was carried out through a descriptive survey of 29 Shipping Agency Firms in Kenya. Questionnaires were used to collect primary data. 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 and a pie chart. The findings indicated that Shipping Agents adopted Customer Focus as a major service quality management practices compared to other practices; top management support, employee management, process management, system process, continuous improvement, rewards and recognition. Further, the study depicted a statistically positive significant relationship between service quality management practices and performance of Shipping Agents in Kenya. The researcher recommends that Managers in the shipping industry should be sensitized on what service quality management practices are and its application on organization performance. The study was based on profitability as the measure of organization performance hence the researcher suggests that similar research be carried to conduct further review of quality management literature to identify additional factors that contribute to service quality management and organization performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Across all service industries, service quality remains a critical issue in maintaining and propagating business in the competitive marketplace. To survive in a highly competitive service environment, it is apparent that service industries need to provide customer with high quality services. Customers today demand quality and from their point of view, quality is nothing but an integral and expected part of service, which is service quality (Kandampully, 1997). The role of quality has always been an important issue in the products and services. With the environment becoming more competitive and turbulent, service industries are increasingly concerned with obtaining a sustainable competitive edge (Collins, 1996).

In today's highly competitive environment, many companies are aiming to gain a share of the global market and to take advantage of higher production and sourcing efficiencies. A key determinant of performance nowadays is the role of the "logistics function" in ensuring the smooth flow of materials, products and information throughout a company's supply chains (Sum, Teo & Ng, 2001). Many approaches to service quality management have been suggested to improve the efficiency and competitiveness of enterprises. Increasing demand for better quality by customers have caused more and more companies to realize that they will have to provide high quality products or services in order to successfully compete in the marketplace.

The shipping industry involves a series of numerous processes, activities and planning. It is an industry that involves huge financial resources due to heavy use of equipment and manhours (McNicholas, 2007). Due to the various complexities and many activities involved in the industry, the desire for growth and expansion has necessitated the in-depth knowledge of ship management services making it a critical component to the daily business activities of most companies especially those companies operating in the logistics and shipping industry with respect to cargo and commercial vessels. In view of this, there is the need to establish an intermediary (ship management agents) relationship at various commercial seaports between owners/charterers of vessels and importers/exporters of goods. This is to ensure the safe and effective management of vessel calls with respect to port management and security, documentations, financial transactions and cargo delivery.

1.1.1 Service Quality Management

Parasuraman et al. (1988) defined service quality as the ability of the organization to meet or exceed customer expectations. It is the difference between customer expectations of service and perceived service. It is the overall judgment similar to attitude towards the service and generally accepted as an antecedent of overall customer satisfaction. Services unlike tangible products are produced and consumed at the same time in the presence of the customer and the service producer. The presence of the human element during the service delivery process greatly increases the probability of error on the part of employees and customers. This error is due to intangible behavioural processes that cannot be easily monitored or controlled (Bowen, 1986). Service quality in all service encounters is thus intrinsically affected by the perspectives of both the service provider and the service receiver. According to Czepiel (1990) research on service quality must always include the perspectives of both the provider and the receiver. However, most research on the service quality construct has been restricted to one perspective, that of the service receiver.

Babakus (2004) defines service quality management as a 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, Zeithaml and Berry (1988) point 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 (SQM) refers 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 SQM 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 Organization Performance

The concept of organizational performance is very common in the academic literature, though its definition is difficult because of its many meanings. The absence of a general theory about performance makes it hard to define organisational performance (Guest, 1997). In the '50s organizational performance was defined as the extent to which organizations, viewed as a social system fulfilled their objectives where evaluation was focused on work, people and organizational structure. In the 60s and 70s performance was defined as an organization's ability to exploit its environment for accessing and using the limited resources.

The years 80s and 90s, managers began to understand that an organization is successful if it accomplishes its goals (effectiveness) using a minimum of re-sources (efficiency).

Brealey, Myers and Allen (2009) define organization's performance as a measure of how well a firm uses its assets from its core operations and generates revenues over a given period of time. Guest 1997 defines organizational performance by placing it in the context of an organisation. The organisation directly controls the indicators of organisational performance which differs from outcomes, because those can be considered as much broader. According to Guest 1997, outcomes are different objectives whereby it depends upon the different stakeholders of a company which ones to focus on. Secondly, organisational performance is based upon measures that reflect the performance of a work unit, business unit and/or firm as exclusive unit. Organisational performance is created by aggregated measurements at an organisational level.

Organizational performance is a multidimensional construct that consists of four elements. These include relative profitability, return on investment, customer retention, and total sales growth (Kim, Hoskisson & Wan, 2004). An organization can assess organizational performance according to the efficiency and effectiveness of goal achievement (Robbins and Coulter, 2002). Hancott (2005) observes that organizational performance; effectiveness and efficiency are synonyms that are interchangeable. Hancott (2005) further points out that a number of indicators have been adopted to measure organizational performance since mid-1900, such as profit growth rate, net or total assets growth rate, return on sales, shareholder return, growth in market share, number of new products, return on net assets, and many others. There are various ways to understand organization performance but in this thesis profit will be the major indicator of performance.

1.1.3 Service Quality Management and Performance

Quality management literature has shown that service quality practices are positively related to firm performance. Flynn, Schroeder and Sakakibara (1995) examined the relationships between eight dimensions of quality management and performance using a path analysis. The analysis showed that management support, customer relationship, supplier relationship and people management are significant to firm performance. SQM practices have been documented extensively in measurement studies as well as in the studies that have investigated the relation of SQM practices to various dependent variables (Jin, 2005). Kotler (2007) argue that various studies have indicated that well-managed service companies share the following common business practices; a strategic concept, a history of top-management commitment to quality, high standards, self-service technologies, systems for monitoring service performance and customer complaints.

It has been measured in various ways and found that the quality management model and specific practices which best predict performance varies across the world. Service quality management is most commonly seen as a set of management practices (all firms regularly set and refine goals for their pursuits that are both strategic and economic, high performance is likely to be a function of the degree to which the firm has achieved its goals (Lei & Slocum, 2005). Kaplan and Norton (1996) underlined that conventionally, organization performance is measured by monetary pointers such as market share, total sale and net profit. Hence to overcome potential inadequacies of organization performance frameworks, this study incorporates non – financial classes: such as leadership, employee management, customer focus, continuous improvement, process management, system process, incentives and recognition) tin relation to organization performance.

1.1.4 Shipping Agency in Kenya

Muthiah (2010) defines agency as "a legal relationship that is created when two parties enter into an agreement; where the agent represents the principal, subject to the principal's right to control the agent's conduct concerning the matters entrusted to him". He further describes that the agent in a ship agency agreement must clearly express in his duties as an agent, as acting on the authority of a named and known principal with respect to all correspondences, contracts, documents, emails, telexes and faxes. Shipping agency in Kenya goes way back to the early 1970's through the establishment of Kenya Ships Agents Association (KSAA) a member of Federation of National Associations of Shipbrokers and Agents (FONASBA). KSAA represents the interests of over 40 shipping lines and agents and plays a leading role to ensure Kenya's trade with the outside world flourishes.

According Knight (2013), the main aim and duty of a ship's agent is to protect the vessel's interest at all times especially with regards to the arrival and departure (ETA and ETD) of the ship in the port at the lowest possible cost. Major services provided by Kenya ship agents include: Port Agency which involves all activities related to port conditions, berthing restrictions, local port, regulations, cargo operations (loading and discharging), estimated duration of the port call (ETA) and estimation of port and cargo expenses (Pro-forma Disbursement Accounts), Husbandry Agency which involves the management of vessels and crew requirements, ship cargo services involving stevedoring, warehousing, storage and delivery (Jean, 2011).

1.2 Research problem

With the dynamic change in the working environment ship owners, want to appoint agents who conform to very high standards. Poor service quality management practices will lead to poor performance of both the ship owner and the ship agents. The researcher seeks to analyse what service quality management practices that can be used to enhance performance of shipping agents in Kenya.

Study by Hassan, Mukhtar, Qureshi and Sharif (2012) found a positive relationship between quality management practices and performance of Pakistani manufacturing firms. Furthermore, it is also found that customer focus was perceived as a dominant TQM practice for enhancing quality performance. Al-refaie, Ghnaimat and Ko (2011) examined on the effect of quality management practices on organizational performance in Jordan concluded that organizations 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.

Owiti (2014) conducted a research on quality management practices and performance of hotels in Nairobi concluded that quality management practices have been adopted moderately and to a small extent. She recommends these practices should be adopted to a larger extent since it is the quality of product and hotel that give it competitive advantage and is a critical success factor. Ndegwa (2012), concludes that there is a lot of importance attached to service quality better bank performance. Ngigi (2013), in her study of service quality and performance of paid television services found a close relationship between service quality and performance and recommends that paid television services providers have to improve performance on all the dimensions of service quality.

A number of studies have been made in the area of service quality management and performance in various industries, very little research has been done in the shipping industry to broaden public knowledge about ship agency. 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 shipping agents in Kenya adopted SQM? What is the relationship between service quality management and performance of shipping agents in Kenya?

1.3 Research objectives

The general objective of this study will be to investigating the relationship between service quality management and performance of shipping agents in Kenya. The specific objectives are:

- i. To examine the extent of adoption of service quality management by shipping agents in Kenya.
- To analyze the relationship between service quality management and performance of shipping agents in Kenya.

1.4 Value of the study

The finding from this study may help management to focus on the identified SQM practices to achieve higher levels of satisfaction in the industry which can provide an advantage over other industries in retaining their competitive environment. Managers can further enhance their knowledge in driving the identified key SQM practices from the study and maximize the potential of the formal quality system. The results will determine the significant SQM practices and their impact on organizational performance in the Kenya Shipping Agents. The

study will provide a baseline to what extent SQM practices have been in place at a company. Thus, knowledge of this baseline can help in gaining continuous improvement in the company performance.

Scholars, students and other researchers may also find the study helpful to identify further areas of research built on the findings of this research. The study may be a source of reference material for future researchers on other related topics; it may also help other academicians who undertake the same topic in their studies. The study may also highlight other important relationships that require further research.

The findings from this study may help the government to provide a significant contribution in developing a better understanding of the SQM practices and quality performance in service industries. The results of the study may also be used by policy makers on service quality management decisions especially the recommendation of best service quality management practices to be adopted for better firm performance

CHAPTER TWO LITERATURE REVIEW

2.0 Introduction

This chapter reviews the past researches which have carried out their research in the same field of study. The specific areas covered here are the theoretical framework, service quality management models, service quality management practices, empirical review and conceptual framework.

2.1 Theoretical Foundation

The theory of quality management has recognized many quality management practices which have been documented and empirically analysed in measurement studies and in studies that have investigated the relationship between quality management practices and performance. The theory of quality management has been developed from three different areas. Chase and Bowen (1991) offer three alternative conceptualizations of service quality that is the attribute theory, the interaction theory and the customer satisfaction theory.

2.1.1 Attribute Theory

The attribute theory assumes that the attributes of the service delivery system determines the service quality and that management has considerable control over the input defining these attributes. The attribute theory assumes that service quality primarily focuses on service delivery system and it applies the product quality conceptualization to services. An attribute theory approach further assumes that management has substantial control over the input explaining these attributes (Klaus, 1985).

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.

2.1.2 Customer Satisfaction Theory

Schiffman and Karun (2004) define customer satisfaction as an individual's perception of the performance of the products or services in relation to his or her expectations. Customer satisfaction is in line with the fact that service quality is a determinant of customer satisfaction, because service quality comes from outcome of the services from service providers in organizations considered to be based on the customer's experience on a particular service encounter (Cronin & Taylor, 1992).

A customer satisfaction theory perspective views service quality as the difference between service quality expectations and the perceptions of the actual service offered (Parasuraman et al., 1988). The customer satisfaction theory places substantial importance on customer perception while the attribute theory focuses on the technical aspects of production. Czepiel (1986) suggests that satisfaction is the result of some comparison process in which expectations are compared with that which is received, it can differ from the actual evaluations or the perceptions of service quality. To understand quality, an understanding of the concept of physical attributes of a service, as well as, consumer's psychology and culture

is required. Customer satisfaction leads to repeat purchases, loyalty and to customer retention (Zairi, 2000).

2.1.3 Interaction Theory

Interaction theory defines service quality as a shared experience of gain by all participants (Klaus, 1985). According to the interaction theory, service quality is as a result of the experience and need satisfaction of the participants who are the customer and the contact employee. Gronroos (1985) define interaction theory as service encounters in which employees have the responsibility of delivering the services to meet the requirements of external customers. They argued that the front line employees who have the direct contacts with external customers are playing a very important role in this service encounter, because any failure from the employees will lead to losses of external customers.

The interaction theory approach to service quality views service quality as a "shared experience of gain" by all participants in the service encounters (Klaus, 1985). Service quality arises through the experiences and the satisfaction of needs of the participants – customer and contact employee. Klaus (1985) argues that service quality is a phenomenon experienced by individuals and is manifested in individual behaviour. It is also a dynamic, complex configuration of physical, situation, and behavioural variables. Klaus (1985) defines quality as "the shared experience of gain by participants and stable pattern of behaviour associated with a given type of service encounter.

2.2 Service Quality Management Models

An organization can gain competitive advantage by use of technology for the purpose of enhancing the service quality by gathering information on marked demand. Conceptual models in service quality enable management to identify quality problems. By preventing the identified problems enables the possibility of improving the profitability, efficiency and overall performance (Parasuraman et al 1988). Service quality models have been in use in many industries for a while now. SERVQUAL has been the most used model when measuring service quality and the most widely applied scale in researches.

2.2.1 The Gap Model

Service quality is a function of the differences between expectation and performance along the quality dimension. Unlike goods quality, which can easily be measured objectively in terms of defects and durability, service quality is an elusive construct that may be difficult to measure. (Parasuraman et al, 1988). Parasuraman et al (1985) research revealed that service quality stems from a comparison of the customers' expectations or desires from the service provider with their perceptions of the actual service performance. Based on their findings they developed a service quality model based on 5 gap analysis;

GAP 1: Customer expectation-management perceptions gap, The Knowledge Gap.

GAP 2: Management perception-service quality specifications gap, The Policy Gap.

GAP 3: Service quality specifications - service delivery gap, The Delivery Gap.

GAP 4: Service delivery-external communications gap, The Communications Gap.

GAP 5: Expected service-perceived service gap, The Service Quality Gap

They argue that perceived service quality is the degree and discretion of discrepancy between consumers' perceptions and expectations. According to Brown and Bond (1995), GAP model is one of the best received and most heuristically valuable contributions to the service literature. The first four gaps (Gap1,Gap2, Gap3 Gap4 are identified as functions of the way in which service is delivered whereas Gap5 pertains to the customer and as such is considered to be the true measure of service quality.

2.2.2 SERVQUAL Model

SERVQUAL stand for service quality as the discrepancy between a customer's expectations of a service offering and customer's perception of the service received. The purpose of SERVQUAL is to serve diagnostic methodology for uncovering wide areas of an organization's service quality weakness and strengths. They developed 5 dimensions namely: tangible, reliability, responsiveness, assurance and empathy. These 5 dimensions developed what is known as the SERVQUAL Model.

The SERVQUAL instrument produces a systematic, multi stage and interactive process that evolves from the identified dimensions and items within that correspond to the specific companies and industries (Zeithaml et al, 1988). SERVQUAL is only one of the instruments used in service quality analysis and there are different approaches which might be stronger in closing the gaps. SERVQUAL has been criticised on both theoretical and operational grounds, although Ausbonteng et al (1996) concludes that: "Until a better but equally simple model emerges, SERVQUAL will predominate as a service quality measure". For this particular research, what management practices have been placed to counter GAP5?

2.3 Service Quality Management Practices

SQM involves the application of quality management practices in all aspects of organization including customers and suppliers and their integration with the key business processes. Oakland and Brah (2000) conducted studies on quality management practices and business performance. Based upon their literature, the researcher has selected the following list of seven main practices of SQM for this study: top management support, employee involvement, customer focus, continuous improvement and innovation, process management, system process and incentives and recognition.

2.3.1 Leadership

Leadership can be defined in different ways that it is hard to come up with a single working definition. Leadership is not just a person or group of people in a high position. Leadership is a process in which leader is indulged in various activities to achieve any goal. Leadership refers to the behaviour or attitude of a leader to collect and direct the individuals towards any goal. Leadership is a communication process of leader and individuals. So the effectiveness of an organization depends upon the effective leader and effective leader is that person who has an effective leadership style (Karamat, 2013).

Leadership is one of the key driving forces for improving firm performance. According to Milakovich (2006), leadership should know how to continually improve systems, predict customer needs and adopt service cultures to focus on customer-driven quality. It is imperative to achieve high service quality to ensure an organisation's survival in a competitive, profit-driven economy. Deming (1986) and Juran (1989) provided that leadership is responsible to implement a quality process in the organization.

2.3.2 Employee Involvement

Employee involvement is a process of participation and empowerment of employees in order to use their input towards achieving higher individual and organizational performance. Involvement refers to the employee participation in decision making and problem solving, and increased autonomy in work processes. As a result, employees are expected to be more motivated, more committed, more productive and more satisfied with their work. Employee involvement enables the organization to have a better insight about the way of functioning and where it can potentially make improvements that would be beneficial for both, the organization and the employees. (Sofijanova & Chatleska 2013)

Delaney and Huselid (1996) found that human resource management strategies have a positive effect on the organizational performance. To remain competitive, organization must train and manage their people to improve their skills & abilities which results in increased performance. Employees in an organization may acquire new knowledge and skills by participating in SQM. As they participate, it leads to lasting changes in behaviour which results in quality improvement (Juran & Gryna, 1993).

2.3.3 Customer Focus

Kotler (2004) study asserts that organization can achieve profitable growth by building high customer lifetime value. His findings further emphasizes that organization must move from the level of studying customer segments to shaping their products according to the customers' needs and wants. In the same context the study of Barah and Tee (2002) stated that managing customer relation, recognizing their needs and demands increases the organizational performance and eventually results in long term success. However, Evans and Lindsay (1995)

study portray customer focus as how efficiently the organization determines the current and future need of customer, their requirements and expectations.

Customer focus centres on gaining a profound understanding of customer requirements and expectations and using that understanding to provide a product or service far exceeding satisfaction. When viewed as feedback, customer focus allows an organization to respond to customer reactions to the output of the system— products or services—and to identify improvements. This concept encompasses the external sponsor who pays for the effort and the end user of the product or service. Customer focus also applies inside an organization to everyone who receives and builds upon another person's work that is the internal customer (Juran 1989). A successful organization recognizes the need to put the customer first in every decision made. In product design and during the development process, the customer should be closely involved and should provide inputs at every stage of the process, so as to avoid waste, defects and quality problems (Flynn, Schroeder, & Sakakibaba, 1994).

2.3.4 Continuous Improvement

Continuous improvement refers to both incremental and breakthrough improvement in organizational performance. Continuous improvement and innovation are the most important part of services, means searching for never-ending improvements and developing processes to find new or improved methods in the process of converting inputs into useful outputs. It helps in reducing the process variability thereby continuously improving the output performance (Sadikoglu and Zehir, 2010). Customers are the important asset for any company. In order to be successful, organizations have to design their products according to the needs of customers. Customization is the key for achieving profitable growth (Asikhia 2010).

Corbett and Rastrick (2000) asserted that the best way to improve organizational performance is to continuously improve the performance activities. Real improvement requires that organizations translate learning activities into action. Kotler (2004) asserts that organization can achieve profitable growth by building high customer lifetime value. His findings further emphasizes that organization must move from the level of studying customer segments to shaping their products according to the customers' needs and wants.

2.3.5 Process Management

Organizations are continually under competitive pressure and forced to re-evaluate their business models and underline business processes. Zairi (1997) defines a process as an approach for converting inputs into outputs. It is the way in which all the resources of an organization are used in a reliable, repeatable and consistent way to achieve its goals. Process management is a systematic approach in which all the resources of an organization are used in most efficient and effective manner to achieve desired performance. Process management deals with how organization designs and introduces the product and services.

Deming (1986) said that improvement in the quality lies in the handling and controlling of the process. Process management involves precisely defining and documenting process management procedures with instructions for machine operation and set-up posted at each workstation to minimize the likelihood of operator error. The objective of process management is to reduce process variation by building quality into the production process leading to increase the quality of outputs as well as decreasing the cost such as rework costs and waste costs (Anderson et al., 1994). The more business process oriented an organization is, the better it performs both from the perspective of the employees as well from an overall perspective.

2.3.6 System Process

Gibson (1962) defines system as an integrated assembly of interacting elements [or components] designed to carry out cooperatively a predetermined function. This implies a multiplicity of people, processes, technologies, and materials that together perform a significant function and contribute to a specific aim—a service or product development. The input to this three-function system comes from sensing the environment; the processing is done by people using technology and methods to do analysis and make decisions; and the output constitutes the response of the system to the input. The infrastructure to make the system work is contained in subsystems such as planning, information, communication, technology, and process control. Improvement of systems that create and deliver firm's primary products and services will lead to better quality products and services, costs will decrease and defects rates will be minimized, customer satisfaction will be achieved (Aquilano, Chase & Jacobs, 2009).

2.3.7 Incentives and Recognition

Incentives are generally developed to generate employee motivation, satisfaction, and greater performance. The link between the three variables has been widely discussed and debated among the researchers, scholars and practitioners (Latham, 2007). The effectiveness of incentives for reaching higher behavioural outcomes of employees is based on the degree to which those incentives are perceived to fulfil or satisfy needs of the employees. Employee encouragement such as rewards and recognition motivates employees to perform which in turn influence customer satisfaction. Since employees' satisfaction could be both the cause

and outcome of overall performance, organizations should demonstrate the link between reward and performance in order to motivate employees.

Latham, 2007, suggests that if there is no link between employee performance and satisfaction or there is a negative one, then the organization clearly has an ineffective system of incentives. Yusuf et al. (2007) reports that employee encouragement is positively related with organization performance and employee satisfaction. It has also been found that employee encouragement gives the right direction to work force and is an essential practice in customer/public dealing industries (Schneider & Bowen, 1995). Therefore, it can be concluded that incentives have great potential for improving employee work performance and increasing production efficiency through encouraging individuals or groups to act in a desired and productive way.

2.4 Empirical Review on Service Quality Management and Organization Performance

Many researchers studied the impact and relationship of quality management with the performance of the organization. Joiner (2006) conducted a research on the role of organization support and co-worker support on quality management and performance. He found that degree of SQM implementation is positively related to organization performance. His findings show that the more one implements TQM, the greater would be the performance. Further, the greater the firm satisfies the customer needs, motivates its employees and makes continuous improvement; the higher would be the performance. Pinho (2007) justified this by relating the TQM and organizational performance. His empirical study showed that there was positive relationship between the two and the more the organization implements TQM, the greater would be the performance.

Valmohammadi's (2011) conducted a study on the impact of SQM implementation on the organizational performance of Iranian manufacturing SMEs. His research found that factors such as leadership, process management and customer focus affected organizational performance. The results showed that there was a positive impact of these variables on the performance. Leadership enhanced the performance and had a positive significant effect. Process management positively correlated with the performance and same with customer focus. Tan et al. (1999) examined that the use of SQM practices positively affect performance. The study illustrated that performance depends on SQM and management commitment.

Ngigi (2013) research on the effect service quality and performance of paid television proved a close link between service quality and performance. Study by Tanui (2008) sought to establish the extent of implementation of service quality practices by pharmaceutical manufacturing companies in Kenya. The findings revealed that top management was more supportive to quality management practices than lower level management. Owiti (2014) conducted a research on quality management practices and performance of hotels in Nairobi found that quality management practices have been adopted moderately and to a small extent. She recommended SQM practices should be adopted to a larger extent since it is the quality of product and hotel that give it competitive advantage and of which is a critical success factor.

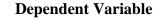
These studies were conducted in various sectors of the Kenyan economy and across the globe but none was on the shipping agency. Hence the need to study the relationship between service quality management and performance of shipping agents in Kenya.

2.5 Conceptual Framework

Generally, organizational performance is assessed by the application of financial measures. According to Bogdan and Biklen (2003) a conceptual framework is a basic structure that consists of certain abstract blocks which represent the observational, the experiential and the analytical/synthetical aspects of a process or system being conceived. An independent variable is that variable which is presumed to affect or determine a dependent variable. It can be changed as required, and its values do not represent a problem requiring explanation in an analysis, but are taken simply as given (Bogdan & Biklen, 2003). The independent variable in this study is quality improvement practices. A dependent variable is what is measured in the experiment and what is affected during the experiment. The dependent variable responds to the independent variable (Everett, 2002). From the conceptual framework illustrated in Figure 2.1, firm performance is directly influenced by service quality management practices .It can be changed as required, and its values do not represent a problem requiring explanation in an analysis, but are taken simply as shown in figure 2.1.

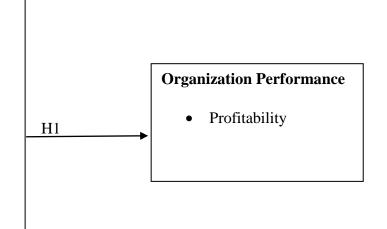
Figure 2.1 Conceptual Model

Independent Variable



Service Quality Management Practices Leadership (Top Management support) Employee Involvement / People Management Customer Focus

- Continuous Improvement
- Process Management
- System Process
- Incentives & Recognition



Source: Researcher, (2015)

The framework is proposed to explore relationships between the seven quality management practices and their relationship on organization performance. The diagram above illustrates the relationship between ingredients of service quality management practices and performance of organizations (the dependent variable). The study conceptualized that service quality management practices process would form independent variables and its effect was expected to impact positively on the performance of the business.

CHAPTER THREE RESEARCH METHODOLOGY

3.0 Introduction

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

3.1 Research Design

A descriptive survey will be used to determine the relationship between SQM and performance of Kenya Shipping Agents. The researcher chose this design due to its ability to ensure minimization of bias and maximization of reliability of evidence collected. A descriptive research is more rigorous, accurate and seeks to find out who, what, when and how, aspects of the research (Cooper & Schindler, 2006).

3.2 Population of the Study

The population of this study will consist of all agents using the port of Mombasa and are eligible registered members of Kenya Ship Agents Association. Currently there are 42 registered agents as at June 2015 (KSAA website) from which the General Manager or Operation manager will be drawn from each agency firm, making a total of forty two (42) respondents.

3.3 Data Collection

Primary data will be used in the study. The data will be collected from respondents using closed ended questionnaire. Questionnaires are suitable to obtain important information about the population and are said to reach large number of subject who are able to read and write independently (Orodho, 2004). Drop and pick method will be used to administer the questionnaire. Hence each respondent will receive the same set of questions in exactly the same way and will be made aware of purpose of the research and assured of their confidentiality.

3.4 Data Analysis

Collected data will be chronologically arranged with respect to the questionnaire outline to ensure that the correct code is entered for the correct variable cleaned and tabulated. The tabulated data will be analysed using descriptive, correlation and regression statistics with the aid of Statistical Package for Social Sciences (SPSS). The following regression mode will be used:

 $\mathbf{Y} = \boldsymbol{\beta}\mathbf{0} + \boldsymbol{\beta}\mathbf{1}\mathbf{X}\mathbf{1} + \boldsymbol{\beta}\mathbf{2}\mathbf{X}\mathbf{2} + \boldsymbol{\beta}\mathbf{3}\mathbf{X}\mathbf{3} + \boldsymbol{\beta}\mathbf{4}\mathbf{X}\mathbf{4} + \boldsymbol{\beta}\mathbf{5}\mathbf{X}\mathbf{5} + \boldsymbol{\beta}\mathbf{6}\mathbf{X}\mathbf{6} + \boldsymbol{\beta}\mathbf{7}\mathbf{X}\mathbf{7} + \mathbf{e}$

Where;

- Y = Organization Performance
- X1 = Leadership/Top management commitment practices
- X2 = Employee management practices
- X3 = Customer focus practices
- X4= Continuous Improvement practices
- X5= Process management practices

X6= System process practices

X7= Incentives and recognition practices

 $\beta 0\beta 1\beta 2\beta 3\beta 4\beta 5\beta 6\beta 7$ is the coefficient of the variables

e is the error term

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter discussed the findings of the study. The purpose of the study was to determine the relationship between service quality management practices and organization performance of shipping Agents in Kenya. The analysis was based on the data collected from 29 Shipping Agents in Kenya The researcher made use of frequency tables and figures to present data. Data composed was collated and reports were produced in form of tables and figures and qualitative analysis.

4.2 Respondent and Firm Profile

The questionnaire was designed in line with the objectives of the study. Of the 42 questionnaires that were sent out, 69% were returned. This response rate was quite good enough for statistical analysis as it is above Mugenda and Mugenda (1999)'s stipulation that a response rate of 50% is adequate for analysis and reporting, a rate of 60% is good and a response rate of 70% and over is excellent.

The study sought information on various aspects of respondents' background that is designation, respondent's years of experience in the agency firm. Information sought out regarding the firm included ownership status of the firm, years of experience, number of employees currently employed in the firm and the approximate proportion of the local market the firm commands. This information aimed at testing the appropriateness of the respondent in answering the questions regarding service quality practices and organization performance among shipping Agents in Kenya.

4.2.1 Respondents Profile

Employees are assigned to the positions in which they are qualified. The study sought to determine the respondents' positions. The findings were tabulated in Table 4.1:

Table 4.1 Position Held by Respondents

Designation	Frequency	Percentage
Senior manager	11	37.93
Middle manager	11	37.93
Lower level manager	7	24.14
Total	29	100

Source: Research data, (2015)

According to the findings in table 4.1 above, most of the respondents 37.9% are senior level managers, 24.1% are middle level managers, and 37.9% are lower level managers. This shows that all the respondents are in management level as targeted.

4.2.2 Work Experience

Respondents' length of service refers to the number of years an employee has worked in a functional department. It also refers to any experience that a person gains while working in a specific field or occupation. The study sought to establish the period of time the respondents had worked for their organization. The findings are illustrated below in Table 4.2:

Table 4.2 Respondents Length of Service

Respondents length of service	Percentage
Up to 5 years	52
6-10 years	38

11-15years	3
16-20 years	3
Above 20 years	3
Total	100

Source: Research data, (2015)

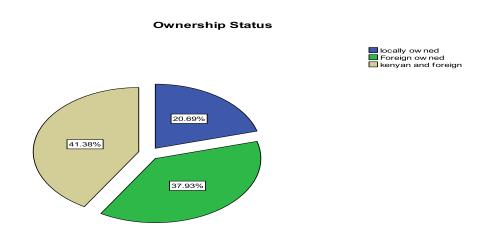
From the findings in Table 4.2, most of the respondents (52%) had worked for less than five years, 38% had worked for less than ten years, 3% had worked for less than fifteen years, 3% had worked for less than 20 years and 3% had worked for more than twenty years. This illustrates that most of the respondents have worked in their current position in management for up to five year enabling them to better understand service quality management practices and organization performance in their respective firms.

4.3 Organization Profile

4.3.1 Ownership Status

The study found that 21% is fully locally owned, 41% was joint Kenyan and foreign owned and 38% was fully foreign owned as per the pie chart below.





Source: Research data, (2015)

4.3.2 Length of Service

The study sought to establish the length of service the firm has been operation. The results were tabulated in Table 4.3:

Table 4.3: Length of Service in Operation

Years of Operation	Frequency	Percentage
Up to 5 years	5	17
6-10 years	4	14
11-15 years	6	21
16-20 years	7	24
above 20 years	7	24
Total	29	100

Source: Research data, (2015)

From the table 4.3, 17% of the firms had been in operation for up to 5 years, 14% had been in operation for up to 10 years, 21% had been operation for 15 years, 24% and 24% had been operation for 20 years and above 20 years respectively.

4.3.3 Number of Employees

The respondents were asked to establish the number of employees employed in their organizations. The results were tabulated in Table 4.4:

Number of Employees	Frequency	Percentage
Up to 10 employees	3	10
11-20	4	14
21-30	3	10
31-40	3	10
41-50	6	21
Over 50	10	34

Total 29 100

Source: Research data, (2015)

The results in table 4.4 indicate 10% of the agency firms had 10 employees, 14% had 20 employees, 10% had 30 employees, 10% had up to 40 employees, 21% had up to 50 employees and 34% had over 50 employees as illustrated above.

4.3.4 Market share

The study further sought to determine the market share their organization possessed. The results were summarized as per below:

Proportion of market share	Frequency	Percentage
Less than 10%	18	62
10 to 20%	5	17
21 to 30%	3	10
41 to 50%	2	7
More than 50%	1	3

29

Table 4.5: Proportion of market share

Source: Research data, (2015)

Total

The results in table 4.5 reveal that 62% of the Shipping Agency firms controlled less than 10% of the market share, 17% of the firms controlled up to 20% of the market, 10% percent control up to 30% of the market share, 7% control up to 50% of the market share and 3% of the all the firms control more than 50% of the market share.

100

4.3 Service Quality Management Practices

The study sought to establish the relationship between service quality management (SQM) and organization performance of Shipping Agents in Kenya. The respondents were therefore asked to indicate the extent to which they agreed with the attributes associated with each of the service quality practices indicators and to rank their level of rating along a number of

constructs. The study used a rating scale ranging from "Strongly Disagree" (1) to "Strongly

Agree" (5).

4.3.1 Top Management Commitment

The respondents had been asked to indicate the extent to which they agreed with specific top management Commitment statements. The findings are presented in Table 4.6

Table 4.6 Top Management Commitment

Top management commitment		Std Deviation
Top management are committed to quality performance	4.17	0.81
Our company's top management provides personal leadership for quality services and quality improvement	3.55	1.18
Top management is evaluated for quality performance	4.07	0.75
Major departments heads participate in the quality improvement process	3.59	1.05
Quality issues are reviewed during management meetings	3.66	1.11
Our company's top management has objectives for quality performance.	4.21	0.82
Average	3.88	0.95

Source: Research data, (2015)

The results in Table 4.6 reveal that mean score for the six statements used to measure top management commitment was between 4.21 and 3.55 Top management had objectives for quality performance had the highest ranking in with a mean score of 4.21 and standard deviation of 0.82 being evaluated for quality performance while top management provision for personal leadership had the lowest score with a mean of 3.55 and standard deviation of 1.18. This shows that the top management sets objectives for quality performance.

4.3.2 Employee Management

The respondents were asked to indicate the extent to which their firms focused on employee management. The relevant results are summarized in the Table below:

Employee management	Mean	Std Deviation
Employees are encouraged to be totally involved in quality improvement.	4.1	0.82
Management let employees participate in achieving organisational goals.	3.86	1.06
Employees are involved in quality decisions.	3.41	1.18
Employees are trained in quality principles	3.66	1.23
Employees are trained in problem solving skills	3.86	1.09
There is bottom-up, top-down and horizontal communication among all staff	4.14	0.99
Average	3.84	1.06

Table 4.7 Employee Management

Source: Research data, (2015)

The employee management had six variables as shown in the Table 4.7 with respective descriptive statistics. The respective means ranged from 3.66 to 4.14, with existence of bottom –up, top- down and horizontal communication having a mean of 4.14 and a standard deviation of 0.99 while training of employees in quality principles had the least mean of 3.66 with a standard deviation of 1.23. This implies that that the firms have a bottom-up, top down and horizontal communication among all staff.

4.3.3 Customer Focus

The respondents were asked to indicate the extent to which their firms practiced continuous Improvement. The relevant results are summarized in Table 4.7 below:

Table 4.8 Customer Focus

Customer focus	Mean	Std Deviation
Employees are in close contact with our customers	4.41	0.68
Firms carry out studies to evaluate customer satisfaction.	3.69	1.2
Employees know who our customers are	3.83	1.1
The firm carries out studies to determine its customer needs and wants.	4.03	0.91
Customer requirements are used as the basis for quality.	4.21	0.9
Average	4.03	0.96

Source: Research data, (2015)

The results in Table 4.8 shows a summary of customer focus showing the rank of the variables

to the general performance of customer focus to general performance. Employees being in close contact with their customers had the highest ranking with mean of 4.41 and a standard deviation of 0.68. The lowest score noted was studies carried out to evaluate customer satisfaction with a mean of 3.69 and a standard deviation of 1.20. This means that employees close contact with customers enhances organization performance.

4.3.4 Continuous Improvement

The respondents were asked to indicate the extent to which their firms practiced continuous Improvement. The relevant results are summarized in Table 4.9:

Table 4.9 Continuous improvement

Continuous Improvement	Mean	Std Deviation
Continuous training for its managerial staff is provided	3.52	1.09

Continuous training for its non-managerial staff is provided	3.32	1.11
Training needs are always evaluated and addressed.	3.41	1.02
Firm measures employee satisfaction on the training received	3.29	1.15
Employees are trained on team working.	3.76	1.06
Average	3.46	1.08

Source: Research data, (2015)

The results in Table 4.9 show mean ranging from 3.29 - 3.76. Training of employees on teamwork had highest mean of 3.76 and a standard deviation of 1.06 whereas firms measurement of employee satisfaction on the training received had the least with a mean 3.29 and a standard deviation of 1.15. From the findings, the researcher concludes that these activities are carried out though not at a very significant level.

4.3.5 Process Management

The respondents were asked to indicate the extent to which their firms' process management contributed to organization performance. The relevant results are summarized Table 4.10

Process Management	Mean	Std Deviation
Customer requirements are emphasized and considered in the design process	3.52	1.33
Product/service design and development involves everybody.	3.76	0.98
Multiple departments coordinate in the product/service development process	4	0.86
Average	3.76	1.05

Source: Research data, (2015)

The results in Table 4.10 reveal that the mean score for the three statements were 3.52, 3.76, and 4.00 respectively which had standard deviation of 1.33, 0.98 and 0.86 respectively. Multiple departments coordinating in service development had the highest mean of 4.0 with a standard deviation of 0.86 while emphasis on customer requirements had the least ranking

with a mean of 3.52 and standard deviation of 1.33. This shows multiple departments coordination is more emphasized in service development.

4.3.6 System Process

The respondents were asked to indicate the extent to which they agreed to the contribution of system process. The relevant results are summarized in the able 4.11:

System Process	Mean	Std Deviation
Quality data and information is available to all staff.	3.48	1.09
Quality data are used as tools to manage quality	3.59	1.09
Quality data are used to evaluate supervisory and managerial performance.	3.72	1
Our firm collects data and analyse data related to its activities	3.62	0.98
Average	3.6	1.04

Source: Research data, (2015)

The results in Table 4.11 had respective means ranging from 3.48 to 3.72 with standard deviation of 0.98 - 1.09.Use of quality data to evaluate supervisory and managerial performance had highest mean of 3.72 and standard deviation of 1.0 while availability of quality data and information to all staff had lowest mean of 3.48 and standard deviation of 1.09. From the findings it is evident the employees feel that availability of quality data is not sufficient and that they were not sure of it.

4.3.7 Incentives and Recognition

The respondents were asked to indicate the extent to which they agreed on incentives and recognition offered by their respective firms. The relevant results are summarized in the Table 4.12

Incentives and Recognition	Mean	Std Deviation
Company has reward system to appreciate employee contributions	3.34	1.26
Systems and procedures of appreciating employee contributions are well defined	3.38	1.21
Employee's enumeration is proportional to work knowledge and contribution	3.66	1.01
Employees are well motivated.	3.55	1.15
Average	3.48	1.16

Table 4.12 Incentives and Recognition

Source: Research data, (2015)

The findings tabulated in table 4.12 show that Shipping Agents in Kenya have generally a weak incentives and recognition system. Employee's enumeration is proportional to work knowledge and contribution had highest mean score of 3.66 and a standard deviation of n of 1.01 while systems and procedures of appreciating employee contributions was ranked least with a mean of 3.38 and standard deviation of 1.21. This shows that employees are not well aware of the rewards and recognition policies and the systems and procedures of appreciating their contributions of which they are recognized and rewarded accordingly.

4.4 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 4.13

Table 4.13 Summary of the Extent of Adoption of Service Quality Management

Practices

Service Quality Management Practices	Mean	Rank
Customer focus	4.03	1
Top management commitment	3.88	2

Employee management	3.84	3
Process Management	3.76	4
System Process	3.6	5
Incentives and Recognition	3.48	6
Continuous Improvement	3.46	7

Source: Research data, (2015)

From the data tabulated in Table 4.13 customer focus with a mean score of 4.03 is ranked first. This implies that majority of the Shipping Agents in Kenya have adopted customer focus as part of their service quality management practices. It is also apparent from the study results that top management commitment with a mean score of 3.88 is ranked in the second position. Employee's involvement (mean = 3.84) comes third followed by process management, system process, incentives and recognition with the mean scores of 3.76, 3.6 and 3.48 respectively. Continuous Improvement is ranked last with a mean score of 3.46, an indication that it is the least adopted service quality management practice among the surveyed Shipping Agents in Kenya.

4.5 The Relationship between SQMP and Organization Performance

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

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 4.14 Regression Model Summary

Model Summary^b

				Std. Error of the
Model	R	R Square	Adjusted R Square	Estimate
1	.860 ^a	0.74	0.654	1.043

Source: Research data, (2015)

a. Predictors: (Constant), Top management practices, Employee management practice, Customer focus practice, Continuous improvement practice, process management practice, System process practices, Incentives and recognition practices

b. Dependent variable (Average Profits Years 2012-2014)

As shown in table 4.14 above the result shows a residual value of 0.860 which is the difference of the observed value and fitted value. The coefficient of determination, R^2 , has a value of 0.740 which is 74% inherently good in its goodness of fit. This is also attributed on human psychological behaviour hence simply hard to predict than a physical process. The predictors: Top management practices, Employee management practice, Customer focus practice, Continuous improvement practice, process management practice, System process practices , Incentives and recognition practices, associated with the response value represent the mean change in predictor with an adjusted R^2 value of 0.654. The standard error of the estimate, is 1.043, which gives the average distance of the data point from the fitted line is about 1.043 %, hence approximately 95% of the observation fall within plus /minus 2 standard error of the regression from the regression line.

		Sum of	df	Mean	F	Sig.
		Squares		Square		
Top Commitment	Between	8.270	9	.919	2.210	.070
	Groups					
	Within	7.898	19	.416		
	Groups					
	Total	16.167	28			
Employee	Between	7.119	9	.791	1.324	.289
Management	Groups					
	Within	11.354	19	.598		
	Groups					
	Total	18.473	28			
Customer Focus	Between	6.066	9	.674	1.358	.274
	Groups					
	Within	9.433	19	.496		
	Groups					
	Total	15.500	28			
Continuous	Between	10.828	9	1.203	1.695	.159
Improvement	Groups					
	Within	13.487	19	.710		
	Groups					
	Total	24.314	28			
Process Management	Between	6.366	9	.707	.888	.553
	Groups					
	Within	15.140	19	.797		
	Groups					
	Total	21.506	28			
System Process	Between	11.087	9	1.232	1.814	.131
	Groups					
	Within	12.902	19	.679		
	Groups					
	Total	23.989	28			
Incentives and	Between	13.417	9	1.491	1.743	.147
Recognition	Groups					
	Within	16.255	19	.856		

Table 4.15 Analysis of Variance (ANOVA)

Groups				
Total	29.672	28		

Source: Research data, (2015)

From Table 4.15 the sum of squares between groups and within groups was found highest in System Process and Incentive and Recognition implying that there was a high variability in the examined components with values of 23.989 and 29.672 respectively. Top commitment, employee management and process management had the least sum of squares between groups and within groups meaning there was less variability in the observed values of 16.16, 18.47 and 15.5 respectively. Top commitment variable had the highest F ratio of 2.21 as compared to the rest, meaning that the variance between groups was highest as compared to the rest of the variables of employee management, customer focus, continuous improvement, process management, system process and incentive and recognition. The least value of F statistic was process management with a value of 0.88 meaning it hat the least proportion of variance between groups and within groups.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
		В	Std. Error	Beta		~-8.	
	(Constant)	1.731	1.504		-1.15	0.263	
	Top management practices	0.757	0.312	0.344	2.428	0.024	
	Employee management practice	0.216	0.307	0.1	0.703	0.49	
	Customer focus practice	0.118	0.266	0.074	0.443	0.662	
	Continuous improvement practice	0.412	0.316	0.253	1.305	0.206	
	Process management practice	0.039	0.255	0.022	0.154	0.879	
	System process practices	0.02	0.404	0.013	0.051	0.96	
	Incentives and recognition practices	0.584	0.289	0.333	2.021	0.056	

Source: Research data, (2015)

a. Dependent Variable: Organisation performance (profitability)

The known coefficients for the regression model are β_0 , β_1 , β_2 , β_3 , β_4 , β_5 , β_6 , β_7 from the table above were obtained by least square method. Where:

 $\beta_{0 is}$ the constant value of -1.731 with a 1.504% standard error term

 $\beta_{1 \text{ is}}$ the coefficient of top management process with a value of 0.344 with a standard error of 0.312

 $\beta_{2 \text{ is}}$ the coefficient value of employee management process with 0.10 with a standard error of 0.307.

 β_3 is the coefficient value of customer focus with a 0.074 value with a standard error of 0.266.

 β_4 is the coefficient value of continuous improvement practice with a value of 0.253 with a standard error of 0.316.

 β s is the coefficient value of Process Management with a value of 0.022 with a standard error of 0.255.

 β_6 is the system process coefficient value of 0.13 with a standard error term of 0.404.

 β_7 is the incentive and recognition coefficient value of 0.333 with standard error term of 0.289.

Table 4.17 Residuals Statistics^a

				Std.	
	Minimum	Maximum	Mean	Deviation	Ν
Predicted Value	3.07	9	6.57	1.524	29
Residual	-1.894	2.36	0	0.903	29
Standard Predicted Value	-2.294	1.596	0	1	29
Standard. Residual	-1.817	2.264	0	0.866	29

a. Dependent variable: Organization Performance

Source: Research data, (2015)

From table 4.17 above the residual value was obtained by getting the difference between the dependant (observed) variable and the predicted value with the respective maximum, minimum and standard deviation values. The N value represents the total number of observations which is 29. The sum and the mean of the residuals is zero and this means that the error term, $\boldsymbol{\varepsilon}$, is zero.

Then the regression model for determining organization performance is

$Y = 1.731 + 0.344x_1 + 0.1x_2 + 0.074x_3 + 0.253x_4 + 0.022x_5 + 0.13x_6 + 0.333x_7 + \epsilon$

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The purpose of this study was to examine the relationship between service quality management and Organization Performance of Shipping Agents in Kenya. This chapter presents a summary of the major findings of the study, discussion on theory and practice and conclusions. The chapter also highlights the limitations of the study and provides suggestions for proposed areas of future research. The study had two objectives: To examine the extent of adoption of service quality management by shipping agents in Kenya and secondly to analyse the relationship between service quality management and performance of shipping agents in Kenya.

5.2 Summary

The overall objective of this study was to establish the relationship between service quality management and organization performance. The study established that most of the respondents interviewed were middle level managers who have served for a period of at least five years. The size of the Shipping Agents in Kenya in terms of employees was also established. Most of the firms surveyed have been in operation for more than 20 years. Approximately 41% of the Agency firms surveyed were jointly owned by both Kenyans and foreigners while 37.9 % were fully foreign owned. The results demonstrated that the Agency firms surveyed have low local market share command.

The first objective of the study was to examine the extent of adoption of service quality management by shipping agents in Kenya. The findings revealed significant correlations

among the study variables. Results show that Shipping Agents in Kenya focus more on customer focus of all the service quality management practices. Most respondents agreed that they were in close contact with their customers and used customer requirements as the basis for quality. However, results indicate that moderately and to a small extent shipping firms have adopted SQM practices; top management commitment, employee management, continuous improvement, process management, system process, incentives and recognition.

The second objective of the study was to analyse the relationship between service quality management and organization performance of shipping agents in Kenya. The study depicted a statistically significant relationship between service quality management practices and performance of Shipping Agents in Kenya. The study established a significant positive relationship. The regression model had positive coefficients of predictors (constraints) of the organization performance. This implies that any increase in any variable will substantially lead to increased organization performance in this case profitability.

5.3 Conclusion

The study findings are in line with the observations made in the literature. Findings from the research are in line with Joiner 2006 findings on role of organization support and co-worker support on quality management and performance where the greater the firm satisfied the customer needs the higher would be the performance. Similarly, Valmohammadi 2011 study on SQM implementation on organization performance of Iranian firms, where factors such as customer focus, leadership, process management variables had a positive impact on performance. Tan et al (1999) illustrated that performance depend on SQM, their findings concur with the researcher's findings of a significant relationship between service quality management practices and performance of Shipping Agents in Kenya

These findings also agree with that of Owiti 2014 on quality management practices and performance of hotels in Nairobi where adoption of SQM practices were on a small extent and the need for its adoption to a larger extent for hotels to gain a competitive advantage which is a critical success factor. These findings agree with Pinho 2007 findings where the more the organization implements quality management practices the greater would be the organization performance.

5.4 Suggestions for Further Research

It was established from the study that customer focus was the only largely adopted quality management practice. Other service quality management practices, especially top management support, employee management, continuous improvement, process management, system process, incentives and recognition should be adopted by every firm, in the shipping industry due to the positive impact on organization performance.

From the findings, most of the shipping companies moderately and to a small extent are aware of what Service Quality Management Practices are and its application. With the unique characteristics of the shipping industry, management of the shipping firms should be sensitized on what Service quality management practices are and its application on organization performance.

Lastly, this study was based on profitability as the measure of organization performance. The researcher recommends that other studies to conduct further review of quality management literature to identify additional factors that contribute to service quality management and organization performance.

45

5.4 Limitations of the Study

The study used questionnaire that rely on self- report responses, however the problem with using a questionnaire is that it is based on the assumption that participants would respond to the questions in an honest and accurate manner. The study was faced by a number of limitations. 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. 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. The study has covered duration of the most recent three years and therefore the findings do not reflect the position is it were the previous three years.

The selection of the study variables was not exhaustive. The factors included in the current conceptual framework may not provide a complete image of the firms' service quality management practices, and organization performance. The research used profitability as the only measure of organization performance. A study on other variables can provide additional insights and explanations concerning the drivers of firm performance in the Shipping Industry. The study used key informants from Shipping Agents in Kenya which put constraints on the generalizability of the results to other firms and other country contexts. The sample selection may also limit the generalization of results to the overall population. The narrow and specific focus of this study means the results are limited to Shipping Agency firms only which may not translate to other industry and national contexts

REFERENCES

- Abdullah, M.M, Uli, J & Tali, J.J. (2005), "The influence of soft factors on quality improvement and performance", *Journal of Quality Management*
- Al Refaies, A., Ghnaimat, O. and Ko, J. (2011), "The effects of quality management practices on customer satisfaction and innovation: A perspective from Jordan. International Journal of Productivity and Quality Management", *Journal of Quality Management*

Anderson, J.C., Rungtusanatham, M., & Schroeder, R.G. (1994), "A Theory of Quality management. Underlying the Deming Management", Academy Of Management Review

- Babakus, E. (2004), "Linking perceived quality and customer satisfaction to store traffic and revenue growth", *Decision Sciences*
- Bogdan, R. C & Biklen, S. K. (2003). Qualitative Research for Education: An introduction to Theories and Methods (4th ed.). New York: Pearson Education group. (pp. 110-120).
- Bolton, R., & Saxena-Iyer, S. (2009). Interactive services: A framework, synthesis and research directions. Journal of Interactive Marketing, 2(3), 91–104.
- Bowen, D.E. (1986) "Managing customers as human resources in service organizations," Human Resources Management, vol. 25, p. 371–383.
- Brah, S.A., Lee, S.L. and Rao, B.M. (2002), "Relationship between TQM and Performance of Singapore companies", International Journal of Quality & Reliability Management, Vol. 19 No. 4, pp. 356-79.
- Brealey, R, A., Myers, S, C., Allen, F. (2008). Principles of Corporate Finance. 9th ed. Singapore: McGraw-Hill/Irwin. p. 329-333.
- Brown, S. W. and Bond, E.U. III (1995). "The internal/ external framework and service quality: Toward theory in service marketing, "Journal of marketing management, February, pp.25-39.
- Chase, R. & Bowen, D. (1991). Service quality in the service delivery system: A diagnostic framework in service quality. Lexington: Lexington Books.
- Collins, R. (1996) *Total Quality Management, Effective Management*. New Zealand: C.C.H. International.

- Corbett, L. and Rastrick, K. 2000. Quality performance and organizational culture. International Journal of Quality and Reliability Management, Vol.17, No.1, pp. 14-26.
- Cronin, J. J., & Taylor, S. A. (1992) Measuring service quality; a re-examination and Extension. The Journal of Marketing, 56, (3), 55-68
- Czepiel, John A., Michael R. Solomon, Carol F. Surprenant, and Evelyn G. Gutman (1986),"Service Encounters: An Overview," in John A. Czepiel, Michael R. Solomon, and Carol F. Surprenant, eds., The Service Encounter: Managing Employee/Customer interaction in Service Businesses, Lexington, MA: Lexington Books, 3-15.
- Czepiel, J.A. (1990) "Service encounters and service relationships: implications for research," Journal of Business Research, vol. 20, p. 13-21.
- Delaney J.T. and Huselid M.A. (1996). The impact of human resource management practices on perceptions of organizational performance, Acad. Manage. J., 39(4): 949-969.
- Deming, W. 1986. Out of crises. Cambridge: Addison-Wesley.
- Evans JR, Lindsay WM (1995). The management and control of quality. 3rd edition, West Publishing, New York.
- Everett, C. (2002). Penn States Commitment to Quality Improvement, *Quality Progress*, Vol. 35, No. 1, pp. 44-49.
- Flynn, B. B., Schroeder, R. G., & Sakakibara, S. (1994). A framework for Quality Management research and an associated measurement instrument. Journal of Operations Management 11 (4), 339-366.
- Gibson, R. E., "A Systems Approach to Research Management," Res. Manage, Part 1, V (4), 215–228 (Jul 1962).
- Guest, D.E., 1997, Human resource management and performance: a review and research agenda, *The International Journal of Human Resource Management*, Vol. 8, No. 3 (June):263-276
- Hasan, M., & Kerr M. (2003). The relationship between total quality management practices and organizational performance in service organizations. The TQM Magazine, 15(4), 286-291.

- Hassan, M., Mukhtar, A., Qureshi, S. U., and Sharif, S. (2012). Impact of TQM Practices on Firm's Performance of Pakistan's Manufacturing Organizations. International Journal of Academic Research in Business and Social Science, 2(10), 232-259.
- Hamon, T. T. (2003). Organizational effectiveness as explained by social structure in a faithbased business network organization. Virginia Beach: Regent University.
- Hancott, D. E. (2005). The relationship between transformational leadership and organizational performance in the largest public companies in Canada. Minneapolis: Capella University.
- Irfan, S. and A. Ijaz, 2011. Comparison of Service Quality between Private and Public Hospitals: Empirical Evidences from Pakistan.
- Jean Lardon (2011). The Ship's Agent: The maritime principal's eyes, ears and hands in the port.
- Jin, L. (2005), "The effects of service quality management practices on customer satisfaction", Department of Business Administration, Paichai University.
- Joiner, T. A. (2007). "Total quality management and performance: the role of organization support and co-worker support." International Journal of Quality & Reliability Management, 24(6), 617-627.
- Juran, J. M. (1989). "Leadership for quality: An executive handbook."
- Juran, J.M. and F. Gryna, 1993. Quality planning and analysis, Third Edition. New York.
- Kandampully J (1997) Firms should give loyalty before they can expect it from customers. Managing Service Quality 7: 92-94.
- Kaplan, R. S., & Norton, D. (2001). The Strategy Focused Organization. Harvard: Harvard Business School Press.
- Kim, H., Hoskisson, R. E., Wan, W. P. (2004). Power dependence, diversification and performance in keiretsu member firms. Strategic Management Journal, 25, 613-636.
- Klaus, G. (1985). Quality epiphenomenon: The conceptual understanding of quality in faceto-face service encounters. Lexington: Lexington Books.

Kotler P. (2004). Marketing management: Analysis, planning and control.(12thed.).Englewood Cliffs, NJ: Prentice-Hall Inc. (Chapter 11).

Kotler, P.(2000), Marketing Management. 10th edition, New Jersey, Prentice-Hall.

- Latham, G. P. (2007). Work motivation: history, theory, research and practice. Sage Publications, Inc.
- Lei, D., & Slocum, J. (2005).Strategic and organizational requirements for competitive advantage. Academy of Management Executive, Vol. 19, No. 1, pp. 31-45.
- McNicholas, M. (2007). Maritime Security: An Introduction. Burlington, MA, USA, Butterworth-Heinemann.

Milakovich, M.E. 2006. Improving Service Quality in the Global Economy: Achieving High Performance in the Public and Private Sectors (2nd edition). Boca Raton, FL: Auerbach.

- Mok, C., Sparks, B., & Kadampull, J. (2009). Service quality management in hospitality tourism and leisure. New York: Routledge.
- Muthiah, Krishna Veni. 2010. Logistics Management and World Seaborne Trade. Mumbai, <u>http://site.ebrary.com/lib/seamkebrary/Doc?id=10415507&ppg=79</u>
- Ndegwa, M. (2012). Service quality practices among commercial banks in Kenya. University of Nairobi, Nairobi Kenya.
- Ngigi, S. (2013). Service quality and performance of paid television services. The case Study of Zuku Company Limited. University of Nairobi, Nairobi Kenya.
- Owiti,T. (2014). Quality management practices and performance of hotels in Nairobi. University of Nairobi, Nairobi Kenya.
- 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.

Pinho JC. TQM and performance in small medium enterprises: The mediating effect of

customer orientation and innovation. International journal of quality & reliability management. 2008; 25(3):256-275.

- Reed, John H., Hall, Nicholas P., Methods For Measuring Customer Satisfaction, Energy Evaluation Conference, Chicago, 1997.
- Sadikoglu E., et al. Investigating the Effects of Innovation and Employee Performance on the Relationship between TQM Practices and Firm Performance: An Empirical Study of Turkish Firms. International Journal of Production Economics. 2010. 127 (1) 13-26.
- Schermerhorn, J. R., Hunt, J. M. & Osborn, R. N. (2002). Organizational Behavior. New York: Wiley.
- Sofijanova E and Chatleska Z (2013). Employee Involvement and Organizational Performance: Evidence from the manufacturing sector in the Republic of Macedonia
- Sum, C-C., Teo, C-B. and Ng, K-K. (2001), "Strategic logistics management in Singapore", International Journal of Operations & Production Management, Vol. 21 No. 9, pp. 1239-60.
- Tan, K.C., Kannan V.R., Handfield R.B. & Ghosh S. (1999), "Supply chain management: An empirical study of its impact on performance, "International Journal of Operations and Production Management, Vol. 19, No. 10, pp. 1034-1052.
- Tanui, P. (2008). A survey of quality practices of pharmaceutical companies in Kenya. University of Nairobi, Nairobi, Kenya.
- Valmohammadi, C. (2011). "The impact of TQM implementation on the organizational performance of Iranian manufacturing SMEs." The TQM Journal, 23(5): 496-509.
- Yusuf, Y., Gunasekaran, A. and Dan, G. 2007. Implementation of TQM in China and organizational performance: an empirical investigation. Total Quality Management, Vol.18, No.5, pp. 509-530
- Zairi M. (1997), Business process management: a boundary less approach to modern competitiveness, Business Process Management Journal, Vol 3 No. 1, pp. 68-80
- Zairi, M., (2000) "Managing customer satisfaction: a best practice perspective", The TQM Magazine, Vol. 12 (6), pp.389-494

APPENDICES

APPENDIX 1

RESEARCH QUESTIONNAIRE

SECTION A: RESPONDENT AND FIRM PROFILE

Thank you for taking your time to fill this questionnaire. Your response to the questions herein will be treated confidentially.

Please answer all the questions as best as you can. Please Tick as appropriate

1. Please indicate the position you hold in the company_____

2. How long have you been in this position?

Up to 5 years []	6-10 years []	11-15 years []
16-20 years []	above 20 years []	

3. What is the ownership status of your firm?

Fully locally owned []	Fully foreign owned []
Joint Kenyan and foreign owned []	others please specify)

4. How many years has the firm been in operation in Kenya?

Up to 5 years []	6-10 years []	11-15 years []
16-20 years []	Over 20 years []	

5. How many employees are currently (both full and part-time) employed in your firm?

Up to 10 employees []	11-20 []	21-30 []
31-40 []	41-50 []	Over 50 employees []

6. What is the approximate proportion (%) of the local market share does your firm command?
 Less than 10% []
 10 to 20% []
 21 to 30% []

SECTION B: 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

7. Top management commitment

Description	1	2	3	4	5
Our company's top management (i.e. top executives and major department heads) are committed to quality performance					
Our company's top management provides personal leadership for quality services and quality improvement					
Our company's top management is evaluated for quality performance					
Major department heads within our company participate in the quality improvement process					
Quality issues are reviewed in our company's management meetings					
Our company's top management has objectives for quality performance.					

8. Employee management

Description	1	2	3	4	5
Employees are encouraged to be totally involved in quality improvement.					
Management let employees participate in achieving					

organisational goals.			
Employees are involved in quality decisions.			
Employees are trained in quality principles			
Employees are trained in problem solving skills			
There is bottom-up, top-down and horizontal communication among all staff			

9. Customer focus

Description	1	2	3	4	5
We frequently are in close contact with our customers					
Our firm carries out studies to evaluate customer satisfaction.					
Our employees know who our customers are					
Our firm carries out studies to determine its customer needs and wants.					
We use customer requirements as the basis for quality.					
Managers and supervisors support activities improving customer satisfaction					

10. Continuous Improvement

Description	1	2	3	4	5
Our firm provides continuous training for its managerial staff.					
Our company offers continuous training for its non- managerial staff.					
Training needs are always evaluated and addressed.					

Firm measures employee satisfaction on the training received			
Employees are trained on team working.			

11. Process Management

Description	1	2	3	4	5
Customer requirements are emphasized and considered in the design process					
Product/service design and development involves everybody.					
Multiple departments (such as marketing, finance, and purchasing) coordinate in the product/service development process					

12. System Process

Description	1	2	3	4	5
Quality data and information is available to all staff.					
Quality data are used as tools to manage quality					
Quality data are used to evaluate supervisory and managerial performance.					
Our firm collects data and analyse data related to its activities					

13. Incentives and Recognition

Description	1	2	3	4	5
Company has reward system to appreciate employee contributions					
Systems and procedures of appreciating employee contributions are well defined					

Employee's enumeration is proportional to work	
knowledge and contribution	
Employees are well motivated.	

SECTION D: FINANCIAL OUTCOMES

14. Please indicate with a tick ($\sqrt{}$) the approximate annual gross profit of your firm in the last

three years

Less than	25-50	50-100	150 million
25million	million	million	and above

15. Overall, on a scale of 1 to 10 where 10 is the score of the best overall performance, I would give our firm a score of ______

END

APPENDIX II

LIST OF REGISTERED SHIPPING AGENTS

LIST OF REGISTERED SHITTING AGENTS
ACCESS SHIPPING AGENCY LTD
AFRICAN SHIPPING LTD
CARGO WORLD AVIATION LTD
CMA CGM KENYA LTD
DIAMOND SHIPPING SERVICES LTD
DIVERSE SHIPPING LTD
EAGOL TRAVEL KENYA LTD
EAST AFRICAN COMMERCIAL & SHIPPING CO LTD
EMIRATES SHIPPING (E.A) LTD
EXPRESS SHIPPING & LOGISTICS (EA) LTD
GREEN ISLAND SHIPPING SERVICES LTD
GULF BADR GROUP (KENYA) LTD
I.MESSINA (K) LTD
INCHCAPE SHIPPING SERVICES K LTD
KENYA NATIONAL SHIPPING LINE LTD
KUSI SHIPPING SERVICES LTD
LOGISTICS EXPEDITORS LTD
MAERSK KENYA LTD
MAGELLAN LOGISTICS KENYA LTD
MEDITERRANEAN SHIPPING CO (MSC)
MITCHEL COTTS KENYA LTD
NIPPON YUSEN KAISHA (NYK)
OCEANFREIGHT E.A LTD
PIL (KENYA) LTD
RAIS SHIPPING SERVICES (K) LTD
RIG LOGISTICS LTD
SEABULK SHIPPING SERVICES LTD
SEAFORTH SHIPPING (K) LTD

SEATRADE AGENCIES LTD
SEVEN SEAS SHIPPING AGENCIES (K) LTD
SHARAF SHIPPING AGENCY (K) LTD
SHIPMARC LTD
SOCOPAO (KENYA) LTD
SOSCO FISHING INDUSTRIES LTD
SOUTHERN ENGINEERING CO LTD
SPANFREIGHT SHIPPING LTD
SPEARS SHIPPING AGENCY (K) LTD
STURROCK SHIPPING (K) LTD
TEHEMA SHIPPING & MARINE SERVICES CO.LTD
WEC LINES (K) LTD

Source: http://www.ksaa.co.ke/members

APPENDIX III

Average Responses o	f each Aspect of	f Service Ouality	Management Practices
in orage neoponses o	- cuch rispece of		in an agement i ractices

Respondent	X1	X2	X3	X4	X5	X6	X7
1	4.33	3.83	4.17	4.00	4.00	4.00	4.00
2	3.17	2.33	2.27	2.00	2.00	2.00	3.25
3	2.50	2.67	3.17	2.00	4.00	2.00	2.00
4	4.67	5.00	5.00	4.00	3.67	4.50	4.00
5	3.30	3.50	3.67	3.40	3.30	2.25	1.50
6	3.17	3.33	3.50	2.80	3.00	3.00	3.25
7	2.83	2.50	4.00	2.40	2.67	2.50	2.25
8	4.17	3.67	2.67	3.20	3.67	3.25	2.25
9	4.50	4.17	4.67	2.40	4.33	3.50	2.50
10	3.83	4.00	4.67	3.80	4.67	3.75	3.50
11	4.33	3.67	4.17	3.00	4.33	3.25	4.25
12	4.33	4.17	4.67	2.80	4.33	4.25	4.50
13	3.83	3.00	3.67	2.80	3.00	3.00	4.25
14	4.17	4.33	5.00	4.00	4.33	4.25	3.75
15	4.00	4.67	4.50	4.00	4.67	4.00	4.25
16	3.67	4.50	4.67	4.60	3.00	4.50	5.00
17	3.50	4.33	4.17	4.00	5.00	4.00	4.25
18	5.00	5.00	4.33	5.00	4.00	5.00	5.00
19	2.00	1.83	2.50	1.40	1.37	2.00	1.25
20	2.83	3.17	3.83	3.00	3.67	3.00	2.75
21	2.83	3.00	2.67	2.00	2.00	2.00	2.00
22	3.67	4.00	4.50	4.20	3.67	4.00	4.00
23	4.17	4.00	4.33	4.00	4.00	4.00	3.25
24	4.17	3.33	4.50	3.60	4.00	4.25	3.00
25	4.67	4.17	4.83	3.80	4.67	4.50	3.75
26	4.33	4.33	4.33	4.20	4.33	4.25	3.75
27	4.00	4.83	5.00	5.00	5.00	4.50	4.75
28	5.00	5.00	5.00	5.00	5.00	5.00	5.00
29	4.50	3.67	4.50	3.40	3.67	3.25	3.75

Source Research Data (2015)