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## Abstract

Quality management practices is the process of managing the activities and resources of the institution so as to achieve goals and prevent nonconformance. In Kenya, the higher education sector has continued to grow steadily as indicated by massive student enrollments over the past few years. However, this growth has not been accompanied by a matching expansion of campus facilities, human resources or space to accommodate these students. The objective of the study was to determine the impact of Quality Management Practices on Service delivery at the Catholic University of Eastern Africa. The research was designed to use quantitative, descriptive and inferential survey design. The target population comprised of employees of the Catholic University of Eastern Africa (CUEA) who were categorized as: senior administrative non-teaching staff, middle level non-teaching staff, academic staff, part time lecturers and support staff giving a total of 550. Stratified sampling was adopted. A sample size of 226 respondents was derived. 207 participated in the study was achieved indicating a response rate of 92%. The researcher adopted questionnaires to conduct the study. Data analysis was conducted using SPSS (V. 25). Quantitative data was analyzed using descriptive and inferential statistics. Descriptive statistics include means, frequencies and standard deviations while inferential statistics included multiple linear regression. The results of the regression model indicate that holding other factors constant, Quality Management Practices had a 43.6% influence on service delivery. The results of the correlation analysis indicated a strong positive correlation between customer focus and service delivery ( $P=.877$ ). A strong positive correlation was also established between continuous improvement and service delivery ( $P=.507$ ). The study established a weak significant association between top management commitment and service delivery as indicated by  $P=-.401; .000$  respectively. Finally, the study showed a negative insignificant relationship between employee involvement and service delivery as indicated by  $P=-.13$  and  $.098$  respectively. The study recommends that top management provide more resources towards quality efforts and pay particular attention to implementation of quality policies and plans. Bureaucratic processes in decision-making by top management affects employees in ensuring that policies are implemented. A hybrid management style is therefore recommended whereby top management consult staff on decision making.

**Keywords:** *Quality Management Practices, Service Delivery, Customer Focus, Commitment, Employee Involvement, & Continuous Improvement.*

### 1.1 Background of the study

Quality has become one of the most important determinants for customers who want to purchase a particular product or service. As a result, many organizations have invested significant time, resources, and capital to acquire and build a suitable quality management system. However, in many cases the adoption of certain business and quality improvement models, methodologies and tools is inappropriate or poorly implemented. Additionally, QMS is not aligned with strategic quality planning and business strategy. This discrepancy leads to poor implementation and frustration for these organizations (Lona, Reyes & Kumar, 2013).

Quality management practices adopted by industries are always changing due to changes of quality concept as time goes by (Yang, 2012). Since the 20th century, manufacturing processes and activities have initiated control practices to ensure product quality. Emphasis was placed on related productivity and manufacturing costs. Therefore, the concepts of quality and control were product-oriented. However, Feigenbaum emphasized in 1956 that quality assurance cannot be achieved by focusing solely on the production process. As a result, in 1959 the concept of Total Quality Control (TQC) was born. TQC emphasized the need to implement product quality at all stages of the product life cycle.

A survey conducted in Vietnam by Nguyen, Phan and Matsui, 2018, sought to establish the Contribution of Quality Management Practices to Sustainability Performance of Vietnamese Firms. The findings of this study found that four quality management practices had a positive impact on performance. Singh, Kumar & Singh (2018), on their study on the impact of TQM on organizational performance in Indian manufacturing and service industries showed a positive impact of TQM on organizational performance. Shafiq, Lasrado and Hafeez, (2019) found a positive relationship between TQM and organizational performance. The findings support the argument that positive effect of TQM is not only limited to organizations in developed nations but to other parts of the world too.

In the African perspective, Owusu, Kwateng and Darko, 2017 in Ghana focused on the relationship between Total Quality Management Practices in aquaculture companies in Ghana. The study found that implementing quality management practices was one of the ways to guarantee high quality products or services. In Nigeria, a study conducted by Sule, Ogbadu and Nafiu (2017) on adoption of TQM by SMEs indicated that SMEs are subject to too many factors and this leads to different performance outcomes. In Kenya, Ochieng, Muturi and Njihia (2015) on the impact of ISO 9001 implementation on organizational performance in Kenya established a positive relationship between the variables. Similarly, Kibe and Wanjau (2014), on their study on the effect of quality management systems on the performance of food processing firms in Kenya found that quality management practices under study had a strong positive correlation with an organizations competitive performance.

Various environmental forces are calling for changes within organisations, higher education institutions included. These changes have put Quality management on the agenda of these institutions. According to Becket and Brookes, 2007, economic, demographic, social, technological and political changes worldwide are putting academic institutions under intense pressures. There is still no consensus made on how best to manage quality in the field of higher education despite the efforts and progress made through research and debate. One of the major

reasons for this is that quality is complex and has many different features; more so in the Higher Education sector (Becket & Brookes, 2006).

Although higher education is able to adopt many of the principles of quality management, it is reasonable to expect some challenges when applying them to a different organisational structure from that of a commercial industry. The concern is that there will be a direct relationship between the conception of higher education being taken, the definition of quality being used and the performance indicators chosen to measure quality (Tam, 2001).

The Kenyan government has continually created emphasis on the quality of services in Kenyan institutions. Several reforms have been made in the sector with the most notable ones being performance contracting and resource-based management and adoption of quality management practices (Kimathi, 2017). Rapid growth in students' enrolment have increasingly put pressure on institutions in the absence of a matching growth in academic staff numbers and space (World Bank, 2017). Even with these financial constraints in mind the government through the Commission for University Education (CUE) has continued to emphasize on the need for quality management practices by encouraging improvement in quality of university programmes. Although most universities have implemented quality management practices to enhance service delivery, their performance is still lacking and requires further investigation. Mokamba, Oloko and Letting, (2014) have emphasized on the need for universities to implement Quality Management practices to improve their performance. This forms the backbone of the current study. There is need to investigate the role of quality management practices and service delivery at the Catholic University of Eastern Africa.

## **1.2 Statement of the problem**

The Catholic University of Eastern Africa operates in the higher education industry in Kenya and is faced with stiff competition from other players in the industry; both public and private institutions. In the wake of a highly competitive environment, customers' needs and wants are ever-evolving which further increases the need to provide more quality services to them. Despite agreement amongst all stakeholders on the need to provide quality services in the higher education sector, little has been done to resolve the issue (Tristan, 2018). To improve service quality, organizations should embrace quality management practices that include customer focus, employee involvement, top management commitment and continuous improvement. Quality management practices advocate for continuous improvement in service delivery. In the wake of a turbulent and uncertain environment, universities like other organizations have to adapt and reorient themselves in the wake of changing environment (Mathooko & Ogutu, 2014). Sigei, 2014 further argues that when Quality Management Practices are communicated to all members of the organization and well implemented, they may have a significant and positive impact on overall performance of the organization.

Enrollment of university students has grown steadily with total enrolment of students in 2015 being 539,749 compared to 440,840 in 2014. This indicated an increase of 22% (Mukhwana et.al, 2016). In a similar vein, since 2016, the number of government-sponsored students hosted by private universities now stands at 14.8%. Government directive through sessional paper No. 14 of 2012 to admit government sponsored students in private universities saw the lowering of university cut-off points to C<sup>+</sup> for these students (Kippra, 2022). The implication of this is that the number of non-revenue generating students has increased which has further increased competition among

private universities for self-sponsored students who are the major revenue generators for these institutions. Additionally, private universities still decry poor funding from the government seeing that the government currently provides only Kshs. 2.4 billion as opposed to the Kshs. 5.6 billion previously agreed on to finance this arrangement. Rapid growth in students' enrolment have increasingly put pressure on institutions in the absence of a matching growth in academic staff numbers and space (World Bank, 2017). Even with these financial constraints in mind the government through the Commission for University Education (CUE) has continued to emphasize on the need for quality management practices by encouraging improvement in quality of university programmes. Although most universities have implemented quality management practices to enhance service delivery, their performance is still lacking and requires further investigation. (Mokamba, Oloko & Letting, 2014) have emphasized on the need for universities to implement Quality Management practices to improve their performance. This forms the backbone of the current study. There is need to investigate the role of quality management practices and service delivery at the Catholic University of Eastern Africa.

Although various studies have been conducted regarding the concept and context of quality management and higher education respectively, none of these had been done within the context of The Catholic University of Eastern Africa. Additionally, none of these studies have focused on service delivery as a measure of performance. Therefore, it was necessary to conduct a study focused on CUEA's academic services in relation to the main characteristics of Quality Management.

### **1.3 General Objective**

The general objective of the study was to establish the effect of Quality Management practices on Service Delivery at the Catholic University of Eastern Africa

#### **1.3.1 Specific Objectives**

1. To evaluate how customer focus affects service delivery at the Catholic University of Eastern Africa
2. To evaluate how commitment of top management in quality efforts affects service delivery at the Catholic University of Eastern Africa
3. To evaluate how employee involvement affects service delivery at the Catholic University of Eastern Africa
4. To evaluate how continuous improvement affects service delivery at the Catholic University of Eastern Africa

### **1.4 Research Questions**

1. What is the influence of customer focus on service delivery at the Catholic University of Eastern Africa?
2. How does commitment of leaders in quality efforts affect service delivery at the Catholic University of Eastern Africa?
3. How does employee involvement affect service delivery at the Catholic University of Eastern Africa?



4. What is the effect of continuous improvement on service delivery at the Catholic University of Eastern Africa?

## **2.0 Literature Review**

### **2.1 Theoretical Review**

#### **2.1.1 Deming's Plan-Do-Check-Act (PDCA) cycle**

The PDCA cycle is a series of steps to gain valuable learning and knowledge for continuous improvement of a product or process. The main focus of this model is on continuous improvement. Effort is geared towards improvement of an organization's products or services. The main tool used for continuous improvement is a four-step quality model which is also known as Deming cycle: Plan, Do, Check and Act (PDCA) cycle (Deming, 1991). The implementation of this cycle has been found to be more effective compared to other methods and any industry can implement PDCA methodology (Patel & Deshpande, 2017). Executing the PDCA cycle requires a continuous search for better impact on improvement. The cycle advances two types of corrective actions; temporary and permanent. Temporary action seeks to tackle and fix the problem while the permanent action involves an investigation and elimination of the root causes and as such It aims at improved process sustainability (Patel & Deshpande, 2017). It consists of a series of four iterative steps for continuous improvement and learning; PLAN, DO, CHECK (STUDY) ACT.

This theory was relevant to this study as its main focus is on continuous improvement. Organisations today are faced with the most scenic of situations, to survive in competitive environments, how can one do that if not by constantly identifying areas of improvement and equipping it employees with the relevant knowledge for these future situations?

Shewart (1931) was the first to develop statistical tools that allow managers to make more knowledgeable decisions regarding not only the quality of the product but also the need to intervene in a given process during the manufacturing process. In the 1950s however, Deming critiqued Shewart's theory and argued that statistical tools are deficient if managers use them inappropriately or impractically or when they advance managerial practices that hinder workers from applying information acquired from statistics to improve processes. As such information on product quality and process stability is counterproductive if management does not later act to rectify the situation or if management's actions are limited to laying blame and exhorting improvement. As such, Deming proposed the fourteen points of management to curb this problem. (Deming, 1982, 1986)

#### **2.1.2 Juran's Trilogy**

This model provides a basis on how organizations can improve performance by understanding the relationship between the processes that plan, control and improve quality and as a result, improve business performance (Juran, 1986; Gryna, 1988). The premise of the model is that quality management is a result of three basic interrelated processes that are quality-oriented. These are quality planning, quality control and quality improvement.

This quality planning process involves the design of products and processes necessary to meet customers' needs. The process involves; identifying quality goals, defining the customers, determining what these customers need, developing product characteristics that seek to satisfy

these needs, developing processes that are able to provide those product features and establishing process controls and transferring the resulting plans to the operating forces.

Juran's theory has emphasized on the customer, commitment of top management and the technical process. The organisation must understand the customer for it to develop products/services to satisfy its customers' needs. Top management should formulate goals and lead the organisation towards these predetermined goals.

According to Hill 1995, resistance to improvement is rightly highlighted, but its nature and extent are not understood, and the proposed solutions are too limited. The mechanisms necessary to convince people of quality management are limited to leadership from above, systematic training and further education, learning benefits through action, and recognition of outcomes. The basis of these methods is that top managers need to win hearts without coercion.

### **2.1.3 Crosby's Zero- defects Theory**

Crosby (1979) is best known for the concept of "zero defects". To him, efficient and effective quality management must be based on "prevention-based system". He further states that mistakes that happen within an organization are due to a ignorance and a lack of attention of employees within the organization (Crosby 1979). He further emphasizes that quality improvement can be achieved when management focuses on the prevention through the attention and training of employees, cost reduction and emphases on controls rather than inspection efforts and finally "doing it right the first time".

Crosby went on to explain that quality is incomparable and there is no such thing as high or low or quality in terms of goodness, feel, excellence and luxury. He also emphasized management's role in improving quality. For him, his 80% of all quality issues in an organization can be traced back to management.

This theory is relevant in understanding the role played by employees in implementation on quality management practices. Human resource is a large contributor in the implementation of quality management. By using Crosby's theory, the organisation can fully understand each employee's role, improve on human capital development and prevent human resources wastage.

## **2.2 Empirical Review**

Customer focus is the extent to which an organization consistently meets the needs and expectations of the customer (Karani & Bichanga 2012). According to Okwiri (2013), customer focus is measured by the presence of expected behavioral outcomes, consistent with a university's focus on customer value. In a university setting, customer focus identifies the existence of a system for identifying the customer for each activity, the needs of the identified customer, and the processes used to generate the value that is passed on to the identified customer. When customer expectations are met, customer satisfaction increases and market share increases.

According to Soltani, 2005, the organization's top management retains leadership responsibility for quality management practices, as well as the involvement of all employees in the organization. This responsibility includes: providing the necessary resources to improve service delivery and defining and reviewing the quality policy and quality objectives on a quarterly basis to ensure compliance with quality standards. It is the role of top management to define the mission, vision

and goals that foster a culture of quality and establish a set of shared values that lead to high performance (Kanji, 2008). Top management commitment is the most important factor for successful quality management implementation (Mutunga, 2013 and Jaahfreh & Al-abedallat 2013).

Employees at all levels are the backbone of the organization and their full participation allows them to use their skills to the benefit of the organization. Involving people and their skills at all levels is beneficial to the organization as a whole. Innovation and creativity are stimulated by motivating people, holding them accountable for their performance, and involving them in decision-making. Approaches to employee involvement range from basic information sharing to self-directed responsibilities such as providing input and suggestions on work-related issues, goal setting, business decision-making, and problem-solving. It is often done in teams with similarities (James & Williams, 2008; Gertsch & Davis, 2013). Deming argued that employee engagement and participation at all levels is necessary to improve the quality of current and future products or services (Talib, Rahman & Qureshi, 2010). All staff should be trained based on the results of a training needs analysis (Goetsch & Davis, 2010).

According to Zakuan *et.al*, 2012 process improvement is wheel of the organizational vehicle. Process improvement puts emphasis on the audit procedure, review of the university's performance and the improvement of processes based on findings. Process improvement is the most important aspect in service management. It means seeking never-ending improvements and developing procedures and processes to establish new and improved methods in the process of changing inputs into outputs (Sadikoglu & Zehir, 2010).

There are two principles that define process improvement; customer focus and employee involvement. Top management commitment is necessary for the successful implementation of continuous improvement. A university should embrace a structure that supports all the activities conducted and encourage teamwork for all employees at different functions. It is vital to educate and train employees for them to meet to meet the set performance standards. There ought to be an effective communication system and a mechanism to reward and recognize the best performance. To remain relevant, universities must focus on customer satisfaction with continuous progress, curriculum development, course delivery plans, and regular program reviews based on market needs (Wanza, Ntale & Korir, 2017).



2.3 Conceptual Framework

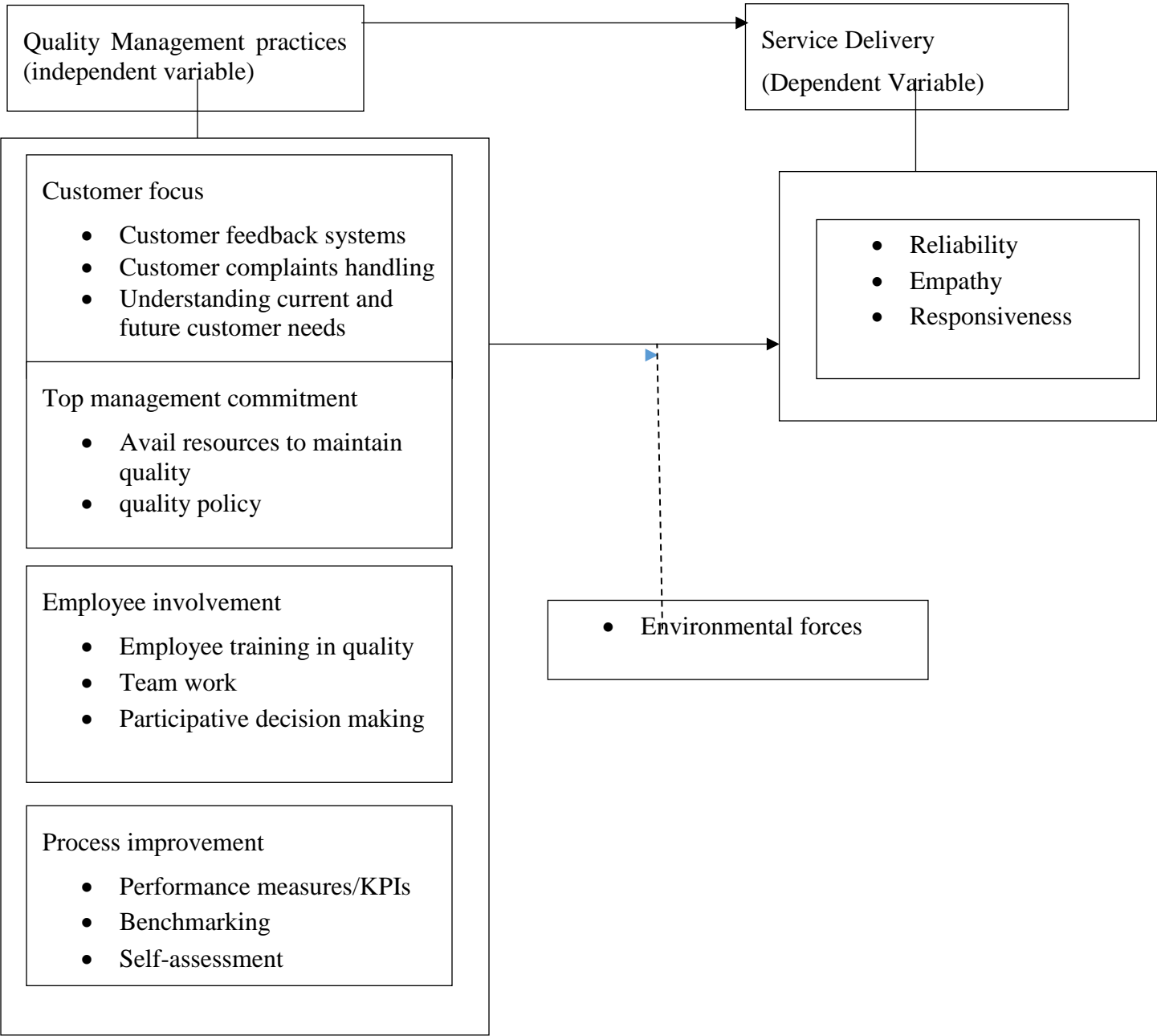


Figure 1: Conceptual Framework

A conceptual framework is a visual representation of how concepts and ideas are related in research, helping researchers identify and understand the research topic under study. Linking the independent and dependent variables completes the framework for a particular expected result.

In the conceptual framework depicted in figure 1, Quality Management Practices are hypothesized to influence service delivery. Quality management practices is the independent variable and is defined by top management commitment, customer focus, employee involvement and continuous improvement. Top management commitment is the direct dedication of high-level management to achieve goals and objectives. Customer focus is the commitment of the institution towards meeting the needs and expectations of the customer through services offered. Process improvement is the incremental and ongoing improvement of the quality of an institution's services. Employee involvement is a management strategy implemented by the institution that allows employees to participate in the organization's decision-making process.

Service delivery is the dependent variable and is defined by reliability, responsiveness and empathy. Reliability is the ability of employees to deliver agreed-upon service with dedication, reliability, consistency and accuracy. Empathy is the willingness of employees to help customers in a friendly and courteous manner. Responsiveness is the promptness and punctuality of staff to serve customers, ranging from customer inquiries, questions and complaints.

However, this relationship between the independent and dependent variables is modified by forces in the external environment. Environmental forces impact the institutions processes and consumer demands. Government actions and approaches can also influence the economy which will eventually impact the way the institution operates.

### **3.0 Research Methodology**

The research was designed to use quantitative, descriptive and inferential survey design. For the study, the target population comprised of employees of the Catholic University of Eastern Africa (CUEA) who were categorized as: senior administrative non-teaching staff, middle level non-teaching staff, academic staff, part time lecturers and support staff giving a total of 550. In this research, stratified sampling was adopted. Stratified sampling suggests that samples are drawn from every segment of the population. This gave a sample size of 226 respondents.

### **4.1 Results and Findings**

The respondents included senior administrative non-teaching staff, middle level non-teaching staff, academic staff, part-time lecturers and support staff. 226 self-administered questionnaires were administered. Out of this, 207 were duly filled and returned, indicating a response rate of 92%.

### **4.2 Regression Analysis**

To achieve the study objective, the researcher regressed the factors (customer focus, employee involvement, top management commitment and continuous improvement). The Model Summary, ANOVA and regression coefficients are discussed in the subsequent sections below.

### **Model Summary**

The Model Summary indicates the coefficient of correlation R, the coefficient of determination R square and the adjusted R square.

**Table 1: Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig. F Change
1	.703 <sup>a</sup>	.495	.485	.51336	.000

a. Predictors: (Constant), continuous improvement, Customer focus, Employee involvement, top management commitment

b. Dependent Variable: service delivery

From the Model Summary Table above, the adjusted coefficient of determination R square is 0.495, an indication that 49.5% of the changes in service delivery at the Catholic University of Eastern Africa is explained by the four factors (customer focus, top management commitment, employee involvement and continuous improvement) and therefore other factors not accounted for in this model explain the remaining 50.5%. These other factors can be studied by future academicians and scholars.

### Analysis of Variance

This is an Analysis of Variance of the processed data at a significance level of 5%. The findings are indicated in Table 2.

**Table 2: ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.125	4	13.031	49.448	.000 <sup>b</sup>
	Residual	53.234	202	.264		
	Total	105.359	206			

a. Dependent Variable: service delivery

b. Predictors: (Constant), continuous improvement, Customer focus, Employee involvement, top management commitment

At 5% level of significance, the value of F calculated  $F_{\text{Calculated}} = 49.448$  while  $F_{\text{critical}} (4, 206) = 2.3719$ . Since the value of  $F_{\text{calculated}}$  is greater than  $F_{\text{critical}}$  ( $49.448 > 2.3719$ ), this indicates that the overall regression model was significant in predicting the impact of Quality Management Practices on service delivery at the Catholic University of Eastern Africa.

**Table 3: Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.436	.309		1.411	.160
	Customer focus	.877	.084	.649	10.465	.000
	Top management commitment	-.401	.079	-.334	-5.085	.000
	Employee involvement	-.130	.079	-.108	-1.661	.098
	Continuous improvement	.507	.080	.420	6.301	.000

a. Dependent Variable: service delivery

The established regression equation by the study was  $Y = 0.436 + 0.877X_1 - 0.401X_2 - 0.130X_3 + 0.507X_4 + \epsilon$

Where Y=Service Delivery

$X_1$ = Customer Focus

$X_2$ = Top management commitment

$X_3$ =employee involvement

$X_4$ = Continuous improvement

$\epsilon$ = Random error term

Findings of the study indicated that there was a statistically significant weak negative association between top management commitment and service delivery as shown by a *P-value* =-40; *Sig*=0.00.

For top management commitment, the *P-value* was 0.000 which is less than 0.05 and therefore top management was significant in affecting service delivery. According to (Oruma, Mirona & Muma, 2014), availability of resources enhances capacity of involved employees in adopting quality management programs Failure to allocate adequate resources is a failure in implementation and not a failure in the system itself (Rureri, Namusonge & Mugambi, 2017).

For customer focus, the *P-value* was 0.000 which is less than 0.05 and therefore customer focus was significant in influencing service delivery at the Catholic University of Eastern Africa. Awareness of customer needs at different stages of the business operation can lead to timely and flexible services and this leads to customer satisfaction. However, by focusing on the customer, extra operational costs are incurred. Thus, customer cooperation is paramount. (Yueng, Cheng & Chan, 2004).

With regard to employee involvement findings indicate that there was a statistically insignificant weak association between employee involvement and service delivery. The *P-value* was 0.098

which is greater than 0.05 and therefore employee involvement was insignificant in influencing service delivery.

On continuous improvement the *P-value* was 0.000 which is less than 0.05 and thus continuous improvement was significant in affecting service delivery. Continuous improvement is important to the overall quality attitude of any globally competitive organization. Organizations place an emphasis on the use of measurement systems including benchmarking and self-assessment (Chang, 2005) which is closely linked to the success of overall TQM process.

## 5.1 Conclusions

This study concluded that:

Customer focus has a positive and significant influence on service delivery at the Catholic University of Eastern Africa. The institution has a customer complaint handling mechanism in place and conducts regular reviews on customer needs and expectation.

Top management commitment has a negative and significant impact on service delivery at the Catholic University of Eastern Africa. Institutional leaders provided resources for the successful implementation of quality management. Similarly quality policies and procedures and well documented and communicated throughout the institution. However, based on the study, their efforts may be falling short.

Employee involvement has a weak a negative and insignificant influence on service delivery at the Catholic University of Eastern Africa. Employees at the institution feel that top management does not involve them in the decision-making process. The university ought to equip employees with the necessary training with regard to quality management practices allow them to execute their tasks diligently.

Process improvement has a positive and significant influence on service delivery at the Catholic University of Eastern Africa. The institution conducts regular quality audits in accordance with ISO certification. Quality performance has also been benchmarked against other quality management best practices.

## 6.1 Recommendations of the study

This study recommends that the University should pay particular attention to implementation of quality policies and plans. In as much as policies and practices are in place, the problem is in the effective implementation of these policies.

It is also recommended that top management focus on employee involvement in quality matters. The Study identified that Top management paid the least attention to participative decision making and employees felt that their views and opinions were not being considered by management. Bureaucratic processes in decision-making by top management affects employees in ensuring that policies are implemented. A hybrid management style is therefore recommended whereby top management consult staff on decision making.

The institution should conduct regular surveys regarding service delivery. It was found out that employees are dissatisfied with the level of service delivery to clients.



The study also recommends that regular training on Quality Management should be conducted to match the ever-changing needs of the clients. Proper training enables employees to perform their tasks more efficiently and without errors.

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