

**TOTAL QUALITY MANAGEMENT PRACTICES AND
PERFORMANCE OF PASSENGER TRANSPORT
SACCO'S IN KENYA**

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DECLARATION

I hereby declare that this research project is my own work and that it has not been presented anywhere for any award. Where I have borrowed ideas from another source, they have been acknowledged in the text.

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DEDICATION

This project is dedicated to my wife Dorothy and our daughter Stracy and son Ian as well as my parents, brothers and sisters who supported and encouraged me throughout my studies

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My appreciation goes to the Almighty God for the privilege accorded me to pursue this MBA degree course. I am highly obliged to my supervisor, Mr. Onserio Nyamwange, for his steadfast support, direction and objective criticism all the way through the entire process of proposal writing, data collection and eventually report writing. In addition, I am thankful to all my fellow students and friends at the University of Nairobi who through our interaction, companionship and experiences shared helped broaden my knowledge and understanding throughout my course. I will also be forever indebted to my family for standing by me.

ABSTRACT

The core objective of the study is to investigate the correlation linking total quality management (TQM) practices (Continuous improvement, employee involvement, management support, teamwork, strategic and systematic approach to improvement, fact based decision making and product and process design) and its effect on organization performance (profits, market share and cost) in passenger transport SACCO's in Kenya. Sums of 300 structured questionnaires were disseminated to workforce of 100 passenger SACCO's; 285 were duly signed and returned, making a response rate of 95%. Using primary data collected, the study employed descriptive statistics to analyze the data obtained. The correlation analysis was then done through the aid of SPSS to find out the correlation Pearson product. Moreover, Pearson's correlation study was then conducted, at 95% confidence break and 5% confidence level 2 –tailed. Both factors had significant P-value between inherent TQM practices indicators and corresponding level of organizational performance as measured by performance dimensions. From the study, it was observed that the passenger transport SACCO's is comprised of three categories namely; long distance buses, long distance shuttles and urban vehicles. Multiple regression investigation was done to find out the linkage connecting performance and the seven independent variables. The outcome value, were then used to test for the implication of each predictor variables (TQM measures) in the model. Besides, the outcome indicated a constructive and significant effect of TQM practices on organizational performance. Therefore, Organizations that subscribe to TQM practices were observed to accrue optimum productivity and quality performance compared to those that did not. The study concludes with recommendations that a wider section can be used for further study, which can be universal to the service business, with multiple feedbacks from diverse persons and administration levels for future studies.

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ABBREVIATION AND ACRONYMS

TQM	-	Total quality management
OTC	-	Overseas trading company
NTSA	-	National Transport and Safety Authority
KBS	-	Kenya Bus Services
QM	-	Quality management
SACCO	-	Savings and Credit Cooperative Organization
BSC	-	Balance Score Card
SPSS	-	Standard Package of Standard Science

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Quality management signifies the establishment of an organization tradition within which businesses are defined and concluded every time and flourishing relationships with clientele, employees and suppliers (Arora, 2004). Juran's (1964) research has indicated that over 80% of the quality defects are management controllable and it is therefore management that most need to change. Deming (1986) argued that value should be checked at every step of a development not by inspecting the product or service on one occasion, when it is completed. Kumar and Garg (2011) found that quality management movement is a journey and not a destination. Evans and Lindsay (2011), studies have shown that organizations can improve their revenue by almost 100% by retaining 5% more of their clientele than their competitors since the price of getting new clientele is much costly than that associated with retaining new customers. Obonyo (2013), affirms that in a hypercompetitive and turbulent market environment, with increasingly lucid buyers faced with plentiful choices, a business can only prevail by fine-tuning the value delivery method and choosing, providing and communicating superior value.

Organizations have moved from quality inspection as a way of managing their businesses to total quality management to enhance higher customer satisfaction, profitability, productivity, market share, reduced defects and remaining competitive in the market environment. In the old era of management, quality was enhanced through the physical checking of the product or service upon completion. Quality of manufactured goods relied on the producers of such service or goods, leaving the customer at crossroad for those goods or services that had hidden quality attributes. The situation is different in the new era of total quality management, the producers bring into being the goods and or services having the client in mind (Juran, 1964).

The research anchored on total quality management (TQM) theory, Deming's fourteen points and Juran's 10 points, and systems theory. Both Deming and Juran emphasized the need to have an integral system whereby everybody in the

organization plays a role to enhance organizational product or service quality. Besides, systems theory emphasized that organizations operate in an open system whereby both the internal and external environment interact. Organizations need to adapt to the external environment by devising strategies that can make them competitive and relevant.

1.1.1 Total Quality Management Practices

Total quality management highlights the need to advance the value of goods and or services to better exploit the resources of the business (Collins, 1996). Lee and Quazi (2010) claimed that, TQM being a business management strategy, progresses the quality of organizational administration, amplify competitiveness and adds value to the client as well as provide a competitive edge for the organizations. According to Kumar and Garg (2011), TQM is a modern administration beliefs and a journey, not an end.

TQM practices are contingent with and tailored according to the organization (Prajogo and Sohal, 2001). Organizations incorporate TQM practices in their daily activities, in order, to realize customer satisfaction, increase their market share, reduce their operating cost and improve on their profits. The implemented practices enable the organization to better compete with their competitors in the market environment. The practices include; customer centric approach, continuous improvement, total employee involvement, management support, teamwork, strategic and systemic approach, product and process design and fact based decision making.

1.1.2 Organizational Performance

According to Lesban (2006), performance refers to a combination of monetary and non-monetary indicators which present information on the scale of achievement of objective and outcome. Rust, Zahorik and Keiningham (2002) observed that, financial performance of organizations can be increased by improving quality performance.

Their study showed that organizations whose principles relate to quality are guided by focus on value created for customer.

Terrein (2012), argued that as world markets are becoming more and more integrated, the service business is coming under burly pressures to ensure that their quality presentation is up to date. Organizations therefore, are adopting the practices of total quality management to edge out the competition. They measure their performance in dimensions of costs, profits, productivity, employee relation and market share. It is through satisfied customers that repeat sales and loyalty is achieved. Total employee involvement in the organization system increases the standard of quality for the goods and services offered to customers. Customers get more satisfied hence make repeat sales which result in customer loyalty.

Integrated system contributes a vital pillar to the performance of any organization. Systems that put into consideration all the activities of the organization, tend to better manage its activities much better translating to higher chances of favorable output. Sometimes, organizations fail to realize the measures of performance due to lack of fact based decision making or very many unnecessary processes or failure to empower their employees. Total quality management is the solution to address all the organization measures successfully.

Sila (2007), argued that TQM helps improve the quality of products and establishes a secure production process. Continuous improvement, which is a feature of TQM, reduces the product cycle time thus improving performance. Customers get satisfied and hence develop their intimate relationship with the organization hence customer loyalty. The loyalty then translates to better sales and better market share in the business environment.

1.1.3 Passenger Transport SACCO's in Kenya

Kenya public transport has been dominated by rail and road transport over the years. London based overseas trading company (OTC), introduced the first buses, a fleet of 13 buses on Nairobi's 12 routes, back in 1934. Initially KBS was the major provider of

public transport in Kenya major cities of Nairobi and Mombasa. Kenya Bus Services was owned by united transport overseas limited, with 75% shareholding and the Nairobi city council with 25%.KBS role as a major transport provider in Kenyan's urban centers was however affected by increase in informal transport providers. By 1990, the total number of matatus licensed in Kenya stood at 17,600.By the year 2003, this number was 40,000 (Meja, 2016).

According to Meja (2016), the number of matatus operating along Kenyan roads is estimated to be over 100,000 today. On the road safety, Kenya has for a long time experience various challenges which impacted negatively on safety along the roads. These include disjointed institutional framework, poor infrastructure, general disregard of existing laws and high rate of road traffic crashes. National Road Safety Council was formed between 1979 and 1988 under the ministry of transport and communication. Couple with other factors which include withdrawals of funding, the council ceased to exist in 1988.Between 1988 and 2012, road safety was managed by various government ministries and departments. The establishment of National Transport and safety Authority (NTSA), came into being through the National transport and safety Act number 33 of 2012, to address road safety challenges and management.

Goetsch and Davis (2006), highlighted profits of TQM as; superior customer satisfaction, excellence of goods and services, delivery time, workforce participation as well as reduced costs, inventory, product development time, and work-in-progress among others. Industry players have developed strategies and measures geared towards winning and retaining market share as a response to Goetsch and Davis viewpoint. The companies have become more innovative by focusing on establishing SACCO's to offer better services to the commuters while expanding their operations beyond borders. The players have had to develop new theories, practices and strategies to remain competitive.

1.2 Research Problem

Qureshi (2012), argued out that TQM has become the most significant area of consideration to most administrators, practitioners and investigators owing to its

strong influence on organization performance, customer satisfaction and profitability. According to Qureshi, TQM offers organizations an alternative to reduce costs, increase profitability, increase market share, increase effectiveness and efficiency of its operations.

Kenya road sub-sector accounts for over 80% of the Country's total passenger traffic and 76% of the freight leaving a small proportion to water, rail and air. The road transport industry is large and well equipped. There is a wide spectrum of enterprises from large companies through to individual owner operators. It is highly competitive and responds to changes in demand, road condition and regulation. Poor data collection of basic data by passenger transport SACCO's is the biggest challenge to effective management and despite the numerous complaints from investors in the industry, passenger transport SACCO's often do not have sufficient information and a holistic understanding of their system in order to better advise investors on specific targeted improvement and growth of their resources (www.krb.go.ke/.../Annex%203).

Researchers believe that lack of attention that passenger transport SACCO's were putting on quality integration, in their strategic management planning, fact based decision making, processes and system was disturbing. It was this gap that informed the problem discussion in this research. Though many studies have been carried out on quality management, none has adequately addressed the dynamics influencing the passenger transport SACCO's in Kenyan context. Most authors share the view and believe that, QM paradigm was relevant for the passenger transport business in Kenya, since resources were scarce, and there was need for these firms to maximize their efficiency by all available means in order to compete effectively.

Zehir (2012), analyzed the impact of Total quality management practices on quality performance and innovation performance. The research found out that system approach to management dimension was important TQM component. The research failed to address the integral system approach to TQM hence the need to carry out these research.

Prajogo (2004), analyzed the correlation among TQM practices, quality performance and innovation performance. The study found out that, TQM considerably and completely contributes to innovation performance, that quality management was a pre-requisite for innovation management. The research failed to address how TQM practices could be used to increase market share, increase productivity, increase profit while reducing cost. This gap informed the research study.

Mbaraka (2011), analyzed the paradigm shift in quality management and how it was impacting on performance in the Kenyan motor industry. He found out that, there was a constructive and significant correlation between quality management and performance. Mbaraka concentrated more on how continuous improvement, customer centric and top management enhance the performance of dealers in automotive vehicles. The research was carried out in a manufacturing set up hence the need to carry out the research in the context of service industry.

Wanderi (2014), analyzed the factors of TQM practices like top management support and workforce involvement in addressing the customer satisfaction. The research failed to address quality management systems as socio-technical integrated system. In addition, the application of the concept was in a construction company. Therefore, there was a need to apply TQM practices in passenger transport SACCO's to check whether the same variables of performance are constant across the board.

Maobe (2014), analyzed system failure and perceived quality of service. The research found out that customer perception on quality relied on assurance and responsiveness. The research failed to analyze other quality management practices like management support and teamwork as some of the things that can improve on customer satisfaction. Hence, the need to carry out this research.

The research sought to make a contribution to the existing body of literature on quality management, by addressing the impact of total quality management practices on passenger transport SACCO's, in Kenya. Besides, the passenger transport SACCO's in Kenya were experiencing challenges which could be linked to high costs of running the vehicles, developing employees to acquire required market and organizational skills and how the management managed the organization team. TQM

stresses the need to move from the age of doing things that the organization is “good at” to focusing on the things the “customer wants” while observing government regulation to overcome the stiff competition (Mbaraka 2011). The research sought to answer the questions: “What are the impact of TQM practices in passenger transport SACCO’s in Kenya?” and “What are TQM practices?”

1.3 Research Objectives

The objectives of this study were;

- I. To identify TQM practices in passenger transport SACCO’s in Kenya.
- II. To determine impact of TQM practices on performance in passenger transport SACCO’s in Kenya.

1.4 Value of the Study

The outcome from the study would be useful in providing additional knowledge to existing and future organization on quality management in passenger transport business in Kenya. This study would also be useful to all motor industry and transport professionals both large and small, since they would enhance the realization on strategic measures that are majorly employed.

The findings would also provide a useful reference document to stake holders in the motor industry and academic institutions in their endeavors to formulate work plan to meet the set performance. Therefore, decision makers in other industries can also find this study useful, as benefits accruing from quality management concepts can be applied in other industries to boost performance.

Moreover, the study would be informative to the government and other stake holders in the quality management systems in terms of policy, administration and provision of funds and facilities required for successful implementation of quality standards. They would use the document to get relevant information about passenger transport business in Kenya.

Besides, the study would inform policy makers particularly those dealing with development of quality management standards. Most importantly, it would help the policy makers both in public and private sector to identify crucial areas in their organizations and make appropriate decisions to ensure that quality is integrated in strategy planning.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The study was carried out to find out the impact of TQM practices in passenger transport SACCO's on performance and also identify and explain the TQM practices and how they relate to performance. The chapter reviewed TQM in a wider dimension. In addition, it explored the findings of other researchers who had carried out the research study in the same field.

2.2 Theoretical Framework

The research study had its foundation on total quality management theory and system theory. The theories would help bring out clearly the impacts of TQM practices on performance for passenger SACCO's in Kenya.

2.2.1 Total Quality Management Theory

Deming (1987), argued that for any organization to realize total quality management, it must incorporate fourteen items to its operation. It include: creating a firmness of principle for improving goods and services, adopting new thinking, ceasing trust on inspection to attain quality, stopping the practice of presenting business on cost alone; minimizing whole price by working with particular supplier, advance continuously and evermore every method for planning, manufacturing and service, establish on job training, implementation and introducing leadership, driving away panic, allowing free interaction of staff, doing away with slogans, encouraging staff to achieve the objectives, eliminating statistical goal for administration, doing away with barriers that deny people delight of workmanship and doing away with the annual evaluation on advantage scheme. Rather, a vigorous programme of education and self-improvement for everyone and positioning everybody in the organization to work towards accomplishing the transformation should be instituted. The theory puts into perspective the ultimate goals of total quality management of focusing on customer satisfaction, increasing firm's productivity while reducing costs, hence would form a strong basis for the research study.

Juran developed 10 steps to excellence improvement in quality which include: Building attentiveness of chance to improve, setting-objectives for development, organizing to attain objectives, providing guidance, carrying out assignments to resolve problems, communication of progress, giving gratitude, communicating the outcome, keeping achievement, maintaining impetus. The theory advances that the application of TQM in the passenger transport SACCO's would translate to better outputs in terms of customer satisfaction, productivity, market share, profit and cost.

2.2.2 Systems Theory

Systems theory was projected in the 1940's by the pioneer, biologist Ludwig von Bertalanffy and highly developed by Ross Ashby (1956). Bertalanffy during his life, emphasized that factual systems are open to, and interact with, their surroundings and that they can get hold of quantitatively new properties through emergence, resulting in continual development. The theory distinguishes the interdependence of human resources, impact of environment on organizational arrangement and function and the effect of outside stakeholders on the organization. In addition, the theory focuses on the surroundings and how it impacts the organization performance.

The system theory was significant to the study since passenger transport SACCO's carry out their business in the external environment. Their operations were shaped by this external environment. In order for passenger transport SACCOS's to survive, they needed to devise strategies that could enable them to compete effectively in the dynamic environment. This was because; the external environment affected the passengers transport SACCO's market share, profitability and cost. Therefore, there was need to understand the theory well for better adaptation to the external environment.

2.3 Total Quality Management practices

The research focused on eight TQM practices and their impact on market share, profits, costs and customer satisfaction in passenger transport SACCO's in Kenya. Each paragraph below discussed the TQM practices.

The first practice was customer centric approach. According to Chester (2008), thriving accomplishment of TQM includes: client maintenance and enhancement of market share. Tena (2009), argue that, customer focus translates to customer loyalty. The current market environment, calls for organizations to begin with the customers and ends with the customers in their planning. This was because they realize that however much effort that the organization puts in the design process, purchase of equipment, training of employees, the customer was the ultimate determinant of quality, hence, customer considerations must be integrated in the organization activities first hand to better realize favorable output and remaining relevant and competitive in the market place (Juran,1988). It was the goal of TQM to achieve customer satisfaction, hence a lot of effort put in planning process.

The second practice was continuous improvement. The introduction of customer and consequent emphasis on continuous improvement, management was one aspect that distinguished quality management paradigm from the traditional paradigm that was informed by classical, human relations, systems and contingency theories (Lysons and Farrington, 2006). Oliver (1997), affirms that, the only way to attain sustainable advantage relies on the ability of an organization to manage their resource decisions. Continuous improvement recognized that the needs of a customer are continuously changing, and so was the environment. Proactive to opportunities, it was unending process that focused on broader systems within the customer value chain. Continuous improvement requires organizations to have effective and efficient systems and processes in order to enhance value to the customer.

The third practice was total employee involvement. Karia (2006), examined the effects of TQM practices on organization workforce, focusing on work-related attitudes. The findings found out that employees were more satisfied when involved in organizational decision making. In any organization, employees were their valued

assets. Sustainable competitive advantage was achieved through people. Employees were hence a valued asset to invest in. Besides, strategy and culture were important. These two were the ones that could move the organization far if integrated well in the organization processes and system. Organizational effectiveness was greatly increased by focusing more on the development of all inclusive business. Traditions of the company were shaped by paying close attention to sound human resource practices. Emphasis was on commitment rather than compliance. The organization had consistent and coherent policies which promote commitment to the organization programs and motivate people to be creative and bring out their full potential to enhance performance.

The fourth practice was the management support. Juran (1964), research has shown that over 80% of quality defects were management controllable and it's therefore management that needs to change. Top management exercises the allocation of resources to carry out certain activities in the organization. If management does not support the brilliant ideas through resource allocation, the realization of the product or service quality can be affected hence increasing the cost of acquiring back dissatisfied customers who might switch loyalty to the competitor. The overall impact will be increased cost of operating the business.

The fifth practice was strategic and systematic approach to improvement. Any industrial organization can grant strategic importance to the operations function through the development of a functional operations strategy, in accordance with an organizational competitive strategy. A literature synthesis on the concept of this functional strategy, would help define policies in operations with the purpose of gaining a sustainable advantage over competitors (Diaz and Martin,2004).Strategic Quality Management provide an organization with the tools to gain a competitive advantage through, flexibility to shifting or up and coming market environment and other government regulations, superior market representation, doing away with defects and waste, condensed costs and better cost administration and better customer focus and satisfaction.

The Sixth practice was teamwork. Garvin (1984), argues that the quality of the service, or of delivery of goods, is not right without humanity in the delivery.

Humanity therefore, need to be put together to have a one united goal. Achieving a united team with one goal, requires a fully dedicated, highly trained and employee involvement in the organization system. Customer focused management paradigm recognized the customer as the key stakeholder in an organization. Employees were also identified as crucial in the organization system. Workforces were empowered to make decisions relative to quality in the production process and their suggestions were implemented. The impact was increased efficiency and effectiveness in the organization.

The seventh practice was product and process design. Kumar and Garg (2011), argued that process and product design is externally focused, incorporating the needs of customers. In order to achieve design quality and defect prevention, quality was exercised at each and every step of the production pipeline. This assisted the company to be proactive hence avoided defects. The system puts into considerations all the internal and external customers into mind with the sole view of satisfying them and promoting organization efficiency hence better returns to investors.

The eight practice was fact based decision making. Crosby (1979), approves that in order to know, how an organization is doing, statistics on performance indicators are necessary. Besides, TQM requires that an organization recurrently gather and analyze data, in order to progress decision making accuracy, accomplish consensus, and allow forecast based on past history. In TQM, decisions were made based on data and facts unlike the older era where decisions were made based on assumptions. As such more accurate judgment were made that propels the organization to the right direction, unlike if the organization could have made a wrong decision, it could be very costly to the point of even bringing down the whole organization to scratch. Based on this, organizations which had adopted TQM have increased their productivity due to making right decisions. Other measures that organizations adopting TQM have improved on are cost reduction, increasing customer satisfaction, improving on operational efficiency and effectiveness.

2.4 Performance Measurement

Performance measures refer to that process of gathering, analyzing and or reporting information regarding an individual, group, organization, system or component on its outcome for decision making. Most often, performance objectives serve as a tool to help understand, manage, and improve how programs or organizations operate and the extent to which they effect desired change (Brown 2015). Moreover, performance is monitored through the model of Plan-Do-check-Act (Tarque's, 2004). This section was critical to the organization since it suggested to them whether there was a continuous improvement in terms of customer satisfaction, market share, productivity, cost reduction, and profitability.

The study adopted a balanced score card approach to carry out its performance measurements. Although, traditional performance measurement tools, focused on financial metrics alone, BSC focuses on three other additional performance metrics (customer, internal process, and learning and growth) to offer a holistic performance point of view (Kaplan,2010). The underpinning formation of the BSC is'' if you cannot compute it, you can comprehend it''(Kaplan,2010). Giannopoulos, Holt, Khansalar and Cleanthous (2013), maintain that the BSC could support small firms to avoid dissatisfaction by identifying internal and external factors causing business failure. The BSC could also help small firms to address external factors by aligning them to customer and economic perspective and link them to internal business processes. BSC would help determine the market share, productivity, profitability, cost, and customer satisfaction.

2.5 Total Quality Management and Performance

Fotopoulos and Psomas (2010), suggested that, the emergence of quality plays a fundamental role to the degree that it has become climax priority for many companies worldwide, in order to achieve their objectives and gain a competitive edge. Total quality management therefore, assist organization increase their profits through incorporating the quality elements at each step hence avoiding the organizations the burden of correcting completed products. These would mean that resources that had been allocated to do other work must be pulled back to repair the product.

Organizations which had adopted TQM have improved their customer satisfaction level hence increasing organizational efficiency and effectiveness. TQM have enabled many firms which had adopted to compete competitively, in the market without fear, registering higher profits, market share and cutting down on operating costs.

2.6 Summary of Knowledge Gaps

The study analyzed previous studies for five authors as listed below;

Table: 2.1 Summary of Knowledge Gaps

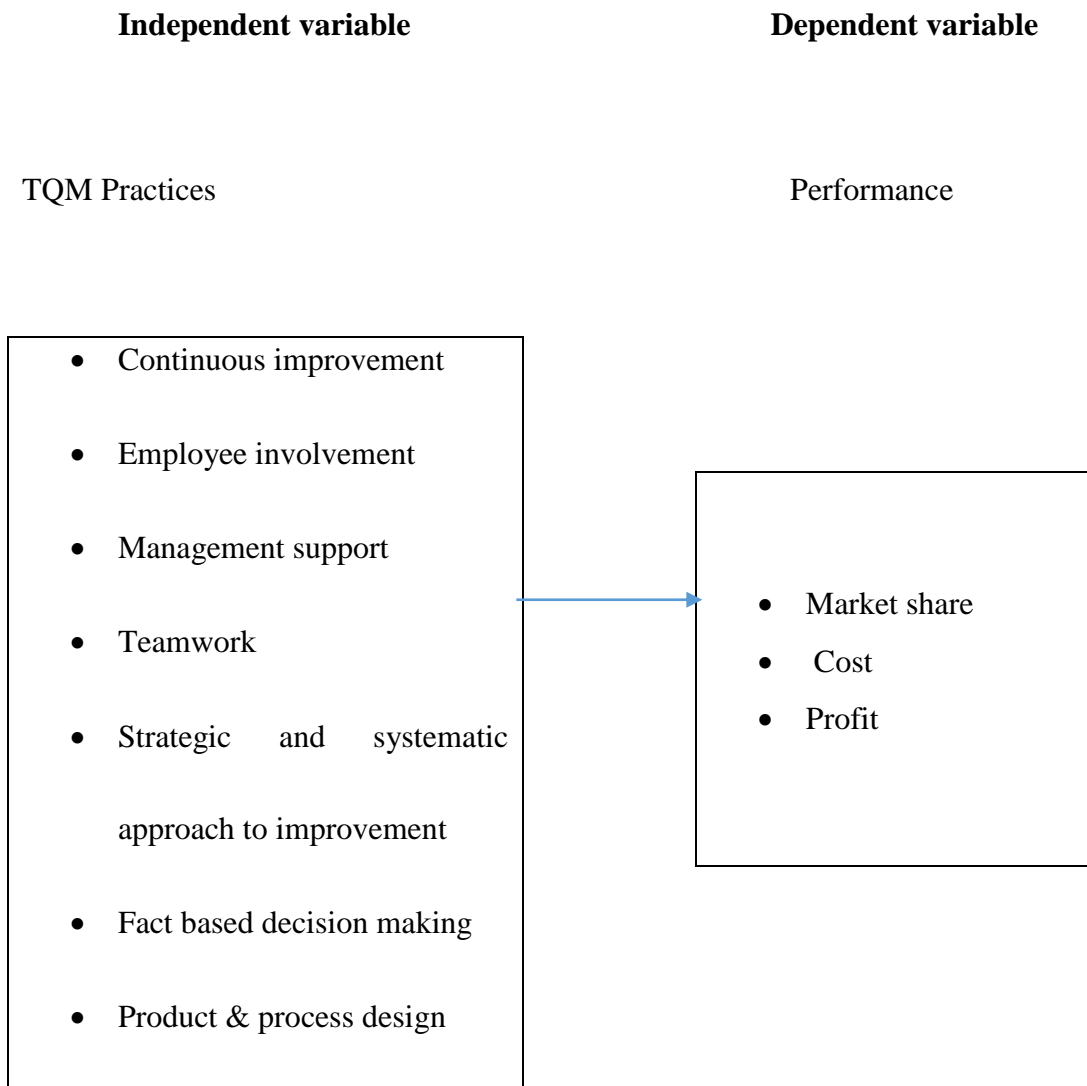
Author	Study	Findings	Research gap
Zehir (2012)	TQM practices, “Effects on quality performance and innovation performance.”	System approach to management dimension is found to be important to TQM component.	Lack the integral system approach to TQM
Prajogo (2004)	The relationship between TQM practices, quality performance, and innovation performance	TQM significantly and positively contributes to innovation performance (product & process) Quality management is a pre-requisite for innovation management.	The study failed to address how TQM practices can be used to increase market share, increase productivity, increase profit while reducing cost.
Mbaraka (2011)	Quality Management paradigm and performance in auto industry in Kenya	It focused on customer focus, Top management support, continuous improvement and system approach.	The study was carried out in a manufacturing set up, hence need to apply in service set up.
Wanderi (2014)	Factors influencing implementation of TQM in construction companies in Rwanda: a case of fair construction company	It focused on top management support, employee training, organization culture and communication.	The study was carried out in a construction set up, hence need to apply in service set up. It did not show how fact based decision making can improve quality in

			construction company.
Maobe (2014)	System failure and perceived quality of service	The research found out that customer perception on quality relied on assurance and responsiveness.	The research failed to analyze other quality management practices like management support and teamwork.

2.7. Conceptual Framework

Many studies on quality management and organizational performance had been carried out in countries where their market environment was totally different from that in Kenya. The study therefore, analyzed the total quality management and its effects on the passenger transport SACCO's in Kenyan context.

Figure 2.1: Conceptual model



Source: Researchers' (2016)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The chapter specifies the roadmap that was followed in carrying out the research project. It explains the research method used to collect and analyze data and it includes: A research design, a target population, a sampling technique, data collection and data analysis.

3.2 Research Design

The research made use of descriptive survey design. Descriptive studies were adopted because it was believed to be the best methods for collecting information that would demonstrate the correlation and describe the world as it exist. These types of studies were often performed before an experiment to identify what specific things to manipulate and include in an experiment, (Bickman and Rog, 1998).

3.3 Target Population

The population of study consisted of all the 635 passenger transport SACCO's operating in Kenya who were registered as at 13th January 2015 by NTSA. The main reason for choosing this number was that it would facilitate better data analysis and interpretation (<http://www.ntsago.ke/2015/saccolist/registeredsaccos.pdf>).

3.4 Sample and Sampling Technique

The study implemented stratified sampling technique to collect data. It created three strata of organized passenger transport SACCO's across the country then developed a questionnaire to collect the information. The study analyzed 100 passenger transport SACCO's. The study believed that this would give better results and conclusion to the research.

Table: 3.1 Summary of Passenger transport Sacco strata

No.	SACCO Strata	Total Number	Sample Size
1	Long distance buses	20	5
2	Long distance shuttles	120	20
3	Urban vehicles	497	75
		635	100

3.5 Data Collection

The study made use of both primary and secondary information. Primary information was collected through already pre-designed questionnaire. The respondents were passenger transport SACCO's staff and the questionnaire was in the form of Likert scale, where respondents were required to indicate their views on a scale of 1-5. The format was chosen because the researcher believed that he could better draw accurate conclusion avoiding misrepresentation of the respondents view.

Part one covered general information and part two covered TQM practices as applied by organizations and the impacts of TQM practices on performance. The data was collected through self-administered questionnaire, drop and pick and by emails. Secondary data adopted came from journals and books. This was to better support the data and conclusion of the study.

3.6 Data Analysis

The descriptive statistics was used to analyze the results of the variables. The collected data was tested for accuracy, reliability, uniformity and completeness in preparation to carry out the data analysis. The data therefore, was summarized and tabulated using descriptive measures. A multiple regression was used to analyze the relationship between TQM practices and performance.

The multiple regression model was calculated as;

$$Y_1 = a + b_1X_1 + b_2X_2 + b_3X_3$$

Where;

Y1 –Market share

Y2 –Profit

Y3-Cost

a - intercept

b₁ - Gradient for X₁

X₁ – TQM practice

b₂ - Gradient for X₂

X₂ – TQM practice

b₃ - Gradient for X₃

X₃ - TQM practice

3.7 Summary of research methodology

Table: 3.2 Summary of research methodology

Objective	Section of questionnaire	Data analysis method
To identify TQM practices in passenger transport SACCO's in Kenya	Part 1	Descriptive statistics, mean, variance and standard deviation
To determine impact of TQM practices on performance in passenger transport SACCO's in Kenya	Part 1 and 2	Multiple regression and correlation analysis

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The chapter evaluates the data collected from the field. The data was collected using structured questionnaires. The objectives of the study were to establish the impact of TQM practices on passenger transport SACCO's on cost, profit and market share. The study targeted the 100 registered SACCO's operating within the republic of Kenya. Sums of 300 questionnaires were distributed and a total of 285 were duly signed and collected making a 95 % response rate. The researcher deemed the response rate as good representative of the population and hence sufficient to draw conclusions from.

4.2 Data validity

Data validation refers to the process of deciding whether the statistical results quantifying hypothesized correlation between variables obtained from regression analysis are satisfactory as descriptions of the data. The results of multiple regression analysis obtained multiple correlation coefficient (R) of 0.885, 0.969 and 0.793 indicating multiple correlation between TQM measures (continuous improvement, employee involvement, management support, teamwork, Strategic & Systematic approach to improvement, Fact based decision making and Product and process design) with profit, cost and market share respectively. The R^2 value of 0.783, 0.939 and 0.629 indicated the extent of the role or contribution of TQM measures were able to explain profit, cost and market share variable as big as 78.3%, 93.9% and 62.9% respectively.

4.3 Total quality management practices

The study sought to determine the correlation that was present between TQM practices, independent variable, and performance, dependent variable of Passenger transport SACCO's in Kenya. The R^2 value of 0.783, 0.939 and 0.629 were obtained indicating the extent of the role or contribution of TQM measures were able to explain

profit, cost and market share variable as big as 78.3%, 93.9% and 62.9% respectively. In overall therefore, the independent variables combined caused a significant effect on cost, profit and market share. The study found out that, different researchers had come out with different outstanding TQM practices in their studies as highlighted below;

In table 2.1, Mbaraka (2011), found out that employee involvement and top management support were key TQM practices that predicted performance. This was affirmed by the results obtained when analyzing performance, cost. Wanderi (2014), also found out that top management, employee involvement and communication were key TQM practices. This was confirmed by the result obtained on performance, profit. In addition, Zehir (2012), Prajogo (2004) and Maobe (2014), had come out with outstanding TQM practices which were also affirmed by the analysis of the results on performance, that indicated a constructive and considerable effect on performance (cost, profit and market share).

The above researchers have come up with different conclusions but what is evident is that, TQM has a constructive and considerable effect on performance. An organization can apply all the TQM practices but a few will stand out clearly as competitive edge. In the study, the results show that for profit; continuous improvement and strategic and systematic approach to improvement had greatest effect, for cost; continuous improvement, management support and employee involvement had greatest effect while for market share; continuous improvement, management support and product and process design had the greatest effect on the dependent variable (performance).

Table: 4.1 Summary of impact of TQM practices on passenger Sacco's Operations

S/ no	TQM practices	Mean value	Standard deviation
1	Continuous improvement	3.04	0.792814
2	Employee involvement	3.14	0.872373
3	Management support	2.78	0.975265
4	Team work	3.09	0.900253
5	Strategic & Systematic approach to improvement	3.29	0.742025
6	Fact based decision making	3.15	0.7627483
7	Product and process design	3.15	0.794534
		3.09	0.70568

The outcome in table 4.1 signify that all characteristics had a mean score around 3.00, indicating that majority of the respondents were neutral on TQM practices applications in their organizations. The aspects had also low standard deviation, indicating the means did not deviate much from the mean value.

Table: 4.2 Summary of impact of TQM practices on Performance of passenger Sacco's

S/ n o	SACCO Name	Mean value	Standard deviation
1	Profit	1.18	0.260164
2	Cost	1.30	0.232007
3	Market share	1.39	0.298435
		1.29	0.263535

The outcome in table 4.2 signify that all characteristics had a mean score below 2, indicating that majority of the respondents strongly agree that profit, cost and market share are affected by TQM practices. The aspects had also low standard deviation, indicating the means did not deviate much from the mean value.

4.4 Relationship Between Total Quality Management Practices and Performance

The study further applied multiple regressions to find out the predictive power of TQM measures on performance. Regression analysis was done to calculate the regression coefficient and regression equation using the independent variable, which was TQM measures in this study and the dependent variable which was performance. The researcher found the statistical package for social sciences version 20.0, to be the appropriate package to carry out coding, entering and calculating the dimensions of the multiple regressions for this study. The investigation was then, carried out at 5% significance level. In the model, the influential aspect for contrasting whether the predictor variables were considerable was done by evaluating the equivalent probability value attained; $\alpha=0.05$. Moreover, the probability value which is less than α , indicated that the predictor variable is significant. The outcomes of the regression examination are shown in the following tables:

4.4.1 Model Summary

Table 4.3 below, demonstrates the variation in the value of the dependent variable which is clarified by the regression model.

Table 4.3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1 Profit	.885	0.783	0.619	0.6273
2 Cost	.969 ^a	.939	.921	.01575
3 Market share	.793 ^a	.629	.608	.06695

Source: Author (2016)

The results of multiple regression analysis obtained multiple correlation coefficient (R) of 0.885, 0.969 and 0.793 indicates multiple correlation between TQM measures (continuous improvement, employee involvement, management support, teamwork, Strategic & Systematic approach to improvement, Fact based decision making and Product and process design) with profit, cost and market share respectively. The R² value of 0.783, 0.939 and 0.629 indicates the extent of the role or contribution of TQM measures, were able to explain profit, cost and market share variable as big as 78.3%, 93.9% and 62.9% respectively. Overall therefore, the independent variables combined cause a significant effect especially on cost, profit and market share.

4.4.2 Analysis of Variance (ANOVA)

The study further performed the analysis of variance (ANOVA), to ascertain the repercussion of the link among the variables in the regression model. The outcomes of the analysis are made available below in table 4.4.

Table 4.4: ANOVA of the Regression

Model		Sum of Squares	df	Mean Square	F	Sig.
1 Profit	Regression	1.189	8	0.1486	2.0569	0.0489
	Residual	6.214	86	0.0723		
	Total	7.403	94			
2 Cost	Regression	6.325	12	0.1486	2.0553	0.0291
	Residual	7.237	82	0.0723		
	Total	13.562	94			
3 Market share	Regression	10.338	16	8.893	4.4982	0.03248
	Residual	11.226	78	1.977		
	Total	21.564	94			

Predictors: (Constant), continuous improvement, employee involvement, management support, teamwork, Strategic & Systematic approach to improvement, Fact based decision making and Product and process design

Dependent Variable: Profit, cost, market share

Source: Author (2016)

The probability value of 0.0489, point out that the regression association was highly considerable in predicting how continuous improvement, employee involvement, management support, teamwork, Strategic & Systematic approach to improvement, Fact based decision making and Product and process design used influenced profit, cost, and market share. From the above table, the F critical at 5% level of significance was 2.0569, 2.0553 and 4.4982 respectively, but since F critical is greater than the F

calculated (value = 1.72196, 1.872 and 1.775), this indicates that the overall model was significant.

This means that when continuous improvement, employee involvement, management support, teamwork, Strategic & Systematic approach to improvement, Fact based decision making and Product and process design are measured together, they all present a significant stage of explanation of the link connecting TQM measures and performance (profit, cost, market share), indicating that 95% chance, so as to the link among the variables is not due to chance.

4.5 Regression Coefficients of Determination

The table below gives a summary of the outcome of the regression equation. The values in column B, are representing the extent to which the value of independent variables donates to the value of the dependent variable. Moreover, the other column, illustrates the level of significance of the study variables. Below are the results in the table 4.5 below:

Multiple regression investigation, was done as to find out the link between profit and the seven independent variables. In the model, P-values were used to experiment for the implications of each predictor variables (TQM measures). The TQM trials were considerable when the impact value was found to be less than 0.05 (significance level). As per the SPSS generated table below, regression equation.

$(Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \epsilon)$ becomes:

$(Y = 1.063 + 0.722X_1 + 0.604X_2 + 0.604X_3 + 0.532X_4 + 0.684X_5 + 0.650X_6 + 0.670X_7 + \epsilon)$

Table 4.5: Coefficient of Determination on Profit

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant) Profit	1.063	0.155		6.858	.01010
Continuous improvement	0.722	0.09	0.632	8.022	.0000047
Employee involvement	0.604	0.129	0.475	4.682	0.0000010
Management support	0.604	0.085	0.519	7.106	000000327
Team work	0.532	0.073	0.459	7.288	0.0000014
Strategic & Systematic approach to improvement	0.684	0.125	0.559	5.472	0.0000043
Fact based decision making	0.650	0.099	0.551	6.566	0.0000037
Product and process design	0.670	0.101	0.569	6.634	0.0000027

a. Dependent Variable: Profit

The results in table 4.5 indicate that the factors (continuous improvement, employee involvement, management support, teamwork, Strategic & Systematic approach to improvement, Fact based decision making and Product and process design) significantly predict the profit.

Performance = 1.063+ 0.722X₁+ 0.604X₂+ 0.604X₃+ 0.532X₄+ 0.684X₅+ 0.650X₆+ 0.670X₇+ ε. It can be distinguished that the independent variables are significant at 0.05% significant level (p=; 0.0000047, 0.00000105, 0.000000327, 0.00000143, 0.00000432, 0.00000376, 0.00000277) respectively and that the factors predicted performance significantly. These results show that Continuous improvement & Strategic & Systematic approach to improvement has the greatest effect to the dependent variable respectively.

Table 4.6: Coefficient of Determination on Cost

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant) Profit	1.936	0.588		3.292	.002
Continuous improvement	0.741	0.035	0.635	21.171	.002
Employee involvement	0.667	0.051	0.648	13.078	.005
Management support	0.737	0.439	0.613	1.679	.001
1 Team work	0.549	0.027	0.615	20.333	.006
Strategic & Systematic approach to improvement	0.519	0.032	0.673	16.219	.001
Fact based decision making	0.602	0.064	0.608	9.4063	.004
Product and process design	0.670	0.101	0.569	6.634	0.007

a. Dependent Variable: Cost

Multiple regression investigation was carried out as to find out the link between cost and the seven independent variables. . In the model, P-values were used to experiment for the implications of each predictor variables (TQM measures). The TQM trials were considerable when the impact value was found to be less than 0.05 (significance level). As per the SPSS generated table below, regression equation.

($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \varepsilon$) becomes:

($Y = 1.936 + 0.741X_1 + 0.667X_2 + 0.737X_3 + 0.549X_4 + 0.519X_5 + 0.602X_6 + 0.670X_7 + \varepsilon$)

The results in table 4.6 indicate that the factors (continuous improvement, employee involvement, management support, teamwork, Strategic & Systematic approach to improvement, Fact based decision making and Product and process design) significantly predict the cost.

Performance = $1.936 + 0.741X_1 + 0.667X_2 + 0.737X_3 + 0.549X_4 + 0.519X_5 + 0.602X_6 + 0.670X_7 + \varepsilon$. It can be distinguished that the independent variables are significant at 0.05% significant level ($p =$; 0.002, 0.002, 0.005, 0.001, 0.006, 0.001, 0.004, 0.0007) respectively and that the factors predicted cost significantly. These results show that

Continuous improvement, management support & employee involvement to improvement has the greatest effect to the dependent variable respectively.

Table 4.7: Coefficient of Determination on Market Share

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant) Profit	1.221	0.224		5.450	.0056
Continuous improvement	0.596	0.096	0.5	6.208	.0024
Employee involvement	0.568	0.057	0.511	9.964	.0014
Management support	0.593	0.087	0.506	6.816	.0017
1 Team work	0.571	0.126	0.445	4.531	.0027
Strategic & Systematic approach to improvement	0.561	0.032	0.529	17.531	.0087
Fact based decision making	0.574	0.064	0.51	8.968	.0012
Product and process design	0.582	0.396	0.607	1.469	.00142

a. Dependent Variable: Market Share

Multiple regression investigation was carried out as to find out the link between market share and the seven independent variables. In the model, P-values were used to experiment for the implications of each predictor variables (TQM measures). The TQM trials were considerable when the impact value was found to be less than 0.05 (significance level). As per the SPSS generated table below, regression equation.

($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \epsilon$) becomes:

$$(Y = 1.221 + 0.596X_1 + 0.568X_2 + 0.593X_3 + 0.571X_4 + 0.561X_5 + 0.574X_6 + 0.582X_7 + \epsilon)$$

The results in table 4.7 indicate that the factors (continuous improvement, employee involvement, management support, teamwork, Strategic & Systematic approach to improvement, Fact based decision making and Product and process design) significantly predict the market share.

Performance = 1.221+ 0.596X₁+ 0.568X₂+ 0.593X₃+ 0.571X₄+ 0.561X₅+ 0.574X₆+ 0.582X₇+ ε. It can be distinguished that the independent variables are significant at 0.05% significant level (p=; 0.0024, 0.0014, 0.0017, 0.0027, 0.0087, 0.0012, 0.00142) respectively and that the factors predicted market share significantly. These results show that Continuous improvement, management support & Product and process design has the greatest effect to the dependent variable respectively.

4.6Correlations

The raw scores in TQM measures and performance for each were correlated. The examination was analyzed using SPSS to find out the correlation Pearson Product Moment Correlation was used. The synopsis of interaction is shown in table 4.8;

Table 4.8: Correlation

		Customer focus	Continuous improvement	Employee involvement	Management support	Team work	Strategic & Systematic approach to improvement	Fact based decision making	Product and process design
Customer focus	Pearson Correlation Sig. (2-tailed)	1							
	N	95							
Continuous improvement	Pearson Correlation Sig. (2-tailed)	.103	1						
	N	95	95						
Employee involvement	Pearson Correlation Sig. (2-tailed)	.708	.103	1					
	N	95	95	95					
Management support	Pearson Correlation Sig. (2-tailed)	.384	.212	.294	1				
	N	95	95	95	95				
Team work	Pearson Correlation Sig. (2-tailed)	.118	.198	.139	.251	1			
	N	95	95	95	95	95			

	N	95	95	95	95	95			
Strategic & Systematic approach to improvement	Pearson Correlation Sig. (2-tailed)	.176	.100	.469	.387	.343	.000	.000	1
	N	95	95	95	95	95	95		
Fact based decision making	Pearson Correlation Sig. (2-tailed)	.165	.172	.108	.134	.125	.000	.280	1
	N	95	95	95	95	95	95	95	
Product and process design	Pearson Correlation Sig. (2-tailed)	.256	.254	.268	.346	.271	.000	.176	.124
	N	95	95	95	95	95	95	95	95

**. Correlation is significant at the 0.01 level (2-tailed).

The data analyzed in table 4.8 was on continuous improvement, employee involvement, management support, teamwork, Strategic & Systematic approach to improvement, Fact based decision making and Product and process design, were calculated into single variables per factor by getting the averages of each factor. Pearson's relationship analysis was then conducted at 95% confidence interval and 5% confidence level 2-tailed. The table above indicates the relationship template among the factors TQM measures of magnitude ≤ 0.5 . The low positive linkage indicates that there is a minimal correlation between the factors. This notwithstanding, both factors had a considerable p-value ($p < 0.05$) at 95% confidence level.

CHAPTER FIVE: SUMMARY, CONCLUSION, RECOMMENDATIONS, LIMITATIONS AND SUGGESTIONS FOR FURTHER STUDY

5.1 Introduction

This chapter summarize the study and draws conclusion based on the outcome. The inference of the findings and areas for further research are also highlighted. In addition, it compares findings from the study to the study by other scholars as illustrated under literature review.

5.2 Summary of findings

The study found it crucial to find out the number of fleet operated by Passenger transport Sacco's and the passengers that the Sacco carries per day. This was intended to give the researcher the level of operations and the productivity of the organization. The researcher also found it necessary to analyze the organization age of existence and employee age of working in the organization. This was to help the researcher analyze whether the employee has stayed enough to understand the organization well.

A correlation analysis was used to establish the level of association between TQM practices and the effect on cost, profit and organization market share. Findings showed that employee involvement, fact based decision making, strategic and systematic approach to improvement, continuous improvement, team work, and product and process design positively correlates with cost, profit and market share.

Organizations that adopted TQM practices recorded high profits, low cost of operation and greater market share as compared to those organizations that did not embrace the practice. Correlation matrix indicates that customer focus, teamwork and employee involvement strongly and positively correlates with higher profits and the independent variable that conditions performance. The established regression equations were;

$$\text{Performance (Profit)} = 1.063 + 0.722X_1 + 0.604X_2 + 0.604X_3 + 0.532X_4 + 0.684X_5 + 0.650X_6 + 0.670X_7 + \epsilon.$$

Performance (cost)= $1.936 + 0.741X_1 + 0.667X_2 + 0.737X_3 + 0.549X_4 + 0.519X_5 + 0.602X_6 + 0.670X_7 + \epsilon$.

Performance (market share) = $1.221 + 0.596X_1 + 0.568X_2 + 0.593X_3 + 0.571X_4 + 0.561X_5 + 0.574X_6 + 0.582X_7 + \epsilon$.

Based on the outcomes of this study, the researcher endorses the research objectives that TQM practices influences Passenger transport SACCO's market share, profits and cost.

5.3 Conclusion

From the outcomes of the study, it is clear that the Passenger transport Sacco's in Kenya are dominated by urban vehicles which most of them do not observe TQM practices. As a result, the cost of operating the business becomes very expensive hence affecting their profits.

It is also noted that organization's that embrace TQM practices, tend to gain a competitive edge against their competitors. This has worked very well with organizations like Mash East Africa, Easy coach Ltd, Kenya Bus Services management Ltd just to mention a few.

It was also found from the correlation analysis that, organizational performance as measured in terms of profits, cost and market share, is highly and positively correlate with TQM practices. The study wind up that there is a correlation between TQM practices and organizational performance.

5.4 Recommendations

From the findings of this study, TQM practices has much to offer to passenger transport Sacco's in Kenya where scarce resources and market dynamism is evident. The study covered 100 Passenger transport Sacco's in Kenya. The findings are a fair representation of benefits organizations does realize when they embrace TQM

practices in their operations. The findings can be further improved by analyzing a bigger population sample size. The study had only three respondents per Sacco. I believe that extending the number of sample and drawing from all the departments can enhance the finding of future research. This will improve data accuracy and better portray organization views.

Future research should also focus on the feedback from the customer on how they perceive the organization quality of service. The study only focused on the views of the organization staff. This is because, in total quality management, it is believed that it is the ultimate customer that determines the quality of a product. It is also recommended that the same research be conducted in other industries to determine whether the same results will be achieved hence the consistency of the quality management theory, that TQM practices enhance organizational performance

5.5 Limitations of the study

In order to declare how the collected data was administered, the study used questionnaires that relied 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 researcher used qualitative data to compliment the information obtained through the questionnaires.

Some respondents suspiciously wondered who the researcher was and what the data was meant for. The questionnaires were only respondent to after assuring them that the information obtained, would be used for educational reason and that it will be handled with the confidentiality it deserves.

5.6 Suggestions for future study

This study focused on, only 95 passenger transport SACCO's in Kenya as listed by NTSA as at 31 January 2015, and therefore generalization could not adequately be extended to every SACCO as they have varying productivity and size stress and their scope is wider than that is considered in this study. Based on this fact among others, it

is recommended to carry out the research in all the 635 SACCO's and others which might have been recently registered.

Similar studies to this, can be replicated in the few years to come to assess if application of TQM practices on passenger transport SACCO's still influences performance

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APPENDICES

Appendix I.LIST OF PASSANGER SACCO's ANALYZED

1. Mash East Africa
2. Modern Coast Bus
3. Easy Coach Bus
4. Nyamira Express bus
5. Climax coaches
6. Bunguma shuttle
7. Classic luxury shuttle
8. Egesa shuttle sacco
9. Great rift express shuttle
10. Isiolo millenium
11. Kangaroo luxury
12. Kerio prestige shuttle
13. Meru shuttle
14. Mololine safaris
15. Mukanyeki shuttles
16. Muranga shuttle
17. Narok line
18. Njoro line services
19. North rift shuttle
20. Nyeri shuttle
21. Prestige shuttle
22. Sasaline classic shuttle
23. Blueline safaris shuttle
24. Great Nyanza travelers
25. Usenge shuttle
26. Kenya Bus services Management Ltd
27. City Hoppa ltd
28. Compliant management
29. Express connections
30. Metro trans East Africa
31. City star shuttle

32. Super metro Limited
33. Megarider management
34. Rwaken Investment
35. Star Bus Company
36. Rasasi investment
37. Embassava cooperative
38. Latema 22 travellers
39. Starways express ltd
40. Manchester matatu
41. Farasi travelers
42. Lucky transporters
43. Inter counties travellers
44. Chania Kibwezi travelers
45. Dandora Usafiri travellers
46. Eastleigh commutter services
47. Sunrise travelers
48. Tawala Utawala
49. Serian savings and credit
50. Nairobi friends travellers
51. Ebenezer matatu savings and credit
52. Kaloleni matatu owners
53. Chepkoilel matatu
54. Fastrack united
55. Kabeness savings and credit
56. Kangemi matatu owners Kasbowa savings and credit
57. Kasbowa savings and Credit
58. Kawangware matatu
59. Kibera Bureti sacco
60. Moiben MS Sacco
61. Nandi North Matatu
62. Dakika matatu owners
63. Indama(nje) Sacco
64. Ziwa m.travellers
65. Uyoma Kisumu sacco

66. Seven city shuttle
67. Snowball Sacco society
68. Umoiner Sacco Ltd
69. Lucky Baba dogo Travellers
70. KAM transporters Sacco
71. Lophu Multipurpose
72. Kayo-line group
73. Mat two friends Ltd
74. Neo Kenya mpya commuters
75. New classic travelers
76. Ngong travelers
77. Ngumo-line savings and credit
78. Nguso travellers sacco
79. Outer circle Sacco
80. Outreach travel
81. Premium travelers
82. Rahma savings and credit
83. Maruti united savings and creit
84. 212C transport sacco
85. 2KGT savings and creidit
86. 2KR route 105 multipurpose
87. 2 TS savings and credit
88. Five friends investment
89. Hannover commercial enterprises
90. KSMT Sacco Ltd
91. Mariba travellers Sacco
92. Msafara Sacco Society
93. West Madaraka route
94. Satima Sacco Society
95. umowa Sacco

Appendix II. Questionnaire

Part I General data

- 1) Name of your organization.....
- 2) Location of your organization.....
- 3) Gender: Male.....Female.....
- 4) Age.....(Optional)
- 5) How many fleet do your organization operate?.....
- 6) How long have you worked with the organization?.....
- 7) How long has your organization been in existence?.....

Part II: TQM practices applied by passenger transport Sacco's in Kenya.

8) Kindly indicate with a tick against each item to the extent that your organization has integrated TQM practices. 1- Strongly agree, 2- Agree, 3- Neutral, 4- Disagree, 5- Strongly disagree.

No	Statement	1	2	3	4	5
I	Customers' are the king to your organization.					
II	Top management are striving to put the organization in a better place in the market.					
III	The organization replaces the obsolete equipment with new ones effectively.					
IV	Required resources to carry out projects are always given in good time.					
V	Employees are empowered to make decisions in the organization.					
VI	Decision making is done only by top management.					
VII	Employees work as a team to achieve company objective.					
VIII	Organization have proper strategic plans and systematic approach to improvement.					
VII	Employees are happy with organizational processes.					
IX	Customers sometimes complain about					

	organizational processes.					
X	Decisions are always made based on facts.					
XI	Sometimes decisions are made based on rumors.					
XII	Organization value fact-based decisions.					
XIII	Organization systems and procedures promote efficiency in daily business operation.					
XIV	There is a smooth and steady flow of communication among the internal customers and the external customers.					
XV	Organization systems and procedures promote effectiveness in daily business operation.					
XVI	All employees know the organization mission and vision statement.					
XVII	All employees strive to the realization of the organization mission and vision statement.					
XVIII	Organization staff well trained.					
XIX	Organization drivers and conductors are well disciplined.					
XXI	Organization vehicles are inspected daily after work.					
XXII	Minor repairs are done on the vehicles after work to avoid interruption of the next day activities.					
XXIII	Organization has its own mechanics to repair the vehicles.					
XXIV	Organization vehicles are kept clean.					
XXV	Are you happy with organization mode of fare payment system?					
XXVI	Are organization vehicles get arrested by traffic police frequently?					

Part III: Impact of TQM practices on performance of passenger transport SACCO's in Kenya.

9)

No	Statement	1	2	3	4	5
I	Does the organization makes a lot of profit?					
II	Are the organization stakeholders happy about the profits that the organization is making?					
III	Do the organization lead the industry in market share?					
IV	Does your market share affect your profits?					
V	Do the organization employees paid in good time?					
VI	Do suppliers complain about late payment for their deliveries?					
VII	Are the internal customers satisfied with organization services?					
VIII	Do top management support quality initiatives?					
IX	Do team work increase organization profits?					
X	Do organization processes affect market share and profits?					
XI	Do organization processes increases organization costs?					
XII	Does organization culture enhance performance?					
XIII	Teamwork reduces organization running cost					
XIV	Good processes and systems reduces organization operational cost.					
XV	Fact based decision making reduces organization cost.					