TOTAL QUALITY MANAGEMENT FOR USER SATISFACTION IN LIBRARY OPERATIONS AND SERVICES WITH REFERENCE TO USIU-AFRICA LIBRARY

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF LIBRARY AND INFORMATION SCIENCE, DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE, UNIVERSITY OF NAIROBI

2017
DECLARATION

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

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DEDICATION

This is a dedication to my parents Julius Kitavi and Rachel Munyao to whom I am indebted. To my brothers and sister; Samuel, Hannah and Nashon for providing the support needed throughout the process.
ABSTRACT

In recent times, one of the most important organizational strategies for achieving competitive advantage has been pegged on improving quality. Quality improvement with which an organization can deliver its products and services is critical for competing in an expanding global market. Libraries which are service oriented institutions have not been left behind in this venture. This study therefore sought to look into the application of total quality management practices in library operations and services. The study was guided by objectives which include; identifying the level of satisfaction for library services and operations among library users at the USIU-A library, establishing the benefits of total quality management practices in library operations and services carried out at USIU-A, examining the barriers in the application of TQM practices in the USIU-A library operations and services and suggesting possible solutions for the improvement of TQM practices in the USIU-A library operations and services. The study was carried out at USIU-A library and information center. The study adopted a descriptive research design. The population constituted of 5523 respondents drawn from the university community including graduate, undergraduate students and staff. Using stratified sampling technique and Yamane’s formula, a sample size of 373 respondents was selected. For the quantitative approach, the research tools employed for the study included the use of questionnaires while for the qualitative approach the research tool utilized was an interview schedule. To enhance reliability of the research instrument, a pilot study was carried out at the KCA University upon which some corrections were made on the research tools. The study found out that for TQM to be effective in the library, there are key essential things that have to be in place which include effective communication and good leadership. Good infrastructure and facilities are also essential for the successful implementation of TQM. At the same time, there also exists barriers that hinder the effective implementation of total quality management practices which include resistance to change and ineffective communication. The recommendations suggested for the successful implementation of TQM include the introduction of policies that provide guidelines as well as strategies that enhance effective communication to the clients which are all aimed at ensuring user satisfaction and maximum utilization of the library services. The research will be beneficial to the USIU-A library management team in identifying strategies suitable for implementation in the application of TQM in the library operations and services
**LIST OF ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CUE</td>
<td>Commission of University Education</td>
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<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
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<tr>
<td>LIS</td>
<td>Library and Information Services</td>
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<tr>
<td>TQM</td>
<td>Total Quality Management</td>
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<tr>
<td>USIU-A</td>
<td>United States International University-Africa</td>
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<td>WASC</td>
<td>Western Association of Schools and College</td>
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</tbody>
</table>
TABLE OF CONTENTS

DECLARATION ....................................................................................................................... i
ACKNOWLEDGEMENTS ................................................................................................... ii
DEDICATION ...................................................................................................................... iii
ABSTRACT ........................................................................................................................ iv
LIST OF ABBREVIATIONS .................................................................................................. v

CHAPTER ONE: INTRODUCTION ...................................................................................... 6
1.1 Introduction .................................................................................................................. 6
1.2 Background to the Study ............................................................................................ 6
    1.2.1 Context of the Study ......................................................................................... 7
    1.2.2 USIU-A Library and Information Center ......................................................... 8
1.3 Statement of the Problem ........................................................................................... 9
1.4 Aim of the Study ......................................................................................................... 9
    1.4.1 Objectives of the Study ..................................................................................... 10
1.5 Research Questions .................................................................................................... 10
1.6 Significance of the study .......................................................................................... 10
1.7 Assumptions of the Study ......................................................................................... 11
1.8 Scope of the study ..................................................................................................... 11
1.9 Limitations of the study ............................................................................................ 11
1.10 Operational Terms and Concepts ............................................................................ 11

CHAPTER TWO: LITERATURE REVIEW ........................................................................... 13
2.0 INTRODUCTION .......................................................................................................... 13
2.1 TQM in Organizations .............................................................................................. 13
2.2 Total Quality Management and Library Science ...................................................... 14
2.3 The Need for TQM in Library Operations and Services ........................................... 15
2.4 Essentials of Total Quality Management .................................................................. 16
    2.4.1 Resource management ..................................................................................... 16
    2.4.2 Information management ............................................................................... 17
    2.4.3 Effective Leadership ...................................................................................... 17
    2.4.5 Organizational Culture ................................................................................... 18
2.5 Barriers to the Application of TQM in libraries ......................................................... 18
    2.5.1 Resistance to Change ..................................................................................... 19
    2.5.2 Lack of proper training and education. ............................................................. 19
2.5.3 Lack of communication................................................................. 20
2.6 Theoretical Framework ................................................................... 20
  2.6.1 The Four Ps and Three Cs Model of TQM .................................. 20
2.7 Conceptual Framework ................................................................... 23
2.8 Chapter Summary ........................................................................... 24

CHAPTER THREE: RESEARCH METHODOLOGY ........................................... 25
3.0 Introduction .................................................................................... 25
3.1 Research Design ............................................................................ 25
3.2 Area of Study ................................................................................ 26
3.3 Target Population .......................................................................... 26
3.4 Sample and Sampling Techniques .................................................. 27
  3.4.1 Sample Size ............................................................................. 28
3.5 Data Collection Methods ................................................................. 30
  3.5.1 Questionnaires ........................................................................ 30
  3.5.2 Interview Schedules ................................................................. 30
3.6 Pilot Study ...................................................................................... 31
3.7 Data Analysis and Presentation ....................................................... 31
3.8 Validity .......................................................................................... 31
3.9 Reliability ...................................................................................... 32
3.10 Ethical Considerations ................................................................. 32
3.11 Chapter Summary ......................................................................... 32

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION ... 33
4.0 Introduction .................................................................................... 33
4.1 Response Rate by Respondents ...................................................... 33
4.2 Background Information of the Respondents .................................. 34
  4.2.1 Gender .................................................................................... 34
  4.2.2 Respondents Profile ................................................................. 34
  4.2.3 Frequency of Use of the Library ............................................... 35
4.3 Level of Satisfaction ...................................................................... 36
4.4 Essentials for Total Quality Management ...................................... 39
  4.4.2 Effective Leadership ................................................................. 40
  4.4.3 Organizational Culture ............................................................ 40
  4.4.4 Staff Attitude and Commitment ............................................... 41
CHAPTER FIVE: SUMMARY OF THE FINDINGS, CONCLUSION AND
RECOMMENDATIONS ................................................................. 49
5.1 Introduction .............................................................................. 49
5.2 Summary of the key findings .................................................... 49
  5.2.1 Level of Satisfaction for library services and operations .......... 49
  5.2.2 Benefits of TQM practices in Library operations and services . 50
  5.2.3 Barriers in the application of TQM in library services and operations . 50
  5.2.4 Improvement of TQM practices in library services and operations . 51
5.3 Conclusion ................................................................................. 51
5.4 Recommendations .................................................................... 52
  5.4.1 Process focus ..................................................................... 52
  5.4.2 Employee education and training ........................................... 52
  5.4.3 Effective Communication .................................................... 53
  5.4.4 Human Resources ............................................................... 53
  5.4.5 Guiding Policies ................................................................. 53
  5.4.6 Measurement of Performance .............................................. 53
  5.4.7 Improvement of Infrastructure and facility ............................ 54
5.5 Recommendations for further research ...................................... 54
  5.5.1 Other Service Industries ...................................................... 54
  5.5.2 TQM Models .................................................................... 54
REFERENCES .................................................................................. 55
APPENDIX I: INTRODUCTION LETTER .................................................. 58
APPENDIX II: QUESTIONNAIRE FOR LIBRARY USERS ......................... 59
APPENDIX III: INTERVIEW GUIDE FOR LIBRARY STAFF ....................... 62
LIST OF FIGURES

Figure 2.1: Conceptual Framework .................................................................................. 23
Figure 4.1 Gender representation..................................................................................... 24
Figure 4.2 Respondents Profile....................................................................................... 35
Figure 4.3 Frequency of library use.................................................................................. 36
Figure 4.4.1 Effective Communication............................................................................. 39
Figure 4.4.2 Effective Leadership..................................................................................... 40
Figure 4.4.3 Organizational Culture ................................................................................. 41
Figure 4.4.4 Staff attitude and commitment ................................................................. 41
Figure 4.4.5 Infrastructure & facilities ............................................................................. 42
Figure 4.5.1 Resistance to change .................................................................................. 43
Figure 4.5.2 Lack of Communication.............................................................................. 44
Figure 4.5.3 Lack of Training and Education................................................................. 45
Figure 4.5.4 Staff attitude and commitment ................................................................. 45
Figure 4.5.5 Infrastructure and facilities......................................................................... 46
LIST OF TABLES

Table 3.1 Population Distribution .................................................................................. 27
Table 3.2: Sample Size ................................................................................................. 29
Table 4.1 Response rate ............................................................................................... 33
Table 4.2 Level of Satisfaction for Library operations and services .............................. 37
CHAPTER ONE: INTRODUCTION

1.1 Introduction

The chapter provides detailed information that includes the background of the study, context of study, statement of the research problem, aim and objectives of the study, research questions, significance of the study, assumption of the study, scope of the study, limitations of the study, and the operational terms and concepts.

Total Quality Management puts focus on the management of the organization in totality to provide quality service to clients. The four main elements of TQM which are of significance include: employee involvement, customer focus, benchmarking and unceasing development in all aspects of an organization (Daft & Marcic: 2011:33).

For any client oriented organization including libraries, the main aim is to achieve success through customer satisfaction. In this era where technology affects the way things are done in all aspects, organizations and institutions have been forced to identify new ways of keeping up with the times. This involves carrying out operations in an organization differently in order to stand out from the rest as well as initiating new products and services. Libraries are considered as service centered organizations and therefore they should aim at providing quality services and thus TQM is an approach that can be utilized to achieve customer satisfaction.

Daft & Marcic (2013:34) further state that employee participation means that achieving quality requires involvement of everyone within the organization. All focus should also be on the customers to find out what they need and try to meet their needs and anticipations.

1.2 Background to the Study

Total quality management (TQM) is a managerial approach, which was established in the early 1950s that sought to provide quality services and products to consumers or clients by seeking sources of continuous motion of advancement. The approach was later adopted to the banking, financial and service oriented sectors with an aim of providing good quality services to clients (Chanda et.al, 2015:717)

Due to the increase of information which is readily available, librarians face the challenge of identifying and organizing information resources that will eventually satisfy the information needs of various clientele. To accomplish this goal, the question of regimes that are facing
resource constrains has to be kept in mind without forfeiting the desires of users. The services offered, accordingly, have to be effective within and without the organization. It is in this setting that the issue of “total quality” becomes appropriate in the administration of library and information services and operations (Moghaddam, &Moballeghi, 2008:912). Libraries are service oriented institutions whose main aim is not only to focus on fulfilling the users’ needs but also to expect their demands and to avail them as necessary. Libraries main aim should be to provide quality services with the minimal resources available. In the present world, the most commonly used catchphrase is that the ‘customer is king.’ Users of the library who are identified as patrons have become more and more conscious of their rights. This has therefore called for quality service provision in libraries. Quality in service is an excursion that never ends and there are always opportunities for improvement on a continuous basis. In this journey, information providers can never say they have gotten to the endpoint. However, with each enhancement they will be crossing important mileposts in giving services which are of quality to users. To advance the quality of services given to users, information providers must therefore formulate new methods of collecting responses from the users of the libraries (Singh & Srivastava, 2015:677)

The term quality has been described as meeting or going beyond customer requests in the present times and anticipation of the future customers. This means that the product or service is appropriate for customer’s use. Fitness for use is associated to benefits acknowledged by the customer and ensuring satisfaction among the customers (Shridhara, 2010). It is the single most vital force principal to success in organizations and growth of companies in both domestic and international markets.

1.2.1 Context of the Study

United States International University-Africa is a private, non-profit, independent university situated on 120 acres of land in Kasarani, Nairobi, Kenya. It has dual accreditation in Kenya by the Commission for University Education (CUE) as well as accreditation from the Western Association of Schools and Colleges Commission, an accrediting body recognized by the United States of America department of Education. The university enrolls over 5,500 students from 65 nationalities, fifteen percent are international students. The university has four schools that offer various undergraduate, graduate as well as doctorate degree programs including Chandaria
1.2.2 USIU-A Library and Information Center

The University Library and Information center is an ultra-modern facility which offers in one central location all the resources both in print and non-print, necessary to support learning, teaching and research, making it the intellectual center of the university. Its core activities entail acquisition, processing and making information available to the university community. The collections are renowned for their strengths as they focus on the programs offered by the university. The library consists of 183,932 print volumes, 42,827 print periodicals, over 100,000 online journals, over 260,000 e-books, 14,317 non-print media and over 50 electronic databases. Being fully automated, it also provides a variety of services to its various users (USIU-A, 2015).

The vision of the library is to provide leadership in innovative, user centered and dynamic library services for academic excellence with a global perspective. The mission of the library is operating within a multicultural and rapidly developing environment, the library and its staff are committed to being active and creative partners in the teaching, research and other knowledge application activities of the university through service to the community by selecting, organizing, presenting and preserving information resources for present and future scholarly communities (USIU-A, 2015).

The core values of the library include:

a. Create hospitable physical and virtual environments for study, teaching, and research;
b. Build collections and create tools to support research, teaching, and learning;
c. Disseminate knowledge and information through Current Awareness Services, Reference and Information Services and Liaison Services;
d. Provide materials not only in the areas of immediate concern, but also in the areas of growing importance;
e. Provide full bibliographic information of materials held by the library;
f. Promote the innovative adoption of emerging learning technologies
g. Ensure the digitization, preservation and long-lasting availability of Library collections and resources;
h. Advance local, national, and international library and information initiatives;
i. Develop, encourage, and sustain expertise, skill, commitment and an innovative spirit in its staff.

1.3 Statement of the Problem

According to Oakland (2014:3) organizations are experiencing great changes in their markets and operations in the current turbulent and hostile environment. This has been attributed to the rapidly ever changing technology, more demanding customers as well as intense competition in the market. Regulators and consumer groups have also added to these pressures.

There is no doubt that libraries around the world, want to provide high quality services and products. This makes sense because no matter what is being offered to customers, no one really wants second best. To make sure this is accomplished, some form of assessment to gauge whether or not those services and products are meeting the needs and expectations of their customers is required (Harer, 2012:72)

Under these pressures from the external environment, organizations in different sectors, put into consideration quality of the products and services as well as the management of quality as one of the key issues to maintain a competitive edge. Among the many practices of quality, total quality management has received consideration from practitioners and academics all over the world (Nadine et al. 2014:6254)

The aim of any library is to ensure maximum utilization of its resources and services. Library and information centers recognizes the importance of consulting its users as a way to providing the highest quality services and resources to the University community. The USIU-A library therefore carries out yearly surveys to gather responses on the quality of services and operations provided. The surveys have identified dissatisfaction among users in the library operations and services. This therefore calls out for research to identify practices aimed at improving customer satisfaction in the library operations and services.

1.4 Aim of the Study

The aim of the study was to examine Total Quality Management for user satisfaction in library operations and services with reference to the United States International University-Africa Library and Information Center.
1.4.1 Objectives of the Study

The objectives of the study were:

1. To establish the benefits of TQM practices in library operations and services
2. To identify the level of satisfaction for library services and operations among users
3. To examine the barriers in the application of TQM practices in the USIU-A library operations and services
4. To suggest possible solutions for the improvement of TQM practices in the USIU-A library operations and services.

1.5 Research Questions

1. What are the benefits of TQM practices to library operations and services?
2. What is the level of satisfaction of library services and operations among users in the library operations and services?
3. What barriers exist in the application of Total Quality Management practices in library operations and services?
4. Which possible solutions can be implemented for the improvement of TQM practices in library operations and services?

1.6 Significance of the study

The findings of the study will enable the USIU Librarian in consultation with members of the library management team identify strategies, based on the responses from respondents for the application of total quality management practices in the operations and services currently offered in the library.

The findings of the study will contribute to the body of knowledge for future researchers and academicians with regards to the applicability of TQM practices in various organizations and institutions.

The findings will enable library managers identify and implement policies aimed at ensuring and accelerating the rate of growth in the library operations and services through TQM practices.
1.7 Assumptions of the Study
1. Library users are not fully satisfied with the existing library operations and services.
2. There exist Total Quality Management practices that can be implemented in library operations and services to effectively serve their users.

1.8 Scope of the study
Scope refers to the extent of the area or subject matter relevant to the research. This study was limited to the United States International University-Africa library and Information center which is the case study of the research with an aim of investigating the application of Total Quality Management practices in its library operations and services. The study focused on the graduate, undergraduate, teaching staff and non-teaching staff who use the library.

1.9 Limitations of the study
Limitations are the conditions, shortcomings and influences that the researcher cannot control, placing restrictions on the methodology and conclusion of the research.

Due to convenience, the study did not get views from alumni as well as external users among the respondents as most of them are difficult to come across in the library.

1.10 Operational Terms and Concepts

Benchmarking
This refers to the process through which institutions find out how others do something well than they do and then try to mimic or improve on it

Continuous improvement
This is the process of making small changes which are incremental or advances in all aspects of the organization on a constant regular basis.

Leadership
Leadership is the ability to not only comprehend and making use of ones innate talents, but to also efficiently control the natural strengths of your team to realize the set out mission.
Library Science
A multidisciplinary or interdisciplinary field that deals with the application of, viewpoints and tools of management, information technology, education and other areas closely related to libraries

Management
The accomplishment of the goals of an organization in an effective and competent manner through planning, organization, leadership and control of the resources of the organization

Organizational Culture
The totality of values and rituals which act as ‘glue’ for the integration among members of the organization

Quality
Quality denotes the degree of fitness for use. Naturally, the user/customer of the product/service is the focal point in quality issues

Total Quality Management
A way of management that seeks to improve the flexibility, efficiency, effectiveness and competitiveness of a business as a whole and it involves getting structured and dedicated to quality departments of an organization, each activity and each person at each level.
CHAPTER TWO: LITERATURE REVIEW

2.0 INTRODUCTION

This chapter provides a review of literature based on the purpose of the study which is to assess the application of total quality management practices in library operations and services. The chapter is organized into headings and sub-headings based on the objectives of the study.

Literature review is the selection of available documents on the topic under study, which contain information, ideas, data and evidence written from a particular standpoint to fulfill certain aims or express certain views regarding the topic. The literature review shares with the reader the results of other studies that are closely related to the one being undertaken. It relates a study to the larger, ongoing dialogue in the literature by filling in gaps and extending prior studies. It provides a framework for establishing the importance of the study as well as a benchmark for comparing the results with other findings (Creswell, 2014).

The literature review will give an insight on what various authors have written with regards to Total Quality Management

2.1 TQM in Organizations

In today’s business environment which is competitive, it is of utmost importance to implement total quality management (TQM) principles not only for financial gains but also for continued existence. This is an ever-changing practice of undertaking business in an attempt to develop methods and processes that cannot be copied by competitors to enable organizations maintain a competitive advantage. In order to achieve the utmost level of quality, it will involve the application of total quality management principles to all facets of an institution, including clients and their incorporation with the key process in a business (Yapa, 2012:505)

The main focus of any service oriented organization should be the customer putting into consideration their needs and demands so as to uphold a competitive advantage and thrive in the market. Consequently, most of the firms in both the developed and developing world have embraced some form of ISO certification’s itself is not a certifying body but rather provider of standards against which organizations can assess their processes and systems. This gives an objective assessment mode for organizations and also a means through which they can benchmark themselves to others globally and see where they stand in comparison to similar organizations. (Ochieng, et.al, 2015:761)
Galyani & Moballeghi (2008:913) state that the concept of TQM has been embraced across all areas to reduce costs, increase efficiency and in the long run ensure customer satisfaction for all organizations, whether big or small, industrialized or service-oriented, profit or not for profit to gain benefits from implementing and applying the principles of TQM. TQM puts focus on the reasoning that organizations are structures with processes concerned with the sole resolve of serving its clients. TQM also aims at the incorporation of all the activities in an organization to attain the goal of customer service. It seeks to enforce principles, achieve competences, define roles of personalities within processes and the organization as a whole, lessen inaccuracies and deficiencies by applying statistical process control, and to employ teams to plan and accomplish processes more efficiently. It involves leaders who are willing to create a culture in which people define their roles in terms of quality outputs to customers.

Total quality management is based on one objective which involves the continuous improvement of three principles including focus on customers, improvement of processes and total involvement

2.2 Total Quality Management and Library Science
The concept of total quality management (TQM) is now a management practice applied in most fields and libraries and information centers have not been excluded, they have typically mirrored the private sector in management trends. Its application in service oriented sectors like library and information services (LIS) started late 1980s with the aim of satisfying customers by way of meeting their desires and anticipations. This conception has become more pertinent in the current age of technology, especially due to the advent of application of ICT in libraries and the changes in information awareness among users. The major structures of total quality management (TQM) are highly significant for libraries, which include customer emphasis, the allocation of work, participation of employees in all ranks, process rather than function and the need for endless improvement in all aspects of the library (Galyani & Moballeghi, 2008:916)

For a long time librarians considered themselves to be attendants of knowledge rather than dynamic specialists in data exchange. In spite of the fact that the primary goal of libraries is to fulfill the needs of their clients, the library experts regularly overlook that. Be that as it may, today’s libraries are pushed to a position where they have to give quality support of its clients to fulfill this reality.
In some circles, it has been argued that libraries are not organizations of production, so the analogy to the private sector approach may not seem appropriate. However, Libraries are involved in production-oriented processes day-in and day-out. Though many of these quality management systems may have originally been designed for private sector industries, they are all appropriate and can be adapted in libraries (Harer, 2012:73)

TQM focuses on the examination of “processes” by which services are delivered and aims to achieve better quality service for customers. It also attempts to flatten the organizational structure by permitting and encouraging staff to play a larger role in the decision-making process. One of the requirements of TQM is that there should be flexibility and empowerment, both of which may be accomplished through teamwork. A specific team approach, the self-directed work team (SDWT), has been used in various ways in several academic libraries.

2.3 The Need for TQM in Library Operations and Services
For long, Librarians have identified themselves as custodians of knowledge rather than active agents in the dissemination of information. Experts often forget that the main objective of libraries and information centers is to satisfy the users. Todays’ libraries have been pushed to a situation where they have to provide quality services to its clientele, to validate their existence. Libraries are now implementing TQM practices following other types of service-oriented industries in the field (Chauhan, 2014:8).

Many librarians still embrace the notion that their services and operations are so indispensable that their users will keep on using them as is the norm, with no extra energy on their part. They wrongly assume that users’ desires are also fulfilled because they utilize the library. Although librarians may regard libraries as requisite, it is by no means definite that those not within the library profession hold this notion. This dislike however seems strange, since like marketing, librarianship, places the user at the center of all activities. It is thus very crucial that the total quality management concept is completely and speedily embraced if libraries are to continue with their existence as providers of information in the near future. The survival of libraries thus depends on maintaining a competitive advantage (Aleyna, 2001:267)
Alema (2001:267) further states that libraries should adopt TQM because this concept represents certain standards and methods, which are collective and already reputable in libraries. These include the elements of management by participation, training of staff, development and open customer service. However, some of the crucial and unexpected elements of TQM such as constant development, quality tools, measurement and client-oriented planning are not commonly practical in libraries. It is for these motives that libraries are in a state to develop and progress upon ideologies they already appreciate and utilize, while presenting new methodologies to organization, solving of problems and foreseeing impending customer needs and services.

2.4 Essentials of Total Quality Management
Organizations in general have been obligated to review their organizational practices in order to advance productivity and the quality of products and services they offer. The achievement and sustenance of quality in organizations necessitates a long-standing obligation. This therefore calls for setting of long term plans with basis on total quality to guarantee efficiency in the organization. Quality should be identified as a strategic objective and therefore it should be mirrored in an organizations corporate mission and vision. The inclusion of TQM principles in the organizational strategies, action plans and policies is connected with the mark of quality management success strategies.

Principles, methodologies, tools and practices in the arena of quality management serve a sole purpose, that of allowing organizations to bridge the gap between the standard required and the standard attained. Quality improvement is a continuous exercise that involves organization of events, setting of goals, organization of events and continuous improvement. The attainment of customer satisfaction in libraries is a venture that can be attained by carrying out frequent surveys amongst users, personal interactions or formal/informal meetings with users to gain their views (Galyani & Moballeghi, 2008)

2.4.1 Resource Management
Employees in an organization require resources to undertake their duties efficiently. Assigning adequate resources including employees, apparatus and material is essential for TQM programmes to be sustained effectively. Library Managers are charged with the duty of
providing suitable assets for the delivery of anticipated services and meeting of the client needs. Resource management programmes which are good improve efficiency, improve safety and lessen inaccuracies (Mohammad, 2014:552)

2.4.2 Information Management

Collection of timely, reliable and relevant data from within and outside the organization is crucial for assessment, improvement and evaluation purposes. Such information enhances the usage of resources effectively and in the identification of customer requirements, effectiveness in operations and efficiency problems. Managers should institute information systems which are effective and encourage their workforce to utilize objective data while making decisions. Managers’ ability to react quickly to rapid fluctuations in the surrounding environment is facilitated by effective information systems. TQM implementation can be supported strongly by information technology. An information system which is effective promotes quality through the identification of areas with problems, highlights basic causes and the establishment of procedures for monitoring (Alexander et al., 2006). Best practices that have been identified can then be shared among departments within an organization as well as across organizations thus enabling extensive collection of automated data to support in the efforts of quality improvement (Alexander, et.al, 2006).

2.4.3 Effective Leadership

Leadership which is effective supports employees through the creation of a vision, lashing out of fear, boosting training opportunities, provision of necessary resources and removal of any impending barriers. Top-down leadership style which appears to be authoritative must be substituted with a more understanding, autonomous, persuasive and allowing participation.

A leadership style which is participatory allows the involvement of employees in the TQM programme thus empowering them to take necessary actions thus ensuring improvement of processes and satisfaction of customers. Senior managers should show a strong commitment to the continuous improvement of quality, creation of a supportive environment and tactically and analytically manage change. Managers should instigate, establish values which should be shared in the organization, set strong aims and objectives, incorporate excellence into organizational policies and strategies, provision of direction, employee motivation and empowering them for active participation in the improvement of quality, monitoring of progress, provision of
applicable response and giving of rewards which are tangible. The commitment of managers leads to an increased workforce commitment to the improvement of quality (Mohammad, 2014:548)

2.4.5 Organizational Culture

Organizational culture is one of the key elements for the implementation of TQM practices. This can be defined as the set of values, norms and beliefs that are shared by members of an organization. However, organizational culture is a wide theory and it would indicate diverse stages, such as values, procedures and practices. Furthermore, organizational culture influences behavior and performance outcomes thus affecting members of an organization, and the organizations’ external environment. (Gimenez-Espin, et.al, 2013:680).

An organizational culture emphasizing transparency, morality, trust, admiration, effective communication, empowerment, education, teamwork, coordination, innovation, focus on customers and endless development provides the basis for the implementation of TQM (Kaluarachchi, 2010)

According to Mohammad (2014:551), shifting organizational culture from the traditional approaches which include blame games, naming and shaming, to a communal quality culture requires clinical and managerial commitment, leadership, unceasing learning and training. The establishment of a corporate quality culture and structure helps institutionalize TQM progressively and sustain activities for the improvement of quality.

2.5 Barriers to the Application of TQM in Libraries

Despite the fact that the critical success factors (CSFs) accountable for a fruitful application of TQM in service industries have helped to achieve the desired results which include increased firms performance, productivity, improvement of customer fulfillment, the practice and implementation of TQM CSFs are not free from hindrances. Paramount significance to such barriers are in this day and age given due concern by the management by carefully checking them through company-wide information network. Such barriers are strictly monitored and controlled by the management thus considered to be manageable with changing efforts. Some of the barriers include the following.
2.5.1 Resistance to Change

The concept of TQM involves a paradigm shift both at the management level and on operational level as well as nonconformance with the status quo. This therefore brings some degree of resistance from both the internal and the external environment due to the change being advocated for. Changes to any of the internal and external elements of an organization’s system causes changes to other elements. Libraries do not operate in an isolated system and therefore are bound to be affected by the external environmental factors. Whether attention is given to quality management is partly determined by the industrial environmental conditions under which the firms operate. If prevailing circumstances do not compel the firms to change toward quality management implementation, any attempt to change would be futile (Mensah, et.al, 2012:129)

Mensah et.al (2012: 129) further states that often, library managers may not be fully cognizant, or perhaps disregard, what it requires for the successful implementation of TQM and achievement of high performance. This boils down to the employees who may harbor inadequate understanding of the concept prior to their introduction to their firms coupled with that fact that these programs come with extra responsibilities, little or no increase in incentives, and uncertainty about what the future holds for them after successful implementation of these programs.

2.5.2 Lack of Proper Training and Education

Talib, et.al (2011:568) state that a number of studies that have been done have shown evidence that poor or no training and education is in existence at all ranks within an organization, and that it contributes to resistance among the employees. TQM environment which is successful calls for a dedicated, well-equipped, and learned work force which contributes abundantly in activities that improve quality. Lack of enough training on quality as well as training in the identification of problems and techniques for solving problems leads to failure in the implementation of TQM program. However, it should be noted that it is possible to design effective training programs which can be implemented correctly.
2.5.3 Lack of Effective Communication

The pieces of the total quality process are held together by effective communication and is vital for the accomplishment of the quality initiatives. The explanation of quality goals and guidelines to the workforce by the management, encourages their guarantee to the TQM programme. Thus, communicating of TQM principles and the establishment of quality awareness are closely related (Hietschold, et.al 2014:6263).

Talib, et.al (2011:570) further states that ineffective communication acts as a key hurdle that hinders efforts at implementing or applying TQM in an organization. In their research, Talib et.al conveyed that among factors which are concerned on people, communication amongst managers and their employees in an organization was the main driving force for the implementation of TQM, and ineffective communication amongst departments in an organization was a real obstacle to the TQM implementation. The lack of or ineffective communication across an organization often ends up bringing disappointed customers, frustrated customer desires, and an atmosphere of mistrust. In most scenarios the management repels in the dissemination of crucial information with their personnel for several explanations which may be valid. This would create the environment of suspicion and clash among employees and the management.

2.6 Theoretical Framework

This is the foundation upon which the entire research is based. It is a logically developed, described and elaborated network of associations among the variables deemed relevant to the problem situation and identified through such processes as interviews, observations and literature review. Experience and intuition also guide the development of the theoretical framework (Sekaran & Bougie, 2010)

2.6.1 The Four Ps and Three Cs Model of TQM

The four P’s form the foundation of a simple model for TQM and provides the hard management requirements to take organizations effectively into the twenty-first century. The importance of the three C’s is also vital. The TQM model is complete when these soft results which include Culture, Communication and Commitment are incorporated into the four Ps structure to move organizations successfully forward (Oakland, 2014: 27)
The model is relevant to TQM as it is seen to create a set of customer-based practices with an intention of improving quality, and enhancing the improvement of processes with an aim of ensuring customer satisfaction, appealing to more clients and ultimately improved organizational performance.

**Performance:** Focus in the organization should be put on the individual performance. This can be achieved through the development, implementing measurement strategies, benchmarking and the provision of the necessary feedback to all ranks of employees’ for unceasing advancements and achievement of goals. This creates an organizational culture upon which employees become committed and have an attitude towards customer satisfaction.

**People:** The managers should put their concentration on people. Training of managers in collaboration with team leaders at all ranks in leadership skills should be enhanced. Formal methods of solving problems; giving highlights on achievements; sharing the evolvement and experiences of past successes, which act as catalysts that offer motivation to employees to continue in the execution of the TQM artifacts, and help recognize their significance and impact to the organization and to themselves. Encouragement should be provided to everyone for the participation in the enhancement of work procedures, as this works as a motivational factor. The emphasis should be on long-term advancement.

**Planning:** It can be noted that in this state the organization is in the entry stage of the philosophy of TQM, thus the leaders should put emphasis on scheduling how the organization will embrace and implement the TQM philosophy and advance the vision, and the structure to bring into line the organization to the philosophy of TQM.

**Processes:** Focus by the leaders should be on the managerial process; ensuring that participation in the management system is established, applied and constantly developed. Activities that ensure the success of these processes must be strategic on the organization levels.
Table 2.1: Four P’s for TQM

| Performance | • Helps in the development of measures that act as indicators of current performance  
|            | • Setting of goals and measurement of progress towards achievements  
|            | • Feedback should be provided to the people at all levels with regards to their performance against the set goals. |
| People     | • Team leaders and managers at all levels should be trained in problem solving and leadership skills  
|            | • Creativity and innovation should be encouraged to stimulate teamwork  
|            | • Emphasis should be put on support, acting on results training, education and learning activities  
|            | • Involves motivation, supporting and recognizing the organization’s people both in teams and individually  
|            | • Helping and supporting people to achieve set targets, plans, aims and objectives  
|            | • Response to people and encouragement for their participation in activities that enhance improvement. |
| Planning   | • Helps in the development of the vision needed for steadiness of purpose and for eventual success in the long run  
|            | • Entails developing, deploying and updating the viewpoint of the preferred culture;  
|            | • Alignment of the organizations’ arrangement in supporting the anticipated culture. |
| Processes  | • Ensuring a system for the management of procedures is established and executed  
|            | • Ensuring that through participation the management system is established, applied and enhanced on a continuous basis  
|            | • Prioritization of activities that ensure improvement and ensuring they’re planned on an organizational basis |

Adopted from Fu et.al (2015:129)
2.7 Conceptual Framework

A variable refers to a characteristic or attribute of an individual or an organization that can be measured or observed and that varies among the people or organization being studied (Creswell, 2014).

Cooper and Schindler (2014), state that an independent variable is a variable the researcher has control over, what he/she can choose and manipulate. For this research the independent variable is the application of total quality management practices.

Sekaran and Bougie (2013), state that a dependent variable is what is measured in a study or an experiment and that responds to the independent variable. For this study, the independent variable is Total Quality Management while the dependent variables include quality of services and operations. The intervening variables include organizational culture, effective leadership, resource management and information management.

Figure 2.1: Conceptual Framework

![Conceptual Framework Diagram](source)

Figure 2.1 Source: (Researcher, 2016)
2.8 Chapter Summary

In summary, the above literature review section has highlighted the various dimensions of total quality management in line with the purpose of the study. The chapter covered the relationship between Total Quality Management and the Library science field, the need for the application of TQM practices in library operations and services. Additionally, it also looked into the essentials and barriers to TQM as well as a model for utilization in organizations.
CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction
This chapter will discuss the research methodology to be employed for the study. Various issues covered include the target population for the study, the sample from the population, data collection methods and analysis.

3.1 Research Design
According to Cooper & Schindler (2011:139) research design is made up of the blueprint for collecting, measuring and analyzing data. It helps the researcher in allocating limited resources by presenting crucial choices in methodology. Further, it is a means for the achievement of research objectives through empirical proof which is required economically. Choosing the research design is determined by a number of considerations which include; the purpose of the research as identified by the research problems and questions, categories of data needed, sources of data and cost factor.

The study utilized a mixed method approach that involved the use of both qualitative and quantitative research approaches. This approach utilizes schemes of getting responses that involve the collection of data either instantaneously or in a given sequence to better understand the research problem. Collection of data involves gathering information in a numeric format as well as textual information so that the final record brings a representation of both qualitative and quantitative information (Creswell, 2003:18).

Quantitative research is associated with the production of numerical data that are objective in the sense that they exist independently of the researcher and are not the result of undue influence on the part of the researcher. The numerical data are seen as the product of research instruments that have been tested for validity and reliability to ensure that the data accurately reflect the event itself, not the researchers’ preferences (Denscombe, 2010).

Denscombe (2010) further highlights that qualitative research emphasizes on the role of the researcher in the construction of the data. There is typically little use of standardized research instruments in qualitative research. It is recognized that the researcher is the crucial “measurement device” and that the researcher’s background, values, identity and beliefs might have significant bearing on the nature of data collected and analysis of that data.
Quantitative approach was essential for the study as the data provided a solid foundation for description and analysis. Interpretations and findings are based on measured quantities rather than impressions and this enhances authenticity. The tables and charts provide an effective way of organizing data and communicating the findings to others. Qualitative approach provides an avenue for alternative explanations and the data and analysis have their roots in the conditions of social existence because the descriptions and theories generated from the research are grounded in reality.

The study employed descriptive research design. Hussey & Collins (2009:5) state that descriptive research is carried out to offer a description of phenomena as they exist. It is used in the identification and obtaining information on the features of a given specific problem or issue. It is therefore imperative to have a definite picture of the phenomenon on which data is to be collected from prior to the collection of the data.

3.2 Area of Study
The area of study was USIU-AFRICA. The university has an enrollment of 5254 students of which 4413 are undergraduates while 841 are graduate students from 65 nationalities, fifteen percent who are international students. The university also has a total of 269 teaching and non-teaching members of staff. This includes 120 teaching staff and 149 non-teaching staff.

3.3 Target Population
Christensen et.al (2014) define Population as “the full group of interest to the researcher, to which one wants to generalize, and from which the sample is selected”. The figures for the target population were derived from the Registrar’s Department and comprised graduate and undergraduate students registered during the summer semester, 2016. Members of staff and faculty currently on session were also included in the population.

Although the entire population was not party to the research study, results from the study are representative of the entire population. In certain cases, the population is huge to allow a researcher to analyze every individual. Thus, the researcher must depend on a smaller representation, a sample to deliver information about the larger population. The goal of the research study was to examine the sample, then generalize the results to the total population (Gravetter & Forzano, 2009).
Table 3.1 Population Distribution

<table>
<thead>
<tr>
<th>Category</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>4413</td>
</tr>
<tr>
<td>Graduate</td>
<td>841</td>
</tr>
<tr>
<td>Non-teaching staff</td>
<td>149</td>
</tr>
<tr>
<td>Teaching Staff</td>
<td>120</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>5523</strong></td>
</tr>
</tbody>
</table>

Source: USIU (2016)

3.4 Sample and Sampling Techniques

Kothari & Garg (2014:147) define a sample as a smaller group gotten from the whole population. The sample should be a representative of population characteristics without any bias so that it may result in a valid and reasonable conclusion. An optimum sample is one which fulfills the requirements of efficiency, representativeness, reliability and flexibility.

Sampling is defined as the selection of some part of an aggregate or totality on the basis of which a judgment or inference about the aggregate or totality is made. It involves obtaining information about an entire population by examining only a part of it. Sampling saves time and money as a sample study is usually less expensive and produces results at a relatively faster speed (Kothari & Garg, 2014:147).

The study used stratified sampling. Chandran (2004:95) states that this method is appropriate to a population in which population units are not homogenous. This technique ensured that every unit from the larger population had a chance of being selected in the sample. The population was divided into homogenous groups called strata before the selection of the required number of samples from each homogenous group was done. Homogeneity is similar with respect to same characteristics. Samples from each of the homogenous groups were selected randomly. The number of samples from each homogenous group was drawn in ratio to the size of that group.

The target population was divided into the following strata; Undergraduate and graduate students as well as members of staff who included both teaching and non-teaching staff.
3.4.1 Sample Size

Gravetter & Forzano (2009:131) state that research studies typically use the results from a comparatively small sample as the basis for providing answers to questions about a relatively large population. The goal is to obtain a sample that is representative of the population.

This study utilized Yamane’s (1967) formula as shown below with an error 5% and with a confidence level of 95%

\[
 n = \frac{N}{1 + N \cdot e^2}
\]

Where: - n= Sample size  
N= Target population  
e= Margin of error  

\[
 n = \frac{5523}{1 + 5523 \cdot (0.05)^2}
\]

n =373

Using Yamane’s (1967) formula, a sample size of 298 undergraduate students was selected from a population of 4413 students, 57 graduate students were selected from a population of 841 students, and 18 members of staff who include both teaching and non-reaching staff were selected from a population of 269. This is as indicated by the below calculations.

Undergraduate Sample Size

\[
 n = \frac{4413}{1 + 5523 \cdot (0.05)^2}
\]

n=298

Graduate Sample Size

\[
 n = \frac{841}{1 + 5523 \cdot (0.05)^2}
\]

n = 57
Non-teaching Staff Sample size

\[ n = \frac{149}{1 + 5523 (0.05)^2} \]

\[ n = 10 \]

Teaching Staff Sample size

\[ n = \frac{120}{1 + 5523 (0.05)^2} \]

\[ n = 8 \]

**Table 3.2: Sample Size**

<table>
<thead>
<tr>
<th>Category</th>
<th>Population</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>4413</td>
<td>298</td>
</tr>
<tr>
<td>Graduate</td>
<td>841</td>
<td>57</td>
</tr>
<tr>
<td>Non-Teaching Staff</td>
<td>149</td>
<td>10</td>
</tr>
<tr>
<td>Teaching Staff</td>
<td>120</td>
<td>8</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>5523</strong></td>
<td><strong>373</strong></td>
</tr>
</tbody>
</table>

Source: Researcher (2016)

The study adopted purposive sampling. (Lynn, 2010:119) states that, purposive sampling is a selection of samples based on one’s knowledge of the population and the objectives of the research. Lynn (2010) further states that purposive sampling is used to select unique cases that are specifically informative. 10 members of library staff and 8 faculty members will be purposively selected for the study since they are perceived to be knowledgeable on the concept of TQM.

Purposive sampling was also used in the case of undergraduate and graduate students. The researcher focused on the students who had undertaken an introduction to business course as they
are also perceived to be aware of the concept of TQM. The questionnaires were distributed during class time guided by the class schedules to avoid repetition among the informants.

3.5 Data Collection Methods

Data is used in the description of the correlation or forms that are shown from their collection and analysis. Data is important to offer confirmation, revision or overturning existing theories and in the development of new theories (Saunders et.al, 2012:46).

According to Christensen et.al (2014:70), data collection refers to the procedure in which the researcher obtains the empirical data to be used in the provision of answers to the research questions. The major methods of collecting data include tests, use of questionnaires, conducting interviews, focus groups, observations, observations and use of existing secondary data. The study will utilize questionnaires and interviews.

3.5.1 Questionnaires

Hussey & Collis (2009:191) define a questionnaire as questions which have been structured in a careful manner, chosen after substantial testing with a view to drawing dependable answers from a precise group of people referred to as respondents with an aim of finding out their thoughts to help in addressing the research questions.

The study utilized a questionnaire that included both open ended and close ended questions. These enabled respondents select from the responses given by the researcher as well as provide answers in their own words. Some of the questionnaires were distributed via e-mail addresses of the respondents as well as by giving them physically in class and picking them later.

3.5.2 Interview Schedules

Christensen et al. (2014:72) state that interviews are conducted in face-to-face situations and over the telephones. Interviews can be asynchronous through interaction over time as well as synchronous whereby the interaction happens in real time.

The use of interviews was employed especially to the top three library staff in the library management team, considered to be the providers of the services. The researcher scheduled specific times based on the flexibility of the respondents to carry out the interviews.
3.6 Pilot Study
Moxham (2012:35) identifies a pilot study as a smaller representation of the main study which is used to evaluate the feasibility and adequacy of the main research. It is used to test the adequacy of research instruments in order to highlight modifications that could be made before they are utilized for the main study.

The pilot study for the research was carried out among undergraduate, graduate and members of staff of the Kenya College of Accountancy University. Accompanying the questionnaire was a letter of introduction for authentication that assured confidentiality of the respondents. The respondents for the pilot study were specifically selected to represent the strata of the respondents to be used in the actual study. The respondents were selected randomly whereby the fifth person out of every ten was picked for the pilot study.

The pilot study carried out identified some errors in relation to the framing of some of the questions as well as difficulty in interpreting some of the questions among the chosen respondents. This enabled the researcher put into consideration the mentioned issues before distributing the final questionnaire to the actual respondents.

3.7 Data Analysis and Presentation
Kothari (2014:122) states that data analysis is the operation aimed at providing a summary of the data collected and organizing the data in a manner that answers the research questions.

Data from the respondents’ questionnaires was coded and keyed into Statistical Package for Social Sciences (SPSS v.23) to attain frequencies and percentages. Descriptive statistical technique was used in data analysis to provide descriptions of the population through numerical calculations, graphs or tables. For better interpretation, data was presented into pie charts and tables.

Data from the interview schedules was interpreted to create explanatory accounts in order to provide meaning.

3.8 Validity
The validity of a measurement procedure is the extent to which the process of measurement, measures the variable it perceives to measure (Gravetter & Forzano, 2009:76). Validity for the
research instruments was enhanced through the verification from the experts who included supervisors before the final adoption was done.

3.9 Reliability
Saunders et.al (2012:192) state that reliability is the extent to which the data collection techniques and analytic procedures will produce reliable or similar findings if they are to be put to the test in another instance or if they are to be replicated by a different researcher. The downside to reliability includes participant errors, participant bias, researcher error and bias.

To enhance reliability, the researcher conducted a pilot study that enabled the identification of errors from the research instruments.

3.10 Ethical Considerations
Ethics can be described as the principles of behavior that act as guidelines to the researchers conduct in relation to the rights of those who are party to the research or to the people the research will have an effect on (Saunders, et.al 2012:226)

Information collected from the respondents was treated with confidentiality to develop trust and promote integrity of the research. The purpose of the study was disclosed to the respondents in order to ensure participation. The researcher strived to provide a precise description of the information while interpreting the data from the respondents.

To avoid issues regarding plagiarism the researcher included both in text citations as well as references of the various sources utilized in gathering information and literature for the study. Plagiarism is the act of using the thoughts, ideas and works of others without acknowledging the sources.

3.11 Chapter Summary
The study methodology was mixed method utilizing both qualitative and quantitative approaches. The sample size that was used as a representation of the population consisted of 373 respondents drawn from the different categories that utilize the library which include undergraduate, graduate, teaching and non-teaching staff. Research procedures entailed carrying out a pilot study to confirm the reliability of the research instruments.
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction
This chapter comprises data analysis, results and discussions of the study based on the results and major findings from data collected from the respondents. The study used questionnaires administered to different categories of the university fraternity as well as responses from the interview schedule conducted among three personnel from the library management. The analysed results are presented in narrative form, tables and graphs. Qualitative data was processed through coding in Statistical Package for Social Sciences.

Data analysis is a stage that integrates a number of elements and it involves the application of techniques which are statistical in nature to the data that has been collected.

4.1 Response Rate
The research was conducted on a sample size of 373 respondents. Of the total number of 262 respondents returned duly filled questionnaires, which is a response rate of 70%. The respondents were divided into 4 major categories which included graduate, undergraduate students, teaching and non-teaching staff. The response rate was as per the representation in table 4.1:

<table>
<thead>
<tr>
<th>Category</th>
<th>Sample Size</th>
<th>Responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>298</td>
<td>187</td>
<td>63</td>
</tr>
<tr>
<td>Graduate</td>
<td>57</td>
<td>57</td>
<td>100</td>
</tr>
<tr>
<td>Non-Teaching Staff</td>
<td>10</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>Teaching Staff</td>
<td>8</td>
<td>8</td>
<td>100</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>373</strong></td>
<td><strong>262</strong></td>
<td><strong>70</strong></td>
</tr>
</tbody>
</table>

Of the 298 questionnaires distributed to the undergraduate students, 187 were returned duly filled representing a 63% response rate. The 57 questionnaires distributed to the graduate students were all duly filled representing a 100% response rate while the 18 questionnaires distributed to the members of staff were all duly filled thus representing a 100% response rate.
Most of the questionnaires from the undergraduate students were not duly filled as most of them could not understand the concept of TQM regardless of the definition given in the questionnaire.

4.2 Background Information of the Respondents
The study sought to establish the background information of the respondents with focus being made on their gender, their profile and the frequency in which they utilise the library.

4.2.1 Gender
Respondents were asked to state their gender. The study established that 59 % of the respondents were female whereas 41 % of the respondents were male as illustrated in the figure below. This was attributed to the fact that the intake for female students for both the undergraduate and graduate programs was high.

![Figure 4.1 Gender Representation](image)

4.2.2 Respondents Profile
The university community is comprised of different groupings of clients who include students who are further categorised into graduate and undergraduate as well as staff who include both teaching and non-teaching staff. In terms of the respondents’ profile 15% comprised of graduate students, 80% were undergraduate students while 3% were the non-teaching staff and 2% were teaching staff.
Undergraduate students constituted the largest number of sampled respondents as they are the largest group of students admitted in the institution in every intake in comparison to the graduate students. According to the USIU-A 2016 catalogue, the spring intake had a total of 4939 undergraduate students as compared to 1333 graduate students.

### 4.2.3 Frequency of Use of the Library

Libraries and information centres exist to be used, therefore to understand the impact upon which the services provided have on their clients, it is necessary to understand the frequency in which the users visited the library and the motivation behind visiting the library. As illustrated in the figure below, majority of the respondents, 23%, frequent the library several times in a week, 15% frequent the library daily, 14% several times a month, 10% during exam week while 2% of the respondents visit the library once a month. The differences in the number of times a user visited the library may be attributed to certain factors which may include the availability of library resources in an electronic format or when the users are referred to the library by their lecturers.

In total quality management, managers should strive to ensure that all the clients’ needs are met. In this case, the library management should identify the reasons as to why the 2% of the respondents rarely visit the library with an aim of coming up with ways of ensuring that everyone visits the library.
Figure 4.3 Frequency of Library Use

4.3 Level of Satisfaction

TQM is an aspect that is concerned with the quality of services and products in an organization. It therefore becomes imperative to ascertain the level of satisfaction among users of the various services and products offered by the library and information centre. The library offers a variety of services to its users and therefore the researcher sought out to get the level of satisfaction for each specific service as illustrated in table 4.2.
The research aimed to identify the level of satisfaction for various library operations and services. With regards to borrowing services a majority of respondents, 59.1% were very satisfied. This can be attributed to the ease in which the service is offered with multiple counters manned by a number of library staff and the functionality of some services like renewal of books which do not require the clients to come physically to the library but with access to internet, they are able to renew their books while off campus.

The inter-library loans services had 72.7% respondents being neutral. This is a service that is not known among a number of library users and the process appears not to favour most of them as indicated by 1.5% respondents who were very dissatisfied. The process of loaning a book from other libraries may take a period of two days to a week thus may inconvenience a user who may require the information resource urgently.

Reference services are services that involve offering physical assistance to library users e.g. in locating books from the shelves, using the computers in the multimedia centre as well as connecting to the internet services. 45.5% were fairly satisfied with the service as many who do
not know how to locate physical books from the shelves are able to learn how to do it. At times, some information materials are not traceable thus the dissatisfaction among some of the respondents.

Ask-A-Librarian service is a service aimed at attending to library users queries on a real time basis. It acts as a chat between a library staff and library users whereby users get instant responses to their queries. 48.5% of the respondents were very satisfied with the service due to the fast rate of response to queries raised and the fact that it is accessible from anywhere.

Instructional services involve imparting information literacy skills among the library users. This may be undertaken through classes or orientation sessions. 50% of the respondents were fairly satisfied as this service enabled them acquire the skills necessary in gathering information and the various information materials to use. 16.7% were neutral about this service as most users do not attend the sessions which have not been made compulsory. The 3% who were fairly dissatisfied may attribute this to the timings of the instructional sessions which may collide with their normal class sessions thus they end up missing on these sessions.

Current Awareness service is a service that focuses on informing users and keeping them abreast on new products or services that have been introduced in the library. Various avenues are used which include the use of social media platforms, library notices, communication via e-mail and word of mouth. 37.9% of the respondents were fairly satisfied with this service as they become aware. 48% of the respondents were neutral. This may be due to ignorance among them whereby they may choose to ignore library alerts from their e-mails or may not give audience to library notices or posters. This therefore gives them no basis to rate on this service.

The library also offers printing and photocopying services. This service is offered at a very subsidized rate. Regardless of this, 36.4% of the respondents were fairly dissatisfied with the service. This may be attributed to certain factors like the availability of only one printer in the library serving all library users as well as inadequate printing papers during certain times thus forcing them to utilize the service outside the library. 31.8% were fairly satisfied due to the fair price of printing and photocopying.
One of the ways of acquiring the library information resources is through purchasing of recommended materials. 39.4% of the respondents were fairly satisfied because most of the items recommended were purchased. 7.6% of the respondents were fairly dissatisfied with this service. This implies that they may not be confident of the process of purchasing the materials either due to delays or if the materials they recommend are not purchased.

A number of users, 21.2% were fairly dissatisfied with the library opening hours. From time to time the library has received recommendations from users to extend the opening hours especially during the exam period. Failure to do so is evident in the responses. 48.5% of the respondents were satisfied with the library opening hours.

4.4 Essentials for Total Quality Management
For Total Quality Management to be applied effectively in organizations, there are several essentials that need to be put in place.

4.4.1 Effective Communication

Figure 4.4.1 Effective Communication
From the respondents, as illustrated in figure 4.4, it was evident that effective communication is essential in the application of TQM in the library operations and services with 74% strongly agreeing while 26 % agreed. No one disagreed regarding effective communication.

4.4.2 Effective Leadership

Leadership involves the commitment and involvement of the top management which is required in the reinforcements of values. From the respondents as illustrated in figure 4.5, 65 % strongly agree, 33%. Agree while 2 % were neutral on the issue of effective leadership as illustrated in the graph below. The commitment to effective leadership by the library managers leads to an increased workforce commitment and thus resulting in the quality of services provided in the library

![Effective Leadership](image)

**Figure 4.4.2 Effective Leadership**

4.4.3 Organizational Culture

Organizational Culture is concerned with the way an organization carries out its day to day activities guided by certain beliefs and values. 35% of the respondents strongly agreed, 57% agreed, 6 % were neutral while 2% disagreed that organizational culture is essential for total quality management. For better quality services and operations in the library, the library managers should implement new ways of carrying out operations as well as new services. These should be different and unique from the existing currently in operation.
Figure 4.4.3 Organizational Culture

4.4.4 Staff Attitude and Commitment

Members of staff contribute immensely in the application of total quality management practices in an organization. If they do not portray attitude and commitment towards their work then the organization may not achieve its mission, vision and goals effectively. The study sought to establish the essentiality of staff attitude and commitment. 49% of the respondents strongly agreed, 47% agreed, 2% were neutral while 2% disagreed. Library staff need to portray a positive attitude as they carry out their duties and show commitment to their work as this will give a good picture to the users.

Figure 4.4.4 Staff attitude and commitment
4.4.5 Infrastructure and Facilities

The study also sought to establish as to whether infrastructure and facilities are essential for TQM. 61% of the respondents strongly agreed, 37% agreed while 2% were neutral. No one disagreed. Infrastructure and facilities refer to the basic equipment and structures necessary to carry out certain activities. In the library these may include; working computers, internet and furniture. These ensure the comfort of the users and enables them utilize the library efficiently.

Figure 4.4.5 Infrastructure & facilities

4.5 Barriers in the Application of Total Quality Management

Despite the many successes brought about by the implementation of TQM, various challenges or barriers exist that hinder or slow its implementation. The study therefore sought to establish the level upon which the following barriers become a hindrance.

4.5.1 Resistance to Change

With regards to resistance to change, 55% strongly agreed, 41% agreed, 2% were neutral, 2% disagreed while no one disagreed as illustrated in figure 4.5.1. In an organization where people are used to undertake duties following certain procedures and guidelines, there is bound to be resistance in the event new ways of doing things are introduced. There is always the fear that new ways of undertaking things will not work out. The resistance to change may be due to lack
of consultation from the library managers who may make decisions on their own. The change might also be on a consistent basis such that it becomes overwhelming to the library staff.

**Figure 4.5.1 Resistance to Change**

**4.5.2 Lack of Communication**

The study additionally sought to check the degree in which lack of communication acts as a barrier in the application of TQM. 53% strongly agreed, 43% agreed, 2% were neutral while 2% disagreed as illustrated in the figure 4.5.2. In an organization, there exists various ways of enhancing effective communication. Communication can be top-down from managers to the library users as well as bottom-up communication from the users to the library managers. Library managers may introduce new library operations and services without effectively informing the clients who are the end beneficiaries.

On the other hand, library users may have complaints or suggestions regarding the improvement of library operations and services but may not convey such suggestions or complaints due to fear of victimization.

The channels used in communication may also have an impact on the effectiveness of communication. Many of the library users may not have social media accounts, thus making communication done through the social media platforms void.
4.5.3 Lack of Training and Education

The study further strived to identify the degree to which lack of training and education are barriers to the application of TQM. 35% of the respondents strongly agreed, 59% agreed, 4% were neutral while 2% disagreed as illustrated in the figure 4.5.3:

Lack of training and education among library staff hinders the successful implementation of TQM practices aimed at improving library operations and services. Training and education should be carried out among the library staff on a regular basis. This will enable them to remain relevant and current of the happenings in the library sector.
Figure 4.5.3 Lack of Training and Education

4.5.4 Staff Attitude and Commitment

On the question regarding staff attitude and commitment, 37% of the respondents strongly agreed, 59% agreed, 2% were neutral while 2% disagreed as illustrated in the figure 4.5.4.

Library staff portraying a negative attitude and with no commitment will be ineffective during the implementation of total quality management practices in library operations and services.

Figure 4.5.4 Staff Attitude and Commitment
4.5.5 Infrastructure and Facilities

Regarding infrastructure and facilities, 47% of the respondents strongly agreed, 46% agreed, 7% were neutral. No one disagreed as illustrated in figure 4.5.5:

For total quality management practices to be effective the library should ensure adequate infrastructure to enhance efficiency in the library operations and services. The infrastructure and facilities may include functioning computers with working internet as well as enough furniture to cater for the library users.

![Infrastructure & Facilities](image)

**Figure 4.5.5 Infrastructure and Facilities**

The study also carried out an interview with one of the top library managers with an aim to identify the current status with regards to TQM in the library operations and services as well as challenges experienced and viable solutions that can be implemented. The interviewee reported that;

“The library is currently implementing several practices with an aim of improving quality in the library operations and services. These practices include communicating effectively to our users when we have new services provided by the library. At the moment we are utilising various avenues to pass the message including e-mail alerts and mostly through our social media platforms”.
“We are also providing adequate infrastructure especially computers and access points to the internet to our users to enable them access our services effectively. This is evident by the increase in the number of internet routers that have been placed on each floor in the library as well as the new computers that have been added in the e-resource centre.

“As we strive to offer quality in our library operations and services, we do experience certain challenges. The budget set aside for the library is inadequate and therefore we may not fulfil some of the goals we have set out to achieve like hiring of more personnel to cater for the ever increasing number of our library users”.

“To help us solve these problems we have to look for funds from various sources without limiting ourselves to the funds allocated to us from the parent institution. We are in the process of implementing policies that will provide opportunities for library staff to be trained on a regular basis”.

4.6 Suggestions for Solutions for Implementation

The respondents were asked to suggest possible solutions for implementation to enhance the quality of library operations and services. Some of the responses cut across all the respondents as listed below.

Majority of the respondents stated in the questionnaires that effective communication should be enhanced to ensure that everyone in the institution is aware of the services and operations available in the library. Any changes that are to be implemented in the library should be all inclusive in that the users should be asked for ideas.

The library staff interviewed, stated that policies should be put in place that guide in the issues of quality management in the library operations and services. This helps to avoid the implementation of operations and services that are not viable to maintain or not based on the users’ needs.

The library staff also responded in the questionnaires on the need for continuous training to ensure they remain relevant in the field and for them to be able to undertake any changes that may be brought about upon the implementation of TQM practices
4.7 Chapter Summary

The chapter has highlighted the analysis of the data gathered. From the findings it was evident that the library users utilized the library several times a week. The library users were very satisfied with the borrowing services provided by the library but were fairly dissatisfied with the photocopying and printing services offered. It is evident that for TQM practices to be undertaken effectively certain measures should be put in place which include effective leadership, effective communication, organizational culture as well as a positive staff attitude and commitment. Some challenges are bound to be experienced during the implementation of TQM practices including lack of communication, resistance to change, poor infrastructure and facilities.
CHAPTER FIVE: SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This chapter gives the framework for the discussion on the findings, conclusions and recommendations of the study. The summary of the data is based upon the research objectives and research questions.

The purpose of the study was to examine the application of Total Quality Management in library operations and services with special reference to USIU-Africa library and information center.

5.2 Summary of the key findings
The summary of the findings are summarized as below based on the specific objectives the study.

5.2.1 Level of Satisfaction for Library Services and Operations
The research sought out to establish the level of satisfaction for the various services offered in the library. It was noted that most of the respondents were fairly satisfied or very satisfied with the services included in the questionnaire based on the percentages of responses.

It is worth noting also that some of the respondents were fairly dissatisfied or very dissatisfied with some of the services offered. Some of the services which fell into this category include photocopying and printing services, which had the highest percentage of dissatisfaction. Other services include: purchase of recommended library materials, reference services, current awareness services and library opening hours.

The dissatisfaction may be attributed to inadequate communication regarding current information in the library, lack of enough printers for printing in the library as well as the library opening hours which inconveniences some of the users especially the graduate students.

A number of respondents were neutral on the services offered in the library, this may be due to lack of awareness on the existence of such services. The service that had the highest percentage of neutrality was the inter-library services with a percentage rate of 72.7%. This is a service that has not been marketed enough to the users and therefore the users had no basis to judge the service.
5.2.2 Benefits of TQM practices in Library Services and Operations

TQM is a concept that may not be known to everyone especially the undergraduate students. The researcher therefore gave an explanation that enabled the respondents provide responses for the essentials of TQM.

The study established that there are some key essential issues that need to be addressed for the library to apply or in the implementation of TQM practices. The researcher identified some of those key issues with an aim of getting to know the level to which they are essential in TQM. The essentials identified included: effective communication, effective leadership, organizational culture, staff attitude and commitment, infrastructure and facilities.

Of the essentials, effective communication got the highest response with 74% of the respondents strongly agreeing that it is essential to TQM. Leadership got a rate of 65%. For TQM to be implemented and applied effectively in the library, the library staff should have total commitment to their work as well as have a positive attitude to implement any new changes required from them. This was evident in the responses where 61% of the respondents strongly agreed while 37% agreed that staff attitude and commitment are essential in TQM.

Infrastructure and facilities aid in the achievement of the day to day activities in the library. These components require human input. 49% strongly agreed that they are necessary essentials in TQM while 47% agreed. On the contrary 2% disagreed that they are not necessary in the application of total quality management practices in the library.

5.2.3 Barriers in the Application of TQM in Library Services and Operations

In any venture there are bound to be barriers that hinder or slow down the progress of the implementation or application of concepts. The library is bound to be faced by certain barriers or challenges. The researcher identified the key major barriers and posed the question to the respondents in order to identify the degree to which these barriers hinder the application of total quality management practices in the library operations and services.
The major hindrances identified include; resistance to change, lack of communication, poor training and education among the library staff, poor staff attitude and commitment as well as lack of adequate infrastructure and facilities

Changes in the library operations and services may get resistance from the library staff as well as from the users.

The respondents identified that resistance to change is a key barrier with 55% of them strongly agreeing, 41% agreeing while 2% were neutral and 2% disagreed. Resistance to change may be a barrier if all the parties involved are not included in decision making.

Effective Communication is key in the library especially when the library is about to implement new services and operations that may affect the users. 53% of the respondents strongly agreed while 43% agreed that lack of communication is a barrier to the application of total quality management.

5.2.4 Improvement of TQM Practices in Library Services and Operations

For TQM practices to be implemented and applied effectively in the library, the staff should continuously engage in training and professional development that will enable them undertake the new challenges without any difficulties. In addition, the library staff should maintain an attitude that displays positivism in their work.

The library, considered a service organization dedicated to the customers should formulate a strategic plan and follow it with a commitment to the improvement of quality. The library should set adequate funds meant for the acquisition of infrastructure and facilities aimed at improving service provision to the users.

TQM should not be seen as a strategy for fixing problems immediately but it should be implemented gradually over a period of time. While implementing TQM practices, not all users’ needs or demands will be satisfied and therefore the library staff should be professional.

5.3 Conclusion

The study has identified the need for TQM as a strategy necessary for application in the library operations and services as these are vital to satisfy the demanding needs of the users.
The library should have focus in the provision of the best and quality services and operations while being able to adapt to changes necessary in order to serve its customers best.

TQM may not be the guarantee for improved performance of libraries or utilization of library resources and services but it can help the library deliver quality services and operations to its clients.

5.4 Recommendations
The success of TQM is achievable with the cooperation of all stakeholders in an organization, from the top management managers to the rest of the staff by ensuring that all the needs of the customers are met. TQM allows the library to continuously assess its performance regarding the services and operations.

5.4.1 Process Focus
Emphasis in an organization should be put in the processes as opposed to the people undertaking those processes. This enables in the shifting off the blame from the individual employees. Statistical studies must be carried out at each stage in order in order to achieve this. This in turn contributes to the improvement of processes in the library. The Library should therefore improve on the existing processes in the persuasion of quality geared towards the customers and their ultimate satisfaction. Approaches to this method include conducting experimental design techniques and consumer research whereby the library can identify new ways of carrying out operations or new services.

5.4.2 Employee Education and training
Majority of the respondents, 59% identified training as a key component in enhancing the implementation of total quality management practices in the library. Employees must be taught about the TQM techniques, getting to have an overview which is comprehensive of TQM while also getting to know the various tools and techniques used in the elimination of problems.

Library managers should organize for workshops and conferences in which invited speakers from other similar or non-similar companies, where the implementation of TQM has been made, come to give talks of their own achievements and failures so that the library can learn from that.
The training should also be done on a regular basis to enable the librarians stay updated in the current trends in the market.

5.4.3 Effective Communication

Communication flow in the library to the members of the university should be enhanced by utilizing the various channels available in a timely and efficient manner. This ensures that the library users are able to know what new happenings are there in the library. The use of social media platforms which include Facebook and twitter can be used to enhance effective communication to the library users

5.4.4 Human Resources

This calls for the managers to ensure their staff are motivated enough to undertake the duties required of them. This also calls for the library managers to increase the number of personnel working in the library to enhance efficiency and ensure the student staff ratio in the library is manageable. This can be achieved through collaboration with the human resource department in identifying suitable candidates

5.4.5 Guiding Policies

Written policies should be included in the mission statement of the library and communicated effectively to both the members of staff as well as the users. This will enhance quality performance in all aspects of the library. It should also be amended frequently depending on the need so as to remain relevant at all times. The librarian and the various section heads in the library should formulate policies for all functions carried out in the library. This enhances uniformity in the delivery of services.

5.4.6 Measurement of Performance

For the library to stay relevant in the ever changing times, it should carry out various performance strategies from time to time. This also enables the library to provide better quality services based on the user needs. A number of measures can be put in place to aid in the gauging of the performance of the various services and operations in the library.
These measures include; user needs surveys, cost benefit analysis to enable the library identify the cost effective strategies to implement while maintaining quality in the library. The library should benchmark with other related institutions to see how such strategies for total quality management are applied

5.4.7 Improvement of Infrastructure and Facility

The library should continuously improve on the infrastructure and facilities utilized in the library. This involves bringing in quality furniture that ensures comfort of the users, quality computers for the multimedia section where users without personal computers are able to utilize that facility as well as improving on the connectivity of the Wi-Fi. These all ensure to provide a conducive platform for the users in the library as well as maintain high quality standards

5.5 Recommendations for Further Research

The study only focused on the application of TQM practices, case of USIU-Africa Library and information center. Further recommendations are highlighted as below

5.5.1 Other Service Industries

Further comparative studies should be carried out to bring out the application of TQM practices in other service industries in comparison to the libraries. A comparison can also be done focusing on the different types of libraries like academic libraries in comparison to public libraries or special libraries due to nature of clientele and the different varying needs of each group.

5.5.2 TQM Models

There exists a number of TQM models that institutions can apply as they strive to improve their quality of services. In Germany, libraries have the possibility to be certified as “Ausgezeichnete Bibliothek” or Excellent libraries, based on EFQM excellence model as well as the Common Assessment Framework model. More studies can be done on the various models to identify the best model an institution can apply in their operations.
REFERENCES


APPENDIXES

APPENDIX I: INTRODUCTION LETTER
10th/Sep/2016
Moses Muendo Munyao
Department of Library and Information science
University of Nairobi
P.O. Box 30197
NAIROBI.

Dear Respondent,

RE: INTRODUCTION LETTER FOR RESEARCH

I am a Masters student in the Faculty of Arts and Humanities, Department of Information and Library Science, University of Nairobi. I am currently undertaking a research on the Application of Total Quality Management practices in library operations and services with reference to the United States International University-Africa library. I am therefore requesting for your participation by filling in the attached questionnaire to enable me collect data for the study.

Information provided shall be treated with utmost confidentiality.

Thank you in advance for your cooperation.

Yours sincerely,

Moses Muendo Munyao
APPENDIX II: QUESTIONNAIRE FOR LIBRARY USERS

INSTRUCTIONS
Kindly answer the questions by ticking against your response or writing in the spaces provided.

DEMOGRAPHIC INFORMATION
1. Gender
   a) Male ☐   b) Female ☐
2. State your Profile
   a) Undergraduate ☐   b) Graduate ☐   c) Staff ☐
3. How often do you frequent the library?
   Daily ☐   Once a month ☐   During Exam week ☐
   Several times a week ☐   Several times per month ☐

4. LEVEL OF SATISFACTION
Please tick the extent to which you are satisfied with the listed Library services and operations.
Use the scale 1 to 5 where 1=Very Dissatisfied, 2= Fairly Dissatisfied, 3=Neutral, 4=Fairly Satisfied 5= Very Satisfied

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<thead>
<tr>
<th>Service</th>
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<td>Borrowing Services</td>
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5. BENEFITS OF TQM PRACTICES

Total Quality Management (TQM) is a management approach concerned with the principle of satisfying users’ needs as well as continuous improvement of existing practices.

From the definition given, are you aware of Total Quality Management practices?

Yes ☐ No ☐

If yes, to what rate do you agree that the following TQM practices are essential in library operations and services? Use the Scale 1= Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree.

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<th>Essentials for TQM</th>
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6. BARRIERS IN THE APPLICATION OF TQM PRACTICES

In your own opinion, to what rate do you agree that the following hinder the application of TQM practices in library operations and services? Use the scale; 1= Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree.

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<th>Barriers to TQM</th>
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7. SOLUTIONS FOR IMPLEMENTATION

Suggest possible solutions for implementation to enhance the quality of library operations and services

______________________________________________________________________________
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APPENDIX III: INTERVIEW GUIDE FOR LIBRARY MANAGEMENT STAFF

1. What is your position in the library?
2. Are you aware of Total Quality Management?
3. If yes, what do you understand by Total Quality Management?
4. What Total Quality Management practices are you currently implementing?
5. What challenges are you experiencing in the implementation of such practices?
6. What viable solutions do you think can be utilized to tackle the challenges experienced?