

## Quality Assurance Strategy on Organizational Performance: Case of Kenyatta University

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### ABSTRACT

This study seeks to establish the effectiveness of ISO 9001:2008 certification on customer satisfaction, employee productivity, inflow of revenue and internal procedures and processes at Kenyatta University. Chapter one covers general background literature reviews on ISO 9001 certification. The background literature reviewed is from developed economies, emerging economies and also from Kenya. Other sections covered under chapter one are; statement of the problem, purpose of the study, study objectives, research questions, scope of the study, justification, significance, limitations, delimitations, theoretical framework, conceptual framework and operationalization of variables. The external improvement theory has been reviewed under the theoretical framework. Chapter two has reviewed literature from recent studies relevant to the area of study while chapter three has described the various methodologies that were employed to assist in achieving the research objectives. In summary, the internal improvement theory suggests ISO 9001:2008 certification would improve internal business processes such that production becomes lean and reduce costs.

The research findings indicate that the level of appreciation and participation in ISO certification as a means to quality assurance strategy has improved customer satisfaction, improved organizational outcomes and increased the revenue inflows for development. The internal processes have also been greatly enhanced by university management.

**Key Words:** Quality, Strategy, Performance

### 1.1 Background

Schwarz and Westerheijden (2004) stated that quality assurance as a separate instrument in university management and in government policy started in the 1970s (in the USA) and 1980s (in Europe), when it was discovered as a new management tool in industry that mimicked the success of the Japanese economy. Papadimitriou & Westerheijden (2010) study findings revealed that ISO standards were applied in six Greek universities out of a total of 21, in the absence of any national quality assurance system. They found that, if institutions engage in quality assurance voluntarily, the effectiveness tended to be much more noticeable than when complying with government-initiated policies.

Quality of higher education and the need for effective quality assurance mechanisms beyond those of institutions themselves are becoming priority themes in national strategies for higher education. This is driven by the importance attached to higher education as a driver of growth and in achieving the Millennium Development Goals (MDGs), on one hand, and the emergence of new types of higher education providers (beyond public institutions), on the other. Quality Management has become a universal strategy for the survival and growth of many organizations in today's fiercely global competitive environment. Given its strategic importance, quality management has gained increasing attention from many academic scholars (Ehigie & McAndrew, 2005); manufacturing industry (Arawati, 2005; Sohal & Terziovski, 2000).

Magutu, Mbeche, Nyaoga, Nyamwange, Onger and Ombati (2010) studied quality management practices and academic services at the University of Nairobi and concluded that the University of Nairobi has applied quality management and to a very great extent has ensured that the Quality Management Policy is appropriate to its purpose. They recommended that public universities should remove the status quo to be supportive to any formulation of new ideas in order to respond to an ever-changing environment in higher education. Their study proposes further research areas to be done to determine how Quality management can contribute to organizational financial performance and customer satisfaction.

### **1.1.1 Kenyatta University**

Kenyatta University (KU) is situated about 23 kilometers from the city of Nairobi on the Nairobi-Thika Superhighway on 1,100 acres of land. The long journey to University status started in 1965 when the British Government handed over the Templer Barracks to the Kenya Government.

Kenyatta University is ISO 9001:2008 certified. Since being awarded ISO 9001 certification, surveillance audits have been conducted after every six months by SGS Kenya Ltd in order to monitor compliance with the standard. In addition, the University has been conducting internal audits as part of the quality management system maintenance programme.

### **1.2 Statement of Problem**

According to Pradhan (2010) educational institutions are undergoing great pressure due to the changing global environment and trade liberalization as they have to meet the needs of industry and other stakeholders with a better skilled and quality workforce. The educational institutions would like to get certified by ISO 9001-2008 certification or/and quality assurance and accreditation because of reasons like; facing competition, acquiring public acceptability, receiving a stamp of quality and improved organizational performance. The study has found that ISO implementation is capable of promoting a dynamic continual improvement with clear responsibilities, standardization of work procedures and renewal of the documentation process, management, production and development of human capital on quality apart from providing goods and services that meet customer requirements. While these initiatives are encouraging, most institutions of higher learning in Kenya have not fully embraced the concept of ISO standardization on organization performance, hence need for this research at Kenyatta University.

### **2.0 Literature Review**

Elmuti and Kathawala's (1997) study of two manufacturing plants in a large U.S. organization showed that the plant with ISO 9000 certification had better and improved quality of work life compared to the non-certified plant. They also found that ISO 9000 certification increased employee productivity, morale, and goal congruence while it decreased absenteeism, rework, and defects. Export sales of the plant were also enhanced.

Kadir (2009) argued that ISO QMS assists an organization in the planning, management, production and development of human capital on quality as well as in the production of goods and services that meet customer requirements. The author conducted a comparative study between the Far East and ASEAN countries on ISO 9001 implementation in public and private sectors, and reaffirmed that implementation cost is still an issue and that ISO 9001 adversely affects other core activities such as increasing staffs' workload.

Haversjo (2000) argued that quality systems such as ISO 9000 certification would improve internal and external quality and consequently improve profitability. He investigated differences in the rate of return of ISO 9000 certified and non-ISO certified Danish companies. His results based on 664 companies showed significantly higher rate of return for ISO 9000 certified companies than their size-matched counterparts. The difference in performance between ISO companies and non-ISO companies was 20% in the year prior to certification and approximately 35% 2 years after certification.

Rajaram (2008) maintained that ISO 9001 certification had lost advantages like market competitiveness, consistency in quality, improved productivity, employee involvement, staff morale and job satisfaction, just similar to Zairi and Yasar Jarrar (2005) remarked. The practical benefits of working towards and achieving the standard are many. They include improved earning, productivity and profitability. On the contrary, Zairi and Yasar Jarrar (2005) reveals a practical situation when the ISO system does not add value to manage the business processes, by mentioning that ISO 9000 Quality standard is not regarded as a major driver of process performance as the company has a policy on achieving these standards based on commercial needs criteria.

### **2.1 Summary of Research Gap**

It is still debatable if quality standards improve business performance and profitability. As seen in literature review, many studies have been done but the most striking thing is the mixed results which indicate that ISO 9001 may or may not lead to improved organizational performance. It is therefore imperative to study how ISO 9001 has impacted on performance at Kenyatta University

## **RESEARCH METHODOLOGY**

### **3.1 Research Design**

This study used a descriptive case study design., especially when the boundaries between phenomenon and context are not clearly evident.

### 3.2 Population

The population for this study was the students, management and other employees of Kenyatta University located within Nairobi city and Kiambu County. The target population was students, lecturers and support staff in Kenyatta University totaling to approximately 23,583, 747, and 1550 respectively (Kenyatta University, 2012).

### 3.3 Sampling Design

This study used stratified and purposive sampling. Within each stratum, simple random sampling was used to identify the individual respondents. With the use of simple random sampling, it means that each individual in the population had an equal chance of being selected (Creswell, 2003). Purposive sampling was used to get information from management. This is because the management team is specific to the offices held within the institution.

The population of this study was large and was estimated to be more than ten thousand. This study aimed to reach out to a sample of 400 respondents. When the population is more than 10,000 individuals, a minimum sample of 384 is recommended (Mugenda & Mugenda, 2003). The sample of respondents was determined using the Fischer's formula adopted from Mugenda and Mugenda (2003) and Njoroge, (2002).

### 3.4 Data Collection

The instruments used in this research were Interviews, observation and semi-structured questionnaires. There was a questionnaire for employees, management and one for students. Interviews were used to compliment the questionnaire in case some respondents expressed unwillingness to fill the questionnaire. In such instances, the questionnaire was used as the interview guide. Observation was used to note issues in the research environment.

### 3.5 Reliability

Cronbach's alpha was used to measure how well a set of items (or variables) measures a single uni-dimensional latent construct. As the average inter-item correlation increases, in correspondence Cronbach's alpha will increase as well. This makes sense intuitively - if the inter-item correlations are high, then there is evidence that the items will be measuring the same underlying construct. This is what constitutes having a "high" or "good" reliability.

### 3.6 Data Analysis

A likert scale questionnaire was used to gather customer responses where the respondent chose on a scale between strongly disagree and strongly agree. The collected data is ordinal and it has an inherent sequence, this means that the difference between strongly agree and agree is not the same as the difference between agree and neither agree nor disagree. The descriptive statistical methods were employed to analyze the data, particularly by deriving the mean and the standard deviation of the study.

An additional statistical analysis was performed and a reliability analysis as significance test on the independent variables to explain the variables. All these tests were done using SPSS (statistical package for social science) version 17 of 2009 supported by Ms. Excel 2007.

## RESEARCH PRESENTATION AND INTERPRETATION

### 4.1 Introduction

This chapter presents the findings of the study, data analysis and interpretation of the results. The findings presented are based on the implementing ISO 9001:2008 in Kenyatta University a case example that is aimed at enabling continuous improvement of the institution's quality management systems (QMS) and processes.

**Table 4.1 Response Rate**

Respondent Category	Targeted Response	Actual Response	Response Rate
Students	349	321	92.2%
Staff	35	27	78%
Management	15	11	73.3%
Total	400	348	87%

The overall response from the three categories of respondents was 87 percent. The response was within the recommended threshold of 70 percent. According to Mugenda and Mugenda (2008), a response rate of 70 percent is acceptable as representative of the sampled population. The overwhelming response to the study clearly indicates the receptiveness of the respondents to ISO compliance at the university. The management, staff and the students feel a sense of identity to ISO 9001:2008 activities at the university.

24 percent of the respondents strongly agreed that ISO certification has increased the level of market demand of the product (student) where as 34 percent agreed upon it. A greater proportion of respondent believe that ISO Certification

has strengthened quality management system at Kenyatta University. 29 percent of the respondents do not agree nor disagree about the integration of ISO 9001:2008 with total quality management in result based learning approach. The university has actually improved its standing from the perspective of the respondents.

Findings show that out of 384 respondents, only 8.5 percent had given their views as there is no difference in quality awareness and Increased confidence in organizations' QMS. This implies that 91.5 percent are positive in these aspects. Although there is indicated improvement as shown in employee morale, reduction in errors and omissions at the accounting level has not sufficiently improved. These comprise approval ratings of improvement of 67.1 percent for employee morale, and 62.8 percent for errors reduction.

The areas of great improvement are team work lauded by 82.9 percent of responses, customer satisfaction supported by 80 percent of respondents, and presence of clearly defined responsibility and obligation codes is overwhelming supported by 88 percent. Other key parameters that were relatively highly ranked included training and motivation of staff at 78.6 percent and student relationship at 79.1 percent. The findings are indicative of an improved university in terms of quality systems enshrined and implemented. The employees also look vibrant from the acknowledged boost of the employee morale. With fostered team work at the university, financial reporting and computations are efficient and effective for there is clearly defined responsibility and obligation of the staff. The student's relationship within themselves and with the administration is highly enhanced. There is every indication that continuous training and motivation of staff has improved service delivery in the university.

#### 4.2 The Current Practices of ISO 9001:2008 at Kenyatta University

The mean scores on extent of current practices of ISO 9001:2008 clauses are illustrated in tables shown below and ranges from 3.2 to 3.94.

K.U has actualized the spirit of ISO Certification. It has a defined, documented and disseminated student oriented quality policy and this also has integrated effective ways of implementing the appointments of the senior executives.

#### 4.3 Documents and Data Control Ratings

Table below shows approval ratings of Document and Data control data

**Table 4.2 Document and Data Control Ratings**

ISO 9001: 2008 Component	Mean	S.D
5. Document and Data Control	3.94	0.70
5.1 Establishes and documents procedures to control all documents and data relating to ISO requirements	3.94	0.63
5.2 Ensures the appropriate documents are available through the control system and provides a tracking procedure for revision	3.93	0.77

Findings indicate that the university is engrossed in massive updating of its documents and materials and this is rated at 3.94 out of 5. This constitutes 78.8 percent of the overall ratings. Through research and extensions the documents and data relating to ISO requirements have been added and revised. The university has a clear control of documents pertaining ISO requisites.

#### 4.4 Procurement

Table below presents the procurement ratings.

**Table 4.3 Procurement Ratings**

ISO 9001: 2008 Component	Mean	S.D
6.Procurement	3.61	1.06
6.1 The system ensures a well defined documented procedure to select and control suppliers.	3.74	1.07
6.2 A clear procedure is documented to verify products on the supplier's premise	3.49	1.05

The ratings of procurement procedures are 3.61 out of 5 representing 72.2 percent approvals. The system of procurement ensures a well defined documented procedure to select and control suppliers was rated at 3.74 out of 5. Findings show that the respondents can identify a clear procedure which is documented to verify products on the supplier's premise is rated at 3.49 out of 5. Procurement procedures have eased and tenders are won competitively. By observation, the quality of work in terms of building and construction at Kenyatta University is just a testimony of improvement in procurement.

#### 4.5 Process Controls

The table below is shows the ratings of process control.

**Table 4.4 Process Controls Ratings**

ISO 9001: 2008 Component	Mean	S.D
7. Process Control	3.39	0.91
7.1 Identifies the different processes to ensure documentation of all procedures, compliance with quality standard, monitoring of process parameters.	3.44	0.93
7.2 Plan the different processes to ensure documentation of all procedures, compliance with quality standard, monitoring of process parameters.	3.34	0.90

Findings show that mean response for process controls such as documentation of procedures, compliance with quality standard, monitoring of process parameters is 3.39. The standard deviation is 0.91. Planning the different process to ensure documentation of all procedures, compliance with quality standard, monitoring of process parameters is supported by 66.8 percent which implies 3.34 out of 5 rating. The improvement in compliance to ISO at the university is therefore sustainable because findings indicate that the institution supports identification of different processes to ensure documentation of all procedures, compliance to set quality standards and eventual monitoring of process parameter. A robust plan on the processes also exists.

#### 4.6: Internal Quality Audit

**Table 4.5 Internal Quality Audit Ratings**

ISO 9001: 2008 Component	Mean	S.D
12. Internal quality audits	3.49	1.20
12.1 Establish and maintain documented procedures for planning and implementation of internal quality audits.	3.49	1.25
12.2 Internal quality audits are scheduled on the basis of status and importance of the activity.	3.50	1.11
12.3 Results of the audits are recorded, reviewed by the management and corrective actions are taken.	3.47	1.24

Findings show that the university is very keen on internal quality audits which are rated 3.5 out of 5. Establishing and maintaining documented procedures for planning and implementation of internal quality audits are similarly rated 3.5 out of 5. The university has appointed a management representative for all the departments to conduct internal audits and monitor processes.

### CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter summarizes the whole research study. It first provides a brief summary of the main findings of the study, conclusions and recommendations.

#### 5.2 Conclusions of the Study

The findings of the study indicate that in Kenyatta University, the customer is their primary focus of the business. By understanding and responding to the needs of customers, the university has correctly targeted key demographics and therefore has increased revenue by delivering the products and services that the students who undoubtedly are the main customers are looking for.

The findings of the study have also shown that Kenyatta University management has assembled a team of good leaders to establish unity and direction quickly in a business environment. Their goal has motivated everyone working on the project, and successful leadership after compliance with ISO 9001:2008 has minimized miscommunication within and between departments in the institution. At Kenyatta University, it was noted that combining management groups may seem a tall order, but if done correctly, it can result in an efficient and effective management system. Findings of the study indicate that leaders are dedicated to the goals of the institution. They aid each other to achieve improved productivity.

Following the ISO 9001: 2008 compliance, Kenyatta University has embraced the continual improvement. The importance underlying the principle is paramount, and is now a permanent objective of the academic institution propelling it to greater heights. Through increased performance, Kenyatta University has increased revenue, funding on projects and gain an advantage over competitors.

It can be concluded that findings indicate that the clauses stated by ISO 9001:2008 are not understood by the human resources within the organization. The problem arises presumably due to part time teachers who come to take classes on period basis and lack of training provided by the institutions.

### 5.3 Recommendations

The first recommendation for action in this study is that the clauses of ISO 9001:2008 certification should clearly be explained timely to the human resources of the Institutions. The second recommendation is that, the ISO 9001:2008 certification should be considered as the beginning of a continuous process rather than a goal to achieve.

The third and urgent recommendation is that the awareness of ISO 9001:2008 certification must not be limited to personalities within the organization management. This is because full appreciation of the programme is hampered by those individuals who feel that ISO compliance is a management activity thus they don't identify with it. It should just be a life time skill.

Lastly, future studies should consider a cross-sectional study design of many other public universities that have implemented ISO. They should also consider non-compliant universities and conduct a comparative study of both private and public universities to find out which side ISO certification has greater impact.

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