FACTORS INFLUENCING IMPLEMENTATION OF QUALITY MANAGEMENT SYSTEM OF SELECTED TECHNICAL AND VOCATIONAL EDUCATION TRAINING INSTITUTE IN BUNGOMA COUNTY, KENYA.

SIMIYU NANJALA EVERLYNE

A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF BACHELOR OF COMMERCE PROCUREMENT OPTION OF GRETSA UNIVERSITY.

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Declaration by Student

This project is my original work and has not been presented for award of a bachelors' degree or for any similar purpose in any other institution

Signature: ..... Date: 7/12/2023.

Simiyu Nanjala Everlyne

BUS-4-3891-21

Approved by Supervisor

This project is submitted for examination with my approval as the university supervisor

Signature: ..... Date: 7/12/2023

Name of Supervisor: Madam Fridah Kathure

School of Business

Gretsa University

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Dedication

This work is dedicated to my beautiful daughter Precious and handsome boy Prince. Thank you for your understanding, love and encouragement whenever I will be away for long periods on study. My dear mother Getrude Naswa Simiyu and father Herman Simiyu Nandasaba, whose love for education inspired me in this pursuit. My sister Carol and the entire Herget family, you are such a blessing, you are my strength.

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Abbreviations and Acronyms

Ho: Null Hypothesis

ICT: Information Communication Technology

IT: Information Technology

ISO: International Organization for Standardization

KEBS: Kenya Bureau of Standards

KISTTI: Kisiwa Technical Training Institute

PC: Performance contract

QMS: Quality Management System

SIST: Sang'alo Institute of Science and Technology

SPSS: Statistical Packages of Social Science

TQM: Total Quality Management

TVET: Technical and Vocational Education and Training

WI-FI: Wireless Fidelity

Operational definition of Terms

Quality: The standard of something as measured against other things of a similar kind; the degree of excellence of something. It means that a product meet and exceed all requirements, standards and specification.

Quality Management System: it is a collection of business processes and procedures which aims to ensure that the quality of products or services meets or exceeds customer expectation

Implementation: it's the execution of a plan, it is the process of putting a decision or plan into effect or execution.

Performance Contract: it is a legal agreement in which one organization agrees to pay another when they successfully finish the project or task they were employed to do

Performance Contracting: it is a freely negotiated performance agreement between a government, acting as the owner of a public agency and the management of the agency

Influencing: it means to affect or change something or someone in an indirect but usually in an important way

Questionnaire: it is a set of printed or written questions devised for the purposes of a survey or statistical study.

Certification: it's an action or process of providing someone or something with an official document attesting to a level of achievement

Heterogeneous: it means diverse in character

Stratification: it is the agreement or classification of something into different groups

Abstract

Quality Management Systems (QMS) are practices which are adopted in institutions with the main aim of meeting the needs of the customers and also ensuring that the quality or rather standard things are done to obtain the set goals or objectives. By doing this, the QMS helps an organization to continue improving in its effectiveness and efficiency of its performance. Most of Technical and Vocational Education and Training (TVET) Institutions in Kenya have adopted QMS as part of Performance Contracting (PC) requirement to enhance performance and improve service delivery. Applying QMS in an organization is expensive and takes a lot of time. Despite of huge resources spent and big investment by government in TVET institutions; implementation still remains a big challenge. Therefore, this study sought to investigate factors influencing implementation of quality management systems in selected public TVET institutions in Bungoma county Kenya. The study was directed by the following objectives: To establish the influence of resource availability on quality management system of public TVET institutions in the selected institutions in Bungoma county, Kenya; To examine the influence of top management skills on quality management systems in public TVET institutions in Bungoma county, Kenya and To assess how information technology influence quality management systems of selected public TVET institutions in Bungoma county, Kenya. The primary data was collected using self-administered questionnaires using both open and closed ended questions from lecturers and students that were sampled from the the public TVET institution in Bungoma county, Kenya, the institution was purposely selected since it is ISO 9001:2015 certified. The target population was 400 lecturers and 1000 third year students, from which a sample size of 169 lecturers and 278 third year students was drawn. The study used descriptive survey design, it's because the design allows the researcher to study and describe the distribution of one or more variables. Krejcie and Morgan table was used in getting the sample size. The data collected was analyzed using Statistical Packages of Social Sciences (SPSS) version 23 which is a software that is mainly used for analysis of statistical data. The Quantitative data was analyzed using descriptive and inferential statistics while qualitative data was analyzed through content analysis.

CHAPTER ONE: INTRODUCTION

1.1: Background of the Study

The term Quality Management System and the initials QMS were invented in 1991 by Ken Croucher, a British management consultant working on designing and implementing a generic model of a QMS within the IT industry. The roots of Quality Management Systems go back to the guild system in old-fashioned times, with master craftsman status representing higher quality goods and services. Fast-forwarded to the industrial revolution, where quality evolved to focus on factory inspections and removing defective goods

A Quality Management System (QMS) is a system that is formalized to document processes, procedures and responsibilities for achieving quality policies and goals. They are practices applied by organizations to help them coordinate and control activities to meet customer and regulatory necessities to improve the efficiency and value continuously. Many organizations today are embracing implementation of QMS since they are able to provide quality for their customers thus giving them value for their money as well as improving their own processes. QMS is a collection of business processes focused on consistently meeting customer requirements and enhancing their satisfaction. It is aligned with an organization's purpose and strategic direction (ISO 9001:2015). There are four main types of quality processes that are prominent in many organizations; ISO 9001, AS9100, Six Sigma and Capability Maturity Model Integration (CMMI). Choosing one depends on its fit to the organization and the understanding of the particular QMS by both employees and customers.

There are Quality Management principles that offer an essential frame work for the implementation of ISO 9001. The core principles are the basis for quality management across the

organization, helping the organization to maximize performance improvement and meet compliance standards. The principles include; Engagement of people across all levels of the organization to help create and deliver processes and procedures that add value, customer focus by meeting their expectation which is essential to growth, stronger leadership which means better quality and consistency, process approach, continual improvement by analyzing and reviewing the organization procedures, evidence based decision making and relationship management whereby organization should establish and maintain strong relationship with its clients.

ISO 9001:2015, the International standard specifying requirements for quality management systems is the most noticeable approach to quality systems. A good quality management system is geared towards commitment to providing quality and customer satisfaction as well as continuous improvement. Gremyr, Lenning, Elg and Martin (2021) talks of increasing the value of quality management systems, they cite out that most organizations have a quality QMS certified to the ISO 9001 standard but the system requires a lot of resources and its value questioned. QMS ensures full documentation of all the processes within an organization system, training of the process owners and internal auditors to increase efficiency in the operational process. The training has increased the connection between employees performance and the quality management factors, Khaled M.S Abukhader (January 2021) uncertain supply chain management 9(3): 521-528. QMS also develops and builds an organizations network which helps in boosting their customer base as well as retaining the already existing customers, Usman 2019, this is maintained through conducting regular internal audits followed by surveillance audits based on the organizations documentation for review of performance and also the Customer Relationship Management (CRM) which is a system used by organization for

monitoring and satisfying the needs of a customer. Piskar Franka (March 2007) Managing Global Transition 5(1)

The Technical and Vocational Education Training (TVET) in Kenya is under the Ministry of Education, and it's State Department for Vocational and Technical Training. The State Department has two directorates i.e the Directorate of Technical Education (DTE) and Directorate of Vocational Education and Training (DVET). The TVET aimed at equipping learners with skills that are directly applicable to the workplace enabling them to learn trades that often result directly in obtaining income.

TVETs in their current form are a relatively new innovation, in existence for less than a decade, but they were around 30 years in the making. In 1989, the United Nations Educational, Scientific and Cultural Organization (UNESCO) created a mandate stating that Vocational Training should contribute to the safeguarding of peace and friendly understanding among nations and with the goal in mind. The International Project on Technical and Vocational Education was established in 1992, Locally, the FET Act of 1998 was followed by the establishment of the South African Institute for Vocational and Continuous Education and Training (SAIVCET) and the term Technical and Vocational Education and Training (TVET) was introduced in 1999 at the UNESCO second international congress on Technical and Vocational Education in Seoul, South Korea. In 2012, public FET colleges in South Africa were redefined as TVETs with private TVETs following suit in 2014. Today, there are 50 accredited public TVET colleges in South Africa, operating on more than 300 campuses across the country. Public TVET colleges are subsidized by the state receiving approximately R8-billion in government support annually.

The implementation and certification of QMS is a voluntary process which can only be achieved depending on how much value an organization puts. Mehdi Bouchetara, Ahlem Fatma,Imad

Eddine (march 2022) International Journal of Economics and Business Adminstration x (1): 261-286 singled out that the positive results expected from the implementation of the QMS depend extensively on the commitment of the top management and the involvement of all its employees.

The organizational structure, type and size of organization also matters in implementation of QMS Kelly Stanton October 2022 (4) Dale et al, (2007). SA Syahdan 2021 puts out that the success and failure of ISO implementation is largely influenced by the cultural factors of organizational quality (Kekale, 1999;Parncharoen et al) QMS engrains a culture of continuous improvement through top management commitment and total employee participation to meet customers' demands (Basu et al, 2020; Gupta & Mittal, 2020; Sarmast et al, 2021)

There has been an increasing awareness about implementation of QMS in higher educational institutions worldwide in the recent past. Improved awareness levels among aspiring students, competitive environment, student's preference to seek admission in quality-oriented institutions, compelling norms of regulatory authorities and the urge of institutions to be among the top are the main reasons for this increased awareness. Existence and continuance of some of the institutes, especially TVET institutions has become a challenging task without focusing on QMS through a strategic approach, Yanamandra Ramakrishna (2022)

The study of TQM principles in the field of management where all activities are aimed at optimizing customer satisfaction through continuous process improvement, TQM in TVET institutions is a strategy that seeks to improve the quality of an institution management thus increasing the competitiveness and value it gives to customers. TQM gives a competitive advantage for TVET institutions because it involves all departments and various levels of the institution,Djojo Dihardjo, Lena Ellitan (November 2021)

Looking at the current TVET policies in Indonesia, we can see that the understanding of what constitutes TVET quality is highly connected to the fulfilment of international standards, third party certification of institutions in Indonesia and the creation of stronger links with enterprises. A major achievement with regard to the Indonesian education system was the introduction of national qualifications framework that sets competency- based learning goals for all education and training courses.

In Nigeria, there are a number of issues that affected quality assurance in education system particularly TVET institutions. The shortage of funds, insecurity, policy inconsistency and lack of regular training of staff, poor infrastructure, lack of staff development program and capacity building, brain drain of qualified staff due to poor incentives, bad leadership within the government level and at the institutions top management level. Since education is very vital and makes an individual useful in the society, the QMS policies should be monitored and evaluated on regular basis in order to improve the quality of educational system in TVET institutions in Nigeria.Yd Usman 2021. In South west, Nigeria, Bandele and Faremi (2012) noted that the technical staff was untrained, tools and equipment were obsolete and the state of workshops and laboratories was not good.

When we look at TVET institutions in Ethiopia, they suffered insufficient internet and this affected training since ICT could not be integrated in training. Infrastructure in the institutions was also below the expected standard thus affecting training (Geressu 2014) Budgetary allocation for training equipment and materials was also insufficient to sustain efficient training. Further, Dasmani (2011) found that TVET institutions in Ghana did not operate as the expected standards due to inadequate human, financial and physical resources. At the same time, they did not have further opportunity for capacity development for their staff and internship for their

trainees. This led to practical skill mismatch since the staff lacked current skills required by the industries and thus becoming difficult to impart the same knowledge to the trainees to be applied in the industry which negatively affected the quality of education offered to the trainees

Ngure 2013 study indicates Kenya TVET institutions suffer from various challenges that have hampered its growth. These include implementation of curriculum that does not take into account the current needs of the industries where graduates are absorbed once they graduate. The curricula do not provide adequate time for practical lessons which is the backbone in TVET training. Hence this leads to the training being offered to the trainees not to match with what the industries require since the curricula has to be implemented to the latter. In curricula design, Ngure noted that very key stakeholders like the industries and curriculum implementers are not involved thus bringing the mismatch. Hence you find many trainers are deviating from the set curricula in order to match their training needs with the market or rather industry.

1.2: Statement of the Problem

The implementation of QMS and its subsequent certification has been found to be a very expensive and time consuming process by most organizations. It involves a number of processes which range from implementers training, development of QMS procedures manual, staff sensitization, auditors training, implementation, pre-qualification audit and certification. All these procedures need a lot of time and resources to successfully be carried out. The cost of ISO 9001 certification can make organizations reluctant to become certified, most organization are opting in hiring an ISO consultant to complete the entire process, however it turns out to be most expensive option that costs £ 5000 - £ 50,000 as the consultants will typically create and charge an organization for many documents included in the package, an organization will end up paying

for the transfer of knowledge to the consultant so he/she may put together the QMS (9000 Store >articles>cost of ISO 9001 certification) This has been seen to be a big challenge for many organizations especially TVET institution who are wrestling with tight budget limitations since they have to give priority to very key processes in organization.

All personnel and all areas in an organization are affected by QMS. Training regarding the QMS should be provided for all employees (Stratford Peer Reviewed Journals and Book Publishing Journal of Strategic Management November 2019), it is also noted out that top management is reluctant to commit time and expenses to train their staff. Chew et al, (1996) in DA Ogony 2017 also mentioned that some organizations perceived that QMS is all about documentation of procedures which could still be applied by their employees and hence ignored the importance of training them

The implementation of QMS should not be considered to be an easy task by top management. Every organization success lies with the top management and therefore their participation in all aspects is very key, thus should acquire skills in various areas of operation for smooth implementation process (chew et al, 1996). They further identified that the reason for such problem was due to lack of sensitization of employees about the benefits of the QMS. Li-ping Tan 2020 observed that most top management of companies did not place quality as a priority against the factor of skills

Integration of IT into an organization system today has been found to be very essential since all processes are becoming automated, hence less or no manual operation of processes (Kharuddin, Ashhari and Nassir 2010). However, most organizations still face a number of challenges in this area since they are yet to adopt the new technology and therefore service delivery is not efficient.

Although these researchers focused on Quality Management Systems, there still exists a knowledge gap as none of them addressed QMS in TVET institutions in Bungoma County, kenya, a case of Kisiwa Technical Training Institute. It was against this background that the researcher sought to study the Factors Influencing Implementation of QMS in Selected Public TVET Institution in Bungoma County, Kenya

1.3: Purpose of the Study

The purpose of the study was to determine the Factors Influencing Implementation of QMS in Public TVET Institutions in Bungoma County, Kenya. A case of Kisiwa Technical Training Institute (KISTTI)

1.4: Conceptual Framework

This explains the existing relationship between the independent and dependent variables. In this study, an attempt was made to find out how the independent variables; Resource availability, Top management skills and Information technology influence implementation of Quality Management Systems. Implementation of QMS is a dependent variable focused on customer satisfaction, corporate image, performance in examination and student completion rates.

For implementation of QMS to take place, there is dependence on a number of independent variables which include; Resource availability that entails physical facilities, availability of funds human resource; Top management skills that entails analyzing and interpreting statistical data, continuous monitoring and evaluation of ISO, financial skills and ISO auditing skills; Information technology such as availability of IT infrastructure and computerization of services.

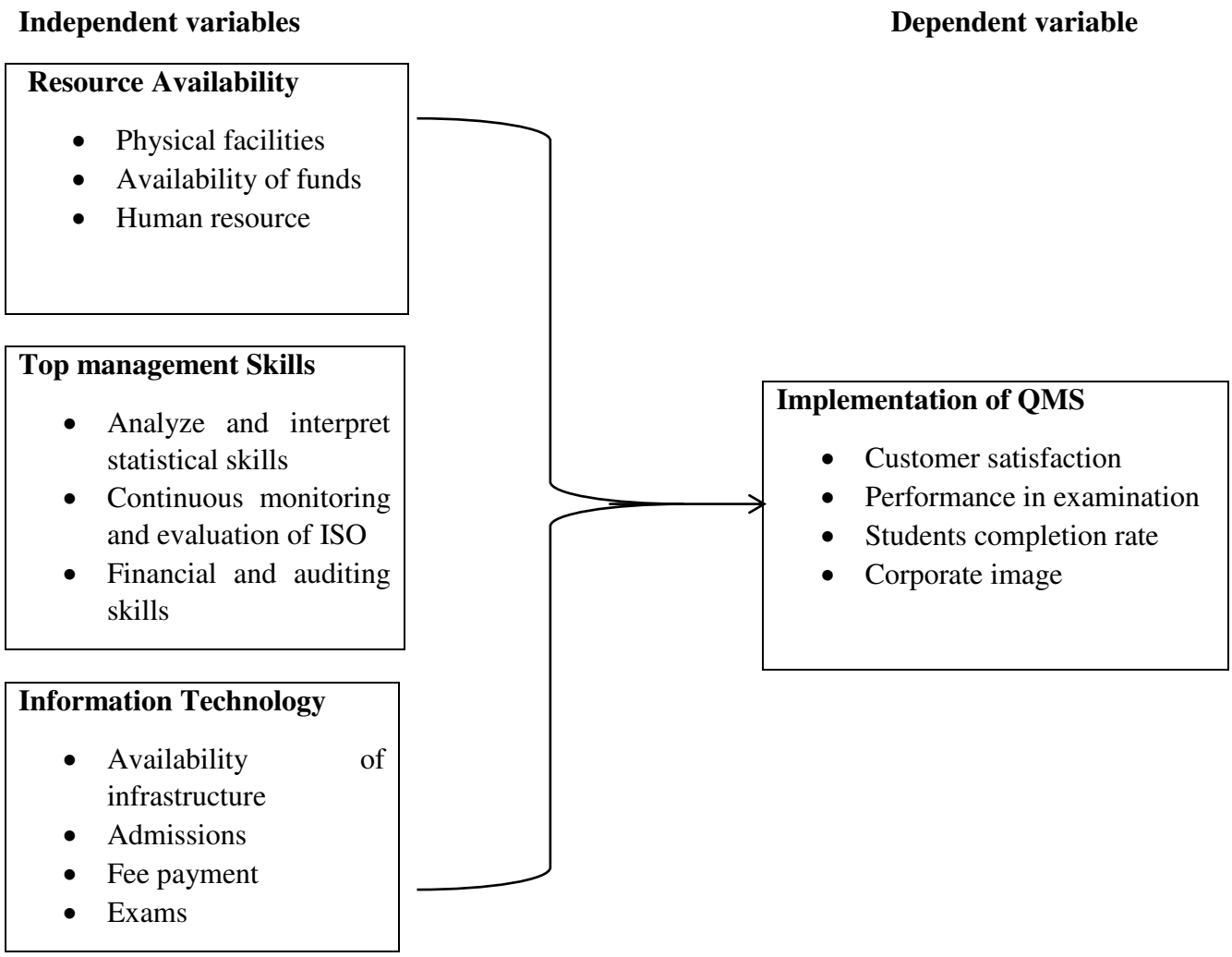

Figure 1: Conceptual Framework

1.5: Research Questions

The research aimed at answering the following questions;

i. Does resource availability influence implementation of quality management system of public Technical Vocational Education and Training institutions in Bungoma County, Kenya?

ii. Do top management skill influence implementation of quality management system in public Technical Vocational Education and Training institutions in Bungoma County, Kenya?

iii. Does information technology influence implementation of quality management system of public Technical Vocational Education and Training institutions in Bungoma County, Kenya?

1.6: Objectives of the Study

This study was guided by various objectives that the researcher wanted to achieve at the end. There was one main general objective that the researcher based her study on then three specific objectives. This objectives were used as directives in coming up with questionnaires.

1.6.1: General Objective

The study was guided by the following general objective;

1. To determine the factors influencing implementation of quality management systems of public Technical Vocational Education and Training institutions in Bungoma County, Kenya

1.6.2 Specific Objectives

i) To establish the influence of resource availability on implementation of quality management system of public Technical Vocational Education and Training institutions in Bungoma County, Kenya

ii) To examine the influence of top management skills on implementation of quality management system of public Technical Vocational Education and Training institutions in Bungoma County, Kenya

iii) To assess how information technology influence implementation of quality management system of public Technical Vocational Education and Training institutions in Bungoma County, Kenya

1.7: Hypothesis of the Study

H_{O1}: There is no significant influence of resource availability on implementation of quality management system of public Technical Vocational Education and Training institutions in Bungoma County, Kenya

H_{O2}: There is no significant influence of top management skills on implementation of quality management system of public Technical Vocational Education and Training institutions in Bungoma County, Kenya

H_{O3}: There is no significant influence of information technology on implementation of quality management system of public Technical Vocational Education and Training institutions in Bungoma County, Kenya

1.8: Significance of the Study

The study was significant because the findings might be engaged by managers in TVET Institutions in Kenya as they seek to implement effective QMS. By doing this research, the study has shown the benefits an institution will gain with the implementation of QMS in its operations. Policy makers will also obtain knowledge on the factors influencing implementation of QMS in public TVET institutions and therefore obtain guidance from this study in designing appropriate policies to enhance implementation of QMS. The study also have a significant contribution to the body of knowledge for researchers in the field of QMS.

1.9: Delimitation of the Study

The study was carried out in one of the public TVET institution in Bungoma County, Kenya namely Kisiwa Technical Training Institute (KISTTI) out of five public TVET institutions within the county. The researcher selected the KISTTI because it is ISO-9001:2015 certified, which is the latest and aims to ensure consistency of quality. The other four institutions, one operate under certification of ISO 9000 which provides a general framework for quality management systems and other two are not certified at all and one was certified but used for pretest. The researcher was confined to establishing factors influencing implementation of QMS in public TVET institutions, the total population comprised of 400 teaching staff and 1000 students in the public TVET institution.

1.10: Limitation of the Study

The limitation of the study was the high cost incurred due to the large number of respondents which required a noteworthy amount of time to collect adequate data, which the study had no control over. To overcome this limitation, the researcher contracted research assistants

1.11: Assumption of the Study

The study assumed that the availability of resources, top management skills and information technology influences implementation of QMS in public TVET institutions. The study was conducted with the assumption that respondents were well versed with QMS issues, they were willingly able to provide honest and truthful information since participation was voluntarily. It was also assumed that respondents had good understanding of the factors influencing implementation of QMS of public TVET institutions especially in Bungoma County, Kenya.

CHAPTER TWO: LITERATURE REVIEW

2.0: Introduction

The purpose of the literature review in this chapter was to establish the root cause of the problem being investigated. The review was done under the following sub-headings; review of literature related to the main concept, review by first, second and third objective, theoretical framework and summary of the identified gaps in the reviewed literature.

2.1: Review of literature related to the Quality Management System in Public TVET Institution

The empirical review of the study was based on the knowledge from other related studies carried out by different researchers. The review was mainly evidence based and related to the main concept of the study which was all about the Quality Management System in public TVET institutions

Quality Management System (QMS) is defined as procedures that have been laid down by an organization that guides it in its daily operations. These procedures are usually documented and are followed in every aspect of its operation for the purpose of achieving quality and maximize its productivity, this is achieved by having leadership commitment and performance of QMS (Maranho Nov 2020). The QMS mainly is concerned with adherence to the documented procedures, implementing the procedures to ensure the objectives are achieved and keeping evidence, hence it concerns all staff within an organization, its main purpose is to improve operations, customer satisfaction and compliance (Moura 2019)

The value of QMS according to ISO 9001 standards will depend on the way staff embrace it. It is important that before implementation, all staff be sensitized in order to accept any changes that

may arise. This leads to an organization improvement in performance since it will bring totally a new system in place. (Wu T, Chen B, Shao Y 2021). In some institutions, staff are usually aware of the QMS fundamental objectives but normally disagree on the challenges of putting it into practice hence need for sensitization (Balahaida, Wilfredo and Joseph Cabiente June 2022)

The implementation of a QMS today is seen to be very critical in the management of an organization C. Psomas, E. Bouranta (2022). QMS when implemented seeks to ensure standards within an organization are maintained hence effectiveness, customer satisfaction, upto date documentation, organizational culture, compliance as well as continual improvement so as to keep pace with the emerging trends (Laszerary Technology 2019). For all organization to be successful in implementation of QMS, all the documented processes should be followed and evidence based, since ISO 9001 standard deals with success. Quality in TVET education covers a very wide area, it encompasses all functions and activities within a TVET institution from the time of admission to graduation of a trainee Kintu D., Kitainge K, and Ferej A 2019. It is important that a lot of emphasis is put on technical educational since it is only through quality training that a trainee can fit into the job market both locally and abroad. Abidin M (2021) study results of an Australian medium sized university revealed that quality when put first and maintained will maximize customer satisfaction.

A QMS is a framework of processes used to ensure that an organization fulfills its objectives and ensures there is continual improvement (E Munyalo 2020). It is important for all staff in an education system to understand and be conversant with the processes that are involved in a QMS within an organization. To ensure compliance, pre-certification audits are carried out by a certification body which approves or disapproves certification (Canadian nuclear safety commission 2021)

The factors influencing QMS implementation including sensitization and involvement of staff in the process in all stages and top management leadership styles that is geared towards uniting and motivating staff (Tennakoon N.S and Weerasiiriya WMRB 2020). The TQM factors revealed by Nyaywa M.M (2020) study include quality focus by the top management that is geared towards ensuring customer satisfaction, engagement of staff in all operations involved in the QMS processes undertaken and provision of the required resources. Saubrata and Anindya as cited in Ater (2013) in D.A Ogony 2017 identify some of the challenges associated with implementation of QMS in textile industry in India as: non-committal of the top management, lack of sensitization of staff on QMS by the management, insufficient financial resources thus affecting certification due to cost implication, failure to undertake staff development or capacity building and too much documentation of processes combined with heavy workload

Ogony D.A (2017), Korgal R.V, Badiger A.S and Burutzki R. (2019) indicated that the QMS practice in TVET institutions in Mozambique and India is still below the world's expectation. Furthermore, the external focus of the technical institutions is lacking with these institutions having to focus more on developing the office facilities and ensuring conducive environment, rather than putting more emphasis on tuition rooms/lecture halls, staff development and putting up laboratories and workshops equipped with modern equipment to boost technical education. To implement a QMS that conforms to ISO 9001, an organization must ensure the following; training the implementers, training the internal auditors, training the lead auditor, documentation of the operation processes, sensitizing all staff and undertake an internal audit (Ngwekazi T.G, Makhanya B.B, Nel H. (2023). Furthermore, the old procedures should be abandoned once the new procedures has been documented and implemented. The only challenge mainly encountered during implementation of QMS is that staff tend to put more emphasis when audit is about to be

carried and forget everything once the audit is done thus deviating from their mandate of ensuring QMS implementation is a continuous process(Evi, E.L & Gantino R (2023)

2.2: Resource availability and implementation of quality management System

The process of implementing ISO standards is not an expensive venture as some organizations may think. Many find the cost to be relatively high and hence shy away from the whole process. To implement the process, organizations need to consider their position in terms of availability of the required resources (L Zhao, J Gu, J Abbas, D. Kirikkaleli (2023). In technical education, the physical resources required include; offices, lecture halls/classrooms and well equipped laboratories/ workshops. For human resource, qualified and competent staff is required both at the top management level and teaching level, financial resource which is very critical in this area is needed in the whole process of ISO standards implementation to certification stage. At the implementation stage, an organization is required to hire the services of a consultant to guide it throughout the process (Sarker, A.A). Further, other costs were incurred in training the process owners and sensitizing the implementers, training the auditors, training the lead auditors and undertaking a pre-certification and certification audit in readiness for certification

TVET institutions in Indonesia were found to be lacking adequate funds as well as development and operational grants from the central government to boost their technical education. This led to constraints on the resource available thus affecting the growth of technical education and at the same time acting as a barrier in the implementation of ISO 9001 standard (Amar and Zain, 2002) in Mitchell, C. and Fakhruddin B (2022). Other resources that affected implementation of ISO standards include; unequipped laboratories/ workshops, obsolete tools, manpower and tight

schedule of the already existing workload. On the other hand, staffs were found to inherit a culture of resistance to change due to unforeseen benefits

Resources in an institution may be categorized under physical resource (infrastructure), human resource (teaching and no- teaching staff) both at university and technical level (Mohammadi, M.M. Jalali A & Hasani A (2021). According to Mahmud, A (2022) the physical evidence that influences the state of perceived service quality in any learning is; modern tuition rooms fitted with smart boards and overhead projectors to facilitate learning, well equipped laboratories/workshops with modern equipment, a library system fully equipped with WI-FI that facilitates the use of e-books and an ICT laboratory equipped with modern computers installed with the latest programs for learning. Wanyama, B.W (2022) found that TVET institutions operated without adequate physical facilities, did not have adequate training tools and lacked adequate training materials. Furthermore, most of the training equipment found were not technologically in line with equipment found in industries and business organizations

Today, students' perception on quality in an institution is the availability of a WI-FI system installed in the library that gives them access to e-books with current learning materials. Partap, B & Saha, P (2019) Furthermore, they are able to carry out research in their specialized area of study without going to the field, hence less time consuming. Reports have shown in some instances that students take lessons while standing due to lack of seating space in the classroom, while in some cases, students have to listen from outside the classroom. In addition, the reading space in the libraries is inadequate hence overcrowded, while the material available is outdated Andiva Z K (2019)

Andiva Z K in the study found that in most public institutions of higher learning, effective curriculum implementation was mainly affected by inadequate space in classrooms due to large

number of students forcing them to undertake their lessons while standing outside the room. The institutions lacked adequate and modern ICT infrastructure for smooth implementation of the curriculum. This affected the academic performance of the institutions and the quality of graduates. Likoko, Mutsosto and Nasongo (2013) in Atabauka, O. N Jacob American Journal of Social 2021 found that some colleges had inadequate facilities such as classrooms, offices, libraries and recreation facilities. It also emerged that most of the institutions were located in unconducive learning environments such as next to littered back streets, overcrowded market centers and neglected building while others lying on a less than half an acre piece of land leaving no room for playgrounds thus becoming a roadblock to the process of implementing a QMS within the institutions.

In Pakistan universities, student response from a study carried out showed that they are not satisfied with the library services. They raised concern about non-availability of internet connectivity system thus lack of WI-FI services hence difficulty in carrying out research. (Ul Hassan, M & Aziz A.A 2019). Students' dissatisfaction will also be noted in the neglected laboratory/ workshop tools used in carrying out practical lessons. In a study of Nigerian universities, office space was found to be inadequate for teaching staff hence difficulty in lesson preparation. Staff also used lecture method since ICT was yet to be integrated in teaching and learning. Tuition rooms as well as workshops were inadequate thus less practical lessons resulting in low imparting of skills required. Basic needs such as power and water supply was also a hitch due to lack of a backup Ibolekwu B.C (2021)

Seats and desks were available in all universities and TVET institutions though some of furniture was in a disreputable condition which was affected by maintenance culture, (Korgal R.V, Badiger A.S & Barutzki R 2019). There were generally many lecture rooms and theatres but they

were not adequate in some cases and some of the rooms were too small for the number of students utilizing the facility. Facilities that were generally in short supply were computers and hostels. Infrastructure in learning institutions was in adequate due to lack of enough revenue and too much reliance on government grants Ratten V. (2020). Moreover, resources such as infrastructure, internet access, automated library system fully installed with WI-FI, current text materials and journals, tools, workshops and tuition room space was an obstacle in growth of education in institutions of higher learning.

Library facilities in most Kenyan and Jamaican public TVET institutions and polytechnics lacked sufficient internet connectivity which limited access to WI-FI thus affecting research that led to drawback in research area which is mainly done online (Clarke- Lindsay R, & Baker Gardner). In Nigeria a study by Tunde and Issa (2013) in EO Idiodi Influence of Library value on University Education indicates, the reading text material are inadequate due to an increase in student enrolment thus not sufficient to serve the students adequately. Further, some books are old and no longer in use. Moreover, the availability of a well-stocked library facility with current reading materials encompassed the research facilities for students clearly indicates that education in institutions of higher learning is linked to a good library. J. Muthimi, Kilika J & Kinyua G (2021) shows that higher education sector operations have been affected by the dwindling resources, against the background of an increasing demand for higher education. This forces the university to diverge from its core business of provision of excellent higher education and instead engage in income generating activities so as to substitute its financial resources. Moreover, public universities have now to compete for the scarce government resources

2.3: Top management skills and implementation of quality management System

Management skills influence the attractiveness of TVET institutions. The principal should have qualification both in administrative and pedagogical level. He should be conversant with technical training and practices which should be result based form of management. Furthermore, by developing a five-year strategic plan, most institutions are able to achieve very many goals with little or no expenditure at all such as improving the work environment, punctuality to work, staff motivation and promoting teamwork. This kind of support from the top management influences the implementation of a QMS. The positive results expected from the implementation of the QMS depend considerably on the commitment of the institution top management and the involvement of all its employees (Mendi,Ahlem & Imadi Eddine 2022)

A QMS must be driven by the top management of an organization since success lies wholly with them. Other staff in any organization are there to perform tasks assigned to them by the top management without having any authority to influence the outcome of QMS within the higher education institutions (Salim Ahmed, Noor Hazillar, Rafikul Islam (2021) Therefore, the top management must work closely with the staff to know their concerns and thus engage them fully in the QMS implementation process. It is therefore important for organizations to frequently train their staff on ISO 9001 standard and come up with a strategy of recognizing staff who adopt QMS in their day-to-day operations Neo S. T Mukwakungu, S.C. Lumbwe A.K and Sukdeo N 2020

K J Kiptanui 2020 identified the quality of teaching and other religious cultures in a university as a gauge of its students' completion rate. Due to much focus on quality of education offered in institutions of higher learning, demand for staff development has taken a Centre stage in the academic arena (Ho Watkins and Kelly 2001). XTT Le, AK Dang, J Toweh, QN Nguyen 2020,

found that remuneration for academic staff was poor compared to the high standard of living. This led to majority of the academic staff engaging in part-time teaching during their normal working to bridge the income gap thus compromising their level of performance. Likewise, they dedicate less time in research since it did not yield any good additional income as compared to part-time teaching. It is estimated that up to two-thirds of lecturers at Kenyan Universities and TVET institutions does not have pedagogical training (Nyaigotti 2004) in Ogony D.A, this led to top management in this institutions hiring unqualified staff without or very little basic training as a lecturer thus, leading to substandard training due to lack of mastery of content by the lecturer hence concentrating more on dictating notes to the students.

J K Kamary 2018 study on strategic plan enactment indicate a clear staff motivation. ISO process and Board of Governors or rather top management decisions towards implementation of strategic plans was low. Furthermore, for effective operation of a quality system, the top management of an organization must totally change the perception of the employees towards knowing what goes on within the organization, participating in the decision making process, taking up responsibilities when called upon and working towards a successful organization. In addition, the staff needs to be motivated in order to come up with new strategies that can be used to improve performance. Antony J, T Scheumann, V Sunder (2022) recommends educating the workforce about the benefits of implementing the QMS prior to and during the implementation process, moreover, a portfolio of training methods should be part of the education and awareness campaign

On many occasions, the recruitment and appointment procedures for staff members in TVET institutions are not competitive and transparent, this pave way for inefficient personnel being brought on board to serve the institution (Wanzala 2013) in Wasike A.J 2018, the top

management of higher institutions need to put into consideration the subordinate staff of their institution and how to satisfy their needs since they play a very important role.

2.4: Information Technology and implementation of quality management System

Information Technology (IT) is the application of systems in a computer to store, retrieve and send information through networks. According to Amade B. Journal of project management 2023, technology today has proved to be the most reliable, cheap and the fastest means of relaying information from one point to another. As observed by O Toole J.M 2019 technology is rapidly growing in terms of innovation and more advanced computer programs are being installed by learning institutions for wider coverage. Today, most TVET institutions are integrating IT in various areas of operations in order to improve its performance and also a competitive edge in the implementation of QMS (Lai, Zhao and Wang, 2006) in Ogony D.A 2017

R Zhang 2021 observed that most organizations invested heavily in IT infrastructure without much influence on implementation of QMS. Gichara (2013) in Ogony D.A 2017 study of total quality management (TQM) in public TVET institutions indicates that a majority had a specific technological orientation for use which was modern and computer based, the technology was used in all levels of management. In addition, the level of technology used was found to extensively influence the use of TQM in the management of the TVET institutions. Technology was used in preparation of certificates, presentation of academic information, archiving academic information among other many uses.

2.5 Theoretical Framework

A number of theories were used to explain the issues of QMS in organizations and institutions

2.5.1 Dr. W. Edwards Deming Theory

This tool focused mainly on the continuous improvement. Its effort was mainly towards the improvement of an organization's products or services. The main tool used for continuous improvement is a four-step quality model, also known as Deming Cycle; Plan, Do, Check and Act (PDCA) cycle. (Wanjobi, G.M, Yatich, H & Ndolo J 2023) Deming's philosophy aims at ensuring that there is improvement in the quality of products and or services offered without deviating from the actual design. In his view, any deviation in the final products, services or processes from the original design was perceived as poor quality. Hence, PDCA cycle helps in monitoring operation process for continual improvement

2.5.2 Dr. Joseph Juran's Theory

His focus mainly was on ensuring that the top management team was well trained for them to perform better. By so doing, he expected improvement in human relations and thus fewer problems. Because employees are usually resistant to change, the top management was supposed to ensure that the cultural practice that affected quality was done away with. In 'The Quality Trilogy', he encountered that through problems, one is able to improve in quality. However, he further pointed out that organizations should avoid crisis in quality which can compromise the quality of a product or service being delivered. According to Juran, quality is the suitability of product use for customer satisfaction (Muljawan, A, Sulaeman,S & Bahri, S 2023).

2.5.3 Crosby's Theory

His main focus was on achieving quality by ensuring there are no defects during production process and at the same meet the specified requirements. In achieving the specified requirements, it is the employees' responsibility to agree upon the requirements of what needs to be achieved and the discretion totally left to the employees. Managers use quality to determine the price of a

product or service. His standard of performance for managers is doing things right the first time. Occasionally, he held “Zero Defects Day” where both managers and employees come together and celebrate their hard work to ensure quality prevails. Capacity building for managers mainly focused on achieving the right quality the first time. Generally, his aim is to produce quality products and services that are free from defects and at the same time satisfy the customer needs. A Muljawan, Sulaeman S, & Bahri S, Asian Social Work Journal 2023

2.6 Research Gap

Table 2.1 Summary of Knowledge gap

Variable	Author	Finding	Knowledge gap
Influence of resource availability on implementation of quality management system	Wanyama B.W 2022	TVET institutions operated without adequate resources	The extent of limited resources and its influence need to be studied
Influence of top management skills on implementation of quality management system	Mendi, Ahlem, Imad Eddine 2022	Positive results expected from implementation of QMS depends on the top management	There was need to determine the exact influence that top management skills have on QMS of the TVET institutions
Influence of information technology on implementation of quality management system	R Zhang 2021	TVETs heavily invested in IT Infrastructure without much influence on implementation of QMS	There was need to determine the influence information technology has on the implementation of quality management system

CHAPTER THREE: RESEARCH METHODOLY

3.0: Introduction

This chapter was focused on the research methodology that was employed in the study. The researcher addressed the following : research design , target population, sample size and sampling procedure, data collection instruments, data collection procedure, validity and reliability, data analysis, ethical considerations and operational definition of variables .

3.1: Research Design

The research was designed to use descriptive survey design. This was adopted because the researcher wanted to describe a specific behavior as it occurs in the environment. The study was quantitative in nature with the main aim of quantitatively analyzing the association between the independent and depended variables. To collect qualitative data survey was used. Preston S.A (2023) survey can be defined as gathering information from the respondents by asking a wide range of the same questions in order to get their varied opinion. To collect quantitative data for this study, questionnaires were used.

3.2: Study Area

The researcher carried out the study in one TVET institution in Bungoma county Kenya: The institution was Kisiwa Technical Training Institute (KISTTI). KISTTI is located in Kabuchai constituency, Bungoma central sub county, Bungoma County. The researcher picked on KISTTI because it is ISO 9001- 2015 certified.

3.3: Target Population.

Population can be defined as a group of individuals or items from which sample are taken for analysis (Kombo & Trumph 2006) in Yambo J.M.O 2022. The target population comprised of

lecturers and students of KISTTI. The pubic TVET institution was purposely selected as it is ISO 9001-2015 certified. A population of 400 lecturers as per the public Service Staff returns (2022) and 1000 third year students were targeted. Third year students were the target because they were in the institution long enough, hence conversant with QMS of the institution. The total population targeted was 1400.

3.4: Sampling Technique

According to Cooper and Schindler (2004) in Zulu T 2022 a sample frame is a list of elements from which the sample is actually drawn and is closely related to the population. The study adopted a stratified random sampling design because the population was heterogeneous. After stratification, the researcher applied a proportionate method in order to obtain a sample of 285 (Krejcie and Morgan sample size table, 1970) in Farlis, F., Bachtiar, N., Rifai, H. A., & Ridwan, E. (2022). Thereafter, simple random sampling was used to select the Head of Department (HOD) and lecturers to participate in the study.

3.5: Sample Size

The sampling frame consisted of lecturers and students. According Krejcie and Morgan sample size table 1970 in Farlis F, Bachitiar, N. Rifai H.A, & Ridwan, E (2022) the sample of the study was of 78 teaching staff and 207 students. Which was selected proportionately (Appendix 6). The sampling frame was presented in table 3.1

Table 3.1 sample size of respondents

Respondents	**Category of respondents**	**Total population**	**Sample size**
Kisiwa Technical Training Institute teaching staff and 3rd year students	Lecturers	400	78
	3rd year students	1000	207
	Grand total	1400	285

Table 3.2 measurement of variables

Type of variable	**Indicator**	**Measurement**	**Measurement scale**	**Research Approach**	**Question**	**Data Analysis**
Independent Variable Resource Availability	- Physical facilities- Availability of funds Human Resource	- Adequacy of facilities -Smooth running of the institution - No. of human resource and qualification	Nominal	Quantitative	What is the influence of resource availability on implementation of QMS	Descriptive statistics
Top management skills	- Analyzing and interpreting statistical data Continuous monitoring and evaluation of ISO - Financial skills - ISO auditing skills	-Knowledge on data analysis - Knowledge on interpretation of statistical data - Frequent monitoring and evaluation of ISO standards - Budget implementation	Nominal	Quantitative	How does top management skill influence implementation of QMS	Descriptive statistics
Information Technology	-Availability of IT infrastructure; computers, hotspot	-Number of computers -Access to internet service and Wifi	Nominal	Quantitative	In what ways does Information Technology influence	Descriptive Statistic

	- Computerization of services being offered; Admissions, Exams, Fees payment collection	-Online registration of students - Online access of fees statements and examination results - Online access to admission letters			implementation of QMS	
Dependent Variable Implementation of Quality Management System	-Customer satisfaction -Corporate image -Quality of performance in examination -Student completion rate	-Number of customer complaints - Performance in National examination - Number of graduates - Number of dropouts	Nominal	Quantitative		Descriptive Statistics

3.7: Research Instruments

The researcher used primary data which was collected from the respondents. The data was analyzed to get the respondents opinion on factors influencing implementation of QMS in selected TVET institution in Bungoma County, Kenya. The researcher used self- administered questionnaires as the instrument to collect data where the respondents remained anonymous. The researcher gave the respondents adequate time to complete the questionnaires after which they were submitted back.

3.7.1 Questionnaire

Questionnaire was used to gather information or data from lecturers and third year students which had Likert Scale and open-ended questions covering the respondents. The student's questionnaire comprised of three section. Section I of the questionnaire included items on: customer satisfaction, improved corporate image and improved quality of performance in

examination and completion rates. Section II outlined resource availability which composed of items on; physical facilities, availability of funds and human resource then section III focused on information technology which comprise availability of IT infrastructure and computerization of services

The lecturers' questionnaire comprised of five sections. Section I of the questionnaire included customer satisfaction, improved corporate image, improved quality of performance in examination and completion rates. Section II outlined resource availability which comprised of items on physical facilities, availability of funds and human resource. Section III focused on teaching staff training that comprised filing system, record keeping system and employee training on ISO the section IV highlighted on top management skills which comprised items on analyzing and interpretation of statistical data, continuous monitoring and evaluation of ISO, financial skills and ISO auditing skill. Section V focused on technology that comprised items on availability of IT infrastructure and computerization of services

3.8: Validity of Measurement

Validity of a research instrument is the degree to which an instrument measures what it is supposed to measure (Kothari 2004). Validity is purely concerned with measurement error or bias. Braum (2005) described the validity in quantitative research as construct validity. The content validity of the research instrument for this study was determined through pre-testing to ascertain if the questions were acceptable, answerable and well understood. The pre-test was done in Sang,alo Institute of Science and Technology. Additionally, the researcher consulted a quality management expert and the university supervisor. Based on their opinion and advice, the questionnaire were amended to enhance its content validity.

3.8.1: Pre- test

The research instrument was pretested in one of the TVET institution called Sang'alo Institute of Science and Technology (SIST) which was not included in the final study. According to Freund and Wilson (1997), pre-test is where the same questionnaire to be used in the study is used on individuals who are related to the study though not part of the respondents to be covered in the study. Through pre-testing, the researcher was able to detect some items that were unclear and areas where more information was required and necessary adjustments made. Pre-test also enlightened the researcher on issues such as ease of administration of the equipment and length of time needed for data collection. This helped in making the instrument for data collection valid and reliable.

3.9: Reliability of Measurement

This is the extent to which results of the study are consistent over time and there is an accurate presentation of the total population under study. Reliability analysis aims at finding out the extent to which a research instrument will yield the same result over and over again when subjected to the same conditions. To test the reliability of the questionnaire as a research instrument, a pre-test was carried out and a Cronbach alpha computed which specified coefficient of 0.9. The reliability therefore was acceptable since the minimum coefficient for acceptable reliability is 0.7

3.10: Data collection Technique

Data collection was deployed upon approval of the proposal after its defense. An introduction letter was issued from the department for consent to collect data from the respondents. The researcher employed a research assistant to assist with data collection. Using the permit and

introductory letter from Gretsa University, the researcher was able to seek permission from principals of the two TVET institutions to carry out pre-test and research. The Head of Departments were used to identify lecturers in their departments and students who participated in the study. The questionnaires were administered with the help of research assistant for a period of 2 months. The study used questionnaires with open and close ended questions to get data from respondents.

3.11: Data Analysis

Descriptive data collected was analyzed, interpreted and inferred through triangulation of information. The identified independent variables were analyzed through review of questionnaires from the targeted population that were interviewed. Before processing the responses, the researcher checked the questionnaires if they were complete for accuracy and consistency. The data was then summarized, coded and entered into the Statistical Package for Social Sciences (SPSS) version 21 that enabled the responses to be grouped into various categories. Data was analyzed using composite mean which was computed by getting the average of the entire mean ranging from 1-5. Anything above the average influenced implementation of QMS. Data was then processed and presented using tables. The quantitative data collected was ordinal and data presentation was done by the use of tables and percentages.

3.12: Logistical and ethical Considerations

The logical and ethical matters were highly considered especially when data was collected during the study. The researcher treated the respondents with high degree of dignity and secrecy. The data and information gathered was only used for research reasons only. The permission of respondent was also sought before issuing the questionnaire to them. The information collected was handled with great confidentiality.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.0: Introduction

This chapter highlights the analysis, presentation and interpretation of the empirical data as well as the findings of the study. The purpose of the study was to investigate the factors influencing implementation of Quality Management System in public TVET institutions in Bungoma County, Kenya. The raw data collected was summarized, edited, coded and organized in appropriate themes and analyzed using Statistical Package for Social Sciences (SPSS) version 23 for analysis to enable the response be grouped into various categories. Quantitative technique of data analysis was used. Quantitative data collected was nominal and was analyzed using composite mean which was computed by getting the average of the entire mean. Anything above the average influenced implementation of QMS, while anything below the average did not influence implementation of QMS. Data presentation was done by use of tables and percentages since percentages have considerable advantage over more complex statistics because they are easy to interpret

4.1: Questionnaire return Rate

A total of 285 questionnaires were administered to the respondents out of which 78 were lecturers and 205 were third year students. However, out of 285, only 265 were received, thus the response rate was 92.98%. According to Mugenda (2003) in YW Musi Mgmt & sustainability 2019, a response rate of 60% is good, while that of 70% is very good. Since the response was 60%, it was sufficient to proceed with data analysis.

4.2 Students Response

The students' response was analyzed as follows;

4.2.1: Quality Management System

The aim here was to explain how the concept of QMS influences its implementation in public TVET institutions within the County.

4.2.1.1 Customer satisfaction

The respondents were asked to rate how customer satisfaction influences implementation of quality management system. The results are presented in table 4.1

Table 4.1 customer satisfaction

	Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly agree**	**Min**	**Max**	**Mean**	**Std Deviation**
Our institution offer quality services	13.2% (25)	11.6% (22)	15.3% (29)	42.9% (81)	16.9% (32)	1.00	5.00	3.3862	1.26912
The top management strives to ensure all customers are served satisfactorily	11.6% (22)	16.4% (31)	14.8% (28)	43.9% (83)	13.2% (25)	1.00	5.00	3.3069	1.22952
The students are satisfied with the institutions customer service	20.6% (39)	20.6% (39)	17.5% (33)	30.2% (57)	11.1% (21)	1.00	5.00	2.9048	1.33346
Composite mean								**3.1993**	

Results in Table 4.1 indicate that majority of the respondents 59.8% (113) agreed that their institution offer customers' quality service, 15.3% (29) were not sure while 24.8% (47) disagreed. The top management was also found to strive to ensure that all customers are served satisfactorily where 57.1% (108) agreed, 14.8% (28) were not sure while 28% (53) disagreed. Students were found not to be satisfied with the institution's customer service where 41.3% (78) agreed, 17.5% (33) were not sure while 41.2% (78) disagreed.

The findings clearly indicate that quality service offered by the institution and strive by top management to ensure all customers are served satisfactorily influence implementation of QMS in TVET institutions while satisfaction of the students with the institutions customer service does not influence implementation of QMS in TVET institutions

Analysis was made on a scale of (1), (2), (3), (4), (5), where:

(1) Strongly disagree
(2) Disagree
(3) Not sure
(4) Agree
(5) Strongly Agree

4.3.1.2 Corporate Image

The respondents were asked to rate how corporate image influences implementation of QMS. The results are presented in Table 4.2

Table 4.2 corporate Image

	Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly agree**	**Min**	**Max**	**Mean**	**Std Deviation**
Our institution is recognized national wide on good performance	6.3% (12)	4.8% (9)	11.6% (22)	36.5% (69)	40.7% (77)	1.00	5.00	4.0053	1.13689
Our institution top player in the TVET	9.0% (17)	5.8% (11)	13.8% (9.0)	32.8% (62)	38.6% (73)	1.00	5.00	3.8624	1.24717

sector									
Our programs are highly competitive in the job market	5.3% (10)	4.2% (8)	9.0% (17)	38.6% (73)	42.9% (81)	1.00	5.00	4.0952	1.07754
Our institution has a good corporate image	7.4% (14)	4.8% (9)	16.4% (31)	37.0% (70)	34.4% (65)	1.00	5.00	3.8624	1.16332
Composite mean								**3.9563**	

Results displayed in Table 4.2 indicate that the institution is recognized national wide on good performance where 77.2% (146) agreed, 11.6% (22) were not sure while 11.1% (21) disagreed. The institution was also found to be a top player in the TVET sector where 71.4% (135) agreed, 13.8% (26) were not sure, while other 14.8% (28) disagreed. Majority, 81.5% (154) also agreed that the programs are highly competitive in the job market, 9.0% (17) were not sure while 9.5% (18) disagreed. On institutions good corporate image where 71.4% (135) agreed, 16.4% (31) were not sure while 12.2% (23) disagreed

It is evident that corporate image influences implementation of QMS in public TVET institutions in Bungoma County, Kenya.

4.3.1.3 Quality of performance in Examination

The respondents were asked to rate how quality of performance in examination influence implementation of quality management system. The results are presented in Table 4.3

Table 4.3 Quality of performance in Examination

	Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly agree**	**Min**	**Max**	**Mean**	**Std Deviation**
Our graduates good performance in examination is reflected in their good performance in the job market	5.3% (10)	4.2% (8)	11.6% (22)	42.3% (80)	36.5% (69)	1.00	5.00	4.0053	1.06440
Our students perform better than other institutions in final exams	4.2% (8)	4.8% (9)	14.8% (28)	43.4% (82)	32.8% (62)	1.00	5.00	3.9577	1.02537
The number of students failing the final exam have reduced close to zero	13.8% (26)	19.0% (36)	22.2% (42)	28.6% (54)	16.4% (31)	1.00	5.00	3.1481	1.29206
Composite mean								**3.7037**	

From Table 4.3, majority of the respondents 78.8% (149) agreed that the graduates' good performance in examination is reflected in their good performance in the job market, 11.6% (22) were not sure while 9.5% (18) disagreed.

Students were also found to perform better than other institutions in the final exams where 76.2% (144) agreed, 14.8% (28) were not sure while 9.0% (17) disagreed

However, 45% (85) agreed that the number of students failing the final exam had still not reduced close to zero, 22.2% (42) were not sure and other 32.8% (62) disagreed

From the findings, it is evident that graduates good performance in examination which is reflected in their good performance in the job market and students' performance in the final examination better than other institutions influences implementation of QMS in TVET institutions. On the other hand, students failing exam having reduced close to zero did not influence QMS implementation in public TVET institution in Bungoma County, Kenya

4.3.1.4 Students completion Rate

The respondents were asked to rate how student's completion rate influence implementation of quality management system. The results are presented in Table 1.1

Table 4.4 Students completion Rate

	Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly agree**	**Min**	**Max**	**Mean**	**Std Deviation**
Student completion rate is 100% from the enrolled register	19.0% (36)	28.0% (53)	21.7% (41)	20.6% (39)	10.6% (20)	1.00	5.00	2.7566	1.27330
Student complete their courses within the timelines projected on their curriculum	13.2% (25)	14.8% (28)	15.9% (30)	33.3% (63)	22.8% (43)	1.00	5.00	3.3757	1.33753
Student dropout rate is low compared to other institutions	8.5% (16)	11.6% (22)	25.4% (48)	34.9% (66)	19.6% (37)	1.00	5.00	3.4550	1.17796
Composite mean								**3.1958**	

From the results in Table 4.4, few of the respondents 31.2% (59) agreed that the student completion rate is 100% from the enrolled register, 21.7% (41) were not sure and 47% (89) disagreed.

Majority of the respondents 56.1% (106) agreed that students complete their courses within the timelines projected on their curriculum, 15.9% (30) were not sure while other 28% (53) disagreed

Further, the students' dropout rate was found to be low compared to other institutions where 54.5% (103) agreed, 25.45 (48) were not sure while 20.1% (38) disagreed

It is evident that student completion rate is below 100%, hence does not influence implementation of QMS in TVET institutions in the County. However, timelines within which students complete their courses is projected in the curriculum and also student dropout rate is low compared to other institution, hence influence the implementation of QMS in TVET institutions.

4.3.2 Resource Availability

The aim here was to establish how resource availability influences implementation of QMS in public TVET institutions within the County

4.3.2.1 Physical Facilities

The respondents were asked to rate how physical facilities influence implementation of quality management system. The results are presented in Table 4.5

Table 4.5 Physical of facilities

	Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly agree**	**Min**	**Max**	**Mean**	**Std Deviation**
We have enough lecturer rooms in our institution	32.8% (62)	30.2% (57)	10.6% (20)	17.5% (33)	9.0% (17)	1.00	5.00	2.3968	1.33934
We have enough workshop rooms in our institution	27.5% (52)	28.0% (53)	12.2% (23)	20.6% (39)	11.6% (22)	1.00	5.00	2.6085	1.38192
There are enough recreation facilities for students in our institution	39.2% (74)	24.9% (47)	10.6% (20)	18.0% (34)	7.4% (14)	1.00	5.00	2.2963	1.34364
Composite mean								**2.4339**	

Results in Table 4.5 indicates that lecture/classrooms were found to be inadequate where 26.5% (50) agreed, 10.6% (20) were not sure and another 63% (119) disagreed

Further, 32.2% (61) agreed that laboratories/ workshop rooms were inadequate, 12.2% (23) were not sure while 55.5% (105) disagreed.

On recreation facilities, 25.4% (48) agreed that there are enough rooms for students, 10.6% (20) were not sure while 64.1% (121) disagreed

It is evident there are no enough physical facilities in the institution, hence does not influence implementation of QMS in TVET institution in Bungoma County, Kenya

4.3.2.2: Availability of Funds

The respondents were asked to rte how availability of funds influence implementation of quality management system. The results are presented in Table 4.6

Table 4.6 Availability of Funds

	Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly agree**	**Min**	**Max**	**Mean**	**Std Deviation**
There is sufficient funds to run our institution	16.4% (31)	16.9% (32)	23.3% (44)	21.7% (41)	21.7% (41)	1.00	5.00	3.1534	1.37715
Our management team is able to mobilize funds for the smooth running of the institution	15.9% (30)	18.0% (34)	18.5% (35)	33.9% (64)	13.8% (26)	1.00	5.00	3.1164	1.30351
There are no stagnated projects due to lack of funds in our institution	20.6% (39)	11.1% (21)	24.3% (46)	25.9% (49)	18.0% (34)	1.00	5.00	3.0952	1.38435
Composite mean								**3.1217**	

Results displayed in Table 4.6 indicate that few of the respondents 43.4% (82) agreed that there are sufficient funds to run the institution, 23.3% (44) were not sure while 33.3% (63) disagreed

The management team was also found not in a position to mobilize funds for the smooth running of the institution where 47.7% (90) agreed, 18.5% (35) were not sure while 33.9% (64) disagreed

On stagnated projects, 43.9% (83) agreed that there were no stagnated projects due to lack of finances, 24.3% (46) were not sure and 31.7% (60) disagreed

From the results, it is evident that availability of funds does not influence implementation of QMS in TVET institutions

4.3.2.3 Human Resource

The respondents were asked to rate how human resource influence implementation of quality management system. The results are presented in Table 4.7

Table 4.7 Human Resource

	Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly agree**	**Min**	**Max**	**Mean**	**Std Deviation**
Our institution have highly qualified professionals' in various fields	11.6% (22)	6.3% (12)	8.5% (16)	50.8% (96)	22.8% (43)	1.00	5.00	3.6667	1.22908
We have adequate number of staff serving our institution	16.4% (31)	15.9% (30)	15.9% (30)	36.0% (68)	15.9% (30)	1.00	5.00	3.1905	1.33517
There is very low staff turnover in our institution	13.8% (26)	23.3% (44)	18.0% (34)	27.5% (52)	17.5% (33)	1.00	5.00	3.1164	1.32376
Composite mean								**3.3245**	

Table 4.7 shows that majority of the respondents 73.6% (139) agreed that the institution had highly qualified personnel in various fields, 8.5% (16) were not sure while 17.9% (34) disagreed

They further agreed that the institution had adequate number of staff where 51.9% (98) agreed, 15.9% (30) were not sure while 32.3% (61) disagreed

On staff turnover, 45% (85) agreed that staff turnover is low, 18.0% (34) were not sure while 37.1% (70) disagreed

From the findings, it is evident that highly qualified professionals in various fields and adequate number of staff serving the institution influence implementation of QMS in TVET institutions. However, low staff turnover did not influence QMS implementation in TVET institutions

4.3.3 Information Technology

The aim here was to establish how information technology influences implementation of QMS in TVET institutions

4.3.3.1 Availability of IT Infrastructure

The respondents were asked to rete how availability of IT infrastructure influence implementation of quality management system in the Public TVET institutions. The results are presented in Table 4.9 below

Table 4.8 Availability of IT infrastructure

	Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly agree**	**Min**	**Max**	**Mean**	**Std Deviation**
We have adequate number of computers in our computer laboratory for students use	38.1% (72)	22.2% (42)	14.8% (28)	12.2% (23)	12.7% (24)	1.00	5.00	2.3915	1.41989
There is sufficient internet connectivity in our institution to facilitate	56.1% (106)	20.6% (39)	6.3% (12)	10.6% (20)	6.3% (12)	1.00	5.00	1.9048	1.27222

student research									
Our institution has the most recent technology	39.7% (75)	19.0% (36)	18.5% (35)	15.9% (30)	6.9% (13)	1.00	5.00	2.3122	1.32204
Our lecturers use different technologies during class instruction and lecturers	43.4% (82)	20.1% (38)	12.7% (24)	17.5% (33)	6.3% (12)	1.00	5.00	2.2328	1.33639
All students can access WIFI as well as internet services in our institution	64.0% (121)	14.8% (28)	6.3% (12)	9.5% (18)	5.3% (10)	1.00	5.00	1.7725	1.23171
The students are trained on how to use technology to get important information such as exam results, fees statements, etc	54.5% (103)	14.3% (27)	11.6% (22)	12.7% (24)	6.9% (13)	1.00	5.00	2.0317	1.34047
Composite mean								**2.1076**	

Results displayed in Table 4.9 indicate that there was no adequate number of computers in the computer laboratory for students use, where only 24.9% (47) students agreed, 60.3% (114) disagreed while 14.8% (28) were not sure

Internet connectivity was found to be insufficient to facilitate student research where only 16.9% (32) agreed, 76.7% (145) disagreed and 6.3% (12) were not sure

Further, only 22.8% (43) agreed that the institution hd the most recent technology while 58.7%

(111) disagreed and 18.5% (35) were not sure

On use of different technologies by lecturers during class instruction and lecturers, 23.8% (45)

agreed, 12.7% (24) were not sure while 63.5% (120) disagreed

On WIFI access as well as internet services by all students, majority of the respondents 78.8% (149) disagreed, 6.3% (12) were not sure and only 14.8% (28) agreed

On students training on use of technology to get important information, majority of the respondents 68.8% (130) disagreed, while 19.6% (37) agreed and 11.6% (22) were not sure

It is evident that availability of IT infrastructure dies not influence implementation of QMS in TVET institutions in Bungoma County, Kenya

4.3.4.2 Computerization of Services

The respondents were asked to rate how computerization of services influences implementation of quality management system. The results are presented in Table 4.10

Table 4.9 Computerization of Services

	Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly agree**	**Min**	**Max**	**Mean**	**Std Deviation**
Students are able to register and book units online	55.6% (105)	11.6% (22)	13.8% (26)	11.1% (21)	7.9% (15)	1.00	5.00	2.0423	1.36378
Students can access various services such as fees statements and examination results easily	42.3% (80)	18.0% (34)	11.6% (22)	16.9% (32)	11.1% (21)	1.00	5.00	2.3651	1.44732
Students get regular updates through internet regarding our institution scheduled	51.9% (98)	16.4% (31)	6.9% (13)	18.0% (34)	6.9% (13)	1.00	5.00	2.1164	1.38656

events									
Our website is attractive	41.8% (79)	15.9% (30)	14.3% (27)	21.2% (40)	6.9% (13)	1.00	5.00	2.2328	1.33639
Our website is regularly updated	38.6% (73)	16.4% (31)	19.6% (37)	19.0% (36)	6.3% (12)	1.00	5.00	2.3810	1.33403
Our online admission service is user friendly to students	42.9% (81)	16.9% (32)	19.0% (36)	14.3% (27)	6.9% (13)	1.00	5.00	2.2540	1.32450
Composite mean								**2.2319**	

Table 4.10 shows results on computerization of services where majority of the respondents 67.2% (127) disagreed that students are able to register and book units online, 19.0% (36) agreed and 13.8% (26) were not sure

On easy access of various services such as fees statements and examination results by students, 28% (53) agreed, 11.6% (22) were not sure while 60.3% (114) disagreed

Further, majority of the respondents 68.3% (129) disagreed that the students get regular updates through internet regarding the institutions scheduled events, 24.9% (47) agreed and 6.9% (13) were not sure

The website was found not to be attractive where only 28.1% (53) agreed, 14.3% (27) were not sure and 57.7% (109) disagreed

On regular update of the website, 25.3% (48) agreed, 19.6% (37) were not sure while 55% (104) disagreed

Online admission service was found not to be user friendly to students where only 21.2% (40) agreed, 19% (36) were not sure and 59.8% (113) disagreed

The results clearly indicates that computerization of services is still low and thus does not influence implementation of QMS in TVET institutions.

4.4 Lecturers Response

The lecturers' data response was analyzed as follows

4.4.1 Quality Management System

The aim here was to explain how the concept of QMS influences its implementation in public TVET institutions in Bungoma County, Kenya

4.4.1.1 Customer Satisfaction

The respondents were asked to rate how customer satisfaction influences implementation of quality management system. The results are presented in Table 4.11

Table 4.10 Customer Satisfaction

	N	Min	Max	Mean	Std Deviation
We give our customer quality service	76	1.00	5.00	3.9868	.94507
The top management strives to ensure that all customers both internal and external are served satisfactorily	76	1.00	5.00	3.9605	.90097
Many of our new customers are referrals from previous and existing customers	76	1.00	5.00	3.4474	.98515
There are no complaints from our customers	76	1.00	5.00	2.4868	1.07695
Composite mean				**3.4704**	

Results in Table 4.11 indicates that customers get quality service with a mean value of 3.9868. Top management was also found to strive to ensure that all customers both internal and external are served satisfactorily with a mean value of 3.9605

Further, many of the customers were found not to be referrals from previous and existing customers whose mean value stood at 3.4474. However, complaints from their customers still existed with a mean value of 2.4868

From the findings, it is evident that quality services offered to customers and strive by top management to ensure both internal and external customers are served satisfactorily influences QMS implementation in public TVET institutions, while referrals of new customer by previous and existing customers and also complains from customers did not influence the implementation of QMS in TVET institutions

4.4.1.2 Corporate Image

The respondents were asked to rate how corporate image influence implementation of quality management system. The results are presented in Table 4.12

Table 4.11 Corporate Image

	N	**Min**	**Max**	**Mean**	**Std Deviation**
Our institution is recognized national wide on god performance	76	1.00	5.00	4.1053	1.04024
Our institution is a top player in the Technical Training sector	76	1.00	5.00	4.1579	.93883
Our programs are highly competititve in the market	76	1.00	5.00	4.1447	.90486
Our institution has a good corporate image	76	1.00	5.00	4.0263	.84811
Composite mean				**4.0263**	

From results displayed above in Table 4.12, it indicates that institution is not recognized nationwide on good performance with a mean of 4.1053

However, it was noted that the institution is a top player in the technical training sector with a mean value of 4.1579

Programs were found to be highly competitive in the market with a mean value of 4.1447

Institutions were also found to lack good corporate image with a mean of 4.0263

From the findings, it is relevant that institutions being a top player in the technical training sector and offering highly competitive programs in the market influence implementation of QMS in TVET institutions. However, nationwide recognition on good performance and corporate image does not influence implementation of QMS in TVET institution

4.4.1.3 Quality performance in Examination

The respondents were asked to rate how quality performance in examination influence implementation of QMS. The results are presented in Table 4.13

Table 4.12 Quality performance in Examination

	N	Min	Max	Mean	Std Deviation
Generally there has been improvement in exam performance over the last five years	76	1.00	5.00	4.0658	.92859
Our graduates are competitive in the labor market	76	1.00	5.00	4.0789	.81262
Our students perform better than other institutions in the final exams	76	1.00	5.00	3.7237	1.05323
The number of students failing the final exam has reduced lose to zero	76	1.00	5.00	2.9079	1.12164
Composite mean				**3.6941**	

Results from Table 4.13 shows that respondents agreed that there has been improved exam performance over the last five years with a mean value of 4.0658

The graduates were also found to be competitive in the labor market with a mean value of 4.0789

Further, it was noted that students perform better than other institutions in the final exams with a mean value of 3.7237

However, the respondents disagreed that the number of students failing the final exam has reduced close to zero with a mean of 2.9079

From the findings, it is evident that improved exam performance over the last five years graduates being competitive in the labor market and students better performance in the final exams than other institutions influence implementation of QMS in TVET institution. However, the number of students failing the final exam reduced close to zero does not influence implementation of QMS in TVET institution.

4.4.1.4 Students completion rate

The respondents were asked to rate how students completion rate influences implementation of QMS. The results are presented in Table 4.14

Table 4.13 Students completion Rate

	N	Min	Max	Mean	Std Deviation
Our students completion rate is 100% from the enrolled register	76	1.00	5.00	2.7500	1.07238
All our students complete their courses within the time frame projected on their curriculum	76	1.00	5.00	3.1974	1.14333
Our student dropout rate is low compared to other institutions	76	1.00	5.00	3.6184	1.03237
All projects undertaken by the institution are completed within the expected timelines	76	1.00	5.00	3.1974	1.24386
Composite mean				**3.1908**	

Results in Table 4.14 indicate that the respondents disagreed that the student completion rate is 100% from the enrolled register with a mean value of 2.7500

Further, they agreed that students complete their courses within the timeframe projected in their curriculum with a mean value of 3.1974

Dropout rate was also found to be low compared to other institutions with a mean of 3.6184

The respondents further disagreed that the projects undertaken by the institution are completed within the expected timelines with a mean value of 3.1774

It is therefore evident that the timeframe within which students complete their courses as projected in the curriculum and low student dropout rate compared to other institutions influence implementation of QMS in TVET institutions. However, timelines within which the projects are undertaken by the institutions are completed and 100% student completion rate from the enrolled register does not influence implementation of QMS in TVET institutions

4.4.2 Resource Availability

The aim here was to establish how resource availability influences implementation of QMS in public TVET institutions

4.4.2.1 Physical Facilities

The respondents were asked to rate how physical facilities influence implementation of quality management system. The results are presented in the table below

Table 4.14 Physical Facilities

	N	Min	Max	Mean	Std Deviation
We have enough lecture/classrooms in our institution	76	1.00	5.00	2.6842	1.27761
We have enough laboratories/workshops in our institution	76	1.00	5.00	2.8289	1.24781
There are enough offices for the teaching and non-teaching staff in our institution	76	1.00	5.00	2.6711	1.08797
There are enough facilities to support various activities in our institution	76	1.00	5.00	2.9474	1.11827
Composite mean				**2.7829**	

From Table 4.15, results indicate that lecturers disagreed that there are enough lecture halls /classrooms in the institution with a mean of 2.6842.

On the other hand, they agreed that there are enough laboratories/ workshops with a mean value of 2.8289

Further the respondents disagreed that offices for teaching and non-teaching staff are enough with a mean value of 2.6711

Lastly, they agreed that there are enough facilities to support various activities within the institution whose mean value stood at 2.9474

From the findings, it is open that enough workshops/laboratories and enough facilities to support various activities within the institution affects implementation of QMS in the institution. However, inadequate lecture halls/ class rooms and inadequate offices for the staffs do not influence implementation of QMS.

4.4.2.2 Availability of Funds

The respondents were asked to rate how availability of funds influence implementation of quality management system. The results are presented in Table 4.16

Table 4.15 Availability of Funds

	N	**Min**	**Max**	**Mean**	**Std Deviation**
There are sufficient funds to run our institution	76	1.00	5.00	3.0658	.99780
Our management team is able to mobilize funds for the smooth running of the institution	76	1.00	5.00	3.6053	.93920
There are no stagnated projects due to lack of finances in our institution	76	1.00	5.00	3.0132	1.33160
Composite mean				**3.2281**	

From the results in Table 4.16, respondents disagreed that there is sufficient funds to run the institution with a mean value of 3.0658

They further disagreed that there are no stagnated projects due to lack of finances with a mean value of 3.0132

However, they agreed that the management team was able to mobilize funds for the smooth operations of the institution influence implementation of QMS in TVET institutions. On the other hand, insufficient funds to run the institution and stagnated projects due to lack of finances do not influence implementation of QMS in TVET institution

4.4.2.3 Human Resource

The respondents were asked to rate how human resource influence implementation of quality management system. The results are presented in Table 4.17

Table 4.16 Human Resource

	N	**Min**	**Max**	**Mean**	**Std Deviation**
Our institution has the best professionals in various fields	76	1.00	5.00	4.0132	.97288
All our staff are highly qualified in their area of specialization	76	1.00	5.00	4.0000	.96609
We have enough staff serving our institution	76	1.00	5.00	2.8947	1.20642
There is very low staff turnover in our institution	76	1.00	5.00	3.2763	1.19553
Our staff is highly motivated to serve our institution	76	1.00	5.00	3.1579	1.28637
Composite mean				**3.4684**	

Results in Table 4.17 indicate that the respondents agreed that the institution has the best professionals in various fields with a mean of 4.0132

Further, they agreed that all the staff are highly qualified in their area of specialization with a mean value of 4.0000

However, they disagreed that there is enough staff serving the institution with a mean value of 2.8947

They further disagreed that there was very low staff turnover in the institution with a mean of 3.2763

On staff motivation, they disagreed that staff are highly motivated to serve the institution with a mean value of 3.1579

It is evident that the best professionals in various academic fields and highly qualified staff in area of specialization do influence implementation of QMS in TVET institutions. However, enough staff serving the institution and low staff turnover does not influence implementation of QMS in TVET institutions.

4.4.3 Teaching staff Training

The purpose here was to establish how teaching staff training influences the implementation of QMS in public TVET institutions

4.4.3.1 Filing System

The respondents were asked to rate how filling system influence implementation of quality management system. The results are presented in Table 4.18

Table 4.17 Filing System

	N	Min	Max	Mean	Std Deviation
Every staff in our institution has basic filing skills	76	1.00	5.00	3.2368	1.12982
Our institution has training program on electronic filing system for all staff	76	1.00	5.00	2.1842	1.10406
Every office has trained personnel on office records filing	76	1.00	5.00	3.0526	1.25321
There is need for everyone to be trained on filing in our institution	76	1.00	5.00	4.2632	.94331
Composite mean				**3.1842**	

Results in Table 4.18 shows that the respondents agreed that every staff in the institution had basic filing skills with a mean value of 3.2368

On training program on electronic filing system for all staff, the respondents disagreed with a mean value of 2.1842

They further disagreed that every office has trained personnel on office records filing whose mean value was 3.0526

However, they agreed that there is need for everyone to be trained on filing whose mean value stood at 4.2632

From the results, it is evident that basic filing skills possessed by every staff and need for every staff to be trained on filing influence implementation of QMS in TVET institutions. However,

training program on electronic filing system for all staff and training of every office personnel on office records filing does not influence implementation of QMS in TVET institution

4.4.3.2 Record keeping System

The respondents were asked to rate how record keeping system influence implementation of quality management system. The results are presented in Table 4.19 below

Table 4.18 Record keeping System

	N	Min	Max	Mean	Std Deviation
Our record keeping system is excellent	76	1.00	5.00	3.1447	1.15128
Every office has highly qualified personnel managing records	76	1.00	5.00	2.9342	1.19259
All staff are trained on electronic record keeping	76	1.00	5.00	2.3684	1.16438
Our institution has record keeping training for all new staff	76	1.00	5.00	2.2368	1.16469
Composite mean				**2.6710**	

Results in Table 4.19 indicates that the respondents agreed that record keeping system was excellent with a mean value of 3.1447

They further agreed that every office had highly qualified personnel managing the records whose mean value stood at 2.9342

On the other hand, they disagreed that all staff are trained on electronic record keeping with a mean value of 2.3684

They further disagreed that the institution do have record keeping training for all new staff with a mean of 2.2368

It is evident from the results that excellent record keeping system and highly qualified personnel in every office managing the records influence implementation of QMS in TVET institutions.

However, staff training on electronic record keeping and having record keeping training for all new staff does not influence implementation of QMS in TVET institutions

4.4.3.3 Employees training on ISO

The respondents were asked to rate how employees training on ISO influence implementation of QMS in TVET institutions. The results are represented in Table 4.20

Table 4.19 Employment training on ISO

	N	Min	Max	Mean	Std Deviation
Our institution follows ISO standards in all operations	76	1.00	5.00	3.9868	1.07695
Every staff in our institution has undergone ISO certification training	76	1.00	5.00	3.4474	1.22632
Staff are trained to operationalize ISO standards in their roles	76	1.00	5.00	3.8947	1.02735
Every staff understands what ISO certification means in regard to our institution operations	76	1.00	5.00	3.8947	.93208
Composite mean				**3.8059**	

Findings from the table 4.20 indicate that the respondents agreed that the institution follows ISO standards in all operations with a mean of 3.9868

However, they disagreed that every staff had undergone ISO certification training whose mean value stood at 3.4474

They also agreed that staffs are trained to operationalize ISO standards in their roles with a mean value of 3.8947

They further agreed that every staff understands what ISO certification means in regard to the institution operations whose mean value was 3.8947

From the results, it is evident that following of ISO standards by institutions in all operations, training of staff to operationalize ISO standards in their roles and understanding ISO certification by all staff influence implementation of QMS in TVET institutions. However, failure in training every staff in ISO certification does not influence QMS implementation in TVET institutions

4.4.4 Top management Skills

The aim here was to establish how top management skills influence implementation of QMS in public TVET institution

4.4.4.1 Analyzing and interpreting statistical data

The respondents were asked to rate how analyzing and interpreting statistical data influence implementation of quality management system. The results are presented in Table 4.21

Table 4.20 Analyzing and interpreting statistical Data

	N	**Min**	**Max**	**Mean**	**Std Deviation**
Our top management team has adequate knowledge on data analysis using various statistical tools	76	1.00	5.00	3.2632	.95734
Our top management have analytical skills	76	1.00	5.00	3.3553	.87489
Our top management are able to interpret statistical data	76	1.00	5.00	3.4737	.84022
Our top management uses statistical data analysis in decision making	76	1.00	5.00	3.3553	.82791
Composite mean				**3.3619**	

Results in Table 4.21 shows that the respondents disagreed that the top management team has adequate knowledge on data analysis using various statistical tools with a mean value of 3.2632. They also disagreed that top management have analytical skills whose mean value stood at 3.3553

However, they agreed that top management is able to interpret statistical data with a mean value of 3.4737

Further, they disagreed that top management uses statistical data analysis in decision making with a mean of 3.3553.

It is open that inadequate knowledge by top management on data analysis using various statistical tools, lack of analytical skills by top management and use of statistical data analysis by top management in decision making does not influence implementation of QMS in TVET institutions. However, interpretation of statistical data by top management influences implementation of QMS in TVET institution

4.4.4.2 Continuous monitoring and Evaluation of ISO

The respondents were asked to rate how continuous monitoring and evaluation of ISO influence implementation of quality management system. The results are presented in Table 4.22

Table 4.21 Continuous monitoring and evaluation of ISO

	N	**Min**	**Max**	**Mean**	**Std Deviation**
It is the duty of our top management team to monitor and evaluate ISO standards within our institution	76	1.00	5.00	3.9605	.94433
Our top management is trained on monitoring and evaluating with regards to ISO standards	76	1.00	5.00	4.0000	.83267
Out top management observes ISO standards keenly in their daily performance	76	1.00	5.00	3.8026	1.03305
Composite mean				**3.9210**	

Results displayed in Table 4.22 indicate that the respondents agreed that it is the duty of top management team to monitor and evaluate ISO standards in the institution with a mean value of 3.9605

They further agreed that top management is trained on monitoring and evaluation with regards to ISO standards whose mean value stood at 4.0000

However, they disagreed that top management observes ISO standards keenly in their daily performance with a mean value of 3.8026

From the findings, it is evident that monitoring and evaluating ISO standards by the top management team and training them on monitoring and evaluation in regards to USO standards influence implementation of QMS in TVET institutions in Bungoma County. However, observation of ISO standards by top management in their daily performance does not influence implementation of QMS in TVET institutions.

4.4.4.3 Financial Skills

The respondents were asked to rate how financial skills influence implementation of quality management system. The results are presented in Table 4.23

Table 4.22 Financial Skills

	N	**Min**	**Max**	**Mean**	**Std Deviation**
Our top management team have financial management skills	76	1.00	5.00	3.6053	.92490
The top management team is able to handle all financial related issues	76	1.00	5.00	3.5526	.85471
The top management team is able to interpret financial statements	76	1.00	5.00	3.6974	.80033
The top management team is able to prepare and implement financial budgets accordingly	76	1.00	5.00	3.7368	.88496
Composite mean				**3.6480**	

Results in Table 4.23 indicates that the respondents disagreed that top management team have financial skills with a mean value of 3.6053

They further disagreed that the top management team is able to handle all financial related issues whose mean value stood at 3.5526

However, they agreed that the top management team is able to interpret financial statements with a mean value of 3.6974

Further, they agreed that the top management team is able to prepare and implement financial budgets accordingly whose mean value was 3.7368

It is evident that lack of financial management skills and handling of all financial related issues by top management does not influence implementation of QMS in TVET institutions. On the other hand, ability to interpret financial statements as well as preparing and implementing financial budgets by top management team do influence implementation of QMS in TVET institutions

4.4.4.4 ISO auditing Skills

The respondents were asked t rate how ISO auditing skills influence implementation of quality management system. The results are presented in Table 4.24

Table 4.23 ISO auditing Skills

	N	**Min**	**Max**	**Mean**	**Std Deviation**
The top management team is adequately trained on ISO auditing	76	1.00	5.00	3.8816	.89394
Our top management audits our ISO standards from time to time	76	1.00	5.00	3.9474	.83098
Composite mean				**3.9145**	

Results from Table 4.24 indicate that the respondents disagreed that the top management team is adequately trained on ISO auditing with a mean value of 3.8816

However, they agreed that top management audits ISO standards from time to time whose mean value stood at 3.9474

From the findings, it is evident that inadequate training of top management on ISO auditing does not influence implementation of QMS in TVET institutions while auditing of ISO standards by top management from time to tome influences QMS implementation in TVET institutions in Bungoma County, Kenya.

4.4.5 Information Technology

The aim here was to establish how information technology influences implementation of QMS in public TVET institution within Bungoma County, Kenya.

4.4.5.1 Availability of IT Infrastructure

The respondents were asked to rate how availability of IT infrastructure influences implementation of quality management system. The results were presented in Table 4.25 below

Table 4.24 Availability of IT infrastructure

	N	**Min**	**Max**	**Mean**	**Std Deviation**
We have enough computers in our offices	76	1.00	5.00	2.5000	1.29099
There is sufficient internet connectivity in our offices	76	1.00	5.00	2.5000	1.23828
Our computers use the most recent technology	76	1.00	5.00	2.7895	1.21453
Our office work have been made easy by use of computers	76	1.00	5.00	3.5000	1.12546
Every staff has access to our LAN as well as internet	76	1.00	5.00	2.7763	1.28165
There are several staff trainings on system and new technology from time to time	76	1.00	5.00	2.6447	1.29310
Composite mean				**2.7851**	

Results in Table 4.25 indicate that the respondents disagreed that there are enough computers in their offices with a mean value of 2.5000

They also disagreed that there is sufficient internet connectivity in their offices whose mean value stood at 2.5000

However, they agreed that their computers use the most recent technology with a mean of value of 2.7895

Further, they agreed that office work has been made easy by use of computers whose mean value was 3.5000

They further disagreed that every staff has access to LAN as well as internet with a mean value of 2.7763 and also disagreed that there are several staff trainings on system and new technology from time to time whose mean value stood at 2.6447

It is evident that inadequate computers in the offices, insufficient internet connectivity in the offices, insufficient access to LAN as well as internet by staff and inadequate staff trainings on system and new technology from time to time do not influence implementation of QMS in public TVET institutions. However, use of most recent technology in the computers and office work being made easy by use of computers and office work made easy by use of computers influenced QMS implementation in TVET institution

4.4.5.2 Computerization of Services

The respondents were asked to rate how computerization of services influence implementation of quality management system. The results are presented in Table 4.26

Table 4.25 Computerization of Services

	N	Min	Max	Mean	Std Deviation

There are efforts to go paperless in all services rendered at our offices	76	1.00	5.00	2.8947	1.24984
Students have easy access to services eg fees statements and examination results can be accessed easily	76	1.00	5.00	2.9342	1.23651
Our students can get regular updates through internet regarding our institution eg opening dates, examination dates, closing dates, graduation list etc	76	1.00	5.00	2.8553	1.41142
Our website is regularly updated	76	1.00	5.00	3.1053	1.24984
Our admission online service is user friendly to students	76	1.00	5.00	2.6842	1.29831
Composite mean				**2.8947**	

Results in Table 4.26 indicate that the respondents agreed that efforts are being made to go to paperless in all services rendered in the offices with a mean value of 2.8947

They further agreed that students do have easy access to services such as fees statement and examination results whose mean value was 2.9342

On the other hand, they disagreed that students do get regular updates through internet regarding opening dates, examination dates, closing dates and graduation list with a mean value of 2.8553

Further, they agreed that the website is regularly updated with a mean of 3.1053

They also disagreed that admission online service is user friendly to students whose mean value stood at 2.6842

From the results above, it is evident that efforts of going paperless in all services rendered in offices, easy access to services such examination results, fees statements and regular updates of the website do influence implementation of QMS in TVET institutions. However, irregular update through internet regarding opening dates, examination dates, closing dates and graduation list as well as unfriendly admission online services does not affect QMS implementation in TVET institutions within the County of Bungoma

CHAPTER FIVE: SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1: Introduction

This chapter finalizes the study by providing the summary of key findings, discussions, conclusions and recommendations which are aligned to the specific objectives of the study

5.2: Summary of Findings

The purpose of this study was to determine the factors influencing implementation of Quality Management System in public Technical and Vocation al Education and Training institutions in Bungoma County, Kenya.

5.2.1: Resource Availability

The aim here was to establish how resource availability influences implementation of QMS in public TVET institutions

On lecture/ classrooms, majority of the respondents 63% (119) disagreed that TVET institutions have enough rooms while 26.5%(50) agreed that they were adequate and a certain percentage who were not even sure if actually the rooms were enough or not. On recreation facilities for students, 25.4% (48) agreed that the facilities were adequate and 64.1% (121) disagreed. On laboratories/ workshops, few respondents 32.2(61) agreed that laboratories /workshops were enough while 55.5% (105) disagreed. Therefore, it was so clear that physical facilities were inadequate

On availability of funds, majority of the respondents 43.4% (82) agreed that institutions did not have sufficient funds to run the institution and another 33.3% (63) disagreed. On the other hand, 47.7% (90) agreed that management team is able to mobilize funds for smooth running of the

institution while 33.9% (64) disagreed. It was further found that 43.9% (83) agreed that institutions have stagnated projects due to lack of finances while another 31.7% disagreed on the same. The results clearly showed that availability of funds in TVET institutions is insufficient

On human resource, it was established that majority of the respondents 73.6% (136) agreed that the institutions have highly qualified professionals in various fields and another 17.9% (34) disagreed. 51.9% (98) further agreed that the number of staff serving the institution is adequate while 32.3% (61) disagreed. On staff turnover, 45% (85) agreed that the turnover is low and another 37.1% (70) disagreed on the same. This clearly implies that human resource in TVET institutions have highly qualified personnel in various fields and the number too is adequate since staff turnover is low.

5.2.2: Employee Training

The aim here was to establish how employee training influences implementation of QMS in public TVET institution

It was established that majority of the respondents 42.9% (81) agreed that staffs are well trained on record keeping system and another 37.5% (71) disagreed. Further, 42.8% (81) agreed that record keeping system is excellent while 39.6% (75) disagreed. On retrieval of personal record, 45.5% (86) agreed that records can be easily retrieved and another 40.2% (76) disagreed. 47.6% (90) of the respondents further disagreed that retrieving missing marks takes a short time while 37.6% (71) agreed. On payment, 56.7% (107) agreed that the data is well captured and updated while 27.5% (52) disagreed. The results clearly showed that training on record keeping as well as retrieval of records and missing marks is still not adequate.

On filing system, majority of the respondents with a mean value of 3.2368 agreed that every staff had basic filing skills. However, a few disagreed that the institution has training program on electronic filing system for all staff as well as every office having trained personnel in office records filing with a mean value of 2.1842 and 3.0526 respectively. Further, they agreed that there is need for everyone to be trained on filing with a mean value of 4.2632. From the findings, it is evident that the staffs still lacked filing skills

Findings also indicate that majority of the respondents with a mean value of 3.9868 agreed that the institution follows ISO standards in all operations. They also agreed that staffs are trained to operationalize ISO standards in their roles and at the same time every staff understands what ISO certification means in regard to the institution operations with a mean value of 3.8947. However, some disagreed that every staff in the institution had undergone ISO certification training with a mean value of 3.4474. The results clearly showed that employees have not undergone ISO certification training even though they are conversant with the standards.

5.2.3 Top management Skills

The aim here was to establish how top management skills influences implementation of QMS in public TVET institutions

Results show that the top management team does not have adequate knowledge on data analysis using various statistical tools with a mean value of 3.2632. it was also established that they lacked analytical skills and does not use statistical data in coming up with decisions both with a mean value of 3.3553. However, it was noted that they are able to interpret statistical data with a mean value of 3.4737. This implies that top management in public TVET institutions are not able to analyze and interpret statistical data

Regarding continuous monitoring and evaluation of ISO, the respondents agreed that it is in the top management's duty to monitor and evaluate ISO standards and that the top management was trained on monitoring and evaluation in regards to ISO standards with a mean value of 3. 9605 and 4.0000 respectively. However, they were found not to observe ISO standards keenly with a mean value of 3.8026.

Findings also indicate that top management team did not have financial management skills and at the same time were not able to handle all financial related issues with a mean value of 3.6053 and 3.5526 respectively. However, they are able to interpret financial statements, prepare and implement financial budgets accordingly with a mean value of 3.7368

On ISO auditing skills, top management were not adequately trained whose mean value stood at 3.8816, though they audit ISO standards from time to time with a mean value of 3.9474

5.2.4 Information Technology

The aim here was to establish how information technology influences implementation of QMS in public TVET institutions.

Findings indicate that institutions did not have enough computers and internet connectivity was not enough with a mean of 2.5000. Few respondents 16.9% (32) agreed that internet connectivity was sufficient, lecturers use different technologies during class instruction and lectures 23.8% (45) and access to WIFI as well as internet service by students 14.8% (28). They however agreed that computers in TVET institutions use the most modern technology with a mean value of 2.7895 and this made work easier. Majority of the students 68.8% (130) agreed that they are able to use technology to get important information during training. However, not all staff had access to LAN as well as internet with a mean value of 2.7763. Staffs are also not trained on systems

and new technology from time to time with a mean value of 2.6447. It was clear that IT infrastructure is yet to be integrated in most operations in TVET institutions

On computerization of services, majority of the respondents 67.2% (127) disagreed that students are able to register and book nits online, access to various services such as fees statement and examination results online 60.3% (114). Another 68.3% (129) disagreed that students get regular updates regarding institutions' schedule of events through internet, 57.7% (109) disagreed that the website is attractive and updated regularly 55% (104). From the findings, it implied that TVET institutions within Bungoma County are not fully computerized

5.3: Discussion of the Findings

The findings shows that most of the respondents indicated that for a successful implementation of Quality Management System in public Technical and Vocational Education and Training institutions in Bungoma County, Kenya, resource availability, employee training, top management skills and information technology should be considered and provided

5.3.1: Resource Availability

Physical facilities like lecture halls or rather classrooms and also recreational facilities for students were found to be inadequate, although there were enough laboratories and workshops in TVET institutions. This concurs with Wanyama B.W (2022) who observed that there are no enough physical resources in the institution to implement QMS. The inadequacy of instructional materials & training facilities contributed to ineffectual service delivery to technical institutes, Gk Mutungi, T Kibaara, S Mwirichia International Journal of Proffession Practice 2023

Furthermore, institutions were also found to lack enough funds to run the daily operations that led to stagnation of projects. However, the management was able to mobilize funds for smooth

running of the institution. This concurs with with Ratten , V (2020) who observed that insufficient funds, lack of enough revenue, too much reliance on government grants and lack of financial support as some of the difficulties encountered in QMS implementation

On human resource, it was established that the institution had highly qualified professionals in various fields and the number was adequate. This clearly indicates that for implementation of ISO standards, organization need to consider the availability of the required resources. Mahmud, A (2022)

5.3.2: Employee Training

On employee training, findings indicate that staff had basic filing skills and not all offices had trained personnel on office record filing, hence there need for all staff to be trained on filing. This shows that staff lack the filing skills which is a clear indication that the institution do not see filing training programs as an investment in human resource. (Noor, Mohd Asri Mohd, Online Journal for TVET practitioners 8.1 2023)

On record keeping, the system was found to be excellent and staff well trained, though personal records and missing marks were not easy to retrieve. This concurs with AA Setyawan, HPrabowo, Simutupang B & Pradipto Y D 2023 where they observed that staffs also needs broader range of skills to be able to participate in quality improvements. Payment data was properly captured and updated. Though offices had qualified personnel managing records, there is still need of training staff on electronic record keeping as well as training new staff. This implied that institutions are likely to face challenges associated with implementation of QMS due to lack of training employees on record keeping

On employee training on ISO, it was also noted that institutions were able to follow ISO standards in all their operations and staff were trained to operationalize ISO standards in their roles Every staff understood what ISO certification meant and had undergone ISO certification training. This finding concurs with Aboudahr, S & Saidin K 2023 Journal of pedagogy & Education Science 2(01) who recommends educating the workforce about the benefits of implementing the QMS prior to and during implementation process.

5.3.3: Top management Skills

The findings indicated that top management was not able to analyze and interpret statistical data as well as analytical skill. Though they are able to interpret statistical data, they do not use it in decision making, thus likely to influence the institutions performance with respect to their internal procedures (RH, Atthsreq, RMTN Affandi Journal Pendidikan Vokari 2023

On continuous monitoring and evaluation of ISO, it was the top managements' duty to monitor and evaluate ISO standards. Though they were trained on monitoring and evaluation in regards to ISO standards, no training was done prior to implementation and thus they did not observe ISO standards keenly. Hence to benefit from implementing QMS, it is important that the workforce be trained prior to and during implementation process

On financial skills, top management lacked financial management skills, hence not able to handle all financial related issues

Top management also lacked training on ISO auditing though conversant with the skills, DW Hussain, A critical perspective (May 9 2023) Thus the management skills can influence implementation of quality management system

5.3.4: Information Technology

Findings indicated that the institution did not have enough computers and that internet connectivity was insufficient, though adaptability of most recent technology made work easier hence students were able to use technology in their training. This clearly indicates that internet connectivity was confined to ICT workshops, staffrooms and administrative offices while being constantly overstretched by growing numbers. Majority of the staff could also not access LAN as well as WIFI and thus did not use different technologies during class instructions and lectures.

Findings also show that computerization of services was found to totally lacking in TVET institutions and hence most services are still being carried out manually, N Mohamad, HM Affandi, NE Sohimi Journal of Technical Education & Training 2023, baseline survey recommendation which stated that institutions need to implement ICT policy by integrating IT in both teaching and learning process

5.4 Conclusions

The purpose of this research was to establish the factors that influence implementation of Quality Management System in public Technical and Vocational Education and Training institutions in Bungoma County, Kenya.

Based on the research findings, the following conclusions can be made. Resource availability, staff training, top management skills and information technology affects to a great extent implementation of QMS in public TVET institution in the county

Resource availability in the public TVET institutions in Kenya was found to influence implementation of QMS. This is evident in the highly qualified professionals in various fields

and adequate number of staff serving the institution. However, inadequate lecture halls or classrooms and recreation facilities were not promising to ensure implementation of QMS in the selected public TVET institution in the county.

Employee training at the public TVET institutions in Kenya was found to be equally critical since staff had only basic filing skills and at the same time, there was no training program in place. However, record keeping was found to be excellent and this influence implementation of QMS in TVET institutions

Top management skills influenced implementation of QMS in public TVET institutions in Kenya since they were highly committed and highly effective towards the implementation of QMS. However, it is noted that top management lacked essential skills like analyzing and interpreting statistical data, continuous monitoring and evaluation of ISO, financial skills and ISO auditing skills

It was also established that information technology plays a key role in implementation of QMS in public TVET institutions in Kenya. Findings show that technology infrastructure was lacking in public TVET institutions in Bungoma County. It also shows that the institutions do not have adequate number of computers in the computer laboratories for student research, institutions do not have the most recent technology and that students could not access WIFI as well as internet services in the institution.

5.5: Recommendation

Based on the study findings, the following recommendations can be made;

- The management to request the government to provide more funding to put additional facilities
- The management to invest in staff development especially in filing system and ISO related matters
- The top management to be trained on key skills like analyzing and interpreting statistical data, continuous monitoring and evaluation of ISO, financial skills and ISO auditing skills
- The public Technical and Vocational Education and Training in Bungoma County, Kenya should invest in Information Technology infrastructure.

5.6: Suggestions for further Research

The following suggestions have been made for further research;

- A research should be done to establish why public Technical and Vocational Education and Training institutions are still lagging behind in adopting Information Technology in training
- A similar research related to this should be carried out in other different counties apart from Bungoma County to enable further generalization of findings.
- Further research should also be done on other factors apart from ones discussed in this study that affects the implementation of Quality Management System in public Technical and Vocational Education and Training institutions

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APPENDICES

Appendix 1: Questionnaire for Students (third years/ module Three

My name is Simiyu Nanjal Everlyne and Iam a degree student at Gretsa University, department of School of Business Procurement option. I am conducting research on Factors Influencing Implementation of Quality Management System in Public Technical and Vocational Education and Training institution in Bungoma County, Kenya. I am kindly requesting you to respond to all the questions in this questionnaire. Your response will be kept confidential and will be used for the purpose of this study.

Name (Optional): ……

Name of Institution: ……

Department: ……

INSTRUCTIONS

a) Tick inside the box
b) Fill in where applicable

Research Questions

Section 1: Quality Management System

The statements in this section are about the various dimensions of Quality Management System among public Technical and Vocational Education and Training institutions in Bungoma County, Kenya. You are required to consider each statement and indicate the actual state in your own assessment on a scale of 1-5 where:

1 Strongly disagree
2 Disagree
3 Not sure
4 Agree
5 Strongly agree

a) Customer Satisfaction	1	2	3	4	5
Our institution offers customers quality service					
The top management strives to ensure that both internal and external customers are served satisfactorily					
The students are satisfied with the institution' s customer service					
b) Corporate Image					
Our institution is recognized national wide on good performance					
Our institution is a top player in the Technical Vocational Education and Training (TVET) sector					
Our programs are highly competitive in the job market					
Our institution has a good corporate image					
c) Quality of performance in Examination					
Our graduate's good performance in examination is reflected in their good performance in the job market					
Our students perform better than other institutions in the final exams					
The number of students failing the final exam have reduced close to zero					
d) Students completion Rate					
Students completion rate is 100% from the enrolled register					
Students complete their course within the timelines projected in their curriculum					
Student dropout rate is low compared to other institutions					

State any areas that you think needs to be improved on to enable your institution offer better quality services to its customers

i. ……

ii. ……

iii. ……

SECTION II: Resource Availability

The statements in this section are about the various dimensions of resource availability among public Technical and Vocational Education and Training institution in Bungoma County, Kenya. You are required to consider each statement and indicate the actual state in your own assessment on a scale of 1-5 where:

1 Strongly disagree
2 Disagree
3 Not sure
4 Agree
5 Strongly agree

a) Physical Facilities	**1**	**2**	**3**	**4**	**5**
We have enough lecture/ class rooms in our institution					
We have enough laboratories/ workshop rooms in our institution					
There are enough recreation facilities for students in our institution					
b) Availability of Funds					
There is sufficient funds to run our institution					
Our management team is able to mobilize funds for the smooth running of the institution					
There are no stagnated projects due to lack of finances in our institution					
c) Human Resource					
Our institution have highly qualified professionals in various fields					
We have adequate number of staff serving our institution					
There is very low staff turnover in our institution					

Give your suggestion on how your institution ensures effective utilization of the following available resources

i) Physical Facilities

……

……

…….

ii) Utilization of Funds

……

……

……....

iii) Human Resource

…….

……..

……..

SECTION III: Information Technology

The following statements regard Information Technology within public Technical and Vocational Education and Training institutions in Bungoma County, Kenya. Rate each statement and indicate the actual state in your assessment on a scale of 1-5 where:

1 Strongly disagree
2 Disagree
3 Not sure
4 Agree
5 Strongly agree

a) Availability of IT Infrastructure	**1**	**2**	**3**	**4**	**5**
We have adequate number of computers in our computer laboratory for students use					
There is sufficient internet connectivity in our institution to facilitate student research					
Our institution uses the most recent technology					
Our lecturers use different technologies during class instruction and lectures					
All students can access WI-FI as well as internet services in our institution					
The students are trained on how to use technology to get important information such as exam results, fees statement etc					
b)Computerization of Services					
Students are able to register and book course units online					
Students can access various services such as fees statements and examination results easily					
Students get regular updates through internet regarding our institutions					

scheduled events					
Our website is attractive					
Our website is regularly updated					
Our online admission service is user friendly to students					

Discuss any aspect of technology in your institution that you think need improvement

1. ……..
2. ……..
3. ……
4. ……
5. …….

THANK YOU

Appendix II: Questionnaire for Lecturers

My name is Simiyu Nanjala Everlyne and I am a degree student at Gretsa University, department of School of Business Procurement option. I am conducting research on Factors Influencing Implementation of Quality Management System in Public Technical and Vocational Education and Training institution in Bungoma County, Kenya. I am kindly requesting you to respond to all the questions in this questionnaire. Your response will be kept confidential and will be used for the purpose of this study.

Name (Optional): ……

Name of Institution: ……

Department: ……

INSTRUCTIONS

c) Tick inside the box
d) Fill in where applicable

Research Questions

Section 1: Quality Management System

The statements in this section are about the various dimensions of Quality Management System among public Technical and Vocational Education and Training institutions in Bungoma County, Kenya. You are required to consider each statement and indicate the actual state in your own assessment on a scale of 1-5 where:

1. Strongly disagree
2. Disagree
3. Not sure
4. Agree
5. Strongly agree

a) Customer Satisfaction	1	2	3	4	5
We give our customers quality service					
The top management strives to ensure that both internal and external customers are served satisfactorily					
Many of our new customers are referrals from previous and existing customers					
There are no complaints from our customers					
b) Corporate Image					
Our institution is recognized national wide on good performance					
Our institution is a top player in the Technical Vocational Education and Training (TVET) sector					
Our programs are highly competitive in the job market					
Our institution has a good corporate image					
c) Quality of performance in Examination					
Generally there has been improved exam performance over the last five years					
Our graduates are competitive in the labor market					
Our students perform better than other institutions in the final exams					
The number of students failing the final exam have reduced close to zero					
d) Completion Rate					
Our students completion rate is 100% from the enrolled register					
All our students complete their course within the timelines projected in their curriculum					
Our student dropout rate is low compared to other institutions					
All projects undertaken by the institution are completed within the expected timelines					

SECTION II: Resource Availability

The statements in this section are about the various dimensions of resource availability among public Technical and Vocational Education and Training institution in Bungoma County, Kenya. You are required to consider each statement and indicate the actual state in your own assessment on a scale of 1-5 where:

1. Strongly disagree
2. Disagree
3. Not sure
4. Agree

5. Strongly agree

a) Physical Facilities	**1**	**2**	**3**	**4**	**5**
We have enough lecture/ class rooms in our institution					
We have enough laboratories/ workshop rooms in our institution					
There are enough offices for the teaching and non-teaching staff in our institution					
There are enough facilities to support various activities in our institution					
b) Availability of Funds					
There is sufficient funds to run our institution					
Our management team is able to mobilize funds for the smooth running of the institution					
There are no stagnated projects due to lack of finances in our institution					
c) Human Resource					
Our institution have highly qualified professionals in various fields					
We have adequate number of staff serving our institution					
There is very low staff turnover in our institution					
All our staff are highly qualified in their area of specialization					
Our staff is highly motivated to serve our institution					

Give your suggestion on how your institution ensures effective utilization of the following available resources

i) Physical Facilities

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ii) Utilization of Funds

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iii) Human Resource

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SECTION III: Employee Training

The statements in this section are about the various dimensions of employee training for public Technical and Vocational Education and Training institution in Bungoma County, Kenya. Rate each statement and indicate the actual state in your own assessment on a scale of 1-5 where:

1. Strongly disagree
2. Disagree
3. Not sure
4. Agree
5. Strongly agree

a) Filing System	**1**	**2**	**3**	**4**	**5**
Every staff in our institution have basic filing skills					
Our institution has training program on electronic filing system for all staff					
Every office has trained personnel on office records filing					
There is need for everyone to be trained on filing in our institution					
b) Record keeping System					
Our record keeping system is excellent					
Every office has highly qualified personnel managing records					
All staff are trained on electronic record keeping					
Our institution has record keeping training for all new staff					
c) Employees training on ISO					
Our institution follows ISO standards in all operations					
Every staff in our institution have undergone ISO certification training					
Staff are trained to operationalize ISO standards in their roles					
Every staff understands what ISO certification means in regard to our institution operations					

Give any additional information in regards to ISO training in your institution

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SECTION IV: Top management Skills

The following statements regard top management skills among public Technical and Vocational Education and Training institution in Bungoma County, Kenya. Rate each statement and indicate the actual state in your own assessment on a scale of 1-5 where:

1. Strongly disagree
2. Disagree
3. Not sure
4. Agree
5. Strongly agree

a) Analyzing & interpreting statistical data	**1**	**2**	**3**	**4**	**5**
Our top management team has adequate knowledge on data analysis using various statistical tools					
Our top management have analytical skills					
Our top management are able to interpret statistical data					
Our top management uses statistical data analysis in decision making					
b) Continuous monitoring and evaluation of ISO					
It is the duty of our top management team to monitor and evaluate ISO standards within the institution					
Our top management is trained on monitoring and evaluation in regards to ISO standards					
Our top management observes ISO standards keenly on their daily performance					
c) Financial skills					
Our top management team have financial management skills					
The top management team is able to handle all financial related issues					
The top management team is able to interpret financial statements					
The top management team is able to prepare and implement financial budgets accordingly					
d) ISO auditing Skills					
The top management team is adequately trained on ISO auditing					
Our top management audits our ISO standard from time to time					

How would you rate the top management skills exhibited in your institution?

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SECTION V: Information Technology

The following statements regard Information Technology within public Technical and Vocational Education and Training institution in Bungoma County, Kenya. Rate each statement and indicate the actual state in your own assessment on a scale of 1-5 where:

1. Strongly disagree
2. Disagree
3. Not sure
4. Agree
5. Strongly agree

a) Availability of IT infrastructure	**1**	**2**	**3**	**4**	**5**
We have enough computers in our offices					
There is sufficient internet connectivity in our offices					
Our computers use the most recent technology					
Our office work has been made easy by use of computers					
Every staff has access to our LAN as well as internet					
There are several staff trainings on system and new technology from time to time					
b) Computerization of Services					
There are efforts to go paperless in all services rendered at our offices					
Students have easy access to services eg fees statements and examination results can be accessed easily					
Our students can get regular updates through internet regarding our institution eg opening dates, examination dates, closing dates, graduation list etc					
Our website is regularly updated					
Our admission online service is user friendly to students					

Discuss any other aspect of technology in your institution that you think need improvement

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THANK YOU.