# WORLD CLASS STRATEGIES AND COMPETITIVENESS IN KENYAN UNIVERSITIES

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A Research Project Submitted in Partial Fulfillment of The Requirement For The Award of The Degree of Master of Business Administration, School of Business, University of Nairobi

# **DECLARATION**

This Management Research Project was my original work, and had not been presented

| for any academic credit in any other academic institution. |                                      |  |
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# **DEDICATION**

I dedicate this project to my late dad whom I had promised to come back to the great University of Nairobi for higher degree(s). Rest in peace you Arsenal and Leopards fan. I finally came for a higher degree at this great university again. To my boys who started and completed their primary school studies while keenly observing me clear this Masters degree, I say to you, "njooni pia nyinyi" (follow my path). My siblings and dear mother who had always wished to attend a graduation ceremony for a higher degree at the University of Nairobi finally got their wish fulfilled.

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#### **ABSTRACT**

This study sought to establish world class strategies and competitiveness at Kenyan universities. The specific objectives were to explore the core competencies, determine competitive priorities and find out the operational strategies at the Kenyan universities. It was guided by theories on RBV approach and Trade-offs in operational competitiveness. To achieve the main objective, a research was carried out using descriptive study design to sample two public and two private universities in Kenya. The tool for data collection was a structured questionnaire whose validity and reliability was tested using face validity as well pilot testing using data from two sample universities. The study found that various Kenyan universities were having different core competencies but mainly 'pooled knowledge' for public universities and 'technical capabilities' for private universities. For competitive priorities, public universities applied cost while private universities had flexibility of programs as key to their competitiveness respectively. Operational strategies used at public universities focused on exhibitions and fund raising while private universities concentrated on usability and ease of online functionability to increase their numbers. It was also found that Kenyan universities have got very few or low shared technologies as well as innovations implying that they operate mostly as single independent units in research and innovations. Regression analysis indicated that the highest beta coefficient was 3.126 for competitive priorities while the lowest beta coefficient was 1.273. Even though the regression intercept of 1.6 was a high figure, it could not be of any use since it was meaningless since no university existed without a form of strategy in place and hence it only acted as an anchor to the regression model. From the findings, it was recommended that Kenyan universities should take measures that enhance their global competitiveness. Similarly, universities should intensify their search for strong partners and linkages with giant technological firms in order to enhance their research/innovation mission accomplishments. Finally, it was recommended that clear and open communication from university leaders was key to achieving operational strategies that would improve their global competitiveness. Since the highest beta coefficient was produced by the competitive priorities, it would be advisable for Kenyan universities to pursue that strategy for achieving world class competitiveness.

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#### **CHAPTER ONE: INTRODUCTION**

# 1.1 Background of the Study

The quest for World Class Operations has been a key driver of internationalization in business both at private and public levels (Schonberger, 2010). This indicates that the business industry can only survive world competition in they are tuned to the international standards that turn their products and services into world class levels. The involvement of various quality standards in the demand and supply chain means that customers are forever going to demand the very best from their providers. This is also true for service providers in which professionals with very high standards are hired to maintain the organization high status (Zawada & Marn, 2012). The system of ranking market players in many fields means that producers are under the spotlight of the global village thus giving no chance for any underperformance. Ranking has taken place in learning institutions specifically universities across the world who have a league table reminiscent of the sports world where various institutions of higher learning highly regard the annual regional and global merit list.

Blanco-Ramírez and Berger (2014) conclude that the business world in its efforts to transform the image of its previous operations from traditional to modern standards has embarked on broad reforms since the beginning of the millennium and this has involved both human resources and technology. Operations are therefore geared towards more customer value that ensures a fair price for superior products while staying very agile in that pricing strategy. It is thus notable to highlight the linkage between competitive

strategies and the need for quality in terms of access, relevance and in particular the investment for an organization. Every organization has therefore tried to establish the best strategy for staying competitive on the hostile market leading to heavy investments by many leading organization into the field of competitive strategies for every business portfolio. It is only through accurate forecast and effective implementation of the chosen strategies that an organization can stay highly competitive in the market failure to which both profits and popularity of the organization products and services could go down or collapse altogether (Borzillo, Schmitt & Antino, 2014).

# 1.1.1 World Class Strategies

Porter and Kramer (2006) observed that the values and aspirations of an organization basically defines the reason or purpose of its existence, popularly referred to as its *raison d'être*. The operations strategy binds the various operations and actions of the organization through combining together of policies, programs, systems and actions to respond to the competitive priorities of the organization's corporate strategy (Bostorff, Moran & Palmer, 2007). The long-term aim of the operations strategy by an organization is to best optimize the organization's resources in order to use the best processes for achieving corporate objectives. These long term decisions involve capacity, location, processes, technology and timing (Srikanta *et al.*, 2016). It is through operations strategies that we identify world class strategies.

One competitive strategy most favoured by organizations is the competitive priorities. By competitive priorities, the main focus is on the dimensional processes that ensure effective supply chain which keeps an organization relevantly competitive on the market.

This is achievable only when organization strategists chose a path that builds on the short term to finally achieve the long-term goals and objectives for the competitive organization. There are few challenges that every business faces to have competitive edge on the competition. These include but are not limited to keeping an eye on the future, staying ahead of competitors, maintain good clientele and keeping up with technological advances while doing more with less (Krajewski, Ritzman & Malhotra, 2013).

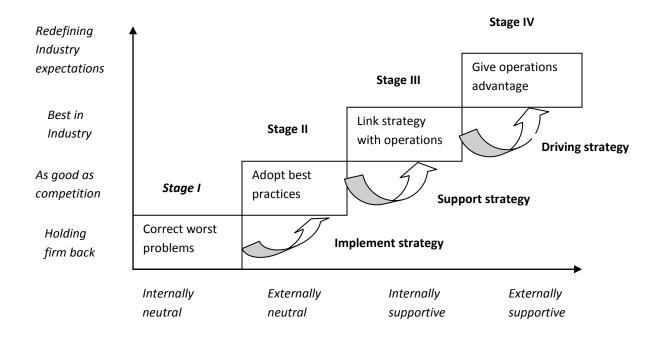
Vivares-Vergara, Sarache-Castro and Naranjo-Valencia (2016) found that when organizations involve features about the individuals in operations strategy decision making (motivations, personal goals and abilities) better performance can be observed in competitive priorities and that when employees reach a higher level of satisfaction and job performance, the performance in competitive priorities improves as well. The scholars add that the second option in operations strategy is through distinctive or core competencies in which the organization's products are actively supported to win orders over competition. Hezelkom (2015) points higher quality, excellent services and low costs as some of the most successful distinctive competencies that have proved sustainable over a long time as well as across various market players in business. In this case, the organization requires an appropriate choice of processes policies as well as well designed infrastructure in terms of controls, procedures and systems.

Benneworth, Pinheiro and Sánchez-Barrioluengo (2016) have clearly distinguished the fact that best practices do not necessarily amount to World Class status. The challenges for both WCO and best practices are surmounting but clearly different.

By WCO, the scholars have shown this to mean implementing a customer focused strategy that can accurately predict needs and respond with highest quality in delivering to the customer. Figure 1 indicates the Hayes and Wheelwright 4-stage model (Hayes & Wheelwright, 1984; Srikanta, Potdar, & Shankar, 2016) that classifies organizations according to the strategic role played by their operations function has always been difficult to operationalise while acting as an excellent to bringing into focus the need to have operations strategy leading an organization into WCO status. This model can be used to guide organizations in optimizing the strategic role of operations function which has been described as the missing link in corporate strategy as well as the formidable competitive weapon of success for world class organization (Skinner, 1985; Srikanta *et al.*, 2016). In the model, organizations are thought never to be at any particular time on the same level instead gradually moving from stage one.

In so doing, as operational capabilities increase, so does the strategic impact of the operations function. Although the first two stages of internal and external security can be achieved easily with some effort, it requires a correct choice of strategies to have attainment of stages three and four which comprise internal and external support. The very top organizations in ranking by industry standards should thus be viewed as the very best from where benchmarking can be done to enhance effective implementation of strategic choices.

Figure 1: Wheelwright and Hayes 4-stage Model



*Note.* Adopted from, "*Restoring Our Competing Edge: Competing through Manufacturing*" by Hayes, R.H. and Wheelwright, S.C., (1984, pg.46) John Wiley & Sons, New York

# 1.1.2 Kenyan Universities

The establishment of universities in Kenya is governed by an act of law Cap 42 of 2012 supervised by the Commission for University Education (CUE). This is a body corporate judged with streamlining quality and the need for research as well as development in Kenyan universities (www.cue.or.ke/).

CUE is in control of public, private and authorized universities totaling 63. These include 22 public, 14 private and 13 universities all serving a high number of students seeking university education in Kenya. Without discrimination, CUE goes about its mandate in which maintenance of standards, relevance of particular course of units and aspects of research and development are given paramount attention.

Using the ranking web of universities (<a href="www.webometrics.info/">www.webometrics.info/</a>) the University of Nairobi is the leading in terms of presence, impact, openness and excellence. It was followed by Kenyatta University, Moi University, Jommo Kenyatta University of Agricultural Technology and Maseno for public universities. In the private sector, Strathmore led followed by Catholic University of East Africa, Mt.Kenya and USIU among others. Kenyan universities are led by an independent chancellor and a vice chancellor who preside over a university council led by a chairman. Competitive strategies in all Kenyan universities are planned at the top levels of management and implemented mainly starting at the main campus of each university. Beginning 2016-2017, the Kenyan government is now able to sponsor students at both public and private universities thus increasing competition among the universities.

#### 1.2 Research Problem

The goal of many organizations is to have a vision through which a strategy is planned to make the organization as competitive as possible especially in the modern global economy (Schonberger, 2010). There is however a big mismatch in organizations' corporate strategy and operations strategy whereas the two need to be in total synchrony for optimum achievement of WCO status (Wheelwright & Hayes, 1985). Observations

from developed nations indicate that organizations have set competitive platforms that give them a head-start on any given market. Krajewski *et al.*, (2013) noted a growing concern over compromised operations strategies through policies of very protective governments and industrial blocks like European Union, North American Alliance and United Kingdom that have led to mismatches between corporate strategy and operations strategy. Hemmati *et al.*, (2016) on the other hand identified the Asian tigers including China, Japan, Korea and India as game-changers in the quest for WCO status as their production standards have regularly challenged the traditional world leaders of the western world. Hazelkorn (2015) studied strategies used by universities to perform well on the ranking list concluding that core competencies and customer-driven strategies were particularly strong among most universities across the world.

Regionally, South Africa and the Arab states of North Africa have been the leaders in propagating for WCO as they continue to be way ahead in rankings carried out on learning institutions as well as manufacturing sector (Colvin, 2008; Altbach, 2015). Organizations outside the mentioned African regions that find their way to the prestigious list have tended to set the trend in their respective countries through competitive priorities. Despite heavy investment by institutions to pursue world class status all through their strategic plan documents and mission statements, few studies have examined the real depth of strategic competitive measures of performance that is the main stay of world class status (Beneworth *et al.*, 2016).

Orenge (2013) made a survey of commercial banks of Kenya focusing on operations strategies concluding that banks did have operations strategies that were not tailored to customer post-service care. Similarly, Terer (2015) in studying the perceived influence of operational strategies on performance of weighbridges in Kenya concluded that core operations of organizations are easily side-stepped in favour of cash-cows that benefit the individuals at operations locations as opposed to the achieving of corporate strategy objectives through operations strategy. Earlier, both Njeru (2012) and Gachara (2012) had also studied operational studies at various banking institutions concluding that only those institutions that tied their corporate strategy to the operations strategy were capable of pushing towards competitive market leadership.

From the studies above, it is clear that several gaps exist. First some of the studies were carried out in different locales in western world, Europe and Asia from where application of operations strategy could be very different as compared to Kenya or Africa. Similarly, although services are supposed to be processed in a virtually similar environment, the banking and manufacturing sector from where majority of operations strategy studies have been carried out provide a different environment from the learning institutions which formed the focus of this study. This study was therefore inspired by these gaps leading to the study question, "how have competitive strategies adopted by the Kenyan universities measuring to world class competitiveness?"

# 1.3 Research Objective

The study had a main objective of establishing operational world class competitiveness by Kenyan Universities. The specific objectives were to:

- a) Determine core competencies used by Kenyan universities
- b) Establish competitive strategies that would lead to World Class status
- c) Examine the competitive status of Kenyan universities

## 1.4 Value of the Study

It was expected that the study in its entirety carried the potential to benefit the Kenyan government in its drive for policy formulation and implementation by the CUE while improving chances of world class status in institutions of higher learning, specifically universities. Both the CUE and parliamentary organs for education policy would find the results valuable.

Similarly, the study results could be used to support or critic theories by scholars on issues concerning strategy theory of trade-offs. Other scholars in the field of world class operations and competitive strategies could use the findings to review or contribute to the existing theories. These include scholars and researchers who have already carried out works on world class status as well as competitive strategies.

The Kenyan universities and other industry players in the education industry could use the study results as a benchmark in establishing strategies that are best suited to their institutions in their strive towards achieving world class status. Such players include private and public universities as well as other higher learning institutions in Kenya.

Last but not least, it was thought that the results of the study could enhance or update the database of operational strategies towards achieving WCO specifically in the education sector. The theories could be both on competitive strategies as well as operations geared towards attaining world class status.

#### **CHAPTER TWO: LITERATURE REVIEW**

#### 2.1 Introduction

In chapter 2 existing literature on the competitive strategies for world class organization status is explored. The chapter also covers the empirical literature on factors that directly play a role in success of adopted strategies that enhance world class status highlighting the relationship between the strategies and outcomes of world class status through a conceptual framework.

#### 2.2 Theoretical Foundation

This sector of the literature review examines the foundation theories that guided this study by linking the strategies to world class measures. Specifically, the Resource Based View and Trade-Offs are considered to be the most appropriate foundational theories when considering competitive strategies as recommended by Krajewski *et al.*, (2013).

#### 2.2.1 Resource-Based View

The Resource-Based View (RBV) as articulated by Barney (1991, 2001) and Newbert (2014) seeks to direct that resources are key to superior firm performance. This applies to both goods and service industry in operations. RBV holds that sustained competitive advantage can be achieved more easily by exploiting internal rather than external factors. It is Prahalad and Hamel (1990) who noted that organizations should look inside the company to find the sources of competitive advantage instead of looking at competitive environment for it.

These could include tangible and intangible resources. On the one hand, tangible resources include buildings, machinery and other capital assets. However, tangible resources are fairly easy to get on the market with correct or even opportunistic funding, thus cannot be sustained for long as the lead competitor. On the other hand intangible assets in terms of brand reputation, trademarks and intellectual property are very difficult to compete against thus remaining to be the mainstay of an organization's competitive advantage.

The RBV theory assumes that skills, capabilities and other resources that organizations possess differ from one company to another. In other words, there are either direct or indirect resources that are very different from one organization to the other and which are very difficult to replicate across the competitors without necessarily invoking court cases, profit losses as well reputation. Such immobile assets include brand equity, processes, knowledge and intellectual property (Newbert, 2014). What this implies is that the organization must have superior resources that are in one way or another protected in a manner to prevent them from diffusing to the market. This also means that the RBV emphasizes strategic choice requiring the organization to identify, develop and deploy key resources to maximize returns.

Hemmati, Feiz, Jalilvand, and Kholghi (2016) have found that internal relationships among organizations coupled with strategic agility and competitive advantage will enhance the organization's ability to have satisfactory performance and remain competitive on the market. The scholars also noted that RBV enables multiple criteria usage in getting measures to apply on the effective implementation of strategic plans.

In their conclusion, Hemati *et al.*, observe that strategically agile organizations, by their nature, focus on deeper understanding of their core capabilities. This feature enables these organizations to identify those processes that are most likely to add value to their products in the eyes of their clients. Doing so may increase the chance of organizations to lower investment risk and prevent wasting of resources, when allocating funds for process improvement. RBV theory is justified in this study as each university in Kenya is a single entity which has specific immobile assets that other universities in the region cannot get or will never get in the near future or in the long run.

# 2.2.2 Trade-Offs in Strategy

Described as pervasive in competition and essential to strategy, trade-offs have been found to create the need for choice and protect against what was referred to as "stuck-in-the-middle". This implies that in every other value-adding process, there has to be some form of sacrifice in order to compensate for what has been foregone (Vivares-Negara *et al.*, 2016). Other positions must therefore be slightly overlooked or left out all together to accommodate a hybrid solution on selecting a strategy. This ensures that no position is left redundant while also taking care of the potentials in the organization that strengthen forward movement.

Porter (1980) first advanced the theory of trade-offs in which one product feature might be a liability in the system in one section while it holds the strengths of yet another very productive sector of the organization system necessitating its continued existence. Similarly, Krajeswski *et al.*, (2013) added that the configuration of specific activities that deliver favourably for a specific organization output might not be suitable for any other sector of the organization citing crude examples like cheerleaders in a football team versus the star players or political hecklers versus the real political leaders. It therefore boils down to how much each of the activities can be tolerated or retained in order not to lose so much focus on the overall production of the end products and services for the organization. The final variation in an organization that necessitates trade-offs is image inconsistencies. Salavou (2015) observed that image or reputation sometimes can be distorted following actions that either were meant to protect something or simply out of unavoidable circumstances. This happens when for example an organization has to stoop low by its standards in order to provide a specific product that it could not provide if it were to consider its high reputation. Salavou mentions a case of higher institutions of learning offering low level programmes meant for middle class colleges simply to capitalize on their cash-cow status.

However, the theory of trade-offs gives room for creating choices and also protect against repositioning and straddling an organization's portfolio. A good sign to detect or observe the theory of trade-offs is when there is a complaint for every action or strategic item implemented (Vivares-Negara *et al.*, 2016). Both internal and external customers will give an outcry during such implementation and it is the duty to the strategic managers to ensure that there are more pleased customers than those that are dissatisfied (Seidel & Whitcomb, 2015). This theory suits the current study appropriately since a university has many tradeoffs required in its choice of suitable competitive strategies.

# 2.3 World Class Strategies and Measures

Radnor and Bucii (2010) identify four main strategies in operations including product and service development, competitive priorities, developing core competencies and customer-driven strategy. In studies on competitive studies, Salavou (2015) observed that to have good conditions of a competitive environment requires an organization to fully assess the age, size and sector or country where operational processes take place. To overcome the lapses of original strategies as recommended by Porter (1996), there is need for hybrid strategies to get the most attractive choices. The most suitable of the four for the current study are competitive priorities and core competencies.

The strategy of competitive priorities takes the form of harmonizing operational costs as observed in a needs analysis by the organization. Schonberger (2010) lists down the four main competitive priorities as low-cost operations, consistently top quality, timely/speedy processes/delivery and flexibility by the organization. The scholar notes that development time, delivery period and distinct quality of the product or service are the key cornerstones of competitive priorities strategy. In other words, the product or service must provide quality at a competitive price consistently to conform to customer needs. Sharkey *et al.* (2012) observed that the characteristic of conformance to the customer was the key factor in competitive priorities strategy implying that the customer must in one way or another be consulted consistently. It has also been observed that competitive priorities are critical as dimensional processes of an organization that enable the organization to remain competitive on the market for both short and long term periods (Krajewski *et al.*, 2013).

The challenges that an organization can face include having effective strategy and maintaining long-term customers while acquiring even more new customers. One commonly suggested solution to overcome these includes a concerted effort to advance technological improvements in order to optimize cost reduction giving room for research and development (R&D).

Another operations strategy is the development of core competencies (Prahalad & Hamel, 1990). Theses core competencies include the combination of pooled knowledge and technical capabilities allowing that particular business organization to stay highly competitive in the market. Such core competencies enable the organization to keep expanding its market share as more customers help spread the message of popularity for the organization. In other words, customer satisfaction, product development and strong professional relationships with stakeholders in the industry are well maintained by the organization. An organization on the market must leverage its core competencies to maintain its growth and continued survival amongst the fierce competition (Albatch, 2015). Many organizations have also successfully implemented such a strategy while carefully assessing any functional areas that are outside the core competencies for immediate outsourcing (Luliya, Sununta, Yuosre & Chotchai, 2013).

The performance measures adopted by an organization could present a strong means of evaluating the existing strategies while at the same time providing a platform for reviewing an existing strategy as well as adopting a new one. The key to these measures being successful or accurate in determining the success of a strategy is proper planning and implementation of both the strategies and measures put in place (Terer, 2015).

The measures take into account either financial perspective or customer perspective both of which are dependent on the business processes, innovation and growth elements for the organization. This will call for the ability of the organization to link such measures to their operations strategy to enhance successful implementation (Orenge, 2013).

## 2.4 Competitive Strategies and World Class Status

Competitive strategies could be planned in an organization but it is the extent to which those organizations can actively be measured to ascertain their implementation that distinguishes various organizations from world class to common class. The nature of strategies employed by an organization also determines what measures are most likely suitable to get appropriate performance levels. Whatever measures used however should have their reliability and validity adequately determined especially when considering world class status (Aulla & Tienari, 2011).

As opposed to financial measures like net profit value (NPV) and return on investment (ROI) strategic operations measures use scales to determine the effectiveness or impact of a given strategy (Prahalad & Hamel, 1990). However the financial measures can not accurately predict how quality or time or customer satisfaction has been achieved through a strategy. The measures cannot also measure innovativeness nor can they give accurate assessment. It is normally argued that to some extent, both competitive strategies play a large role in an organization's development towards achieving world class status. Of much important is the fact that all these might not translate into cost reduction but improved operational processes always come up (Shah & Nair, 2014).

The correct measure balancing financial and non-financial measures can be achieved through a balanced score card since that includes both the innovativeness and financial successes or failures of the organization (Hazelkorm, 2015). It is then notable that no single measure in operations strategy can be relied upon to measure the effect or impact of a given strategy. In another study, Meybodi (2015) found evidence of misalignment between organizational goals and objectives and proactive development of organizational core capabilities. The result also indicates that managers with high-level positions as well as those from large organizations placed higher emphasis on strategic benchmarking performance measures. Further studies have indicated that performance measures diversity can be achieved through evaluation of business strategy merging well with operational strategies (Cheng & Humphreys, 2016).

# 2.5 Empirical Studies

This section highlights some studies that have taken place concerning operations strategy as well as WCO status. It also summarizes the study gaps from various findings to come up with a workable conceptual framework that will be a guide to the field study in establishing the competitive operations strategies in Kenyan Universities.

Aula and Tienari (2011) studied mergers across universities in their quest to be ranked more favourably on the universities "league table". Using 12 universities across North America which had attempted such mergers, the scholars concluded that employee-training for staff at universities as well as customer orientation were key to achieving the much sought-after WCO status.

However, the scholars also noted that state-run universities had a very different set-up as compared to private ones making it difficult to measure some characteristics. Sangwan *et al.*, (2015) studied the impact of implementing world class manufacturing on a company performance using a business company in South Africa. The scholars concluded that productivity improvement can add value but that the long term effect is dependent on the sustainability of continuous improvements in the company practices. In other words, value creation should be a culture in the organization in order to help sustainability while involving customers on a regular basis to confirm that their satisfaction is as cost-free as possible.

Shah and Nair (2014) used 29 universities in Australia to test strategy development and implementation in higher learning institutions. The scholars concluded that universities need to have a more positive approach in alignment of the business strategy with operational strategy to minimize the risk of failure in implementation aimed at achieving world class status.

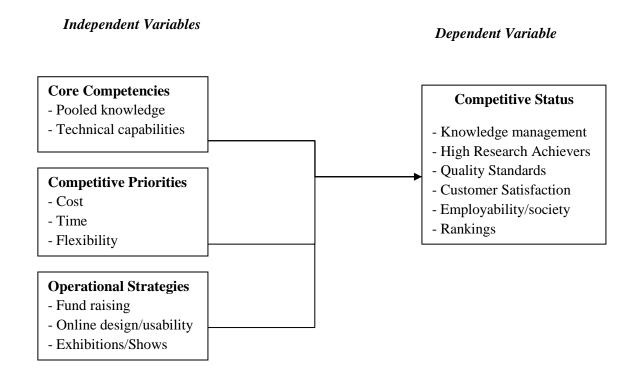
Locally, Gachora (2012) studied the impact of electronic innovations on operations strategy implementation at banking institutions in Nairobi, Kenya. Sampling 24 commercial banks, Gachora concluded that such a strategy only works if several other factors are very satisfying to the immediate customer of the bank. Specifically, cost factor in running bank transactions also played a role in such a way that if the electronics innovation became a bottleneck, the Kenya consumer reverts to the old system of doing things citing interbank transfers as well as mobile money banking as both failed and successful electronic innovations in the Kenya banking industry.

Terer (2015) studied the influence of operations strategies on the operations of weighbridges focusing on a major weighbridge in Mlolongo, Machakos County, Kenya. In the scholar's findings, operational costs and the training of staff to man the weighbridges were found to be totally inconsistent with the ministerial corporate strategy implying that the operations strategy had not been correctly applied. All the above cases point towards several gaps by scholars prior to the current study. In the first instance, studies from across the world and regionally do not squarely address the local situation even though they act a simulator to understanding operations strategy. Similarly, the local studies have mainly focused on banking and non-academic market. This creates a gap to be filled through the study of learning institutions with a focus on the UoN. The study will therefore seek to ascertain the measures used in achieving lean manufacturing which elevates an organization to WCO status.

# 2.6 Conceptual Framework

Conceptual framework (Kothari, 2008) presents an opportunity for a study to express in linear form the relationship between the variables under review. This comes in form of a framework. Such a framework is intended as a starting point of reflection about the research and its context. The dependent variable in this study was attainment of WCO status while the independent variables constitute factors that act as a guideline in operations towards WCO status as shown in Figure 2.

**Figure 2: Conceptual Framework for Competitive Strategies** 



#### **CHAPTER THREE: RESEARCH METHODOLOGY**

#### 3.1 Introduction

This section deals with the research methodology which refers to the choices that researchers make about cases to be studied. The chapter is arranged to cover the methodology starting with research design and followed by the study population. It finally covers the data collection as well as analysis and presentation.

# 3.2 Research Design

This study adopted a descriptive study design because it sought to collect data from various sources without influencing the respondents and the specific period of the study. Primary data from the field and secondary data from relevant reports was utilized. Through this design, the study can make a good description of the existing relationships among the different various being studied (Cooper & Schindler, 2009). This was suitable to the current study focusing on Kenyan universities which allowed for past and current status on competitive strategies and measures towards WCO status to be examined, without bias.

# 3.3 Population

Kothari (2008) noted that a population of study contains subjects with similar characteristics desirable for a study and which can be evaluated uniformly. It is notable that the target population will normally comprise of subjects that are measurable and exhibit characteristics desirable by the study.

# 3.4 Sample Design

This study used stratified sampling by selecting universities from both private and public universities. The sampling involved a choice from the total 63 universities in Kenya. By statistical recommendations, a 5 percent representative of the whole population is adequate for statistical analysis. Therefore (5x63)/100 = 3.15 constituted the sample rounded off to the nearest whole number of 4 universities selected on the basis of their longevity including UoN, K.U, USIU-A and KCA. For logistical ease of access, only the main campuses of each university were accessed within the city of Nairobi. Cooper and Schindler (2009) recommend a small sample for representation of subjects that require indepth review. Universities are such examples of in-depth review entities.

#### 3.5 Data Collection

This study sought to collect primary as well as secondary data in order to obtain optimum results of analysis. Secondary included material from the university website and any reports from scholars of similar subject as well as physical reports dealing with strategic or world class status. The study a structured questionnaire as its tool of data collection administered using 4 research assistants.

This instrument was best suited to the study given that most of the operations examined were likely to be perception thoughts from the past and present times. The questionnaire had a section for general demographic data and sections that directly inquired on each variable. A 5-point Likert-type scale was used on the questionnaire since the questions asked required opinion rating.

## 3.6 Data Analysis

Data from the questionnaires was cleaned and edited. It was analyzed using descriptive analysis as well as inferential statistics appropriate for such study (Kothari, 2008). This involved involve getting the frequency tables, percentages, mean and standard deviation. Specifically, the means and standard deviations of each data were analysed in a table to determine the extent to which the variables affected each other using Factor Analysis tool. Finally, the relationships between variables were established through a linear regression model of the form Y = a + bx + c. The analysis applied Statistical Program for Social Scientists (SPSS version 20) computer program for all data processing.

# 3.7 Summary of Methodology

The analysis for the study is summarized in Table 1 indicating all the three variables and how each variable was analysed. In general, the mean and standard deviation of each variable was derived leading to factor analysis to rank all factors and finally applying regression analysis to determine the extent to which the independent variables affected the dependent variable.

The various sections of the questionnaire tool as highlighted in table 1 in which section A was meant to provide general information that would help identify the respondents in one way or the other. Sections B and C had factors or aspects of the independent and dependent variables placed in Likert type scales thus necessitating the use of such a scale.

**Table 1: Operationalisation of Variables** 

| Objective (Variable)  | Data<br>Collection | Data Analysis                   |
|---|--------------------|---------------------------------|
| a) Determine core competencies applied by Kenyan Universities | Section B          | Factor analysis                 |
| b) Establish competitive priorities in<br>Kenyan Universities | Section C          | Factor Analysis                 |
| c) Link variables to establish competitiveness                | Section D          | Regression analysis of the form |
|   |                    | Y = a + bx + c                  |

#### CHAPTER FOUR: ANALYSIS AND DISCUSSION OF RESULTS

#### 4.1 Introduction

The main objective of the study was to determine world class strategies and competitiveness in Kenyan universities. The study focused on respondents from the public and private universities with responses from their headquarters in Nairobi County. This chapter data was analysed and findings discussed with respect to various scholarly works previously done in the field of operations management.

## 4.2 Respondents' Demographics

The study focused on respondents from both public and private universities in Nairobi County. Specifically, the respondents were split into three categories; teaching staff, administrative staff and students. This information is contained in Table 2 indicating that majority 62 percent of the respondents were students followed by teaching staff at 28 percent and administrative staff at 10 percent. Data was collected from University of Nairobi and Kenyatta University as well as USIU-A and KCA universities respectively. Out of the 100 questionnaires distributed, 12 could not be processed as some were either mutilated or not fully-filled. Some other 20 were never returned and since this was an academic exercise, such respondents could not be forced to return the questionnaires. It was therefore conclusive that only 68 responses could be effectively analysed. Since the target was 100 respondents, this translates to a 68 percent response rate and this was deemed adequate for the type of study undertaken.

As highlighted by various scholars including Kothari (2008) as well as Cooper and Schindler (2009), every type of research requires different response rates. However, the more open a study is, the more it will require over 50 percent response rate while extremely sensitive research studies e.g. medicine or forensic crime would require very low response rates to generate successful statistical results.

**Table 2: Categorisation of Respondents** 

| Category by function                | Frequency | Percentage |
|-------------------------------------|-----------|------------|
| Lecturers                           | 19        | 28         |
| Students                            | 42        | 62         |
| Administration (Non-Teaching Staff) | 7         | 10         |
| Totals                              | 68        | 100        |
|                                     |           |            |

# 4.4 Core Competencies

The aim of this specific objective was to establish core competencies as possessed by Kenyan Universities. This was done through asking questions on the main aspects of core competence which are pooled knowledge and technical capabilities. The analysis was finalized using factor analysis in which the aim was to establish an Eigen value which ranges from 0 to 1. The closer the value to 1, the more likely that it can occur while the closer it is to zero the more likely that the factor is a rarity.

From the results in Table 3, it was clear that Kenyan Universities had the core competence of pooled knowledge as opposed to technical capabilities. Top Eigen values were found among core competency factors 0.926 for professional training, 0.872 for onjob-discussion and 0.813 for discussion forums. On low scores, technical capabilities were the minority with Eigen value of 0.298 recording for high usage by freshmen, followed by another low score of 0.302 in practical application of technology and 0.427 in sharing of innovative enterprises.

It was also indicative that partnerships with strong technology giants were not emphasized by Kenyan universities as seen from the low Eigen value of 0.306. The results are in support of other studies which have indicated similar findings. Sharkey *et al.*(2012) identified lack of linkages or relationships between African Universities and large corporate technological leaders citing poor leadership as well as lack of prioritization as key to the prevailing situation. Similarly, Seidel and Whitcomb (2015) concluded that whereas regional universities were good at discussion forums and training their staff, it was always difficult to find any that shared their innovations and to a lesser extent practical application of the technologies they purported to produce at their institutions of higher learning.

**Table 3: Factor Analysis on Core Competences** 

| <b>Core Competence Factor</b>                  | Eigen Value |
|--|-------------|
| Pooled Knowledge                               |             |
| On-the-job discussion                          | 0.872       |
| Formal Apprenticeships                         | 0.724       |
| Discussion forums                              | 0.813       |
| Corporate libraries                            | 0.614       |
| Professional training                          | 0.926       |
| Mentoring programs                             | 0.751       |
| Technical Capabilities                         |             |
| High budgets for research & development        | 0.541       |
| Sharing innovative enterprises                 | 0.427       |
| Practical application of technology            | 0.302       |
| High level of use by freshmen                  | 0.298       |
| Inputs into technology has a measurable output | 0.521       |
| Strong partnerships with technology giants     | 0.306       |

# **4.5** Competitive Priorities

This objective sought to identify the competitive priorities that Kenyan universities have adopted in the pursuit of world class competitiveness. The questionnaire section for collecting data was also set to capture aspects or factors that that indicate competitive priorities. Analysed data using factor analysis is as indicated in Table 4. The aim was to rank each factor according to the Eigen value which ranges from 0 to 1. Indications from the results were that no particular competitive priorities were distinctively high in the Eigen scores implying that the universities did not have a clear differentiation among themselves. In cost indicators, the only high score was price of stationery at university bookshops with an Eigen value of 0.701 followed by comparison of cost of programmes in comparison to rival universities at 0.611. The lowest score in this category was disposal of depreciating or disused assets at 0.317.

This is reflective of the true situation at Kenyan universities as all campuses contain some obsolete equipment that no one makes use of but are never disposed of including machine and old office equipment as well as furniture. The highest factor selected by respondents at the Kenyan universities appeared to be flexibility of operations in which customer appreciation of the flexible timings scored a high Eigen value of 0.725 while adequate completion time for programs had a score of 0.634.

Other aspects of competitive priorities scored generally low Eigen values with time indicators scoring below 0.500, a show that Kenyan universities are not strict or timely when completing their programs. This has the implication that one cannot be sure of when to complete a given programme at Kenyan universities.

**Table 4: Factor Analysis on Competitive Priorities** 

| Aspects of competitive priorities  | Eigen<br>value |
|--|----------------|
| Cost Indicators  | varue          |
| How does cost of programs compare to other universities                              | 0.611          |
| What are the average prices of stationery at the university bookshops                | 0.701          |
| How wages and salaries of the university compare to other universities in Kenya?     | 0.502          |
| What is the average speed of disposal of depreciating or disused assets?             | 0.317          |
| How appropriate is the population of staff in the present working at the university? | 0.424          |
| Time Indicators  |                |
| Does the university follow its academic year time-plan to near perfection?           | 0.438          |
| Are programmes completed on time?  | 0.421          |
| Flexibility of operations  |                |
| Have customers appreciative of the flexible nature of university programs timing?    | 0.725          |
| Is there adequate time for completion of every program the university engages in?    | 0.634          |

## 4.6 Competitiveness Measurability

The objective of this dependent variable was to identify the main competitive measures that are applied by Kenyan universities in achieving world class competitiveness. This question necessitated the application of factor analysis to analyse the various aspects or factors that contribute towards having competitiveness.

Customer driven priority among the Kenyan universities had an Eigen value of 0.761 followed by employability of graduates with 0.652. From the results, it is indicative that Kenyan universities use customer priority as the key competitiveness strategy while also proving that they set measures that make their graduates employable to attract more people to their institutions. This could be said to explain the high employability of University of Nairobi graduates. On the lower scores, quality was found with the lowest score of 0.401 which could be an indication that there is not much being done to have measurable quality standards on the ground at both public and private universities.

The results are in direct support of studies by other scholars including Orenge (2013) and Meybodi (2015) both who concluded that quality was taken for granted by many institutions as they pursue profits through political alignment and careful business oriented objectives. Similarly, Shah and Nair (2014) observed that educational institutions are best-placed to pursue customer driven strategies as they continue to serve a community that is always in need of higher education. This was therefore a key indicator of competitiveness that Kenyan universities can successfully pursue.

**Table 5: Factor Analysis for Competitiveness** 

| Aspect of competitiveness measure         | Eigen Value |
|---|-------------|
| Knowledge management Strength             | 0.611       |
| Development of Products and Services      | 0.532       |
| Quality prioritized in all activities     | 0.401       |
| Customer Satisfaction the number 1 factor | 0.761       |
| Employability of graduates guaranteed     | 0.652       |
| Rankings taken to serious levels          | 0.411       |

# 4.7 Relating Strategies and Competitiveness

This section of the study report relates the dependent variable and independent variables which in this case were the strategies explored as they relate to world class competitiveness. To ascertain that such a relationship exists, the study carried out a regression analysis to establish links between strategies and competitiveness.

# 4.7.1 Regression Model Interpretation

The regression model used was a linear type of the form:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

#### Where:

Y is the dependent variable (Competitiveness)

 $\beta_0$  is the constant term

 $\beta_{\bar{i}}$  is the coefficient of the independent variable  $X_{\bar{i}}$  where i = [1, ...3]

 $X_i$  is independent variable where i = [1, ...3] (Core Competencies, Competitive Priorities and Operational Strategies)

is the error term.

The dependent variable was competitiveness (COM) while the independent variables were Core Competencies (CC), Competitive Priorities (COP) and Operational Strategies (OST). The regression equation was therefore solved as follows using coefficients from Table 6.

COM = 1.6 + 2.138CC + 3.126COP + 1.273OST

## **4.7.2** Interpretation of Beta Coefficients

The beta coefficients that informed the study regression model can be interpreted as follows from Table 6. For every effort of trying to have a competitive university, each Kenyan university would be 1.6 times more successful without the effect of core competencies, competitive priorities and operational strategies in place. This implies that the universities can as well be competitive without any strategies. From practical experience this cannot be true and hence the figure 1.6 is simply an intercept anchoring the regression line and can therefore be of no meaning to the administration of the universities.

However for every change in effort of trying to have competitive institutions through core competencies, there is an increase in the impact by 2.138 times. Similarly such a change in effort on competitive priorities has an impact of 3.126 times the effect of competitiveness. It also indicates that for every change in strategies for operational strategies, there is an increase of 1.273 times the competitiveness of that institution. Competitive priorities therefore carry the day with a beta coefficient of 3.126 compared to the rest, 2.138 for core competencies and 1.273 for operational strategies.

**Table 6: Coefficients (a)** 

| Model |            | Unstandardi | Unstandardized Coefficients Co |       | Т     | Sig. |
|-------|------------|-------------|--------------------------------|-------|-------|------|
|       |            | В           | Std. Error                     | Beta  |       |      |
| 1     | (Constant) | 1.614       | 1.712                          |       | 1.312 | .000 |
|       | CC         | 2.138       | 2.107                          | .804  | 1.170 | .000 |
|       | COP        | 3.126       | 2.149                          | .272  | 1.451 | .021 |
|       | OST        | 1.273       | 3.222                          | 1.411 | 0.420 | .000 |

a Dependent Variable: COM

The results as shown in tables 7 and 8 indicate that 95% of the variance in the competitiveness can be explained by the predictor variables CC, COP and OST defined above ( $R^2 = .945$ , adjusted  $R^2 = .712$ ).

**Table 7: Model Summary** 

| Model | R       | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|---------|----------|-------------------|----------------------------|
| 1     | .972(a) | .945     | .712              | 0.24                       |

a Predictors: (Constant), CC, COP, OST

The analysis of variance in Table 8 indicated that the model is significant in explaining the variance in competitiveness (p=.001). The strong relationship that exists between competitiveness and variables of core competencies, competitive priorities and operational strategies is an indication that competitiveness can be enhanced through proper implementation of these strategies. This is corroborated by studies done in the same filed by Schonberger (2010) as well as Sangwan *et al* (2015).

In both studies, the conclusion was that institutions without strategic plans would not be competitive globally. Similarly, Vivares-Vergara *et al* (2016) found that not all strategies can steer an institution towards world class competiveness and they recommended prioritization as well as effective implementation of any selected strategy to achieve competiveness.

Table 8: ANOVA (b)

| Model |            | Sum of Squares | df | Mean Square | F      | Sig.    |
|-------|------------|----------------|----|-------------|--------|---------|
| 1     | Regression | 14229.057      | 4  | 3557.26     | 14.216 | .001(a) |
|       | Residual   | 2317.204       | 64 | 62.627      |        |         |
|       | Total      |                | 68 |             |        |         |

a Predictors: (Constant), CC, COP, OST

b Dependent Variable: COM

# CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Introduction

Chapter 5 provides a final output for the report in which study findings and a summary of conclusions as well as recommendations are presented. The very last section gives a highlight of suggestions for further study and limitations for the field visit.

## 5.2 Summary of Findings

The main objective of the study was to explore world class strategies and competitiveness in Kenyan universities. It was established that Kenyan universities have various core competencies retained in various levels. The public universities have pooled knowledge as their core competency while private universities tended to have an advantage in terms of technical capabilities.

Another finding was that cost has not been well strategized in both public and private universities with the only low cost factor being low prices at the university bookshops. This implied that the Kenyan universities have not fully embraced the core competency of cost lowering. The study also established that flexibility was found in the universities since it was possible for one to have lessons in very flexible time schedules at most of the Kenyan universities allowing for ease of control of completing the programmes..

Another major finding was that public as well as private Kenyan universities used exhibitions and online usability as an operational strategy in getting to more learners. However, it was not common to have fundraising as a major operational strategy at these universities. It was also found that the quality function or strategy was not emphasized at the universities. This was also true in terms of timeliness which was observed to be a big problem with programs not completed on schedule. Finally, it was established that there is a strong link between strategies and competitiveness. Kenyan universities have effectively utilized customer-driven strategies but not developed products and services that could make them unique and competitive.

#### 5.3 Conclusions

In conclusion the study noted that Kenyan universities are not well-positioned for world class competitiveness. The strategies that would make Kenyan universities compete globally have not been implemented while those that are in place do not have adequate effective implementation. The Kenyan universities have embraced to a large extent, customer-driven strategies but not fully pursuing measures that could strengthen such strategies. It was also concluded that majority of the Kenyan universities do not take quality as a priority which implies in one way or another, they fail to be globally competitive.

In view of the above conclusions, the study came up with recommendations for the university education sector.

#### 5.4 Recommendations

The government as the custodian of academic institutions especially public universities stood a good chance of benefiting from the findings of this study and hence the need to recommend that universities should have a review of their staff participation in operational strategic planning.

Second, it implies that the Kenyan universities should approach the world competitiveness with much planning and careful implementation procedures that are well-monitored. Third, the Kenyan universities should in practice try to involve as much as possible their clients in their effort to become world class competitors in their field.

Third, there was need to emphasize the importance of global competitiveness at the Kenyan universities with an emphasis on operational strategies. Fourth, Kenyan universities should try to seek many partnerships with big technological firms that could support innovations and research programs. This is happening to some extent but not large enough to create a competitive edge. Fifth, the study recommended that both core competencies and competitive priorities require good communication while involving all staff. The Kenya government could help in supporting infrastructure that nurtures university core competencies as well as competitive priorities

Finally, some of the theories including RBV could be re-examined to establish how resources could be a hindrance towards achieving world class competitive status. In other words, leaders should be given an opportunity to dispose of or acquire more resources if the action would leads towards world class competitiveness.

## 5.5 Limitations of the Study

One of the main limitations of the study was that responses were from various sources and included historical information implying that forecasts using the same would naturally be incomplete since complex models would have to be used to get accurate predictions.

It was also difficult getting to the top level staff at all the universities visited since there is a general code of silence among academic institutions and in particular, when public university students like the author of this report cross over to the private universities without raising suspicion. To overcome this, a letter of introduction was openly used with respondents assured of the nature of study and their confidentiality guaranteed.

#### **5.6** Areas of Further Research

There is need for further research in many areas of world class competitiveness. It is possible for other scholars to compare and contrast the various levels of success for each strategy applied across the Kenyan universities. Another possible area of study would be to determine how quality in Kenyan universities can be used as the key strategy in world class competitiveness. Other studies that can enhance the current one include studying the effect of core competencies in enhancing world competitiveness as well establishing the challenges faced in implementing operational strategies at Kenyan universities.

#### REFERENCES

- Altbach, P. (2015). The costs and benefits of world-class universities. *International Higher Education*, (33).
- Aula, H.M. & Tienari, J. (2011) "Becoming "world-class"? Reputation-building in a university merger", *Critical perspectives on international business*, *Vol. 7* Iss: 1, pp.7 29
- Blanco-Ramírez, G. & Berger, J.B., (2014) "Rankings, accreditation, and the international quest for quality: Organizing an approach to value in higher education", *Quality Assurance in Education, Vol. 22* Iss: 1, pp.88 104
- Borstorff, P., Moran F. & Palmer D.(2007). The Relationship between National Culture, Organizational Culture, Causal Ambiguity and Competitive Advantage in an International Setting: An Exploratory Analysis, Jacksonville State University
- Colvin, G. (2008). Talent is overrated: what really separated world-class performers from everybody else. Penguin.
- Cooper, D. R., & Schindler, P. S. (2009). *Business Research Methods* (9th ed.). New York: McGraw-Hill.
- Gachara, J.W. (2012). Electronic business practices as an operational strategy by commercial banks in Nairobi. *Unpublished MBA Thesis*, University of Nairobi
- Hayes, R.H. and Wheelwright, S.C., (1984) *Restoring Our Competing Edge: Competing through Manufacturing*, John Wiley & Sons, New York.
- Hazelkorn, E. (2015). Rankings and the reshaping of higher education: The battle for world-class excellence. Springer.
- Hemmati, M., Feiz, D., Jalilvand, M.R. & Kholghi, I. (2016) "Development of fuzzy two-stage DEA model for competitive advantage based on RBV and strategic agility as a dynamic capability", *Journal of Modelling in Management, Vol. 11* Iss: 1, pp.288 308
- Kothari, R.C. (2008). *Research Methods: Methods & Techniques*. 3<sup>rd</sup> ed. Irwin Publishers. New Delhi India.
- Krajewski, L.J., Ritzman, L.P., & Malhotra, M.K. (2013). *Operations management:* processes and supply chains, 10<sup>th</sup> edition, Pearson, New Jersey

- Luliya T., Sununta S., Yuosre B., & Chotchai C., (2013) "Competitive strategies and firm performance: the mediating role of performance measurement", *International Journal of Productivity and Performance Management, Vol. 62* Iss: 2, pp.168 184
- Meybodi, M.Z. (2015) "Consistency of strategic and tactical benchmarking performance measures: A perspective on managerial positions and organizational size", Benchmarking: *An International Journal, Vol.* 22 Iss: 6, pp.1019 1032
- Njeru, J.W. (2012). The extent to which operational strategies adopted by Equity Bank determine its performance. *Unpublished MBA Thesis, University of Nairobi*
- Orenge, G.B. (2013). Competitive priority choices and operations strategies adopted by commercial banks of Kenya. *Unpublished MBA Thesis*, University of Nairobi
- Porter, M (1980). Competitive Strategy: Techniques for Analysing Industries and Competitors, Free Press
- Porter, M. & Kramer, M. (2006). Strategy & Society: The Link Between Competitive Advantage and Corporate Social Responsibility, Harvard Business Review
- Prahalad, C.K. & Hamel, G. (1990). The Core Competences of the Corporation. Harvard Business Review (May-April), 79-91
- Radnor, S & Bucci, K (2010). Analysis of Lean Implementation in UK Business Schools and Universities. *Journal of Association of Business Schools*, 2(3), 34-42
- Salavou, H.E. (2015) "Competitive strategies and their shift to the future", *European Business Review*, Vol. 27 Iss: 1, pp.80 99
- Sangwan, K.S., Jindal, A., & Digalwar, A.K., (2015) "Modeling the performance measures of world class manufacturing using interpreting structural modeling", *Journal of Modelling in Management, Vol. 10* Iss: 1, pp.4 22
- Schonberger, R. J. (2010). World class manufacturing: the next decade: building power, strength, and value. Simon and Schuster.
- Sharkey, L. D., Razi, N., Cooke, R. A., & Barge, P. A. (2012). Winning with transglobal leadership: How to find and develop top global talent to build world-class organizations. McGraw Hill Professional.
- Seidel, K. & Whitcomb, J. (2015), Exploring Novice Teachers' Core Competencies, in Gerald K. LeTendre, Alexander W. Wiseman (ed.) *Promoting and Sustaining a*

- *Quality Teacher Workforce (International Perspectives on Education and Society, Volume 27)* Emerald Group Publishing Limited, pp.197 238
- Shah, M., & Nair, C.S. (2014) "Turning the ship around: Rethinking strategy development and implementation in universities", *Quality Assurance in Education*, Vol. 22 Iss: 2, pp.145 157
- Skinner, W., (1985) *Manufacturing: The Formidable Competitive Weapon*, John Wiley & Sons, New York, NY.
- Srikanta, R., Potdar, P.K. & Shankar, A. (2015) "Measurement of manufacturing agility: a case study", *Measuring Business Excellence*, Vol. 19 Iss: 2, pp.1 22
- Terer, H.K. (2015). Perceived influence of operational strategies on performance of weighbridges in Kenya. *Unpublished MBA Thesis*, University of Nairobi
- Vivares-Vergara, J.A. Sarache-Castro, W.A. & Naranjo-Valencia, J.C (2016) "Impact of human resource management on performance in competitive priorities", *International Journal of Operations & Production Management, Vol. 36* Iss: 2, pp.114 134

#### **APPENDICES**

# **Appendix I: Questionnaire**

Dear Respondent,

It is with pleasure that you are welcome to participate in this academic research and wish to assure that the purpose of this research is strictly to conform to academic requirements. Your confidentiality is guaranteed and on request, the results of this study can be availed to your given address. On average, it is estimated that you need about 15 minutes to fully go through the questionnaire. For any further clarifications, please directly contact the researcher (**Shitote**) on <u>0727439529</u>.

#### **SECTION A: GENERAL INFORMATION**

| 1. What is you designated job title?                  |  |
|---|--|
| 2. How long have you worked in your current position? |  |
| 3. What is your highest level of education?           |  |

In the following sections, tick the box that best describes your opinion on the various items

**SECTION B:** To what extent are the following core competencies implemented at your university?

|   | Very<br>Low | Low | Not<br>Sure | High | Very<br>High |
|---|-------------|-----|-------------|------|--------------|
| Pooled Knowledge                        |             |     |             |      |              |
| 4. On-the-job discussion                |             |     |             |      |              |
| 5. Formal Apprenticeships               |             |     |             |      |              |
| 6. Discussion forums                    |             |     |             |      |              |
| 7. Corporate libraries                  |             |     |             |      |              |
| 8. Professional training                |             |     |             |      |              |
| 9. Mentoring programs                   |             |     |             |      |              |
| <b>Technical Capabilities</b>           |             |     |             |      |              |
| 10. High budgets for research &         |             |     |             |      |              |
| development                             |             |     |             |      |              |
| 11. Sharing innovative enterprises      |             |     |             |      |              |
| 12. Practical application of technology |             |     |             |      |              |

|   | Very | Low | Not  | High | Very |
|---|------|-----|------|------|------|
|   | Low  |     | Sure |      | High |
| 13. High level of use by freshmen           |      |     |      |      |      |
| 14. Inputs into technology has a measurable |      |     |      |      |      |
| output                                      |      |     |      |      |      |
| 15. Strong partnerships with technology     |      |     |      |      |      |
| giants                                      |      |     |      |      |      |

**SECTION C:** To what extent are the following Competitive Priorities implemented at your university?

|   | Very<br>Low | Low | Not<br>Sure | High | Very<br>High |
|---|-------------|-----|-------------|------|--------------|
| Cost Indicators                               | LOW         |     | Buile       |      | Iligii       |
| 16. How does cost of programs compare to      |             |     |             |      |              |
| other universities                            |             |     |             |      |              |
| 17. What are the average prices of stationery |             |     |             |      |              |
| at the university bookshops                   |             |     |             |      |              |
| 18. How wages and salaries of the university  |             |     |             |      |              |
| compare to other universities in Kenya?       |             |     |             |      |              |
| 19. What is the average speed of disposal of  |             |     |             |      |              |
| depreciating or disused assets?               |             |     |             |      |              |
| 20. How appropriate is the population of      |             |     |             |      |              |
| staff in the present working at the           |             |     |             |      |              |
| university?                                   |             |     |             |      |              |
|   |             |     |             |      |              |
| Time Indicators                               |             | _   | 1           | 1    |              |
| 21. Does the university follow its academic   |             |     |             |      |              |
| year time-plan to near perfection?            |             |     |             |      |              |
| 22. Are programmes completed on time?         |             |     |             |      |              |
|   |             |     |             |      |              |
| Flexibility of operations                     |             |     |             |      |              |
| 23. Have customers appreciative of the        |             |     |             |      |              |
| flexible nature of university programs        |             |     |             |      |              |
| timing?                                       |             |     |             |      |              |
| 24. Is there adequate time for completion of  |             |     |             |      |              |
| every program the university engages in?      |             |     |             |      |              |

**SECTION D:** To what extent are the following measures of world class implemented at your university?

|  | Very | Low | Not  | High | Very |
|--|------|-----|------|------|------|
|  | Low  |     | Sure |      | High |
| Knowledge management Indicator               |      |     |      |      |      |
| 25. To what extent is the ease of usage or   |      |     |      |      |      |
| confidence level in the library and other    |      |     |      |      |      |
| main university resource centres?            |      |     |      |      |      |
| 26. What is the frequency of usage by        |      |     |      |      |      |
| registered accounts on the website of the    |      |     |      |      |      |
| university                                   |      |     |      |      |      |
| 27. How rapid are value-improving            |      |     |      |      |      |
| responses at various resource centres of the |      |     |      |      |      |
| university?                                  |      |     |      |      |      |
| Training Indicator                           |      | •   |      |      |      |
| 28. Quality training of staff                |      |     |      |      |      |
| 29. Very flexible accessibility to training  |      |     |      |      |      |
| 30. Training leads to improved careers       |      |     |      |      |      |
| Quality Indicator                            |      |     |      |      |      |
| 31. Cost of quality is acceptable            |      |     |      |      |      |
| 32. Effective equipment in use               |      |     |      |      |      |
| 33. High level of compliant products         |      |     |      |      |      |
| 34. Timely and complete delivery of          |      |     |      |      |      |
| products                                     |      |     |      |      |      |
| 35. Number of complaints by customers        |      |     |      |      |      |
| 36. Number of reminders to complete a        |      |     |      |      |      |
| service                                      |      |     |      |      |      |
| Customer Satisfaction Indicator              |      |     |      |      |      |
| 37. Many customers recommend this            |      |     |      |      |      |
| university                                   |      |     |      |      |      |
| 38. Most customers express extreme           |      |     |      |      |      |
| satisfaction                                 |      |     |      |      |      |
| 39. High overall satisfaction in staff and   |      |     |      |      |      |
| students                                     |      |     |      |      |      |
| 40. Benchmarking to industry competition     |      |     |      |      |      |
| 41. Branding attributes appreciated by       |      |     |      |      |      |
| customers                                    |      |     |      |      |      |
| 42. There are well developed programs for    |      |     |      |      |      |
| keeping in touch with majority customers     |      |     |      |      |      |
| Employability                                |      |     |      |      |      |
| 43. Do you perceive your graduates as        |      |     |      |      |      |
| easily employable?                           |      |     |      |      |      |
| 44. To what extent do your graduates get     |      |     |      |      |      |

|   | Very<br>Low | Low | Not<br>Sure | High | Very<br>High |
|---|-------------|-----|-------------|------|--------------|
| employed after less than six months?          |             |     |             |      |              |
| 45. Are many large organizations              |             |     |             |      |              |
| interested in your graduates:                 |             |     |             |      |              |
| 46. Can you attribute top management jobs     |             |     |             |      |              |
| in the country to your graduates              |             |     |             |      |              |
| Rankings                                      |             |     |             |      |              |
| 47. Is the country ranking reflective of your |             |     |             |      |              |
| university position?                          |             |     |             |      |              |
| 48. Does the university take measures to      |             |     |             |      |              |
| improve on the rankings in all fields?        |             |     |             |      |              |
| 49. Has the university subscribed to any      |             |     |             |      |              |
| international ranking system or group?        |             |     |             |      |              |

| 50. What do universities | •     | of exhibitions | and trade or 1                          | research shov | ws that take                            | place at                                |
|--------------------------|-------|----------------|---|---------------|---|---|
|                          | ••••• |                | • |               | • | • |
|                          |       |                |   |               |   |   |
|                          |       |                |   |               |   |   |
|                          |       |                |   |               |   |   |

Thank you for your confident participation.