Effectiveness of ISO 9001:2008 Certification On Service Delivery Of Public Universities In Kenya

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Abstract
ISO develops voluntary technical standards, which add value to all types of business operations. They contribute to making the development, manufacturing and supply of products and services more efficiently, safer and cleaner. To remain competitive, many Public Universities in Kenya have started the ISO 9001 certification process. ISO 9001 is part of a series generally referred to as ISO 9000. An ISO 9000 registration means that an organization’s quality management system meets the requirements of the standard as issued by the International Organization for Standardization (ISO). This study sought to identify the effectiveness of ISO 9001:2008 on service delivery in ISO certified public universities in Kenya and establish the effects of adaptability to changing market need, teaching facilities improvement, curricular development and streamlining of processes as a result of ISO certification. This study adopted a descriptive research design to establish the effectiveness of ISO certification on service delivery in public universities in Kenya. The study used stratified sampling technique in coming up with a sample of 200 students and descriptive analysis was used to analyze the primary data of quantitative nature (structured questions). Multiple linear regression analysis will be conducted to determine the relationship between dependent (service delivery) and independent variables (adaptability to changing market need, teaching facilities improvement, curricular development and streamlining of processes). The study established that streamlining of processes as a result of ISO certification influences the public universities’ service delivery most, followed by curricular development, teaching facilities improvement and adaptability to changing market needs. The study therefore recommends that all universities should seek for ISO certification and streamline their processes which include enrollment processes, payment services, registration, hostels allocation, medical services, timetable and examination results.

Keywords: ISO Certification, Standards, Development and Registration


Background
The objectives of universities are to provide in-depth knowledge, seek academic development, educate students, and coordinate national development demands (Johnes and Taylor, 1990).Kenyan university education has come a long way, from one university level institution (Nairobi University College) between 1963 and 1970 when it became a fully fledged university and changed to University of Nairobi. There was an increase of students enrollment and following the recommendations of a Presidential Working Party, Moi University was established in 1984, soon after Kenyatta University College and Egerton University College, which were constituent colleges of UoN, were elevated to full University status in 1985 and 1987 respectively. By the end of 2009 there were 29 universities in Kenya; 7 public universities, 22 private universities of which 11 have either received university charter or are on letters of interim authority (Commission of Higher Education, 2009).Public universities in Kenya refer to the universities that are funded or subsidized by the government and established through institutional Acts of Parliament.

Corresponding to this movement, research on various themes related to ISO 9000 has proliferated. Most of the earlier studies on ISO 9000 are descriptive where the researchers sought to investigate the main reasons and benefits of being certified to the standards, another group of studies have attempted to link the reasons for certification and the benefits accrued with some recent studies have investigating the relationship between the internalization process and the benefits realized from ISO 9000. However, none of the studies consider a holistic...
framework that links the motivation for implementing ISO 9000 standards, the internalization of practices underlying ISO 9000 standards, and operational and business level performance. Firms adopt ISO 9000 standards for two distinct reasons; provide a set of generic guidelines that potentially result in improved processes and for enhancing corporate brand equity. This study seeks to present an investigation of the relationship between motivation for ISO 9001 certification and effectiveness of service delivery in ISO certified public universities in Kenya.

Statement of the Problem
Kenya has over 130,000 students enrolled in local universities. This translates into a Gross Enrolment Ratio (GER) of 3%, which is lower than the 5% GER for sub-Saharan Africa (Otunga 2010). Despite the fact that public universities understand the significance of providing quality services, it has been observed that in most of cases, efficiency of service delivery often falls far short of the goals that have been set. This is because the administrators forget to tie service delivery with predetermined performance standards. They are not paying as much attention to planning the implementation of their quality standards as they give to formulating these standards (Kibet 2004). Despite the growing popularity and increasing numbers of ISO 9001 certified organizations across many public and private sectors in the global economy, whether this brings about better performance is still an open question.

Objectives of the Study
i. To find out the effectiveness of ISO 9000:2008 certification on service delivery in Public Universities in Kenya
ii. To assess how adaptability to changing market needs, as a result of ISO 9001:2008 certification, affects public universities’ service delivery
iii. To evaluate how teaching facilities improvement, as a result of ISO 9001:2008 certification, affects public universities’ service delivery;
iv. To establish how curricular development, as a result of ISO 9001:2008 certification, influences the service delivery of public universities; and,
v. To investigate how streamlining of processes, as a result of ISO 9001:2008 certification, influences the service delivery of public universities.

Justification of the Study
Public universities in Kenya have experienced a lot of challenges to the quality of their services, therefore have been encouraged to adopt private sector practices for organizational survival. Different approaches to their management that are concerned with productivity, quality, performance review, and measurement have been taken eg TQM, BPR and ISO. Therefore, a study identifying strategic ISO factors and assessing their importance to the effective delivery of services in Kenyan Public universities assumes great significance.

Scope of the Study
The study was carried out on the seven public universities in Kenya. These are; University of Nairobi; Moi University; Kenyatta University; Egerton University; Jomo Kenyatta University of Agriculture and Technology; Maseno University; and, Masinde Muliro University of Science and Technology.

Literature Review
This study identified four theories and concepts that are relevant to the topic of the research paper. Curriculum theory of Curricula Development- Curriculum theory (CT) is an academic discipline devoted to examining and shaping educational curricula. Within the broad field of curriculum studies, CT includes both the historical analysis of curriculum and ways of viewing current educational curriculum and policy decisions. Social development theory of teaching facilities improvement - Social development theory attempts to explain qualitative changes in the structure and framework of organisations that help the society to better realize its aims and objectives (Kolchin and Giunipero, 2005). Structural contingency theory and changing Market - Structural contingency theory argues that individual organizations adapt to their environment. The environment is seen as posing requirements for efficiency, innovation or whatever, which the organization must meet to survive and prosper. This in turn leads the organization's management to adopt a strategy for the organization which in part reflects the environment but is in part also a managerial statement of organizational objectives given the comparative advantage of the organization (Ajayi, 2001). Equity Theory of Streamlining processes- Equity theory is concerned with the perceptions people have about how they are treated as compared with others. The theory posit that employees seek to maintain equity between the input they bring into a job and the outcome they receive from it against the perceived inputs and outcomes of other employees (Uzumeri, 1997).
Conceptual Framework

Figure 1 Conceptual Framework

Independent Variables | Dependent Variables
--- | ---
Adaptability to Changing Market | Service Delivery of Public Universities
Teaching Facilities Improvement |  
Curricular Development |  
Streamlining Processes |  
ISO 9001:2008 Certification

Research Gap
Numerous research studies have been conducted on ISO certification, service delivery and in public universities but none has focused on the effectiveness of ISO 9000:2008 certifications on service delivery in Public Universities in Kenya. This study will therefore seek to fill the gap by focusing on four variables which include: adaptability to changing market needs, teaching facilities improvement, curricular development and streamlining of processes.

Research Methodology
This study adopted descriptive research design to establish the effectiveness of ISO certification on service delivery in public universities in Kenya. Descriptive research design approach was advantageous to the study as it utilizes elements of both quantitative and qualitative research methodologies to offer description of the state of affairs as it exists at present.

The study population involved regular students in all the seven public universities. This is represented in the table below.

Table 1 Target Population

<table>
<thead>
<tr>
<th>University</th>
<th>Target Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nairobi</td>
<td>4,500</td>
</tr>
<tr>
<td>Kenyatta</td>
<td>2,400</td>
</tr>
<tr>
<td>Jomo-Kenyatta</td>
<td>2,150</td>
</tr>
<tr>
<td>Egerton</td>
<td>3,500</td>
</tr>
<tr>
<td>Moi</td>
<td>2,100</td>
</tr>
<tr>
<td>Maseno</td>
<td>2,300</td>
</tr>
<tr>
<td>Masinde Muliro</td>
<td>3,400</td>
</tr>
<tr>
<td>Total</td>
<td>20,350</td>
</tr>
</tbody>
</table>

Sampling Technique and Sample Size
The study used stratified sampling technique in coming up with a sample of 200 students. Random sampling was used in choosing the sample within the stratum. Table 2 below is a representation of the sample size used.
Table 2 Sample Size

<table>
<thead>
<tr>
<th>university</th>
<th>Target population</th>
<th>Sample</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nairobi</td>
<td>4,500</td>
<td>45</td>
<td>1.0</td>
</tr>
<tr>
<td>Kenyatta</td>
<td>2,400</td>
<td>24</td>
<td>1.0</td>
</tr>
<tr>
<td>Jomo-Kenyatta</td>
<td>2,150</td>
<td>22</td>
<td>1.0</td>
</tr>
<tr>
<td>Egerton</td>
<td>3,500</td>
<td>35</td>
<td>1.0</td>
</tr>
<tr>
<td>Moi</td>
<td>2,100</td>
<td>21</td>
<td>1.0</td>
</tr>
<tr>
<td>Maseno</td>
<td>2,300</td>
<td>23</td>
<td>1.0</td>
</tr>
<tr>
<td>Masinde Muliro</td>
<td>3,400</td>
<td>34</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20,350</strong></td>
<td><strong>204</strong></td>
<td><strong>1.0</strong></td>
</tr>
</tbody>
</table>

Data Analysis
The collected data was analyzed and interpreted as follows;

Gender of Respondents
In the questionnaire used, the respondents were requested to indicate their gender. According to the findings 52.08% of the respondents indicated that they were female while 47.20% indicated that they were male. This clearly shows that most of the respondents in this study were female.

Respondent’s Year of Study
According to the findings, 27.08% of the respondents indicated that they were in first year, 23.96% indicated that they were in second year, 25.52% of the respondents indicated that they were in third year and 23.44% indicated that they were in fourth year. This shows that most of the respondents were in their first year. Below is a graphical representation of the same.

![Graphical representation of respondents' year of study](image)

University’s Service Delivery Rating
The respondents were requested to rate their universities’ service delivery. Table 3 below shows the response.

Table 3 University’s service delivery rating

<table>
<thead>
<tr>
<th>Service Delivery</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>32</td>
</tr>
<tr>
<td>Good</td>
<td>38</td>
</tr>
<tr>
<td>Average</td>
<td>69</td>
</tr>
<tr>
<td>Poor</td>
<td>37</td>
</tr>
<tr>
<td>Very Poor</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>204</strong></td>
</tr>
</tbody>
</table>

From the findings, 69 respondents rated their universities’ service delivery as average which is represented by 33.82%, 38 respondents (18.63%) rated it as good, 37 respondents (18.14%) rated it as poor, 32 respondents (15.69%) rated it as excellent and 28 respondents (13.72%) rated it as very poor. This is an indication that service delivery in most universities was average.

Service Delivery
The respondents were requested to indicate the extent to which ISO certification affected service delivery in their institution. According to the findings, 31.77% of the respondents indicated that ISO certification affected service delivery in their institution to a great extent, 23.44% indicated to a moderate extent, 17.19% indicated to a little
extent, 14.06% indicated to no extent at all and 3.64% indicated to a very great extent. This shows that ISO certification affected service delivery in their institution to a great extent. This is highlighted in figure below Figure 3 ISO certification and service delivery

![ISO certification and service delivery](image)

**Adaptability to the changing market and service delivery**

The respondents were requested to indicate the extent to which adaptability to the changing market, as a result of ISO certification affect service delivery in public universities in Kenya. This is shown in figure 4 below. Figure 4 Adaptability to the changing market and service delivery

![Adaptability to the changing market and service delivery](image)

From the findings, 31.77% of the respondent indicated that adaptability to the changing market, as a result of ISO certification affect service delivery in public universities in Kenya to a great extent, 18.75% indicated to a very great extent, 18.23% indicated to a moderate extent, 17.19% indicated to a little extent and 14.06% indicated to no extent at all. From these findings we can deduce that adaptability to the changing market, as a result of ISO certification affect service delivery in public universities in Kenya to a great extent. Papps (1995) had earlier indicated that transformation of traditional methods of public service delivery was started by the changes in the market environment.

**Impacts of ISO certification on market responsiveness**

The respondents were also asked to indicate the extent to which they agreed with the stated impacts of ISO certification on market responsiveness in public universities in Kenya. Table 4 below shows the response.
Table 4 Impact of ISO certification on market responsiveness

<table>
<thead>
<tr>
<th>Market Responsiveness</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved general institutional publicity (public Awareness)</td>
<td>3.98</td>
<td>0.982</td>
</tr>
<tr>
<td>Student placement after a Course (post training)</td>
<td>3.89</td>
<td>0.876</td>
</tr>
<tr>
<td>Improved industrial based learning</td>
<td>4.02</td>
<td>0.876</td>
</tr>
<tr>
<td>Award of excellence</td>
<td>4.08</td>
<td>0.782</td>
</tr>
<tr>
<td>Constantly reviewing organizational structure</td>
<td>4.03</td>
<td>0.728</td>
</tr>
</tbody>
</table>

According to the findings, the respondents agreed with a mean of 4.08 and a standard deviation of 0.782 that ISO certification was acting as an award of excellence. The respondents also agreed with a mean of 4.03 and a standard deviation of 0.728 that ISO certification helped in constantly reviewing organizational structure. The respondents further indicated with a mean of 4.02 and a standard deviation of 0.876 that ISO certification improved industrial based learning. The respondents also agreed with a mean of 3.98 and a standard deviation of 0.982 that ISO certification improved general institutional publicity (public Awareness). Lastly, the respondents indicated with a mean of 3.89 and a standard deviation of 0.876 that ISO certification helps student placement after a course (post training).

Teaching Facilities Improvement and Service Delivery

The study sought to establish the extent to which teaching facilities improvement influence service delivery in public universities.

Curricular Development

The study also sought to establish how curricular development, as a result of ISO 9001:2008 certification, influences the service delivery of public universities therefore respondents were asked to indicate the extent to which ISO certification influenced aspects of curriculum development.
Table 5  ISO certification and aspects of curriculum development

<table>
<thead>
<tr>
<th>Curricular Development</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate curriculum delivery time</td>
<td>3.98</td>
<td>0.972</td>
</tr>
<tr>
<td>Curriculum is reviewed constantly/periodically</td>
<td>4.02</td>
<td>0.872</td>
</tr>
<tr>
<td>A market driven curriculum in place</td>
<td>4.06</td>
<td>1.023</td>
</tr>
<tr>
<td>Partnerships/linkages both locally and internationally</td>
<td>3.87</td>
<td>1.001</td>
</tr>
<tr>
<td>Installation of media based teaching i.e. multi-media</td>
<td>3.78</td>
<td>0.892</td>
</tr>
</tbody>
</table>

According to the findings, the respondents indicated with a mean of 4.06 and a standard deviation 1.023 that ISO certification influences a market driven curriculum in place to a great extent. The respondents further indicated with a mean of 4.02 and a standard deviation of 0.872 that ISO certification influences curriculum is reviewed constantly/periodically to a great extent. In addition, the respondents indicated with a mean of 3.98 and a standard deviation of 0.972 that ISO certification influences adequate curriculum delivery time to a moderate extent. Further, the respondents indicated with a mean of 3.87 and a standard deviation of 1.001 that ISO certification influences partnerships/linkages both locally and internationally to a moderate extent. Lastly, the respondents indicated with a mean of 3.78 and a standard deviation of 0.892 that ISO certification influences installation of media based teaching i.e multi-media to a moderate extent.

Streamlining Processes

The study also sought to investigate how streamlining of processes, as a result of ISO 9001:2008 certification, influences the service delivery of public universities.62.5% of the respondents indicated that ISO 9000 certification enhanced streamlined service delivery processes in public universities while 37.5% disagreed. The respondents were requested to indicate the extent to which they agreed with some stated impacts of ISO certification on processes in public universities in Kenya and below is the response.

Table 6 Impacts of ISO certification on processes in public universities

<table>
<thead>
<tr>
<th>Processes</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility of timetable online and on time</td>
<td>4.03</td>
<td>0.982</td>
</tr>
<tr>
<td>Complaints once raised are addressed on time</td>
<td>4.11</td>
<td>0.871</td>
</tr>
<tr>
<td>Prompt and easy accessibility of examination results</td>
<td>3.97</td>
<td>0.827</td>
</tr>
<tr>
<td>Prompt availability of accommodation after application</td>
<td>3.78</td>
<td>1.101</td>
</tr>
<tr>
<td>Hastened admission process</td>
<td>3.67</td>
<td>1.092</td>
</tr>
</tbody>
</table>

From the findings, the respondents indicated with a mean of 4.11 and a standard deviation of 0.871 that as a result of ISO certification complaints once raised are addressed on time. The respondents also indicated with a mean of 4.03 and a standard deviation of 0.982 that ISO certification has led to accessibility of timetable online and on time. In addition, the respondents indicated with a mean of 3.97 and a standard deviation of 0.827 ISO certification had led to prompt and easy accessibility of examination results. Further, the respondents indicated with a mean of 3.78 and a standard deviation of 1.101 that ISO certification prompt availability of accommodation after application. Lastly, the respondents indicated with a mean of 3.67 and a standard deviation of 1.092 that ISO certification had hastened admission process.

Summary of the Findings

Service Delivery and ISO Certification - The study established that service delivery in most of the Kenyan universities was average and that ISO certification affected service delivery to a great extent. The study also revealed that ISO 9001:2008 certification defines responsibilities clearly, improves communication within the universities, facilitates data gathering for management, improves the attitude of the staff, improves staff management, improves integration within the university and reduces improvisation.

Adaptability to the changing market - The study established that ISO 9001 certification put in place help to afford the university flexibility and adaptiveness in response to the market. In addition, the study found that adaptability to the changing market, as a result of ISO certification affect service delivery in public universities in Kenya to a great extent. The study also revealed that ISO certification was acting as an award of excellence, helped in constantly reviewing organizational structure, improved industrial based learning, improved general institutional publicity (public Awareness) and helps student placement after a course (post training).

Teaching facilities improvement - The study established that facilities improvement is a good mechanism which ensures quality in teaching and also helps in cost cutting measures. In addition, university’s physical facilities, including teaching and recreational facilities, determine student enrolment and the number of academic programmes it can offer. They also ultimately affect the quality of an individual student’s experience.
Curricular Development – The study revealed that rapidly changing conditions and needs of society can pose serious challenges to university education with regard to effective and efficient management of resources capable of producing graduates who are problem-solvers and who can wrestle with the daily demands of public and private enterprises and hence curricular development was of paramount importance.

Streamlining Processes - This study found that ISO 9000 certification enhanced streamlining of service delivery processes in public universities. The study also found that as a result of ISO certification complaints once raised are addressed on time.

Conclusion
The study concludes that there is a positive relationship between adaptability to the changing market as a result of ISO certification and public universities’ service delivery. ISO certification was acting as an award of excellence has helped in constantly reviewing organizational structure, improved industrial based learning, improved general institutional publicity (public Awareness) and helps student placement after a course (post training). The study also concludes that a positive relationship exists between teaching facilities improvement as a result of ISO certification and public universities’ service delivery.

Recommendations
This study found that adaptability to the changing market, as a result of ISO certification affect service delivery in public universities in Kenya to a great extent. This study therefore recommends that other universities (private universities) should seek for ISO certification so as to adapt well to the changing market.

Bibliography


Report: Tempe, Arizona.


