EFFECT OF TOTAL QUALITY MANAGEMENT PRACTICES ON
ORGANIZATIONAL PERFORMANCE IN KENYA: A CASE OF TERTIARY
INSTITUTIONS IN UASIN GISHU COUNTY

WILSON KIPROTICH CHEPKECH

A Research Project Submitted to the Graduate School in Partial Fulfillment of the
Requirement for the Conferment of Masters of Business Administration Degree in
Strategic Management, Faculty of Commerce

KISII UNIVERSITY

OCTOBER, 2014
DECLARATION AND RECOMMENDATION

Declaration by the student
I, the undersigned, declare that this Project is my original work and that it has not been presented in any other university or institution of higher learning.

Signed.................................................... Date..............................................

Wilson Kiprotich Chepkech
CBM12/10549/14

RECOMMENDATION
This Project has been submitted for examination with my approval as a University supervisor.

Signed.................................................... Date..............................................

Dr. Bonuke Ronald
Kisii University
Faculty of Commerce

Signed.................................................... Date..............................................

Dr. Tarus Benjamin
Kisii University
Faculty of Commerce
DEDICATION

To my wife Edith Chirchir and our beloved son FabianCarlos Kigen for understanding and encouragement and to my parents for providing the gift of education
ACKNOWLEDGEMENT

This work would not have been completed with my effort alone. My most heartfelt gratitude goes to God for His provision, strength and enablement. I know if it were not for him i would not have completed this Project. My sincere thanks and appreciation also goes to my supervisors Dr.Bonuke Ronald and Dr.Tarus Benjamin for expert guidance, encouragement and enormous contribution during development of this research Project. Their positive criticism and patience made this work what it is. I also appreciate the contribution of friends and colleagues who participated in the research. To my family am so grateful for their understanding and encouragement.
ABSTRACT

Tertiary institutions in Kenya are experiencing changes in the form of expansion of the sector, diversification of provision, more heterogeneous student bodies, new funding arrangements, increasing focus on accountability and performance, global networking, mobility and collaboration. These changes have challenged institutional management that, more than ever before, need to revise and specify institutional mission statements, assess impact of new sources of funding, meet requirements for accountability, consider participation in globalization and international competition and the requirements for national, regional and international integration. Adoption of Total Quality Management practices by organizations in Kenya develops voluntary technical standards, which add value to all types of business operations. They contribute to making the development and supply of products and services more efficiently, safer and cleaner. To remain competitive, profit making and non-profit making organizations in Kenya have embraced Total Quality Management Practices. This study examined the effect of Total Quality Management practices on organizational performance in Kenya. The specific objectives of this study were to determine the effect of top management commitment on organizational performance, to investigate the effect of customer focus on organizational performance and to examine the effect of employee involvement on organizational performance. It adopted explanatory research design. The target population comprised head of departments and tutors in the tertiary institutions within Uasin Gishu County whose total population was 421. The sample size of 264 respondents was drawn using stratified random sampling. Questionnaires were used to collect primary data. Statistical Package for Social Sciences (SPSS) was used to conduct data analysis using descriptive statistics such as mean and standard deviation, and inferential statistics such as correlation analysis and multiple regressions to test hypothesis. Pearson correlation was used to determine the relationship between the total quality management practices and organizational performance while multiple regressions were used to determine the effects of the various elements of total quality management on organizational performance. The study findings of correlation analysis showed that top management commitment, employee involvement, and customer focus were positively and significantly affect organizational performance. The findings of the multiple regressions analysis showed that the observed changes in organizational performance attributed to the elements of total quality management practice is 56.9% ($r^2=.569$). This finding of this research supports the hypothesis that total quality management practices significantly affect organizational performance thus any tertiary institution managers aiming to achieve organizational performance should pay close attention to all the elements of total quality management. The study recommends that future studies test the effects of the other elements of total quality management practices on organizational performance that were not part of the current study.
# TABLE OF CONTENTS

DECLARATION AND RECOMMENDATION ........................................................................ ii

DEDICATION .................................................................................................................. iii

ACKNOWLEDGEMENT .................................................................................................... iv

LIST OF FIGURES ........................................................................................................ ix

LIST OF TABLES ........................................................................................................... 1

LIST OF ABBREVIATIONS ............................................................................................ 2

CHAPTER ONE .............................................................................................................. 3

INTRODUCTION ............................................................................................................ 3

1.1 Background of the Study ......................................................................................... 3

1.2 Statement of the Problem ....................................................................................... 6

1.3 Objective of the Study ............................................................................................ 7

1.3.1 Specific Objectives of the Study ....................................................................... 7

1.4 Study Hypotheses ................................................................................................... 7

1.5 Significance of the Study ....................................................................................... 8

1.6 Scope and Limitation of the Study ....................................................................... 8

1.7 Assumptions of the study ..................................................................................... 9

1.8 Operational Definition of Terms ......................................................................... 10

CHAPTER TWO .............................................................................................................. 12

LITERATURE REVIEW ................................................................................................... 12

2.1 Theoretical Review ............................................................................................... 12

2.2 The Concept of Organizational Performance ..................................................... 13

2.3 The Concept of Total Quality Management ....................................................... 14

2.4 Total Quality Management Practices and Organizational Performance ............... 16

2.5 The Conceptual Framework ............................................................................... 24
CHAPTER THREE ................................................................................................................. 25

METHODOLOGY .................................................................................................................. 25

3.1 Research Design .......................................................................................................... 25
3.2 Study Area ................................................................................................................... 25
3.3 Target Population ......................................................................................................... 26
3.4 Sample Size and Sampling Procedure ........................................................................ 26
3.5.1 Data Collection Instruments .................................................................................... 28
3.5.2 Data Collection Administration ................................................................................ 29
3.6.1 Validity of Research Instruments ............................................................................. 29
3.6.2 Reliability of Research Instruments ......................................................................... 29
3.6.3 Measurement of Variables ....................................................................................... 30
3.7 Data Analysis Procedures ............................................................................................ 30
3.8 Ethical Consideration ................................................................................................... 31

CHAPTER FOUR ................................................................................................................... 32

DATA ANALYSIS AND PRESENTATION .......................................................................... 32

4.1 Demographic Characteristics of the Respondents ....................................................... 32
4.2 Effects of Top Management Commitment on Organizational Performance ............ 33
4.3 Effects of Employee Involvement on Organizational Performance .......................... 37
4.3.1 Relationship between employee involvement and organizational performance .... 38
4.4 Effects of Customer Focus on Organizational Performance ...................................... 39
4.4.1 Relationship between customer focus and organizational performance ............... 42
4.5 The level of Organizational Performance ................................................................... 42
4.6 Regression results on effects of Total Quality management practices on Organizational performance ................................................................................................................. 44
4.6.1 Model summary ....................................................................................................... 44
4.6.2 Analysis of Variance .............................................................................................................. 45
4.6.3 Coefficient of the Total Quality Management Practices ................................................. 46
4.6.4 Hypothesis Testing .............................................................................................................. 48

CHAPTER FIVE .......................................................................................................................... 49

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS .................. 49

5.1 Summary of Findings ............................................................................................................. 49
5.1.1 Top Management Commitment and Organizational Performance ................................. 49
5.1.2 Employee Involvement and Organizational Performance .............................................. 50
5.1.3 Customer Focus and Organizational Performance ............................................................ 51
5.2 Conclusion ............................................................................................................................. 52
5.3 Recommendations ................................................................................................................ 52
5.4 Suggestion for Further Research ........................................................................................ 53

REFERENCES ............................................................................................................................. 54

APPENDIX I: LETTER OF TRANSMITTAL ............................................................................. 60

APPENDIX II: RESEARCH QUESTIONNAIRE ........................................................................ 61

APPENDIX IV: RESEARCH PERMIT .......................................................................................... 64

APPENDIX V: MAP OF UASIN GISHU ...................................................................................... 65
LIST OF FIGURES

Figure 2.1 Conceptual Frameworks........................................................................................................16
LIST OF TABLES

Table 3.1: Target population ................................................................................. 18

Table 3.2: Sample Size ............................................................................................ 25

Table 4.1: Demographic information of the respondents ........................................... 33

Table 4.2 Top management commitment to quality management .............................. 35

Table 4.3: Correlation analysis between top management commitment and organizational performance .............................................................................................................. 36

Table 4.4: Response on Employee involvement in the institution .............................. 37

Table 4.5: Correlation analysis between employee involvement and organizational performance .................................................................................................................. 39

Table 4.6: Response on Customer focus .................................................................... 41

Table 4.7: Correlation analysis of customer focus and organizational performance ........ 42

Table 4.8: Level of organizational performance .......................................................... 43

Table 4.9: Model Summary ......................................................................................... 45

Table 4.10: Analysis of Variance (ANOVA) ............................................................... 46

Table 4.11: Regression Coefficients .......................................................................... 47
LIST OF ABBREVIATIONS

AHP- Analytic Hierarchy Process

CEO- Chief Executive Officer

CF- Customer Focus

CVI- Content Validity Index

EFQM- European Foundation for Quality Management

EI- Employee Involvement

HE- Higher Education

HEI- Higher Education Institutions

ISO- International Standards Organization

IUCEA- Inter University Council of East Africa

M- Mean

MBNQA- Malcolm Baldrige National Quality Award

MSE- Micro and Small Enterprise

QM- Quality Management

R & D- Research and Design

RVTTI- Rift Valley Technical Training Institute

SD- Standard Deviation

SPSS- Statistical Package for Social Sciences

TIVET- Technical, Industrial, Vocational and Entrepreneurship Training

TMC- Top Management Commitment

TQM- Total Quality Management
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Improving the organizational performance of Higher Education Institutions (HEIs) is critical and proposes the application of Total Quality Management as a quality model. Total Quality Management addresses two important aspects of quality in Kenyan HEIs: leadership and governance systems and student satisfaction. Visionary and creative leadership is critical to the transformation of higher education. Restructuring of the leadership, governance and management systems of each institution should be a priority (Kinyanjui, 2007). With regard to providing students with an enabling academic and learning environment, Standa (2008), noted that the critical issue was to facilitate building capacities of students and make them succeed as intellectuals, leaders, professionals, researchers and creative human resource. University students have time and again expressed their displeasure with university management in a number of ways including demonstrations and riots, often causing destruction to university property and to members of the public. Standa (2008) further argued that the rules governing students conduct and discipline should be enforced fairly and that students’ disciplinary regulations need to be reviewed to indicate, among others, minimum period for resolving cases, reporting and appeals.

Globally, higher education (HE) environments are frequently described as turbulent and dynamic. Both global and national forces are driving change within and across individual countries and their higher education institutions (HEIs). These changes have served to put the issue of Total Quality Management firmly on the agendas of national governments, institutions, academic departments and individual programme of study (Becket & Brookes, 2006). Despite the progress that has been made through research and debate, there is still no universal consensus
on how best to manage quality within HEIs. One of the key reasons for this is the recognition that quality is a complex and multi-faceted construct, particularly in HE environments (Harvey & Knight, 1996; Cheng & Tam, 1997). As a result, the measurement and management of quality has created a number of challenges. This, in turn, has led to the adoption of a variety of quality management practices within different countries and their HEIs, many of which draw upon existing industry models.

HEIs are viewed as international operations. He states that in the Asia Pacific region (Australia, China, Hong Kong, India, Japan, Korea, Malaysia, New Zealand, Taiwan, Central Asia - Kazakhstan, Kyrgyz Republic, Mongolia, Uzbekistan and Tajikistan), with the exception of the central Asian countries, there is much commonality in environmental forces. Government initiatives to widen access are extensive, and there is an increasingly competitive environment in HE, for example where new tertiary institutions are being established in countries such as India and Malaysia in order to retain provision within their own country. This, he reports, has made Total Quality Management in HEIs a very important factor in their development agendas. (Murata, 2006)

The principal motivation for pursuing ISO certification among firms in the UK was the ability of the certificate to open customers' doors that were previously closed, or would close, if ISO certification were not achieved (Dick, 2000). ISO certification is a necessary entry ticket for an organization for selling its products abroad in new markets (Gunnlaugsdottir, 2002). A similar study in the East, Middle East and Africa (EMEA) region that includes Kenya states that in the East, Middle East and Africa (EMEA) arena (Czech Republic, Denmark, Estonia, Finland, Greece, Kenya, Iceland, Netherlands, Norway, Poland, Spain, South Africa, Sweden, Turkey, United Kingdom) there are considerable changes regarding sources and levels of funding across the whole region, this may be in relation to an increased number of private institutions or
reliance on private sector funding for example (Giannakou, 2006). There is a commonality in terms of government drives to increase access to HE and a significantly diversified student market as a result of this. In conjunction with the Asia Pacific region there are increased concerns regarding the quality of provision in HE. In emphasizing the suitability of Total Quality Management as a quality model in HEIs in Kenya, Mutula (2002) states that TQM has the potential to encompass the perspectives of different stakeholders in an integrated manner and thus is a comprehensive approach to quality management that can facilitate change and innovation.

Total Quality Management (TQM) is a management philosophy and company practice that aims to harness the human and material resources of an organization in the most effective way to achieve the objectives of the organization (Chin, 2004). Other models that have been tested within HE include the Balanced Score Card, Malcolm Balbridge Award, ISO 9001:2008 series, Business Process Re-engineering, SERVQUAL and EFQM excellence model (Mutula 2002). Kinyanjui (2007) states that administrative and management structures of the public universities should be analyzed and streamlined to create efficient, effective, responsive and lean structures to avoid wastage of resources, duplicated responsibilities and overlapping mandates where members of different levels are members at next level and to institute checks and balances. Partnership and participation should be the hallmarks of good governance. Power to make decisions should be devolved to operational units (faculties, institutes and departments). These operational units should be strengthened to enable them to discharge their functions effectively. The recruitment of deans, directors of institutes, heads of departments, administrators and managers for the operational units should be done competitively at all levels and remuneration be pegged to competence and performance.
The ISO certification has fundamentally been a private sector affair, but it is becoming a public sector affair too, especially in Kenya. It is believed that ISO is a mark of quality and a step towards international standards (Mutula, 2002). However, Singels, Ruel & van de Water (2001) in a survey of 950 organizations of North Holland noted a common misconception among the organizations that ISO would mandate higher levels of product quality. They were of the view that ISO certification gives no guarantee that the quality of products or services of an organization is better than the quality of other organizations.

1.2 Statement of the Problem

Higher education plays an important role in the production and distribution of national income. The knowledge produced and skills imparted by the sector contribute to faster growth in national income, an expansion of the system contributes to more equal sharing of the national income. With expansion of the knowledge economy, the knowledge produced by the system and the skills possessed by its graduates are becoming deciding factors in promoting economic progress and social welfare. Improving organizational performance of higher education is thus imperative to national growth and development. The quality of performance of HEIs can be improved by implementing quality management models such as Total Quality Management (Varghese, 2013). Total Quality Management (TQM) implies an organization’s obsession with meeting or exceeding customer expectations. It is an approach for continuously improving the quality of goods and services delivered through the participation of individuals at all levels and functions of an organization (Pfau, 1989). Many TIVET institutions in Kenya are embracing TQM practices and have gone further to attain ISO 9001:2008 certification. The objectives of these efforts are to ensure timely delivery of services, customer satisfaction and improved general performance. Whether the TQM practices adopted by these institutions are related to non financial performance of such institutions remains unclear (Standa, 2008).
Many global, regional and local studies have underscored the role of TQM practices in enhancing customer satisfaction in an organization (Crosby, 2000; Oakland, 2003; Denning, 2006; and Feigenbaum, 2006). These studies have, however, concentrated on the impact of TQM practices on performance of profit making organizations but not academic institutions. Past studies have also focused on Universities as HEIs but little has been done on tertiary non-University institutions that offer Diploma and Certificate levels of training (Obara et al., 2010). This confirms that there is very limited literature on effect of TQM practices on tertiary non University institutions in Kenya.

The study therefore, seeks to determine the effect of TQM practices on organizational performance in Kenya using tertiary institutions within Uasin Gishu County as case study.

1.3 Objective of the Study

The general objective of this study was to determine the effect of Total Quality Management practices on organizational performance in Kenya.

1.3.1 Specific Objectives of the Study

The study was guided by the following specific objectives:

i) To determine the effect of top management commitment (TMC) on organizational performance

ii) To examine the effect of customer focus (CF) on organizational performance

iii) To assess the effect of employee involvement (EI) on organizational performance

1.4 Study Hypotheses

This study made the following hypotheses:

i. $H_{01}$ There is no significant relationship between top Management commitment (TMC) and organizational performance
ii. \textbf{Ho}_2 \text{There is no significant relationship between customer focus (CF) and organizational performance}

iii. \textbf{Ho}_3 \text{There is no significant relationship between employee involvement (EI) and organizational performance}

1.5 Significance of the Study

This study is relevant to the management of tertiary institutions in Kenya on the state of implementation of Total Quality Management and its impact on education service delivery with recommendations of improving education service delivery. Secondly, the study is also important to the management of tertiary institutions to enable them come up with strategies to alleviate the challenges of change in the future with the implementation of TQM practices. Third, the study can also assist the Ministry of Education in coming up with reforms to strengthen the provision of education and training services in tertiary institutions in Kenya. Finally, the study is going to increase knowledge in the area of research in implementation of Total Quality Management practices and educational service delivery. This study is useful to students who wish to carry out further research.

1.6 Scope and Limitation of the Study

This study focused on tertiary institutions such as Eldoret Polytechnic and Rift Valley Technical Training Institute within Uasin Gishu County in Kenya. Within the context of the Total Quality Management model, this study specifically focus on three core practices of TQM namely top management commitment, customer focus and employee involvement. This study also covers organizational performance indicators of tertiary institutions such as employee satisfaction, quality training, academic excellence, and customer satisfaction. The effect of total quality management on organizational performance deserve further research since the data that was analyzed was collected from one sector of service industry in one country, more studies are required before general conclusions can be drawn.
1.7 Assumptions of the study

This study made assumption that respondents cooperate and respond honestly and that findings from the sample can be generalized to other tertiary institutions in the entire country.
1.8 Operational Definition of Terms

**Customer Focus:** This study refers it as the orientation of an organization toward serving its clients' needs to improve the relationship between an organization and its customers.

**Customer Satisfaction:** This study refers it as a measure of how education services provision by tertiary institutions meet or surpass student or customer expectations.

**Employee Involvement:** This study refers it as the regular participation of employees in deciding how their work is done, making suggestions for improvement, goal setting, planning and monitoring of their performance. It also refers to morale or employee willingness to accomplish organizational objectives.

**Employee Satisfaction:** This study refers it as a terminology used to describe whether employees (institution staff) are happy and contented and fulfilling their desires and needs at workplace.

**Organizational Performance:** This study refers it as the actual output or results of an organization as measured against its intended outputs. It encompasses four specific areas of firm outcomes; customer satisfaction, employee satisfaction, quality training and academic performance.

**Tertiary Institution:** This study refers it as non-University education and training institutions offering diploma and certificate courses which includes colleges, institutes and polytechnics.
**Top Management Commitment:** This study refers it as the degree, to which top management sets up quality management objectives and strategies, provides and allocates necessary resources, contributes in quality improvement efforts, and assesses quality management implementation and performance.

**Total Quality Management:** This study refers it as a management approach of an organization, centered on quality, based on the participation of all its members and aiming at long run success through customer satisfaction and benefits to all members of the organization and to society.
CHAPTER TWO

LITERATURE REVIEW

2.1 Theoretical Review

This study was guided by the structural contingency theory proposed by Donaldson (1996). The key element of structural contingency theory is that organizations must fit their structure to the contingency factors in order to maintain and improve performance. Structural contingency theory holds that there is no single, effective structure for all organizations. Instead, organizations must adapt their structures to fit the contingency factors and the environment as they affect the organization. Contingency factors include: strategy, size, task, uncertainty, parent organization, public accountability, critical assets and technology.

In postulating the relevance of the theory to improving organizational performance, Donaldson (2006) uses the 5-stage structural adaptation to regain fit (SARFIT) model. First, organization is in fit as it has acclimatized to its environment. In the second stage there is in contingency change where the organizational environment changes. Consequently in the third stage, the organization is in misfit and performance suffers. The fourth stage is where the organization does structural adaptation to correct the state of misfit and to reinstate its level of performance. In the final stage, the organization achieves a new fit and performance recovers. Strategic choice also plays a role in Kenyan tertiary institutions in that they bow to the imperative of adopting a new structure that fits its new level of the contingency factor in order to avoid loss of performance from misfit”. It is thus the onus of this study to examine the relationships between total quality management and organizational performance of tertiary institutions in Kenya.
2.2 The Concept of Organizational Performance

Organizational performance comprises the actual output or results of an organization as measured against its intended outputs (or goals and objectives). Organizational performance encompasses three specific areas of firm outcomes: financial performance (profits, return on assets and return on investment), product market performance (sales, market share), and shareholder return (total shareholder return and economic value added). Specialists in many fields are concerned with organizational performance including strategic planners, operations, finance, legal, and organizational development. In recent years, many organizations have attempted to manage organizational performance using the balanced scorecard methodology where performance is tracked and measured in multiple dimensions such as financial performance (such as shareholder return), customer service, social responsibility (such as corporate citizenship and community outreach) and employee stewardship (Richard et al., 2009).

Organizational performance is the ultimate dependent variable of interest for researchers concerned with just about any area of management. This broad construct is essential in allowing researchers and managers to evaluate firms over time and compare them to rivals. In short, organizational performance is the most important criterion in evaluating organizations, their actions, and environments. This importance is reflected in the pervasive use of organizational performance as a dependent variable. Organizational performance encompasses three specific areas of firm outcomes: financial performance, market sales and market share and shareholder return, organizational effectiveness is broader and captures organizational performance plus the plethora of internal performance outcomes normally associated with more efficient or effective operations and other external measures that relate to considerations that are broader than those simply associated with economic valuation (either by shareholders, managers or customers), such as reputation (Richard et al., 2009).
2.3 The Concept of Total Quality Management

It is a management approach of an organization centered on quality, based on the participation of all its members and aiming at long term success through customer satisfaction and benefits to all members of the organization and society. Total quality management (TQM) consists of organization-wide efforts to install and make permanent a climate in which an organization continuously improves its ability to deliver high-quality products and services to customers. While there is no widely agreed-upon approach, TQM efforts typically draw heavily on the previously-developed tools and techniques of quality control. "Total Quality Management (TQM) is a strategy for continuously improving performance at every level, and in all areas of responsibility. It combines fundamental management techniques, existing improvement efforts, and specialized technical tools under a disciplined structure focused on continuously improving all processes. Improved performance is directed at satisfying such broad goals as cost, quality, schedule, and mission need and suitability. Increasing user satisfaction is the overriding objective. A term first used to describe a management approach to quality improvement. Since then, TQM has taken on many meanings. Simply put, it is a management approach to long-term success through customer satisfaction. TQM is based on all members of an organization participating in improving processes, products, services and the culture in which they work (Arawati, 2005).

The Malcolm Baldrige National Quality Award, in the United States annually recognizes American businesses, educational institutions, and healthcare organizations that run high-quality operations. Organizations are judged on criteria from seven categories: leadership, strategic planning, customer focus, measurement, analysis, and knowledge management, workforce focus, operations focus and results. Leadership is the degree of visibility and support that management provides in implementing a total quality environment. Strategic planning refers to a clear vision,
mission, long-term plan and quality policy. It adds that the degree of visibility and support that management provides in implementing a total quality environment is significant to the success of TQM adoption.

There are eight organizational practices necessary for Total Quality Management (Arawati, 2005. First is customer focus. The study states that the customer ultimately determines the level of quality. No matter what an organization does to foster quality improvement-training employees, integrating quality into the design process, upgrading computers or software, or buying new measuring tools—the customer determines whether the efforts were worthwhile. Second is employee involvement. All employees participate in working toward common goals. Total employee commitment can only be obtained after fear has been driven from the workplace, when empowerment has occurred, and management has provided the proper environment. High-performance work systems integrate continuous improvement efforts with normal business operations. Self-managed work teams are one form of empowerment. The third practice is being process centered. It states that a fundamental part of TQM is a focus on process thinking. A process is a series of steps that take inputs from suppliers (internal or external) and transforms them into outputs that are delivered to customers (again, either internal or external). The steps required to carry out the process are defined, and performance measures are continuously monitored in order to detect unexpected variation.

The fourth practice is having an integrated system. Although an organization may consist of many different functional specialties often organized into vertically structured departments, it is the horizontal processes interconnecting these functions that are the focus of TQM. Micro-processes add up to larger processes, and all processes aggregate into the business processes required for defining and implementing strategy. Everyone must understand the vision, mission,
and guiding principles as well as the quality policies, objectives, and critical processes. The fifth practice is having a strategic and systematic approach to management. A critical part of the management of quality is the strategic and systematic approach to achieving an organization’s vision, mission, and goals. This process, called strategic planning or strategic management, includes the formulation of a strategic plan that integrates quality as a core component. The sixth practice is continual improvement. A major thrust of TQM is continual process improvement. Continual improvement drives an organization to be both analytical and creative in finding ways to become more competitive and more effective at meeting stakeholder expectations. Seventh is fact based decision making. In order to know how well an organization is performing, data on performance measures are necessary. TQM requires that an organization continually collect and analyze data in order to improve decision making accuracy, achieve consensus, and allow prediction based on past history. The final practice is effective communication (Arawati, 2005). During times of organizational change, as well as part of day-to-day operation, effective communications plays a large part in maintaining morale and in motivating employees at all levels. Communications involve strategies, method, and timeliness. These elements are considered so essential to TQM that many organizations define them, in some format, as a set of core values and principles on which the organization is to operate.

2.4 Total Quality Management Practices and Organizational Performance

2.4.1 Effect of Top Management Commitment on Organizational Performance

Top management can be referred to as the corner stone of a successful Total Quality programme as they hold the seat of most influence upon those working for the company. They do not as such produce anything, but they get results through their employees. Their management style
may come into play when trying to get the best from staff, whether it is through an authoritarian approach or a participation styled approach (Meere, 2005). Magutu et al., (2010) demonstrates that ISO 9001:2008 provide an invaluable set of benefits for academic institutions in Kenya. They argue that ISO 9001:2008 certification carry advantages like market competitiveness, consistency in quality, improved productivity, employee involvement, staff morale and job satisfaction. The practical benefits of working towards and achieving the standard are many. They include improved earning, productivity and profitability. On the contrary, Arawati (2005) reveals a practical situation when the ISO system does not add value to manage the business processes, by mentioning that ISO 9001: 2008 quality standards is not regarded as a major driver of process performance as the company has a policy on achieving these standards based on commercial needs criteria.

TQM is a way of life for a company. It has to be introduced and led by top management. This is a key point. Attempts to implement TQM often fail because top management doesn't lead and get committed - instead it delegates and pays lip service. Commitment and personal involvement is required from top management in creating and deploying clear quality values and goals consistent with the objectives of the company, and in creating and deploying well defined systems, methods and performance measures for achieving those goals. These systems and methods guide all quality activities and encourage participation by all employees (Zhang, 2007).

A previous study by Ahmad et al., (2008) investigated top management commitment role in maintenance of ISO 9001:2008 and in outcomes of QM system in Algeria, practices and implementation in two large service organizations. The investigation concerned with top management commitment and leadership from different approaches such as involvement in quality improvement, providing necessary resources and showing steady commitment to quality
perfection. Through applying different analysis techniques, the results showed a variation in extent of top management commitment role in ISO 9001:2008 maintenance and TQM system and practices between the two organizations. The respondents of the first company reflected higher positive statements on their top management. The final conclusion of the study emphasized on the positive role of top management in ISO 9001:2008 maintenance and TQM system outcomes (Ahmad et al., 2008).

An investigation into ISO 9001:2008 certified public universities operating in Kenya and Uganda to identify the most important factor for the implementation of TQM revealed that management leadership and commitment are imperative factors in implementation of TQM (Olel, 2006). From a service quality approach Sit et al., (2011) found that leadership as TQM construct has a strong positive association with service quality in the commercial banks in Malaysia. The study targeted middle management employees in 20 commercial banks listed in the stock exchange. The main objective of the study was to examine the association between TQM practices and service quality in Malaysia’s commercial banking industry. The authors drew from the results that the challenge of top management leadership in commercial banks is to satisfy customers with high quality services.

The same degree of importance of management leadership is supported by findings of a study conducted by Eshiwani (2009). Outcomes of the study showed visionary leadership as one of most four critical human resource related factors that promise successful TQM implementation in high education institutes in Kenya. The authors discussed vitality and criticality function of visionary leadership in high education institutions. This importance occurs in involvement of top executives in creating sustains and customer orientation work dimension and presenting apparent quality values in their institutes. The positive impact of leadership in TQM in high education has been outlined in a study that assigned weights to the criteria of the Malcolm Baldrige National
Quality Award (MBNQA) from perspective of academics and managers in Peruvian high education institutes. By applying analytic hierarchy process (AHP), leadership with its two sub criteria (senior leadership and Governance and Social Responsibility) weighted higher than that in MBNQA. According to new weights assigned to the TQM criteria including leadership, the author proposed a model to base for national Peruvian award regarding TQM in education (Macey and Schneider, 2008).

The role of leadership in context of TQM practices and implementation from other approaches with a focus on Kenyatta University, Kenya was investigated by Mwiria and Nyukuri (2004). The general objective of the study was to examine the relationship between TQM practices and role stressor. The study indexed dimensions of TQM practices and role stressors in Kenyan Universities. Contradictory to the commercial banks cases, the index revealed that leadership has potentially negative impact on role stressors. Paradoxical to the above outcomes and supporting the findings in commercial banks and high education preceding cases, leadership has high positive role in quality management in Libyan public hospitals. Shin and Collier (2000) concluded this from a study involved three levels of hospitals throughout urban Tripoli. Details of findings from analysis were that “The finding seems to suggest that leadership and management commitment is higher in district level hospitals than in state and national level hospitals. It also suggests that this factor is higher in state level hospitals than in the national referral center.” Leadership as a TQM dimension in Libyan service firms has been found to have a significant positive impact in enhancing customer satisfaction. Criticality of leadership role, especially within service context, fall into one core principle “making the right management decisions” in order to “pleasing customers” by creating one-vision culture in the organization through reflecting high commitment and effective leadership (Tan, 2001). Wiklund and Edvardsson
(2003) determined that top management leadership is a major factor in TQM programs and initiative especially in the context of Research and Development (R&D). The purpose of the study was to determine the constructs of TQM in the R&D context from academic researchers’ perspectives. It involved researchers in the field of science and technology from the largest four public South African universities.

From the above analyses, it is apparent that top management commitment is pertinent to the success of TQM models in organizational settings. If leadership roles in TQM aren’t taken up by chief executive officers (CEO’s) and their line senior managers nothing much in ways of changes was implemented and any that are wont stand the test of time.

2.4.2 Effect of Employee involvement on organizational performance

Employees do not decide on how they are to be managed, but when implementing change to management styles one cannot expect that all employees was pick it up and accept it because management sees the need to make the change. It is imperative that management keep employees in the picture at all times when decisions are being made regarding TQM, which should encourage participation and help ease transition. When the identification of the tools for a system to be used is complete it should be ensured that the right training is given to the right people. This is to emphasize the benefits of why their using them and how they are using them. Training given to the right people has been proven to minimize the misuse of the tools and techniques (Otunga, 2007).

On-going education and training of all employees supports the drive for quality. Employees are encouraged to take more responsibility, communicate more effectively, act creatively, and innovate. As people behave the way they are measured and remunerated, TQM links remuneration to customer satisfaction metrics. Employee involvement is a matter of courtesy
asking people’s opinion before making decisions that affect them. Employee involvement is a very simple process. If a decision is made affecting the employees, it is always better to consult them as they may have some intelligent ideas to offer and this was help in building up the relations and creating a conducive environment for better results. In the study, employees who indicated that their organizations were one of the best performers reported double the level of engagement compared to employees who reported average organizational performance. Fifty-three percent of those who saw their organizations as top performers were highly engaged while only 8 percent of those who reported their organizations as under-performing were engaged (IUCEA, 2010).

It is important that the organization find ways to clearly communicate successes that demonstrate how the organization is performing, and especially to find ways to socialize stories of superior performance. Clear, well-planned, high-impact messages can help employees not only see the connection between their work and these successes, but also understand how they support overall organizational performance, which ties directly to engagement levels. Clearly, engaged employees understand the value of ensuring a positive customer experience and are more likely to demonstrate their commitment by delivering high quality products and services. Customer and employee-driven experiences that highlight great customer satisfaction and loyalty need to be effectively shared throughout the company. Like the connection to organizational performance, the connection to positive customer experiences is vital to healthy engagement levels (Magutu et al., 2010).

In discussing about employee performance improvement through involvement versus fear and insecurity in Kenyan organizations Mutisya (2010) highlights those participatory measures such as team-working and high-involvement work practices demonstrate improvements in performance, but can also have less positive outcomes for employee and social well-being.
Performance changes may occur because participation leads to changed attitudes which lead to higher performance. Alternately, changes to behavior and performance may be achieved not through attitude changes but through fear and an insecure or intensified work environment. One explanation for these contradictory results is that participation schemes are sometimes introduced as part of restructuring packages. When employees are faced with an insecure environment, participation may induce compliance and not the attitude changes necessary for employees' commitment to the enterprise. If this is so, behavioral changes may not be of the order anticipated.

The degree of influence accorded to employees is also important. Low levels of participation with little employee autonomy have been identified as a reason for disappointing results. Where employees’ expectations have been raised by introducing participation, but there is little real improvement in employee influence, workers may express resentment and dissatisfaction. Where participation is only from the top down, workers may feel that they are being lectured and not listened to. Even where participation is from the bottom up, workers may feel that management is using their ideas, with no return seen by employees (Mutisya, 2010).

### 2.4.3 Effect of Customer Focus on Organizational Performance

A strong link between the delivery of high quality goods and services and profitability through customer satisfaction was found by Nganga (2010). The study defined Customer satisfaction as the degree to which a firm’s customers continually perceives that their needs are being met by the firm’s products and services. Soltani (2005) espouses that an organization must identify customer relationship to measure customer needs and expectations; involve customers in quality improvement and determine customer satisfaction. The availability of customer complaint information to managers and the degree of the use of customer feedback to improve product
quality reveal the level of customer focus in an organization. As customer expectations are dynamic, an organization needs to survey customer expectations regularly and modify its operations accordingly.

An extensively covered element within the TQM literature is customer focus and (in association herewith) customer satisfaction. Given the increasing focus on the creation of competitive advantages it is argued, that quality ought to be defined from an external perspective of customer expectations, rather than from predetermined internal specifications (Murata, 2006). Throughout the empirical literature, there is a general agreement that quality does not solely rely on the organization's ability to produce products with correct technical specifications. In order to stay competitive, the organization must be able to respond and adapt to changing customer preferences and needs Brah et al., (2001). It is thus important that every employee in the organization is involved and committed towards establishing and sustaining a high level of customer satisfaction. The supportance of having a high degree of customer focus in SMEs is likewise addressed in the study conducted by Ahire and Golhar (1996), who furthermore argue that the focus on customers may be stronger in SMEs due to their proximity to and close relationship with the customers.

It is a necessity that both current as well as future needs of the customers are understood and met, when creating and sustaining a customer oriented organization. This implies that the organization actively must establish a variety of mechanisms, enabling efficient ways of letting customers contact the organization with product inquiries and related questions, as well as establishing channels from which the organization can obtain knowledge about customer preferences. In order to gain full advantage of this knowledge, it is important that incoming information and changes in customer preferences are analyzed and understood (Nganga, 2010).
2.5 The Conceptual Framework

Figure 2.1 Relationship between TQM practices and Organization Performance

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>TQM Practices</td>
<td>Organizational Performance</td>
</tr>
</tbody>
</table>

- Top Management Commitment
- Customer Focus
- Employee Involvement

Source: Author’s Conceptualization (2014)

Figure 2.1 above conceptualizes the relationship between independent variables and dependent variables. The independent variable is conceptualized as TQM practices and was measured by constructs such as top management commitment, customer focus and employee involvement. The dependent variable on the other hand was operationalized as organizational performance which constructs are employee satisfaction, customer satisfaction, quality training and academic excellence. The adoption of TQM practices by tertiary institutions may affect organizational performance of the institutions.
CHAPTER THREE
METHODOLOGY

3.1 Research Design

The study adopted an explanatory research design. According to Mugenda and Mugenda (2003) an explanatory research design is one which collects data in order to test hypothesis or to answer questions concerning the current status of the subjects under study. An explanatory research design is an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables. The ultimate goal is to learn about a large population by surveying a sample of that population that was used to explain what is in existence in respect to conditions or variables that are found in a given situation without influencing the variables. The study was to establish the correlation and causal relationship between total quality management practices and performance of an organization.

3.2 Study Area

The study was carried out at Uasin Gishu County. It lies in the mid west of the Rift Valley region and borders six counties namely Elgeyo Marakwet County to the East, Trans Nzoia county to the North, Kericho county to the South, Baringo county to the South East, Nandi county to the South West and Bungoma county to the West. It covers an approximate area in kilometers of 3,345.2. Temperatures range from a minimum of 8.4°C to a maximum of 27°C. It has two rainy seasons with average rainfall from 900mm to 1,200mm per annum. It has a population of 894,179 as per the 2009 Kenya National Census. Uasin Gishu County boasts of over 770 primary schools, 158 secondary schools and over 15 tertiary institutions. The county has several middle level colleges and Universities. Higher Education institutions include Moi University, Kisi University,
University of Eldoret, African Institute of Research and Development Studies, Eldoret Aviation College, Rift Valley Technical Training Institute and Eldoret Polytechnic.

3.3 Target Population

The population of the study comprised of tutors and head of departments of Eldoret Polytechnic and Rift Valley Technical Training Institute, which are the only tertiary institutions that are ISO 9001:2008 certified and operates under the Ministry of Education in Uasin Gishu County. The target population was 421 (216 from Eldoret Polytechnic and 205 from Rift Valley Technical Training Institute as shown in table 3.1.

Table 3.1 Target Population

<table>
<thead>
<tr>
<th>Tertiary institution</th>
<th>Position</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eldoret Polytechnic</td>
<td>Tutors</td>
<td>206</td>
</tr>
<tr>
<td></td>
<td>Heads of department</td>
<td>10</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>216</td>
</tr>
<tr>
<td>R.V.T.T.I.</td>
<td>Tutors</td>
<td>197</td>
</tr>
<tr>
<td></td>
<td>Heads of department</td>
<td>8</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td>205</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>421</td>
</tr>
</tbody>
</table>


3.4 Sample Size and Sampling Procedure

The sample size comprised of 264 tutors and heads of department of which 134 were selected from Eldoret Polytechnic and 130 from R.V.T.T.I.

The following formula was used;
\[ n = \frac{z^2 pq}{d^2} \]

where \( n \) is the desired sample size (if the target population is greater than 10,000)

- \( z \) is the standard normal deviate at the required confidence level
- \( p \) is the proportion in the target population estimated to have characteristics being measured
- \( q \) is \( 1-p \)
- \( d \) is the level of statistical significance set

As recommended by Fisher *et al.*, (2000). If there is no estimate available of the proportion in the target population assumed to have the characteristics of interest as is in this study, 50% should be used. Using a \( z \)-statistic of 1.96 and a desired accuracy level of 0.05 then the sample size was:

\[ n = \frac{1.96^2 (0.5)(0.50)}{0.05^2} = 384 \]

Since the population is less than 10,000 from both institutions, the required sample size was smaller. A final sample estimate was calculated using the formula:

\[ n_f = \frac{n}{(1+n/N)} \]

where \( n_f \) is the desired sample size (when the population is less than 10,000)

\( n \) is the desired sample size (when the population is more than 10,000)

\( N \) is the estimate of the population size
Table 3.2 Sample Size

<table>
<thead>
<tr>
<th>Institution</th>
<th>Group</th>
<th>Population</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eldoret Polytechnic</td>
<td>Tutors</td>
<td>206</td>
<td>124</td>
</tr>
<tr>
<td></td>
<td>Heads of department</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Subtotal</td>
<td>216</td>
<td>134</td>
</tr>
<tr>
<td>R.V.T.T.I.</td>
<td>Tutors</td>
<td>197</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>Heads of department</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Subtotal</td>
<td>205</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>421</td>
<td>264</td>
</tr>
</tbody>
</table>

**Source:** Author, (2014)

The census method was used to select ISO 9001: 2008 tertiary institutions in Uasin Gishu County that was participate in the study. Staff members were stratified as heads of departments and tutors. All heads of departments (10 for Eldoret polytechnic and 8 for R.V.T.T.I.) participated in the study. After stratification of the population, simple random sampling was used to draw staff samples for tutors from the subgroups using a table of random numbers. The sample size calculation formula by Mugenda and Mugenda (2003) was used in this study.

### 3.5 Data Collection Procedures

#### 3.5.1 Data Collection Instruments

Data was collected using a questionnaire in a form of a Likert scale ranging from 1 - Strongly Agree, 2 - Agree, 3 - Neutral, 4 - Disagree and 5 - Strongly Disagree. The questionnaires were
self-administered to tutors and head of departments in the institutions under study. Primary and secondary data collected were used in this study. Primary data was collected through the questionnaires while secondary data was collected from text, journals and magazines.

3.5.2 Data Collection Administration

The researcher acquired research permit from National Commission for Science, Technology and Innovation and Kisii University. With granted authority, permission was sought from the tertiary institution management to conduct the study at their institution entries. With the help of research assistants, the questionnaire was administered to tutors and head of departments at their places of work. The researcher waited and collects all the filled in questionnaires. This method ensured that all questionnaires are filled in and returned.

3.6 Instrumentation

3.6.1 Validity of Research Instruments

According to Mugenda and Mugenda (2003) validity is the accuracy and meaningfulness of inferences, which are based on the research results. The researcher established validity of research instruments by presenting the questionnaire to supervisors from Kisii University. Their advice was used to adjust the instruments.

3.6.2 Reliability of Research Instruments

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Reliability is influenced by random error. As random error increases, reliability decreases. Random error is the deviation from the true measurement due to factors that have not been addressed effectively by the researcher such as coding, ambiguous instructions to respondents and bias (Mugenda and Mugenda, 2003). To established reliability of the instruments, the researcher carried out a pilot study in Kenya Medical Training College, Eldoret
branch. Reliability of data was checked by applying Cronbach’s Alpha which measures internal consistency or average correlation of items in a survey instrument to gauge its reliability. The Cronbach Alpha formula was used since reduces the time required to compute a reliability coefficient in other methods. Its coefficient is also a conservative estimate of reliability hence avoids overestimation (Kerlinger, 1993). The Cronbach Alpha coefficient obtained was 0.817 which indicate that the instruments were reliable.

3.6.3 Measurement of Variables
Total Quality Management practices were measured using scalar developed by Tarus (2012). A measurement method for organization performance developed by the researcher and internal consistency reliability should be above 0.6 (Heire et al, 2006).

3.7 Data Analysis Procedures
Data was screened to ensure that responses are legible and understandable and that responses are within an acceptable range and are complete. Collected data was coded and entered into the Statistical Package for Social Sciences program for analysis. The analysis was done in three stages. The first stage involved checking data reliability by applying Cronbach’s Alpha (α). Cronbach Alpha measures internal consistency or average correlation of items in a survey instrument to gauge reliability. The second stage was the application of the Pearson’s moment of correlation analysis to assess the strength of relationship between dependent and independent variables. Multiple regression analysis was then applied to test association of variables with each other and the extent of variance in the dependent variable as a result of unit change in the independent variable as indicated by the coefficient of determination factor (R²). This study was to establish the correlation and causal relationship between TQM practices and organization
performance. To achieve this, multiple regression models was used to assess the contributions of independent variables in predicting organizational performance of tertiary institutions.

The multiple regression model that was used for this study was:

\[ Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + e \]

The model was then modified to reflect the variables of this study:

\[ Y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + e \]

Where 
- \( Y \) - Organizational Performance
- \( \alpha \) - Constant of Proportionality
- \( x_1 \) - Top Management Commitment
- \( x_2 \) - Customer Focus
- \( x_3 \) - Employee Involvement
- \( e \) - Error Term

3.8 Ethical Consideration

Volunteer participation was explained clearly to the participants before they sign their consent forms. Participants had the freedom to withdraw from the study at any stage. The study had guarantee confidentiality and anonymity to the participants. The names of all informants was coded to conceal their identity and to maintain confidentiality.
4.1 Demographic Characteristics of the Respondents

This section presents a brief description of the demographic characteristics of the sampled respondents involved in this study. Such a description is considered to be very important in providing a better understanding of the respondents included in the study and therefore provide a good foundation for a detailed discussion of the results based on the stipulated objectives of the study. The demographic characteristics included gender, length of service and designation. The demographic characteristics of the respondents were as follows; 166 (63%) of respondents were males and 98 (37%) of respondents were females. The data showed that majority of respondents were males. This finding shows that 30% constitutional gender rule has been followed by the institution under this study.

On the length of service, 24 (9%) of respondents had served for less than six months, 61 (23%) of respondents had served between 6 months and 2 years, 121 (46%) of respondents had served between 2 to 4 years while 58 (22%) of respondents had served for more than 4 years. The data showed that majority of respondents had served between 2 and 4 years which is considerably long period enough to provide significant information concerning institutional operations and management.

Concerning staff designations 246 (93%) of respondents served as tutors and 18 (7%) of respondents as heads of departments. The data showed that significant proportion of respondents were tutors which gives the study a better perspective on how employees are involved in day to day operations of the institution as shown in table 4.1.
4.2 Effects of Top Management Commitment on Organizational Performance

The study set out to establish the extent to which respondents believed that the commitment of senior level management is critical for success of Total Quality Management. The respondents were presented with five Likert scale questions relating to top management commitment. On Support of quality policies by senior level management, majority 239 (90.5%) agreed, 20 (7.6%) were uncertain and 25 (1.9%) disagreed (M=4.2, SD=.66). This result shows that majority of respondents (90.5%) agreed with the statement that senior level management support quality policies implementation within the institutions hence improving organizational performance. In addition, 229 (83%) of the respondents agreed that selection, promotion and appointment of staff by senior level management to positions are by merit, while 38 (14.4%) were uncertain and 7 (2.7%) disagreed (M= 4.1,SD= 0.76). Concerning senior level management is committed to quality 198 (75%) agreed, 59 (22.3%) were uncertain and 7 (2.7%) disagreed (M=3.9, SD 0.79).
Statement on senior level management was willingness to provide resources necessary to maintain quality in operations, 203 (76.9%) agreed while 50 (18.9%) were uncertain and 11 (4.2%) disagreed (M=3.9, SD=0.81). Majority of the respondents 213 (80.7%) believe that the commitment of senior level management is critical for success in total quality management implementation while 41 (15.5%) were uncertain and 10 (3.8%) disagreed (M= 4.1, SD =0.83).

It was also clear from the response that Institutions’ processes and operations are standardized since 198 (75%) of the respondents agreed while 48 (18.2%) were uncertain and 17 (6.4%) disagreed (M=3.7, SD=0.75). The Likert scale was rated 1 to 5, hence the mean was 2.5, from the results, all the means were above 2.5, hence it indicate that majority of the respondents agreed with the statements presented to them as showed in table 4.2. The results indicate that top management commitment to the institutions operation and management under study to support total quality management practices implementation in the organization is critical as summarized in table 4.2.
<table>
<thead>
<tr>
<th>Statements</th>
<th>STA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>STD</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support of quality policies by Senior level management</td>
<td>F</td>
<td>92</td>
<td>147</td>
<td>20</td>
<td>5</td>
<td>0</td>
<td>4.1</td>
<td>.76</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>34.8</td>
<td>55.7</td>
<td>7.6</td>
<td>1.9</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selection, promotion and appointment of staff by Senior level management to positions is by merit</td>
<td>F</td>
<td>85</td>
<td>134</td>
<td>38</td>
<td>6</td>
<td>1</td>
<td>3.9</td>
<td>.79</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>32.2</td>
<td>50.8</td>
<td>14.4</td>
<td>2.3</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior level management is committed to quality</td>
<td>F</td>
<td>70</td>
<td>128</td>
<td>59</td>
<td>5</td>
<td>2</td>
<td>3.9</td>
<td>.81</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>26.5</td>
<td>48.5</td>
<td>22.3</td>
<td>1.9</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior level management is willingness to provide resources necessary to maintain quality in operations</td>
<td>F</td>
<td>70</td>
<td>133</td>
<td>50</td>
<td>9</td>
<td>2</td>
<td>4.1</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>26.5</td>
<td>50.4</td>
<td>18.9</td>
<td>3.4</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The commitment of Senior level management is critical for success in total quality management implementation</td>
<td>F</td>
<td>94</td>
<td>119</td>
<td>41</td>
<td>8</td>
<td>2</td>
<td>4.1</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>35.6</td>
<td>45.1</td>
<td>15.5</td>
<td>3.0</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institution processes and operations are standardized</td>
<td>F</td>
<td>97</td>
<td>101</td>
<td>48</td>
<td>12</td>
<td>5</td>
<td>3.7</td>
<td>.75</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>36.7</td>
<td>38.3</td>
<td>18.2</td>
<td>4.5</td>
<td>1.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Author, (2014)
4.2.1 Relationship between Top Management Commitment and Organization Performance

Correlation analysis was further used to describe the strength and direction of relationship between top management commitment and organization performance. The relationship between independent variable (top management commitment) and dependent variable (organizational performance) were investigated using Pearson product-moment correlation coefficient as shown in (Table 4.3). There was a strong positive relationship between organizational performance and top management commitment ($r=.391, p=0.01$), indicating a positive correlation between top management commitment and organizational performance. The results indicate that top management commitment support total quality management practices in their organizations to improve their performance.

Table 4.3: Correlation analysis between top management commitment and organizational performance

<table>
<thead>
<tr>
<th></th>
<th>Organizational performance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational</td>
<td>Pearson</td>
<td>1</td>
</tr>
<tr>
<td>performance</td>
<td>Correlation</td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>264</td>
</tr>
<tr>
<td>Top management</td>
<td>Pearson</td>
<td>.391**</td>
</tr>
<tr>
<td>commitment</td>
<td>Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>264</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed). Source: Author, 2014
4.3 Effects of Employee Involvement on Organizational Performance

From table 4.4, it can be observed that majority 183 (69.3%) agreed that employees participated in overall decision making (autonomy) in their respective institutions while 157 (59.5%) were uncertain and 78 (29.5%) disagreed (M=3.9, SD=0.93). The same observation can be made for the statement that employees are provided with adequate training and education to perform their tasks, 207 (78.4%) agreed while 36 (13.6%) were uncertain and 21 (7.9%) disagreed (M=3.8, SD=0.87). On presence of clear communication channel between employee and senior managers 192 (72.7%) agreed, 57 (21.6%) were uncertain and 15 (5.7%) disagreed (M=3.9, SD=0.86). Larger proportion of respondents 176 (66.7%) agreed that managers listened to employee’s opinions, 81 (30.7%) were uncertain and 7 (2.7%) disagreed (M=3.9, SD=0.78). Inquiry into whether top management encouraged team work among employees 184 (69.7%) agreed, 77 (29.2%) were uncertain and 3 (1.2%) disagreed (M=3.5, SD=0.75). The Likert scale was rated 1 to 5, hence the mean was 2.5, from the results, all the means were above 2.5, hence it indicate that majority of the respondents agreed with the statements presented to them, as indicated in table 4.4.
Table 4.4: Response on Employee involvement in the institution

<table>
<thead>
<tr>
<th>Statements</th>
<th>STA</th>
<th>A</th>
<th>N</th>
<th>D</th>
<th>S</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees are given chance to participate in decision making</td>
<td>F</td>
<td>26</td>
<td>157</td>
<td>157</td>
<td>64</td>
<td>14</td>
<td>3.9</td>
<td>.93</td>
<td>-.837</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>9.8</td>
<td>59.5</td>
<td>59.5</td>
<td>24.2</td>
<td>5.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees are provided with enough training and education to adequately perform their tasks</td>
<td>F</td>
<td>70</td>
<td>137</td>
<td>36</td>
<td>13</td>
<td>8</td>
<td>3.8</td>
<td>.87</td>
<td>-1.152</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>26.5</td>
<td>51.9</td>
<td>13.6</td>
<td>4.9</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is a clear communication channel between employee and senior managers</td>
<td>F</td>
<td>61</td>
<td>131</td>
<td>57</td>
<td>10</td>
<td>5</td>
<td>3.9</td>
<td>.86</td>
<td>-.815</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>23.1</td>
<td>49.6</td>
<td>21.6</td>
<td>3.8</td>
<td>1.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee’s opinions are listened to by senior managers</td>
<td>F</td>
<td>80</td>
<td>96</td>
<td>81</td>
<td>5</td>
<td>2</td>
<td>3.9</td>
<td>.78</td>
<td>-.333</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>30.3</td>
<td>36.4</td>
<td>30.7</td>
<td>1.9</td>
<td>0.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees are encouraged to work in teams by senior managers</td>
<td>F</td>
<td>70</td>
<td>114</td>
<td>77</td>
<td>2</td>
<td>1</td>
<td>3.5</td>
<td>.75</td>
<td>-.188</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>26.5</td>
<td>43.2</td>
<td>29.2</td>
<td>0.8</td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author, (2014)

4.3.1 Relationship between employee involvement and organizational performance

This study also carried out correlation analysis to investigate the relationship between employee involvement and organizational performance. The results indicate a strong positive correlation \( r = .715 \), at \( p = 0.01 \) between independent variable (employee involvement) and dependent variable (organizational performance). The results indicate that for Total Quality Management practices to results in organizational performance, employee involvement is very important as indicated in Table 4.5.
Table 4.5: Correlation analysis between employee involvement and organizational performance

<table>
<thead>
<tr>
<th></th>
<th>Organizational performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td>performance</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.715**</td>
</tr>
<tr>
<td>N</td>
<td>264</td>
</tr>
<tr>
<td>Employee involvement</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>264</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed). Source: Author, (2014)

4.4 Effects of Customer Focus on Organizational Performance

The analysis of employee perspectives concerning customer focus was also carried out. Majority of the respondents 168 (63.8%) agreed that employees are trained on customer focus practices, 74 (28%) were uncertain and 22 (8.3%) disagreed (M=3.5, SD=0.75). On whether attention to customer needs is key to organizational success 190 (72%) agreed while 70 (26.5%) were uncertain and 4 (1.6%) disagreed (M=3.9, SD=0.72). This study sought to know if the organization always meets customers need and expectations 188 (71.2%) agreed while 67 (25.4%) were uncertain and 9 (3.4%) disagreed (M=3.9, SD=0.84). On whether Customer complaints are given priority by the organization 177 (67%) agreed, 80 (30.3%) were uncertain and 7 (2.7%) disagreed (M=3.9, SD=0.83). The response indicated that organization performs market research to find out customer needs, since 170 (64.4%) of the respondents agreed, 77 (29.2%) were uncertain while 17 (6.5%) disagreed (M=3.8, SD=0.98). The results indicated that customers have clear channels of communication with the organization, since 168 (63.6%)
agreed, 77 (29.2%) were uncertain and 19 (7.2%) disagreed (M=3.6, SD=0.81). Furthermore, 190 (72%) believe that when the customer succeeds the organization succeeds, 67 (25.4%) were uncertain and 7 (2.7%) disagreed (M=3.9, SD=0.82). They also believe that employees derive satisfaction from fulfilling customer expectation since 199 (75.3%) agreed, 57 (21.6%) were uncertain while 8 (3.0%) disagreed (M=3.9, SD=0.79). The Likert scale was rated 1 to 5, hence the mean was 2.5, from the results, all the means were above 2.5, hence the results indicate that majority of the respondents agreed with the statements presented to them, as shown in table 4.6. The results indicate that customer focus has impacts on organizational performance as indicated on the means for all the study variables all of which are above 3.5 in a five Likert scale.
<table>
<thead>
<tr>
<th>Statements</th>
<th>STA</th>
<th>A</th>
<th>N</th>
<th>DA</th>
<th>STD</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees are trained on customer focus practices</td>
<td>F</td>
<td>13</td>
<td>155</td>
<td>74</td>
<td>18</td>
<td>4</td>
<td>3.5</td>
<td>.75</td>
</tr>
<tr>
<td>%</td>
<td>4.9</td>
<td>58.7</td>
<td>28.0</td>
<td>6.8</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention to customer needs is key to organizational success</td>
<td>F</td>
<td>47</td>
<td>143</td>
<td>70</td>
<td>2</td>
<td>2</td>
<td>3.9</td>
<td>.72</td>
</tr>
<tr>
<td>%</td>
<td>17.8</td>
<td>54.2</td>
<td>26.5</td>
<td>.8</td>
<td>0.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organization always meets customers need and expectations</td>
<td>F</td>
<td>80</td>
<td>108</td>
<td>67</td>
<td>8</td>
<td>1</td>
<td>3.9</td>
<td>.84</td>
</tr>
<tr>
<td>%</td>
<td>30.3</td>
<td>40.9</td>
<td>25.4</td>
<td>3.0</td>
<td>0.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer complaints are given priority by the organization</td>
<td>F</td>
<td>70</td>
<td>107</td>
<td>80</td>
<td>5</td>
<td>2</td>
<td>3.9</td>
<td>.83</td>
</tr>
<tr>
<td>%</td>
<td>26.5</td>
<td>40.5</td>
<td>30.3</td>
<td>1.9</td>
<td>.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organization performs market research to find out customer needs</td>
<td>F</td>
<td>85</td>
<td>85</td>
<td>77</td>
<td>11</td>
<td>6</td>
<td>3.8</td>
<td>.98</td>
</tr>
<tr>
<td>%</td>
<td>32.2</td>
<td>32.2</td>
<td>29.2</td>
<td>4.2</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customers have clear channels of communication with the organization</td>
<td>F</td>
<td>31</td>
<td>137</td>
<td>77</td>
<td>15</td>
<td>4</td>
<td>3.6</td>
<td>.81</td>
</tr>
<tr>
<td>%</td>
<td>11.7</td>
<td>51.9</td>
<td>29.2</td>
<td>5.7</td>
<td>1.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When the customer succeeds the organization succeeds</td>
<td>F</td>
<td>73</td>
<td>117</td>
<td>67</td>
<td>5</td>
<td>2</td>
<td>3.9</td>
<td>.82</td>
</tr>
<tr>
<td>%</td>
<td>27.7</td>
<td>44.3</td>
<td>25.4</td>
<td>1.9</td>
<td>.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees derive satisfaction from fulfilling customer expectation</td>
<td>F</td>
<td>64</td>
<td>135</td>
<td>57</td>
<td>5</td>
<td>3</td>
<td>3.9</td>
<td>.79</td>
</tr>
<tr>
<td>%</td>
<td>24.2</td>
<td>51.1</td>
<td>21.6</td>
<td>1.9</td>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

M-Mean, SD-Standard deviation  
Source: Author, (2014)
4.4.1 Relationship between customer focus and organizational performance

This study also focuses to establish the effects of customer focus and organizational performance. To ascertain the effect, correlation analysis was performed. Correlation analysis indicated a positive correlation ($r=.575$, $p=0.01$). The results indicate that Total Quality Management practices which are customer oriented affect organizational performance as shown in table 4.7.

Table 4.7: Correlation analysis of customer focus and organizational performance

<table>
<thead>
<tr>
<th></th>
<th>Organization performance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>performance</td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>264</td>
</tr>
<tr>
<td>Customer focus</td>
<td>Pearson Correlation</td>
<td>.575***</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>264</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed). Source: Author, (2014)

4.5 The level of Organizational Performance

The dependent variable for this study was organizational performance. The respondents were presented with statements on; customer satisfaction, employee satisfaction quality training and academic excellence as a measure of organizational performance. Majority of the respondents agreed to the four aspects under consideration; customer satisfaction 90.7% agreed, employee’s satisfaction 76.9% agreed, and academic excellence 82.2% agreed. The results indicate that the organizations are fairly well as indicated in table 4.8.
Table 4.8: Level of organizational performance

<table>
<thead>
<tr>
<th>Statements</th>
<th>STA</th>
<th>A</th>
<th>N</th>
<th>DA</th>
<th>STD</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer satisfaction</td>
<td>F</td>
<td>81</td>
<td>161</td>
<td>21</td>
<td>1</td>
<td>0</td>
<td>4.2</td>
<td>.60</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>30.7</td>
<td>61.0</td>
<td>8.0</td>
<td>0.4</td>
<td>0.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee satisfaction</td>
<td>F</td>
<td>62</td>
<td>141</td>
<td>49</td>
<td>8</td>
<td>4</td>
<td>3.9</td>
<td>.82</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>23.5</td>
<td>53.4</td>
<td>18.6</td>
<td>3.0</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality training</td>
<td>F</td>
<td>108</td>
<td>102</td>
<td>42</td>
<td>6</td>
<td>6</td>
<td>4.1</td>
<td>.92</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>40.9</td>
<td>38.6</td>
<td>15.9</td>
<td>2.3</td>
<td>2.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic excellence</td>
<td>F</td>
<td>84</td>
<td>133</td>
<td>39</td>
<td>6</td>
<td>2</td>
<td>4.1</td>
<td>.78</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>31.8</td>
<td>50.4</td>
<td>14.8</td>
<td>2.3</td>
<td>.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author (2014)

4.5.1 Summary of Correlation Analysis

This study sought to investigate the relationship between total quality management practices and organizational performance using Pearson Correlation. Correlation results indicated that the three practices under consideration were statistically significant; employee involvement had the highest positive correlation of 0.715, p=0.01, followed by customer focus, 0.575, p=0.01, and lastly top management, 0.391, p=0.01 as indicated in table 4.9.
Table 4.9 Summary of Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Organizational Performance</th>
<th>Top Management Commitment</th>
<th>Employee Involvement</th>
<th>Customer Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational performance</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top management commitment</td>
<td>Pearson Correlation</td>
<td>.391**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee involvement</td>
<td>Pearson Correlation</td>
<td>.715**</td>
<td>.316**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customers focus</td>
<td>Pearson Correlation</td>
<td>.575**</td>
<td>.216**</td>
<td>.617**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed). Source: Author, (2014)

4.6 Regression results on effects of Total Quality management practices on Organizational performance

4.6.1 Model summary

This study further carried out regression analysis to determine the extent in which the Total Quality Management practices; top management commitment, employee involvement and customer focus affects organizational performance. $R^2$ represents the values of multiple
correlation coefficients between the predictors used in the model (top management commitment, employee involvement, and customer focus) and organizational performance. The $R^2$ represented the measure of variability in organizational performance that is accounted for by the predictors (independent variables). From the model, $(R^2 = .569)$ shows that all the predictors account for 56.9 % variation of organizational performance. The value of adjusted $R^2$ was .564, showing that the prediction of Total Quality Management practices on organizational performance account for approximately 56.4 % less variance. The change statistics were used to test whether the change in adjusted $R^2$ is significant using the F ratio. The model caused adjusted $R^2$ to change from zero to .569 as summarized in table 4.9.

**Table 4.9: Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.754$^a$</td>
<td>.569</td>
<td>.564</td>
<td>2.66102</td>
<td>.569</td>
<td>114.528</td>
<td>3</td>
<td>260</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Customer Satisfaction, Top Management Commitment, Employee Involvement b. Dependent Variable: Organization Performance **Source:** Author, (2014)

**4.6.2 Analysis of Variance**

The analysis of variance was used to test whether the model could significantly fit in predicting the outcome than using the means. The F- ratio represents the ratio of improvement in prediction that results from fitting the model, relative to the inaccuracy that exists in the model. The F- ratio was 114.528 and was significant (P<.05). The model significantly improved the ability to predict the effects of Total Quality Management practices on organizational performance.
Table 4.10: Analysis of Variance (ANOVA)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>2432.924</td>
<td>3</td>
<td>810.975</td>
<td>114.528</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>1841.072</td>
<td>260</td>
<td>7.081</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4273.996</td>
<td>263</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Customer focus, Top Management Commitment, Employee Involvement  
b. Dependent Variable: Organization Performance  
Source: Author, 2014

4.6.3 Coefficient of the Total Quality Management Practices

Table 4.11 shows the estimates of $\beta$ values and gives an individual contribution of each predictor to the model. The $\beta$ value explains about the relationship between organizational performance with each predictor (top management commitment, employee involvement and customer focus). The positive $\beta$ values indicate the positive relationship that exists between the predictors and the outcome. The $\beta$ value for top management commitment, employees’ involvement and customer focus had a positive coefficient thus positive effect on organizational performance as summarized in the model below.

The general regression model is indicated below:

$$Y = \alpha + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + e$$

The model was modified to reflect the variables of this study:

$$Y = \alpha + \beta_1x_1 + \beta_2x_2 + \beta_3x_3 + e$$

$$Y = \alpha + .204 \times x_1 + .720 \times x_2 + .207 \times x_3 + e$$
Where $Y$ - Organizational Performance
   $\alpha$ - Constant of Proportionality
   $x_1$ - Top Management Commitment
   $x_2$ - Customer Focus
   $x_3$ - Employee Involvement
   $e$ - Error Term

The t test was used as a measure to identify whether the predictors were making a significant contribution to the model. When the t-test associated with B-values is significant and the predictor is making a significant contribution to the model. The smaller the value of significance (the larger the value of t) that is the greater is the contributor of that predictor.

From this study findings the model shows that the top management commitment indicates ($t = 4.149$, $p = .05$); employees’ involvement ($t = 9.950$, $p = .05$) and customer focus ($t = 4.064$, $p = .05$). This study finding showed that Total Quality Management practices had significant relationship with organizational performance, as shown in table 4.11.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>5.855</td>
<td>.824</td>
<td>7.108</td>
<td>.000</td>
<td>4.233</td>
</tr>
<tr>
<td>Top Management Commitment</td>
<td>.204</td>
<td>.049</td>
<td>.178</td>
<td>4.149</td>
<td>.000</td>
</tr>
<tr>
<td>Employee Involvement</td>
<td>.720</td>
<td>.072</td>
<td>.530</td>
<td>9.950</td>
<td>.000</td>
</tr>
<tr>
<td>Customer Focus</td>
<td>.207</td>
<td>.051</td>
<td>.210</td>
<td>4.064</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Organizational Performance Source: Author, 2014
4.6.4 Hypothesis Testing

Hypothesis 1 (H₀₁) There is no significant relationship between top management commitment (TMC) and organizational performance. Findings showed that top management commitment had coefficient of estimate which was significant (β=0.178, p=0.000) where p< 0.05 therefore we reject null hypothesis and accept alternative hypothesis, which states there is significant relationship between top management commitment (TMC) and organizational performance.

Hypothesis 2 (H₀₂) There is no significant relationship between employee involvement (EI) and organizational performance. Findings showed that employee involvement had coefficient of estimate which was significant β=0.530, p=0.000) where p< 0.05 therefore we reject null hypothesis and accept alternative hypothesis, which states there is significant relationship between employee involvement and organizational performance.

Hypothesis 3 (H₀₃) There is no significant relationship between customer focus and organizational performance. Findings showed that customer focus had coefficient of estimate which was significant β=0.210, p=0.000) where p < 0.05 therefore we reject null hypothesis and accept alternative hypothesis, which states there is significant relationship between customer focus and organizational performance.
CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings
On the basis of this study objectives and data analysis, the results support the following summary findings:

5.1.1 Top Management Commitment and Organizational Performance
The first objective sought to find out the relationship between top management commitment and organizational performance. From the results majority 90.5% believe that senior level management support quality policies, 83% agreed that selection, promotion and appointment of staff by senior level management to positions is by merit. 75% agreed that senior level management is committed to quality, 76.9% agreed that senior level management was willing to provide resources necessary to maintain quality in operations.

Majority of the respondents 80.7% believe that the commitment of senior level management is critical for success in total quality management implementation, 75 % agreed that institutions’ processes and operations are standardized. Correlation analysis results indicated a strong positive relationship between top management commitment and organizational performance \((r = .391, p=0.000)\). The results agree with those of Ahmad et al., (2008) who investigated effect of top management commitment role in maintenance TQM practices in Algerian organizations. The final conclusion of the study emphasized on the positive role of top management in ISO 9001:2008 maintenance and TQM system outcomes.

The results were also similar to those found by (Olel, 2006) who conducted an investigation into ISO 9001:2008 certified public universities operating in Kenya. The study revealed that management leadership and commitment are imperative factors in implementation of TQM.
Similarly Wiklund and Edvardsson (2003) conducted study to determine the constructs of TQM in four largest public South African universities; the results indicated that top management leadership is a major factor in TQM programs and initiative especially in the context of Research and Development (R&D).

5.1.2 Employee Involvement and Organizational Performance

The second objective of this study was to investigate the relationship between employee involvement and organizational performance. This study tested this relationship in the areas of employee participation in decision making, adequacy of training, clarity of communication with top management, and top management support for team work. 69.3% agreed that employees participate in overall decision making in their respective institutions, 78.4% agreed that employees are provided with adequate training and education to perform their tasks, 72.7% agreed on presence of clear communication channel between employee and senior managers, Larger proportion of respondents (66.7%) agreed that managers listened to employee’s opinions and that majority 69.7% agreed that top management encouraged team work among employees. Correlation results indicate a strong positive correlation (r=.715, at p=0.000) between employee involvement and organizational performance.

This study finding concur with Mutisya (2010), who conducted a study in Kenyan organizations, the study highlighted that those participatory measures such as team-working and high-involvement work practices demonstrate improvements in performance. Performance changes may occur because participation leads to changed attitudes which lead to high employee performance. Similarly (Otunga, 2007) found out that it is imperative that management keep employees in the picture at all times when decisions are being made regarding TQM, which should encourage participation and help ease transition. When the identification of the tools for a system to be used is complete it should be ensured that the right training is given to the right
people. This is to emphasize the benefits of why their using them and how they are using them. Training given to the right people has been proven to minimize the misuse of the tools and techniques.

5.1.3 Customer Focus and Organizational Performance

The third objective of this study was to find out the relationship between customer focus and organizational performance. Majority of the respondents 63.8% agreed that employees are trained on customer focus practices, 72% believed that customer needs are key to organizational success, 71.2% believed that organization always meets customers need and expectations, on whether Customer complaints are given priority by the organization, 67% agreed.

The response indicated that organization performs market research to find out customer needs, since 64.4% of the respondents agreed. 63.6% indicated that Customers have clear channels of communication with the organization. Majority of the respondents 72% believe that when the customer succeeds the organization succeeds, while 75.5% believe that employees derive satisfaction from fulfilling customer expectation. Correlation analysis indicated a positive correlation ($r=0.57$, $p=0.000$).

The results concur with Nganga (2010) who found a strong link between the delivery of high quality goods and services and profitability through customer satisfaction. Similarly, (Murata, 2006) posited that given the increasing focus on the creation of competitive advantages, quality ought to be defined from an external perspective of customer expectations, rather than from predetermined internal specifications. Brah et al., (2001) also concluded that quality does not solely rely on the organization's ability to produce products with correct technical specifications. In order to stay competitive, the organization must be able to respond and adapt to changing customer preferences and needs.
5.2 Conclusion

This study examined the relationships between top management commitment, employee involvement, customer focus and organizational performance. From this study finding, this study concluded that top management commitment was critical for organizational performance. The study also found that top management in the institutions under study was willing to commit organizational resource in supporting total quality management. Results also indicated that institutional processes and procedures were standardized to meet total quality management requirements.

Concerning employees’ involvement, this study concluded that employee involvement had a direct relationship with organizational performance. Employees were involved in decision making within their respective organizations, employees are provided with adequate training and education to perform their tasks, and there were clear communication channel between employees and senior managers listened to employee’s opinions and encouraged team work among employees.

The study also concluded that customer focus was critical for organizational performance. The results indicated that the organization always attempted to meet its customer needs, address customers complaints as a priority for the organization, the organization actively performed market research to identify customer needs and that the organization provided clear channels of communication to its customers.

5.3 Recommendations

This study recommends that since Total Quality Management Practices (top management commitment, employee involvement and customer focus) have been found to have positive
effects on organizational performance, it is necessary that it be adopted as a quality management model in all tertiary institutions and other organizations at large.

This study also recommends that tertiary institutions managers be enlightened on the importance of total quality management practices on organizational performance to enhance the level of top management commitment to the practice and consequently achieve better organizational performance.

This study also recommends that managers should also increase the level of employee involvement in their tertiary institutions decision making and autonomy of procedures to improve their levels of productivity in the organization.

This study also recommended that since customer focus has an effect on organizational performance, it is necessary for managers of tertiary institutions to initiate market research to find out customer needs, provide clear channels of communication and address customer complaints in time.

5.4 Suggestion for Further Research

This study recommends that future studies test the effects of the other elements of total quality management practices (process-centeredness, integrated system, continual improvement, strategic and systematic approach, fact-based decision-making and communication) on organizational performance that were not part of this study.
REFERENCES


Varghese, N.V. (2013). “Governance reforms in higher education: a study of selected countries in Africa” UNESCO.


APPENDIX I: LETTER OF TRANSMITTAL

Wilson Kiprotich Chepkech
Kisii University,
Faculty of Commerce,
Department of Business Administration,
E-mail: tichro5@yahoo.com

Dear Respondent,

RE: RESEARCH PROJECT

My name is Wilson Kiprotich Chepkech, pursuing a Master of Business Administration Degree at Kisii University. I am undertaking a research study on the effect of Total Quality Management practices on organizational performance in Kenya: a case of tertiary institutions in Uasin Gishu County.

Your institution has been selected as a key respondent for the study and I am requesting permission to be allowed to carry out the study. Any information provided was treated with the utmost confidentiality it deserves and it was used purely for academic purposes.

Thank you.

Yours faithfully,

Wilson Kiprotich Chepkech.
CBM12/10549/14
APPENDIX II: RESEARCH QUESTIONNAIRE

1. Please indicate your gender

   Male □   Female □ (tick the appropriate box)

2. How long have you worked for the institution? (tick the appropriate box)

   Less than 6 months □   6 months to 2 years □   2 years to 4 years □   More than four years □

3. Kindly indicate your position in the institution (tick the appropriate box)

   Head of department □   Tutor □

4. Kindly indicate whether in your opinion quality is reflected in the following aspects about top management commitment of the institution (tick the appropriate box)

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support of quality policies by Senior level management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selection, promotion and appointment of staff by Senior level management to positions is by merit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior level management is committed to quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior level management is wasing to provide resources necessary to maintain quality in operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The commitment of Senior level management is critical for success in total quality management implementation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institution processes and operations are standardized</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Kindly indicate the extent to which you agree with the following aspects on **employee involvement** (tick the appropriate box)

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees are given chance to participate in decision making</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees are provided with enough training and education to adequately perform their tasks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There is a clear communication channel between employee and senior managers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee’s opinions are listened to by senior managers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees are encouraged to work in teams by senior managers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Kindly indicate the extent to which you agree with the following aspects on **customer focus** (tick the appropriate box)

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees are trained on customer focus practices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention to customer needs is key to organizational success</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organization always meets customers need and expectations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer complaints are given priority by the organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The organization performs market research to find out customer needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customers have clear channels of communication with the organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When the customer succeeds the organization succeeds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees derive satisfaction from fulfilling customer expectation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Do you believe that quality measures in your institution are adequate to ensure that there is:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic excellence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX III: RESEARCH PERMIT

THIS IS TO CERTIFY THAT:
Mr. Wilson Kiprotich Chepkem
of Kish University, 6434-401100
has been permitted to conduct
research in Uasin Gishu County

on the topic: EFFECT OF TOTAL
QUALITY MANAGEMENT PRACTICES ON
ORGANIZATIONAL PERFORMANCE IN
KENYA: A CASE OF TERTIARY
INSTITUTIONS IN UASIN GISHU COUNTY

for the period ending:
30th November, 2014

Permit No: NACOSTUP/14/7320/3377
Date of Issue: 15th September, 2014
Fee Received: Ksh 1,000

Secretary
National Commission for Science, Technology & Innovation
Maps of Uasin Gishu

Uasin is a collection of map images. This political map of Uasin Gishu is one of them. Click on the Detailed button under the image to switch to a more detailed map.

See Uasin Gishu from a different angle.

Each map style has its advantages. No map type is the best. The best is that Mapill lets you look at Uasin Gishu from many different perspectives.

This political map is nice. But there is a good chance you will like other map styles even more. Select another style in the above table.