A SURVEY OF BENCHMARKING PRACTICES IN HIGHER EDUCATION IN KENYA: THE CASE OF PUBLIC UNIVERSITIES
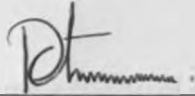
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A Research Project Submitted in Fulfillment of the Requirements for the Award of the Degree of Master of Business and Administration (MBA), School of Business, University of Nairobi

2006

DECLARATION

This project is my original work and has not been submitted for a degree in this or any other university.
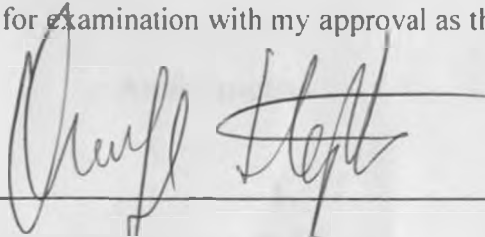
Signed: _____

MAGUTU PETERSON OBARA

Date: _____ 25th of October, 2006. _____

This project has been submitted for examination with my approval as the university supervisor.

Signed: _____

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Lecturer, Department of Management Science
School of Business, University of Nairobi.

Date: _____ 25/10/2006 _____

QUOTE

"A good education is an essential part to success. However, one must have a certain respect and admiration for those who have made their marks without the benefits of the traditional university education. The culture called street has given birth to some of the most successful and insightful people in the world. Many people would not be where they are today were it not for the skills and knowledge they acquired and dues they paid on the streets. There is no school tough than the one characterized with Learning and failure as the most powerful symbols of renewal, rebirth and growth. They are also the most crucial elements for the creation of life itself and they can not be benchmarked"

Anonymous

DEDICATION

TO:

My Almighty God

For Your Insurmountable Love and Everything

My Ever Loving Father

John Magutu

Who underwent pains to ensure I got the best in education

My Late Loving Mother

Cathie

For Her Gloomed Foundation

R.I.P Good Mum

My Love

Gladys

For your Support and Encouragement During the Entire Period of Study

My Mother in law

Bwari Magoma
Without whose support I would not have made it

My first In-law

Joseph Ombaba

Whose love for education and wholehearted support encouraged me to pursue higher education

My Step Mum, Rebecca; My Grand mums, Bintita & Yukah; My other Inlaws, Munga, Konga, Nyagochi, Miriam; My Dear Brothers, Maurice, Gilbert, Albert, Pevon & Amecha; My Dear Sisters, Josephine, Wilter, Franciscah, Lydia, Lineth, Jackline, Winnie, Liz & Flora; My Uncles, Atuti, Sang'onde, late Nyang'ara and Momamyi; My Cousins, Anyona, Karioki, R. Atuti, Vinny, Okari, Zippy & Others; *For Your Moral and Material Support; All Whom I Attribute This Academic Achievement To!* And My Late Grandparents; *Theirs is an Everlasting "Omwando".*

ACKNOWLEGMENTS

ABSTRACT

This was a survey of benchmarking practices in higher education in Kenya, the case of public universities, whose objectives were: to document the benchmarking activities in the public universities; to establish the challenges facing the public universities in benchmarking. Cross sectional survey was used in this study to collect data from the six public universities with their respective campuses/schools in the population of interest. The respondents were senior administrators and the academic staff. Of the 53 informants who were sampled, 31 responded, thus a response rate of 58 percent. Descriptive statistics were used to analyze and summarize the data before presenting it in the form of proportions, means, tables and graphs.

The study found out that continuous improvement systems in Kenyan public universities are good, not excellent. The external drivers of change/continuous improvements in public universities are the customers/students as opposed to legislation, while the major internal trigger of change is the actual performance. The public universities effectively and successfully benchmark for continuous improvement. The Kenyan public universities use action research and performance indicators as the sources of referencing information on benchmarks. The most common type of benchmarking in use is development/improvement benchmarking and planning to make use of international benchmarking. Finally, the three critical factors that have influenced the success of benchmarking practices, and as to why the institutions don't practice international benchmarking are: time and resource availability; limited duration, comparability and compatibility.

Key Words: Benchmarking, Continuous Improvement, Quality and Higher education.

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LIST OF TABLES, CHARTS AND GRAPHS

LIST OF ABBREVIATIONS USED IN THE PROJECT

APQC	-American Productivity Quality Council
CHE	-Commission of Higher Education
GDP	-Gross Domestic Product
HE	-Higher Education
HEFCE	-Higher Education Financing Council
HELB	-Higher Education Loans Board
HEQC	-Higher Education Quality Council
HESA	-Higher Education Statistics Agency
ICT	-Information and Communication Technology
JAB	-Joint Admission Board
LTSN	-Learning and Teaching Support Network
NGO	-Non-Governmental Organizations
NUCCAT	-Northern Universities Consortium for Credit Accumulation And Transfer
QAA	-Quality Assurance Agency
SAP	-Structural Adjustment Programmes
TQM	-Total Quality Management
UK	-United Kingdom
UNESCO	-United Nations Educational Scientific and Cultural Organization
USLS	-University Students Loans Scheme

CHAPTER ONE: INTRODUCTION

.1 General Background

Benchmarking has been used as a tool, methodology and technique for continuous improvements n sectoral operations to gain and maintain competitive advantage. Participating on enchmarking has promoted a culture of thinking about quality, assessing one's own erformance and taking responsibility for it. This is aimed at improving customer relations and romoting self-criticism. Depending on how excellent, good, bad or indifferent an organization's perations are it determines the direction, urgency and priorities for a sound base of appetite lasting) for change and for a continuous drive to enhance quality. At its simplest competitive erformance standard it would consist merely of judging whether the achieved performance of n operation is better than, the same or worse than that of its competitors (Norman. 2001).

he term benchmarking was first used by Rank Xerox to describe a process of self-evaluation nd improvement through the systematic and collaborative comparison of practice and erformance with competitors in order to identify own strengths and weaknesses, and learn how o adapt and improve as conditions change (Camp. 1989). Benchmarking has been quickly dopted by many sectors of business and industry as part of the quality movement (Spendolini, 992). The Education sector is no exemption. The first use of the term in an educational sense is ccorded to Melton: - "Standards represent benchmarks with which students compare their bility and performance" (Student Physician. 1957, cited in the *New Oxford English Dictionary*).

All these arguments stress the fact that benchmarking as used to denote excellence or a mark of listinction in a product or service, is a versatile tool in the service sector, both in profit and non-rofit making set ups. This meets the general meaning of benchmarking as a reference or riterion against which something can be measured, concurring with the original meaning in urvey as it was used to denote a mark on a survey peg or stone that acts as a permanent eference point against which the levels of various topographic features can be measured.

1.1.1 The Concept of Benchmarking in Higher Education

The changes in higher education (HE) are because of five primary factors: higher public expectations over what universities should be delivering: increasing parental concern about the quality of education: greater emphasis on college ratings: demographic changes in student population: and higher costs. In the changing environment, producing more is not always better. Yet, most universities have increased student to faculty ratios and costs. For them to compete in the global environment, universities must have quality beyond the competition, technology before the competition and costs below the competition (Watson, 1996). The universal definition higher education is education provided by a college or university (*new Oxford English Dictionary*).

Benchmarking is one of the method higher education institutions can use to help them achieve the objective of efficiency and cost-effectiveness in optimizing the resources available to support learning. This leads to transformation from a small elitist to a large, multi-purpose system of higher education. Higher education, being a state issue, successive government policies create a more competitive environment and benchmarking demonstrates to funding councils that they are providing value for public investment (Wragg, 1998).

Lund (1998) points out that interest in benchmarking has grown rapidly to the point where it is a significant tool for the management and improvement of quality and standards in most areas of higher education. These management services include library facilities, estates, energy and treasury. The first transnational benchmarking exercises were taken as a process for self-evaluation in North America followed by Australia, and the United Kingdom (Alstete, 1995: Farquhar, 1998: Massaro, 1998: Lund, 1998) and the continental Europe (Schreinterer, 1998: Wragg, 1998; Fielden and Carr, 2000; Mackie, 2000). Mackie (2000) and Carr (2000) demonstrate that, in the global market of higher education, there are clearly competitive advantages in establishing and maintaining a reputation for providing good quality education, high academic standards and world-class research output. Public universities are under increasing pressure to show how they perform relative to universities in the global community and there is growing interest in transnational benchmarking to make reliable international

comparisons and learn from other HE systems in Africa and in the world, alongside their private competitors (Wragg, 1998; Lund and Jackson, 2000a).

Conceptualization of benchmarking at its simplest level can be viewed as a strategy for enabling people to think outside the boxes they normally inhibit: the boxes being departments, services or functional units of institutions (Spendolini, 1992). Thus benchmarking is a learning process structured to enable those engaging in the process to compare their services, activities, processes products and results in order to identify their comparative strengths and weaknesses as a basis for self- regulation and improvement. Benchmarking offers a way of identifying 'better and smarter' ways of doing things and understanding why they are better or smarter. Given those insights, an institution can then implement changes that will improve practice or performance. Conclusively, benchmarking is an approach to self-evaluation through comparative analysis for the purpose of self-improvement.

1.1.2 Evolution and Structure of Higher Education in Kenya

Kenya has attached education to economic and social development since 1963 (Sifuna, 1998). This led to the rapid expansion of the education system to provide qualified persons for the growing economic and administrative institutions and to undertake some reforms to reflect the aspirations of an independent state (Court and Ghai, 1974). Higher education in Kenya can be traced back to 1922, when the then Makerere College in Uganda was established as a small technical college which was then expanded to meet the needs of the three East African countries i.e. Kenya, Uganda, Tanganyika and Zanzibar, as well as Zambia and Malawi. In the 1940's and early 50's, it was only this college that was providing university education in East Africa. This lasted until 1956, when the Royal Technical College was established in Nairobi. In 1963, the Royal Technical College became University College Nairobi, following the establishment of the University of East Africa with three constituent colleges in Nairobi, Dar es salaam and Kampala (Makerere). The University of East Africa offered degree programmes of the University of London till 1966. In1970, the University of Nairobi was established as the first university in Kenya.

Due to the demand for qualified personnel for both the private and public sector in the 1970's, the number of Kenyans seeking university education exceeded the capacity of the only then, University of Nairobi. From then, university education in Kenya has expanded with a rise in student enrolments, expansions of Universities, diversity of programmes and setting up of new universities and campuses. From one university in 1970 the number has increased to 6 public universities, one university college and 17 private universities.

Over the last four decades, the social demands with respect to higher education in Kenya have clearly intensified. This has been exemplified by the rise in enrolment in public and private universities, the proliferation of more private universities and the establishment of the private wings (self sponsored programmes) in the public universities. Student enrolment in Kenyan public universities has increased very rapidly between 1964 to date. In 1970 student enrollment stood roughly at 3,443 (Sifuna, 1998). According to an article in the *Daily Nation*, dated and posted to the web on December 8, 2005, with the additional students in the parallel degree programmes, the total enrolment in both public and private universities has grown from 55,200 students in 1998 to 91,541 students (33,550 females and 57,991 males) in 2005. Financing higher education in Kenya like most African countries was historically free, with the public purse covering both tuition and living allowances (Weldman, 1995). The rationale for free higher education in Kenya was based on, among other things, the country's desire to create highly trained manpower that could replace the departing colonial administrators. In return, graduates were bound to work in the public sector for three years.

There was a general dramatic expansion and increase in the number of students seeking university education in 1974, the introduction of University Students Loans Scheme (USLS) to provide full loans to students failed due to lack of legal basis to recover matured loans from loanees and university students' treatment of the loan as a grant from the government, which was not to be paid. In 1995, the government, through an Act of parliament, established the Higher Education Loans Board (HELB) to administer the student loan scheme. It was also empowered to recover all outstanding loans given to former University students since 1952 and establishment of revolving fund to lend to needy Kenyan students in higher education to ease pressure on the exchequer now standing at 40% of the annual national budget (Government of Kenya, 2005).

Higher education in Kenya is run by the Commission for Higher Education (CHE) established in 1995 under provisions of the University Act with some of the major functions such as; to accrediting universities: to promote the objectives of university education namely the development: processing. storage and dissemination of knowledge for the benefit of mankind: advice minister on development of the public university and cooperate with the government in the planned development of university education. Above all. to examine and approve proposals for courses of study and course regulations submitted to it by private universities. Although these functions are considerable statutory to CHE to run university education. a number of criticisms have been leveled to the operations of the organization (Sifuna, 1998).

According to Sifuna (1998), only one CHE's statutory function i.e. the accreditation of private universities has been its main preoccupation since its secretariat became operational in 1986. The politicization of planning and development of university education has effectively denied the commission its roles. The government's action in decision-making has also made it difficult to play an active role in public university budgetary matters. Lastly, the creation of the Vice-chancellors of the Joint Admission Board (JAB) rendered inoperative the CHE statutory requirement to make regulations in respect to admission of persons seeking enrollment in public universities and provide central admissions service to public universities, as well as the maintenance of the standards for courses and examinations. Sifuna also observed that there had been no planning in university education for a considerable length of time. The last planning effort in university education was before rapid expansion started. The increasing demand for higher education is also seen to have contributed to lack of planning. Sifuna's study (1998) revealed that rapid expansion of university education was a spontaneous response to the higher demand. Popular demand for higher education has increased since people have put a lot of hope in higher education and which appears unique in the countries of this region.

The definition of any method of self-evaluation should reflect its purpose. The two fundamental purposes of any method of self-evaluation in the higher education (Kells. 1992. 1995: Jackson, 1997b) are: to facilitate improvement and to satisfy expectations and requirements for professional accountability. This will achieve measurable benchmarking and comparability to others. Universities especially state would like to know whether these purposes mentioned above are giving them increased professional and operational efficiency hence this study.

1.2   Statement of the Research Problem

This study attempted to examine the various benchmarking practices and processes (activities), used in higher education.. The emergence of these purposes had been prompted by the need to draw a distinction between benchmarking for regulatory purposes and benchmarking for the development and improvement. Price (1994) defined benchmarking for continuous/development and competitive advantage as the open and collaborative evaluation of services and processes with the aim of emulating or improving the best available practice. Jackson (1998c) also defined regulatory benchmarking as a process to facilitate the systematic comparison and evaluation of practice, process and performance to aid improvement and self-regulation.

Some of the yardsticks that the study used to assist in the identification of the processes and practices of higher education to be benchmarked, key among them were: the benchmarking activities classified according to the nature of the processes that underpin the activity (Jackson, 1998c); the four referencing processes as mechanism for comparison (Jackson, 1998b:Jackson and Lund, 2000a); benchmarking practice model- the four practice model (Jackson and Lund, 2000b); benchmarking for quality or standards (lund,1998;Town, 2000; price,2000); benchmarking assessment practice (QAA,1998c); credit and assessment regulations (Margham, 1998); benchmarking academic practice creation of directories or online database (Hounsell et al., 1996); departmental academic management (Burge et al.1996: Jackson et al 1997); the outcomes of learning (QAA subject benchmarking); benchmarking key skills (Hodgkinson,1996; 2000); quality assurance practice codes and the negotiable work-based learning (Coleman and Viggars 2000).

Jackson (2000) noted that the growth of benchmarking in higher education reflects a number of imperatives including: the search for a more effective way of regulating standards in a diverse, multipurpose mass system of higher education, the need to ensure that public resources are used as effectively as possible, provision of information to drive change in line with the government's social and economic agenda and to the public to inform choice and with market requirements. He further noted that benchmarking can and does serve a different agenda driven by a need to learn in order to understand, improve, change and innovate; a commitment to self-determined

improvement; models of working that are based on professional rather than public accountability and processes that are founded on action research.

Hence, there was a challenge for higher education to develop benchmarking in a way that will help people learn a bout and improve their own practice while improving the overall capacity of the systems to develop, improve and regulate itself. Academic benchmarking is equated to subject benchmarking i.e. a bureaucratic process for the purpose of making them accountable for their standards. But the examples above show that benchmarking can support very different agenda.

Out of the seven public /state universities, the University of Nairobi offers most of the degree programmes and has been admitting 75% of the candidates who qualify for higher education. Only the University of Nairobi managed the 21st position in Africa (UNESCO World Conference on Higher Education 1998). Thus, regardless of the rapid expansion of university education, there are a number of challenges, which have made the Kenyan universities, rank lowly in the recent 2005 academic ranking of the world universities. According to the UNESCO World Conference on Higher Education (1998), low funding from the exchequer, increased enrolment, limited access compared to the population level, increased enrolment without commensurate improvement in available resources and facilities, gender inequality and a low research capacity which does not support the development agenda, due to failure by the public universities to attract and increase income from research grants and contracts which can be sourced for from government, local authorities, industry and commerce, failure to meet the industry and development needs, are among some of the problems facing universities in Kenya .The problems have led to fears that quality of education is in a downward trend in most of the public universities. This can be depicted in the number of the students seeking higher education outside the country and the brain drain due to poor staff remuneration.

 In Kenya, a closer analysis of expenditure by the Ministry of Education showed that the government expenditure allocation to Education that stood at 18% of total expenditure in 1988/89 declined to 6.9% by 1991/92 (a reduction by 62%) and stood at only 7.3% by 1996/97 (World Bank, 1995a: Government of Kenya, 1996; Abagi 1997). The basic and higher education sector have been the most affected by such fiscal trends. Education recurrent budget has risen

from 33.41 percent of the total government recurrent budget in 2001/02 to 34 percent in 2004/05.The consequences have included lack of equipment, teaching material and other operation and maintenance expenditure outlays (Government of Kenya, 1993; 2005).

Given that the ability of governments to finance education and other social services is likely to continue to decline, the process needs to be revisited to ensure a more balanced and equitable educational system through benchmarking (Government of Kenya, 1993; 2005).

According to Siringi and Mwaura (2005), more than a million Kenyan professionals live and work abroad, making the country one of the most heavily brain-drained in Africa. Damning statistics released by the Government showed that between 0.5 and 1.8 million Kenyans work overseas, although their skills were much needed locally. Additionally, although more than 30,000 Kenyans leave for higher studies overseas, less than 9,000 of them return home on completing their learning. Thus when people who are highly skilled leave the country, or those who have acquired high skills do not return, it poses serious brain drain, robbing the country of essential human resource capacity to help in socio-economic development. The possible strengths include the high quality Kenyan graduates employed and working elsewhere outside Kenya. The introduction of private wings for example the University of Nairobi Enterprises and Services (UNES) and the parallel programmes has given many Kenyan students at bachelors and postgraduate, an opportunity for higher education and saved the country 'forex'.

To this end, within a new global market, characterized by rapid information change, intense information flows and increasing competition through the reduction of barriers to trade and exchange, higher education institutions, particularly in Kenya, are slowly emerging as organizations driven by the commercial imperative of market led forces. Yet their strategies for resource utilization are embedded in models of higher education institutions as public institutions rather than commercial organizations. This has been coupled with other major challenges such as: inadequate funding especially for research and development, quality and relevance, inadequate use of ICT, lack of a unified accreditation system, un-harmonized legal frameworks, inadequate management capacity, drug and substance abuse. Hence, there was need to explore ways of reversing and addressing the above challenges through benchmarking the whole higher education sector, to meet the best practices for continuous improvement and regulatory purposes.

From the foregoing. it was necessary to conduct a study documenting the benchmarking practices in the Kenyan public universities. Defining and documentation of a perfect benchmarking system was aimed at exploiting the opportunities in Kenya which included a very large base in higher education capacity. a number of institutions with infrastructural capacity and adequately trained human resource. and the underutilized existing infrastructural and human resources capacity (Nyaigoti-Chacha. 2004).

Kenyan public universities are not the only ones training students for undergraduate and postgraduate in Kenya and in the world: there are hundreds. and they provide the learning opportunities in thousands of different programmes. courses and facilities. According to Spendolini, (1992). a university can use this fact to its advantage. by benchmarking against other universities and schools. Benchmarking provides abundance of ideas that can be used to improve teaching and learning processes. and ultimately the quality of the academic function and student knowledge. This does not necessarily require comparisons with universities considered to be " the best". and it is not limited to particular school either. What has not worked at another university may work pretty well in Kenya. under different circumstances.

Major escalation of environmental turbulence and production to an unfamiliar world of marketing and above with new technology. competitors and enlightened customers. there is an unprecedented questioning of the firm's role in society (Ansoff and Mc Daniel. 1990). Part of the reasons why the Kenyan universities have ranked poorly in the world academic ranking includes; failure to allow students transfer their grades to other universities that offer similar courses. there is no system of converting experience into grades for mature students. pegging admissions to bad capacity, no online learning systems and unilateral picking and assigning candidates to courses they are not suited for. Benchmarking will not only benefit the public universities from enrolling local students but also attract students beyond the continent and become net exporters of higher education services. The Kenyan public universities can outmaneuver South African competitors or even overtake tourism. as a major foreign exchange earner if they can benchmark their courses. streamlining their operations and meeting the local and foreign student needs.

A number of researches in benchmarking especially in higher education have been conducted in the past, but none has been conducted locally. Jackson (2001) found out that benchmarking can support very different agenda driven by a need to learn in order to understand, improve and innovate; a collective commitment to self-determined improvement even in a competitive market- a new collegiality and models of working that are based on professional rather than public accountability. He suggested that the Learning and Teaching Support Network (LTSN) would help higher education communities make effective use of this benchmarking methodology; this was on a basis of UK higher education.

Although researches have been done on benchmarking locally, none has focused on higher education in Kenya. One particular local research by Amollo (2002) on benchmarking the order delivery process for continuous improvement in the Kenyan oil industry, suggested that there was need for a study to be conducted to determine to what extent other companies outside the oil industry in Kenya use benchmarking as a continuous improvement tool. This study therefore is an attempt to document the benchmarking activities based only on the academic function of the Kenyan Public Universities. This was through the examination of what the Kenyan public universities were doing to benchmark themselves against best practices, processes and tools to reverse the challenges facing their quality of higher education and exploit all available opportunities for continuous improvement to meet world-class status. It also sought to find out the challenges facing Kenyan public universities in benchmarking the academic function in higher education, through the examination of the critical factors influencing the choice of the various benchmarking practices and activities in an organization while benchmarking.

1.3 Objectives of the Study

This study aimed to achieve the following objectives:

a)   To establish and document the benchmarking practices in the academic function of public universities in Kenya.

b)   To identify the challenges facing benchmarking of education in public universities in Kenyan higher education.

1.4 Significance of the Study

It was anticipated that this study would be useful to the following groups:

a)   Academicians / Researchers

Findings from this research will assist academicians in broadening of the syllabus with respect to this study hence providing a deeper understanding of benchmarking methodology as a tool for continuous improvement.

b)   Individual Public/State Universities

Public universities, alongside private higher institutions of learning, which are lagging behind in benchmarking may have a chance to re-evaluate their present systems while others may use this findings in development of better continuous improvement tools.

c)   Commission of Higher Education (CHE)

Since the CHE is vested with the role of ensuring and given considerable statutory powers to run university education by promoting knowledge, Planning, budgeting and financing of public universities, accreditation of private universities, staff development, scholarships and physical development of university education, standardization, equation and recognition of qualifications and course regulations; CHE can use the findings in the development of standards to be used while benchmarking the quality of education in higher Institutions of learning.

d)   Government

The government can use the findings for their research to assist in policy formulation and development of a framework for benchmarking the higher education;

e)   Higher Education Sector

Such findings on the choice of the benchmarking tools for continuous improvement may assist the higher education institutions in the aligning of their vision and mission statements. This will assist in goal congruence, hence optimizing their goals of quality education.

CHAPTER TWO: LITERATURE REVIEW

2.1 Overview

Benchmarking provides a clear signal of success or failure as it has been widely recognized as a technique that can dramatically improve process performance to best practices level. McNair and Leibfried (1992) have studied benchmarking within continuous improvement: they insist that within continuous improvements. benchmarking is an external focus on internal activities. functions or operations as one of the most recent methodologies that has emerged in corporate attempt to gain and maintain competitive advantage.

Robert Camp. who pioneered benchmarking at Rank Xerox. coupled the process of "finding and implementing best practices". with the reason for doing it "to improve work processes that will satisfy customers" (Loveday, 1993). Price (1994) also coupled "the open and collaborative evaluation of services and processes" process with the purpose. "the main purpose of emulating or improving best available practice". Thus benchmarking is a self-evaluation approach of comparative analysis for the purpose of self –improvement. The APQC (1997). summarized this concept quite clearly, they stressed that benchmarking methodology as a process of improving performance by continuously identifying. understanding (studying and analyzing). and adapting outstanding practices and processes found inside and outside the organization and implementing the results. Benchmarking. as a process for self-evaluation. was adopted to higher education in North America in the early 1990s (Farquhar. 1998). and more recently, the UK (Lund. 1998: QAA. 1998a. b. Lund. 2000) and continental Europe (Schreiterer, 1998). The first international benchmarking was undertaken in mid-1990s (Wragg. 1998: Fielden and Carr. 2000: Mackie. 2000). Jackson (2001) noted that the challenge for higher education will be to develop benchmarking in a way that will help people learn and improve their own practice while improving the overall capacity of the system to develop. improve and regulate itself.

Benchmarking in UK higher education began in the early to mid-1990s. It was initially applied to the management of library. facilities. estates. energy and treasury (Lund. 1998). but interest in the technique has grown rapidly to a point where it is likely to become a significant tool for the management and improvement of quality and standards in most areas of higher education.

2.2   Benchmarking Methodology

Benchmarking is a disciplined process that begins with a thorough search to identify best-practice-organizations, continues with the careful study of one's own practices and performance, progresses through systematic site visits and interviews, and concludes with an analysis of results, development of recommendations and implementation (Garvin, 1993).

The essence of benchmarking is learning from others, understanding of whom and the benchmarking partners' performance level both for comparison and for registering improvement, comparison of performance levels, levels of processes and practices to meet the obligation of making improvements on continual basis and improving efficiency with respect to best practices (Dewhurst et al., 1999). Benchmarking, therefore, is a continual systematic measurement through comparison that frequently seeks fresh approaches, following implementation of improvements and reviewing the benefits (McNair and Leibfried, 1992). Best practices are documented strategies and tactics employed by highly admired companies. Due to the nature of competition and their drive for excellence, the profiled practices have been implemented and honed to help their practitioners as the most admired, most profitable and the strongest competitors in business (Watson, 1996).

2.2.1 Evolution of Benchmarking Methodology

Benchmarking has traversed four distinct generations: *The first generation*: - reverse engineering was characterized with initiatives of teardown and technical product analysis. *The second generation*: - competitive benchmarking which involved comparisons of processes with those of competitors. This is where benchmarking was refined into science by Xerox, mainly during 1976-1986. *Third generation*-process benchmarking: -where it was realized that learning can be made from companies outside the industry and required more in –depth knowledge and understanding. *Fourth generation*: - strategic benchmarking which involves a systematic process for evaluating alternatives, implementing strategic and improving performance by understanding and adopting successful strategies from external partners. Here, there are alliances who participate in ongoing business partnership perspective, and continuously and long-term. The climax is making fundamental shifts in a process that feeds re-engineering (Watson, 1996).

2.2.2 Benchmarking Practice Models

Attention has been drawn to models of higher education organization. which have been matched by similar strategic paradigms in business. Core competences are now as important as customers focus in strategic planning. They relate to the resources that a university has. These breeds ground for innovative approaches to competitive and co-operative advantage in the commercial world (Clarke. 1997). Benchmarking models are derived from institutional models.

Although "purists" argue that there is only one practice model (collaborative partnership). four practice models have been distinguished (Jackson and Lund. 2000b). The models are classified depending on whether the benchmarking process is independent i.e. no direct involvement of partners or collaborative i.e. there is an active involvement of partners. Jack and Lund (2000b) noted that there is: A-collaborative group partnership: B-collaborative one- to – one partnership. C-brokered models; which involve an individual or agency intervening to create the A or B collaborative model; C-Independent self-referencing.

The above schema/classification also developed a second set of characteristics based on whether the benchmarking process is essentially dialogical i.e. exploring how well something is done and how it might be improved. Testing implicit expectations where practice is regulated through professional norms and values requires exercise of professional judgment based on understanding many complex (inter-related) issues. The boundaries of inquiry are often not well-defined agendas. Often. in formative as well as summative assessment. decision making through consensual agreement and may require high degree of confidentiality to protect individuals in bureaucratic or professionally sensitive situations. Checking and verifying that what is done is good enough and satisfies requirements. often tests explicit requirements and require relatively little evaluation and judgment. the boundaries of inquiry are usually well defined. amenable to checklists and pro-formas. decision making controlled by regulation and often integral to quality management strategies (Jackson. 2001: 1997).

The framework defined: the frameworks or models are multi-dimensional. explicitly balancing between participation and communication within the evaluation process. The most dialogical models are the collaborative and the bureaucratic model is the independent self-referencing.

2.2.3 Benchmarking Process Ideas

Sources of information about other organizations' processes can be obtained from data centers, libraries or through direct contact (Cartin, 2000). Benchmarking, as a method of self-evaluation is based on two different process ideas: first, referencing and comparing one thing with another and secondly, searching for and creating reference points or benchmarks and understanding the reasons why they are reference points.

Benchmarking activities can be classified according to the referencing processes as a mechanism for comparison that is used. Four different reference processes can be distinguished (Jackson, 1998; Jackson and Lund, 2000a): *Action research*: - focused surveys supported by discussion; *Performance indicators*: - statistical measures and online databases; *Specification*, codes of practice, descriptors and examples of good practice; *Performance criteria and scoring systems*: - standardized testing examples of performance.

2.2.4 Objectives of Benchmarking

Benchmarking is one of the performance management strategies to setting realistic performance standards (Nahmia, 2000). It is also concerned with searching new ideas and practices, which must be able to be copied or adapted. The success of benchmarking, however, is largely due to more than its ability to set performance standards and enable organizations to copy one another. It is essentially about emulating, creativity and innovation (Cartin, 2000).

Benchmarking can help reinsure the idea of direct contribution of what an operation has to the competitiveness of its organization (Nigel and Robert, 2000). Benchmarking process might be focused either on quality or standards. Benchmarking activities that are focused on the quality of education might be directed towards: *The quality of the outputs from the process* i.e. result profiles, progression rates, progression to further studies and progression to employment; *The quality of inputs to the educational process* i.e. students, staff and resources; *The quality of the process itself* i.e. curriculum design, teaching and learning methods, support and guidance, assessment, recruitment and marketing, research supervision, management and administration and *the way in which quality is defined* will, however, have an important bearing on the way the

benchmarking activity is framed: for example. QAA subject benchmarking has defined quality as excellence i.e. equivalent to "best in class" in the world of profit-making organizations. as consistency. fitness of purpose. value for money or the capacity to transform learners. The context has also been important: for example. is the learning experience campus-based. distance learning or conducted in the work environment. boarding or day scholars?

Benchmarking processes that are focused on standards of learning might be directed towards: the intended outcomes i.e. what the learners will be expected to know and be able to do. These are processes that enable outcomes to be achieved i.e. means by which the learners will be enabled to achieve: the expected outcomes. curriculum. teaching and learning methods. and support and guidance systems; outcomes actually achieved i.e. the means by which the learners will demonstrate the achievement of specified educational outcomes and the actual standards achieved. This is the framework on which QAA (1998a) subject benchmarking is predicted (Jackson. 2001).

2.2.5 Components and Success of a Benchmarking System

When participating in a benchmarking system. success largely depends on five factors (Laeven and Smit. 2000): *first*. the added value offered by the method compared to internal management reports: *secondly*, the possibility of identifying opportunities and bottlenecks objectively: *thirdly*. the possibility of testing an organization's own course against the performance of others and against the organization's own former performance: *fourthly*. the extent to which the method will support the management in realizing quality management within the organization itself: *lastly*. the extent to which the method will contribute to a greater accountability to the outside world with regard to the organization's goals and performance.

Benchmarking is a simple concept but can be quite complex in its application. Not all benchmarking attempt have been successful because of lack of a disciplined planned approach or resources needed (Cartin, 2000).

2.2.6 Typical Higher Education Operations

Public universities contextual professional model could provide a focus for higher education institutional training and induction and for continuing professional development activities at the level of subject and department. It could also provide the basis for definition of quality and standards at which quality and standards are actually determined (Ashcroft and Foreman-peck, 1996).

Guidance to the operations in higher education is in form of a comprehensive framework for the management of quality and standards at departmental level. The main constituents of the framework address the areas of: policy and objectives, organization for quality, quality assurance systems and documentation, quality improvement of academic standards, and integration and externality (Burge et al, 1996: http:/quoll.maneng.nott.ac.uk/epc).

Higher education (public universities) operations department controls the practices, processes, procedures and activities to protect quality and standards of the education it provides. The specification requires departments to explain: how programmes and modules are designed and approved; admissions and entry standards; arrangements for the delivery and management of programmes; strategies for guiding and supporting students; arrangements for managing service teaching; formal mechanism to facilitate staff-student communication; arrangement for reporting and dealing with problems; policies for assessing students and for determination of academic standards; arrangements for supervising research students; formal mechanisms for reviewing the quality of education and teaching, and the standards attained by students. In addition, there is need for explanation of: the mechanisms used to assure the quality and standards of any collaborative programmes in other institutions for which the department has supervisory responsibility.

Thus the departments are expected to codify their practices with the specifications and work within and articulate with the higher education institutions quality assurance policy framework (Burge and Tannock, 1992: Tannock and Burge, 1994; Jackson, et al., 1996: 1997).

2.2.7 Components of Benchmarking in Higher Education

Laeven and Smit (2003) noted that the development of a benchmarking system is no mean understanding. They use a set of instruments in the Dutch libraries and they prove the value of benchmarking as a tool to achieve quality management rating very highly. A number of researches have been carried out in this area reflecting the range of approaches and application in business, administration and academic process. The UK HE is the major case in point.

Lund (1998) and Town (2000) have studied how academic libraries in the UK utilized benchmarking in 20 institutions with respect to availability of up–to-date stock, staff development ability and approachability, user experience, education and feedback, innovation and learning environment. Their focus is on four key best practices and processes: user induction/education, information retrieval, information provision and delivery, and facilities provision. This gave a first practical experience of benchmarking to a wide number of practitioners throughout the sector. Price (2000) notes a distinctive approach to the benchmark practice relating to the management of built and serviced environment based on a process of action research and active learning among those involved. The focus is catering management, portering services, space utilization and management and facilities management indicators.

A number of studies on benchmarking assessment practice were also reported in the UK Pilot studies in Benchmarking Assessment Practice (QAA, 1998c). In a study by Bridges et al. (1999), the frequency distribution characteristics of over 90,000 undergraduate module marks in eight subjects were pooled and examined. The analysis revealed systematic differences in marks distribution due to deep-rooted marking traditions that transcend institutional cultures or regulatory regimes and which ultimately give rise to the well-known variations in degree classifications in each subject (HEQC, 1996). This and others raised questions about the differential demand on learners for different assessment methods and strategies used.

In 1997, the Northern Universities Credit Consortium for Access and Transfer (NUCCAT) in UK undertook a major benchmarking exercise to systematically examine the way in which credit was being used in member institutions (Margham, 1998; NUCCAT, 1998). They provided information in respect of the academic year (length of undergraduate and postgraduate year,

timing of semester or terms, number of normal learning hours at undergraduate and postgraduate levels), rules for using credit (number of credits required for an award, number of credit levels), the regulation of assessment (extent to which institution-wide regulations are developed at undergraduate and postgraduate), contribution to honours classification of marks at different levels, module pass mark, rules for compensation or condonement of failure, progression with module failure, rights to re-assessment; substitution of failed modules, structure of assessment boards, and deployment of external examiners. These results are now being used by the QAA in developing a national framework for credit and qualification. This is a good illustration on how benchmarking for self-improvement can also improve the capacity of a system to regulate itself.

The above benchmarking processes were examples of collaborative group partnership, a practice model treating benchmarking as a process of action research and active learning. The dynamic is created through a forum or club composed of people who are committed to the process of learning more about themselves through learning about others.

Benchmarking was also done on the curriculum framework, which is central to the way an institution provides its education. Morgan (2000) describes the benchmarking exercise undertaken by Thames Valley University to inform the development of a new learning environment. The main object of the research was to gain a better understanding of the organization, administration and infrastructure underpinning different approaches to learning in a modular regime. This was an example of a collaborative one-to-one partnership-benchmarking model.

There was also another independent benchmarking (non-collaborative) which required only the presence of a database of relevant statistics and performance indicators (metric benchmarking). The last two decades have witnessed a stream of initiatives and policies aimed at promoting the conditions for performance assessment in higher education through the application of management statistics and performance indicators (Johns and Taylor. 1990, Cave et al., 1997; HESA, 1997, Lund and Jackson, 2000b). This included facilities management, library and information services, finance and participation.

Bureaucratic benchmarking uses text-based information (not numerical) performance indicators, or statistics to provide reference points for comparison. These include, information in the form of specifications, descriptor's codes of practice or exemplars especially in benchmarking (QAA, 2000c) or national key skill standards (Hodgkinson, 2000). The engineering professors' council (EPC) co-ordinated the production of specifications for departmental quality management system (Burge et al., 1996;Jackson et al., 1997) that attempted to codify what academic staff would consider to be good professional practice in the main areas of academic management. There was also a benchmarking professional body programme accreditation and benchmarking the outcomes of learning and skills. The key skill standards were to provide benchmarks to aid the design of curricula and assessment (Hodgkinson, 1996; 2000).

The last benchmarking exercise in this area was on brokered models which combined the metric /bureaucratic or collaborative approaches with the intervention of a consultant, agency or organization broker like the learning and teaching support network. This method was based on the objective (quantitative) and subjective (qualitative) evaluation and comparative analysis of over 700 performance measures (Jackson, 2000). This brought a more qualitative approach in which factual information relating to performance is considered in the light of the many contextual factors that influence overall performance. There was an information – led brokered benchmarking: focused on recruitment and marketing whereby national data sets are available annually and cover applications and acceptances to all institutions, while institutional data sets allow an institution to compare their own data with aggregate data of relevant group of institutions (both have their uses in benchmarking (Coleman and Viggars, 2000). There is no disagreement amongst the various researchers about the primary task of subject benchmarking. The benchmarking of learning outcomes and assessment encouraged curriculum designers to reflect the intended outcomes of programmes and consider a mere systematic way the strategies and methods that can be used to promote learning (www.ltsn.ac.uk/generic center).

2.2.8 Fundamental Purposes of Benchmarking Higher Education

There are two fundamental purposes of any method of benchmarking in Higher Education (Kells, 1992, 1995; Jackson, 1997b): *Accountability and standards*: Benchmarking here facilitates the systematic comparison and evaluation of practice. process and performance to aid improvements

and self-regulation. This is aimed at satisfying expectations and requirements for professional accountability; and *Development and competitive advantage*: Benchmarking here targets an open and collaborative evaluation of services and processes with the aim of emulating or improving best available practice. This is meant to facilitate improvement-development-change.

2.2.9 Performance Management

This is the process of quantifying action, where measurement means the process of quantification and the performance of the operation is assured to derive from actions taken by its managers. Even the most well-intentioned employees become frustrated and discouraged when they receive little feedback regarding the impact of their efforts. Benchmarking motivates performance in four ways: *first*, it reinforces performance. Evidence of good performance is an opportunity to congratulate and reward employees for a job well done, serving to motivate staff to maintain and improve performance; *secondly*, it identifies mission critical factors essential for quality improvement and provides evidence of where their efforts will have the greatest positive impact on improving performance. Identifying areas where performance is below that of peers/competitors challenges staff/employees to improve by tapping into their natural competitive nature; *thirdly*, it provides meaningful performance comparisons. With evidence that others perform at a higher level, employees typically rise to the challenge and commit themselves to improvement; *lastly*, it provides continuous assessment. With a continuous benchmarking process, employees come to know what needs to be improved and recognize when and how their performance will be assessed in the future (Nigel et al., 2001).

2.2.10 Continuous Improvement

Continuous improvements adopt an approach of improving performance, which assumes more and smaller incremental improvement steps. According to the ISO 9001:2000: Quality Management Principle No. 6. "Continual improvement of the organization's overall performance should be a permanent objective of the organization." In today's turbulent and dynamic business environment, organizations can only become successful if they can continuously challenge the status quo and improve their products, services and customer value as part of their day-to-day

operations. This makes benchmarking a very important tool in achieving continuous improvements (Nigel et al., 2001).

2.3   Products of Benchmarking

A benchmarking exercise might rely exclusively on one particular approach or it might utilize a combination of approaches. The products of benchmarking range from improved networking, collaborative relationship, followed by benchmark information and a better understanding of practices, processes or performance and insights on how improvements might be made. Benchmarking practice models are defined in terms whether the benchmarking process is independent (no direct involvement of partners) or collaborative (active involvement of partners). According to Jackson (2000), benchmarking results in three different products: *Improved networking*, collaborative relationship and mutual understanding between participants; *Benchmarking information* – in the form of text numerical or graphical information about the area of study for example evaluate the reports, guidelines, specifications, how to do it work books, specification and codes of best practices, exemplars of good conduct/different practice and statistics; *A better understanding of practice, process or performance*, and *insights* into how improvements might be made this understanding can be retained among the participants for example in order to gain or maintain competitive advantage, or it can be disseminated more widely through conferences, workshops and publications.

2.4   Types of Benchmarking

All schemes for classifying benchmarking activities are somewhat artificial because many benchmarking exercises will combine a variety of approaches and straddle different categories of a scheme. Benchmarking activities can be classified according to the nature of processes that underpin the activity (Jackson, 1998) and/or whether the process is implicit or explicit; conducted as an independent or a collaborative or partnership exercise; confined to a single organization- internal, or involves other similar or dissimilar organizations- external; focused on the whole process i.e. vertical benchmarking or part of process as it manifests itself across different functional units i.e. horizontal benchmarking; focused on inputs, process and outputs or a combination; based on quantitative/metric information data and/or qualitative/bureaucratic

information: primarily about self-referencing against standards or expectation i.e. regulatory benchmarking. The seven standard types of benchmarking are:

2.4.1 Strategic Benchmarking

This is used where organizations seek to improve their overall performance by examining the long-term strategies and general a approaches that have enabled high-performers to excel. Nahmia (2000) critically examined core competences, new product and service development, changing balance of activities and improving capabilities for dealing with changes in the background environment making conclusions that changes resulting from this type of bench marking may be difficult to implement and the benefit are likely to take a long time to materialize. Jackson and Lund (2000a) further noted that it is appropriate to use this type of benchmarking when the focus is on the re-aligning strategies that have become inappropriate for example changes in the background such as technology or customer requirement.

2.4.2 Performance Benchmarking or Competitive Benchmarking

This is used where organization consider their position in relation to performance characteristics of key products and services. This refers to process of tearing down a competitor product to see what can be learned from its design and construction (Cartin. 2000). Benchmarking partners are drawn from the same industry and it is appropriate to use this type of benchmarking when the focus is on the relative level of performance in key areas or activities in comparison with others in the same industry and finding ways of closing gaps in the performance (Appleby, 1999).

2.4.3 Process Benchmarking

This invariably involves s producing process maps to facilitate comparison. It is used when the focus is on improving specific critical processes and operations. The benchmarking partners are sought from the best practice organizations that perform similar work or deliver similar services. It is appropriately used when the focus is in improving key processes in a short time (Vic. 2000).

ional/Generic Benchmarking

when the organization want to benchmark with partners drawn from different r or areas of activities aimed at finding ways of improving similar functions or s. Leads to innovation and dramatic improvement. when used to focus on ities or services for which counterparts do not exist and patents of benchmarking e sector exist and lastly when radical change is necessary (Jackson. 1998a).

I Benchmarking

eeking partners within the same organization or example from business units erent areas .The main advantage of internal benchmarking is that access to id information are easier. standardized data is often readily available usually less ce are needed and there may be fewer barriers to implementation as practices easy transfer across the same organization. However. real innovation may be best in class performance is more likely to be found through external t is appropriate to use this kind of benchmarking when; several business units organization exemplify good practice. exchanging information and data with tions would be understandable in cases where there is inexperience in applying d lastly time and resources are limited (price. 1994 and Anderson. 1995).

Benchmarking/Best Practice Benchmarking

s seeking outside organizations that are known to be best in class and provides learning from those who are at the leading edge. Although not every best can be transferred to others. this type of benchmarking is appropriate when ght and examples of good practice are found in other organizations that are ual companies. Implementation is slower because of the "not invented here" e of benchmarking may also take up more time and resources to ensure that lata and information the credibility of the findings and the development of ations (Vic, 2000).

2.4.4 Functional/Generic Benchmarking

This is used when the organization want to benchmark with partners drawn from different business sector or areas of activities aimed at finding ways of improving similar functions or work processes. Leads to innovation and dramatic improvement. when used to focus on improving activities or services for which counterparts do not exist and patents of benchmarking within the same sector exist and lastly when radical change is necessary (Jackson. 1998a).

2.4.5 Internal Benchmarking

This involves seeking partners within the same organization or example from business units located in different areas .The main advantage of internal benchmarking is that access to sensitive data and information are easier. standardized data is often readily available usually less time and resource are needed and there may be fewer barriers to implementation as practices maybe relatively easy transfer across the same organization. However. real innovation may be lacking and the best in class performance is more likely to be found through external benchmarking. It is appropriate to use this kind of benchmarking when: several business units within the same organization exemplify good practice. exchanging information and data with external organizations would be understandable in cases where there is inexperience in applying benchmarking and lastly time and resources are limited (price. 1994 and Anderson. 1995).

2.4.6 External Benchmarking/Best Practice Benchmarking

The major focus is seeking outside organizations that are known to be best in class and provides an opportunity of learning from those who are at the leading edge. Although not every best practice solution can be transferred to others. this type of benchmarking is appropriate when innovation is sought and examples of good practice are found in other organizations that are lacking in individual companies. Implementation is slower because of the "not invented here" syndrome. The type of benchmarking may also take up more time and resources to ensure that comparability of data and information the credibility of the findings and the development of sound recommendations (Vic, 2000).

2.4.7 International Benchmarking

International benchmarking is used in situations where good practice organizations are located in other countries too few benchmarking partners within the same country to produce valid results and the aim is to achieve world-class status. This can take more time and resources to set up and implement. The results may need careful analysis due to national differences. The different ways of classifying benchmarking processes are tackled in works of Camp (1989), Spendolini (1992), Jackson (1998), Appleby (1999), Jackson and Lund (2000).

2.5 Critical Factors Influencing the Choice of the Various Benchmarking Tools and Scope

According to Norman (2001) the choice of benchmarking tools and scope depends on the how excellent, good, bad or indifferent an organization's operations are. Jackson (2001) noted that there are various considerations, which affect the choice of the type of benchmarking to use. Benchmarking is a simple concept but quite complex in application thus not all benchmarking attempts succeed due to undisciplined planning approach and limited resources (Cartin, 2000).

The following are the factors noted by Norman (2000), Jackson (2001) and Cartin (2000) that influence benchmarking decisions: *Compatibility with local conditions*. Finding benchmarking partners willing to participate in the benchmarking studies, identifying those comparable in size, market condition and sector with something to teach others and willing to share their best practice information; *Comparability of companies and process*; *Time and resource availability*; *Limited duration* for in depth interviews and preparations; The *availability of resources* to run both the participation and implementation of benchmarking determines the choice and scope of benchmarking methodology; *Level of experience* in benchmarking. Organizations which have no experience in benchmarking and lack business process understanding usually choose internal benchmarking; *Objectives to be achieved and aspects to be reviewed*. Getting acceptance for the use of both quantitative and qualitative benchmarking information determines the performance levels and processes respectively. The above, acts as challenges to benchmarking but information technology is used to support logistics, with the introduction of microcomputers in the early 1980's (Norman, 2000).

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Research Design

This was a case study on the benchmarking practices in the Kenyan higher education, specifically public university education. The study was limited to public universities only and did not include other institutions of higher learning and private universities that offer higher education. A case study involves a careful and complete observation of a social unit, which is either, a person, institution, family, cultural group or an entire community-and emphasizes depth rather than the breadth of the study (Kothari, 1990). The case study research design was chosen other than for instance, the cross-sectional survey, because the objectives of the study required an in-depth understanding and information about the subject matter. The study was inquiring into public universities present and past benchmarking processes, practices and tools used if any to predict the future higher education situation based on continuous improvement, quality and competitiveness.

This study therefore constituted the seven public universities in Kenya as per the Commission of Higher Education report for December 2005. Bearing in mind the number, the study was conducted in form of a census. This was possible because the number was not too big: meaning the seven (7) public universities (see appendix 3) were visited within a very short duration of time. This entailed distribution of questionnaires to the informants in the academic function of all the pubic universities. The unit of analysis was the university's academic function and the 32 respondents sampled were the specialists in that function's operations. Rosco (1975) proposes a rule of the thumb for determining a sample size and says that a size of 30 to 500 is appropriate for most researches.

3.2 Data Collection

This study relied on primary data collection methods. The items in the instrument were developed from the literature review to assist in the collection of primary data. (see Appendix 2). It was delivered to all the public universities to the various respondents i.e. heads of the academic function operations: Chairpersons, Deans of Faculties, principals and Registrars

Academic Affairs of the various universities. The questionnaire was self administered in that it involved the 'drop-and-pick-later' approach. This gave the respondents ample amount of time to think through the questions before answering them. I was however. available to clarify some questions.

The questionnaire has two parts with different sets of questions. The questions are both closed and of open-ended type. The closed ended questionnaire aimed at obtaining of responses while the open-ended bit gave flexibility for the respondent to answer. The first part of the questionnaire sought to get general (individual and organizational) information on the specific university. The second part focused on the information relating to the main continuous improvement benchmarking and regulatory practices. processes and tools. The first questions from part two are to answer the first objective as the last three questions answers the second objective. All the respondents/informants were expected to answer all questions in the two parts.

3.3: Data Analysis

The process of data analysis involved several stages. Completed questionnaires were edited for completeness and consistency. The data was then coded and checked for any errors and omissions (Kaewsonth & Harding. 1992). The data was analyzed using procedures within Statistical Package for Social Sciences (SPSS)_PC version 10 to get its feel. One basic form of analysis was performed i.e. simple descriptive uni-variate statistics for measured variables.

The responses from the open-ended questions were listed so to obtain proportions appropriately: the mean and standard deviation were used. The mean measured the average response of the population. The mode was used as an arithmetic measure of the most frequently identified observation. The standard deviation looked at the spread of the answers from the mean. For closed questions, a comparative analysis using distribution tables. quantiles (percentiles) and graphical analysis was done to ascertain whether there was a significant difference within the pattern of responses and to improve the presentation of the analyzed results for ease of interpretation.

CHAPTER FOUR: DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter covers data analysis and findings of the research. The data is summarized and presented in the form of proportions, means, tables and graphs. It documents the benchmarking practices in the academic function of public universities in Kenya. Data was collected from the six public universities with their respective campuses/schools in the population of interest. The respondents were senior administrators and the academic staff. Of the 53 informants who were sampled, 31 responded, thus a response rate of 58 percent.

4.2 General Overview of Universities Characteristics

This section presents a general overview of all the six public universities in the population of interest.

4.2.1 The Academic Level the Respondents and Length of Experience in the Academic Function

The respondents were asked to indicate their level of education, and the results are in table 4-1.

Table4-1 Academic Level the Respondents

Academic Level	Frequency	Percentage
PhD/Professors	11	35
Doctorate	9	30
Masters	11	30
TOTAL	31	100

Source: Research data

From the table 4-1, 35% of the respondents who filled the questionnaires were PhD holders, 30% of them had Doctorate degrees and 30% of them held Masters degree. This indicates that the greater percentage have a strong academic background and hence highly likely to know their stuff very well. From the data, 16% of the respondents who were surveyed had less than 5 years

experience. 30% had experience of 5-10 Years in the academic function and higher education. This shows that 54%, a significantly large percentage had a high level of experience of above 10 years, a strong indication that we are dealing with people with high level of knowledge in higher education academic function.

4.2.2 Graduates' Congruence to the Market and Degrees Marketability

The respondents were asked to rate their graduates congruence to market place and the marketability of the degree courses they offer. Of the 31 respondents, 35% of them rated the graduates' congruence with the market requirements and the marketability of degree programmes as excellent. 65% of them rated them as good an indication that the quality of the graduates is not yet at the top level of excellence. None indicated fair and bad, as shown in chart 4-1. There is room towards excellence for Kenyan public universities. Carr (2000) demonstrated that, in the global market of higher education, there are clearly competitive advantages in establishing and maintaining a reputation for providing good quality education, high academic standards and world-class research output in the market place.

Chart 4-1 Graduates' Congruence to the Market And Degrees Marketability
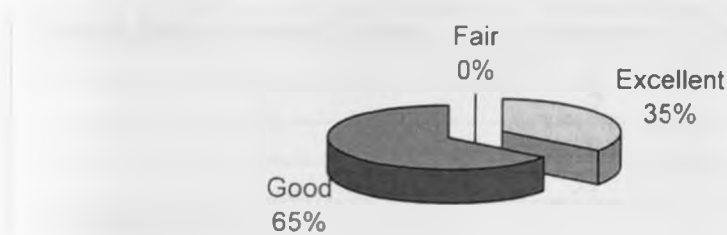
Source: Research Data

4.2.3 The Teaching and Learning Media Used Most by the University

The respondents were asked to give the most commonly used media in Teaching and Learning in the public universities, and the results are as in table 4-2.

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Table 4-2 Teaching and Learning Media Used Most by the University

Media	Frequency	Percentage
Chalk and Board	7	23
Overhead Projectors/ Transparencies	4	13
Computers and LCD Projectors	2	6
Sliding and White or Felt-Boards	18	58
Total	31	100

Source: Research Data

From table 4-2; 23% of the respondents indicated they used Chalk and Board. 13% indicated use of Overhead Projectors/ Transparencies. 6% indicated use of Computers and LCD Projectors. 58% indicated the greatest use of Sliding and White or Felt-Boards. This is a strong indication that new media is replacing traditional media of teaching and learning.

4.2.4 Rating and Renewal Frequency of the (Continuous) Improvement Systems in the Universities

The respondents were asked to appraise the continuous improvement systems in place. where Benchmarking was a subset of it. The results are in table 4-3.

Table 4-3 Rating The (Continuous) Improvement Systems in the Universities

Continuous Improvement System	Frequency	Percentage
Good	24	77
Fair	7	23
Bad	0	0
Total	31	100

Source: Research Data

Out of the 31 respondents who were sampled. 77% of the them ranked their continuous improvement systems as good. 33% of them as fair and none as bad as shown in *Table 4-3*. This shows that public universities have some continuous improvement systems in place. This affirms Norman's (2001) proposition that: at its simplest competitive performance standard would consist merely of judging whether the achieved performance of an operation is better than. the same or worse than that of its competitors. For organizations to effectively and successfully benchmark for continuous improvement. there is need to scan the environment for new benchmarks.

Respondents were required to indicate the frequency of renewal in their academic function and from the data, 56% of the respondents in the survey renew their improvement practices annually while 45% are reviewed monthly. Semi-annually and continuously got no response. This is an indication that continuous improvement has a frame of renewal and not left to chance (Norman, 2001). Important trends detected need to be monitored continuously so as to detect changes, direction and rate the change. This will also assist in the review of the procedures from time to time.

4.2.5 How the Universities' Academic Programmes Compare to other Universities Globally

Every organization wants to know how it is fairing in the global market. The current market of higher education is tending towards a global village due to globalization. The respondents were therefore to account how their programmes measure with the global market.

Chart 4-2 How the Universities' Academic Programmes Compare Globally

Source: Research Data

From Chart 4-2, 19% indicated that they have excellent programmes, while 81% indicated that they have good programmes, which indicates that there is a very big gap to make Kenyan public universities international centers of Excellence. According to Watson (1996), thus, for the public universities to compete in the global environment, they must have quality beyond the competition, technology before the competition and costs below the competition.

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4.2.6 The External and Internal Drivers of Change in the University

Threats to any organization come from outside and may influence greatly the scope and course of action. There is need therefore to scan the external environment and establish what exactly dictates change (Jackson, 2000). Respondents were therefore asked to indicate the triggers that drive change from outside and inside the university in its academic function.

Table 4-4 The External Drivers of Change in the University

External Drivers of Change	Frequency	Percentage
Customers/Students	26	84
Market place	4	13
Legislation	1	3
Others	0	0
Total	31	100

Source: Research Data

Customers/Students received 84% while the Market place received 13% as Legislation received only 3%. From table 4-4 above, majority of the universities used customers/students as major triggers of change externally.

The need and frequency of renewal in any system for change for continuous improvement is always triggered by both internal and external factors. Respondents were therefore asked to indicate the triggers that drive change from within the university academic function. Actual Performance received 84% while the Monitoring systems or controls received 13% as Dysfunctional behavior received only 3%. From the research data, majority of the universities used Actual Performance as major triggers of change internally. Lead benchmarking should extend beyond internal and eternal financial and non-financial measures focus lead performance measures. These are indeed the academic performance management literature documented as: "Predictive performance measures" (Neely et al., 1995); "Leading indicators" (Cumby and Conrod, 2001; Kaplan and Norton, 2004); "Proactive-leading indicators, preventive/subjective" (Manoocheri, 1999).

4.3: Benchmarking Practices

4.3.1 Existence of Benchmarking Systems

The respondents were asked to indicate whether they do benchmark or not. From the research data, 58% indicated that indeed they do. The higher education sector requires continuous improvement. There are many techniques that can be used to achieve continuous improvements, to give the customers: - students, sponsors, the employers, the community and the government high quality/zero-defect outputs. Benchmarking which is a continuous systematic measurement and comparisons aimed at seeking fresh approaches, implementing improvements and reviewing the benefits in higher education, is one of the techniques (Norman, 2001).

4.3.2 The major Reason of Benchmarking

The respondents were asked to indicate their objective in benchmarking. The major objective of benchmarking is to achieve continuous improvements and from the research data, 68% indicated that it is for development and improvement, as 32% indicated that they use it for Regulatory purposes. This affirms the major reason of any benchmarking exercise: APQC (1997) stressed that benchmarking methodology as a process of improving performance by continuously identifying, understanding, and adapting outstanding practices and processes found inside and outside the organization and implementing the results.

4.3.3 What Drives the Agenda Benchmarking

The respondents were asked to indicate what drives the agenda of learning, improvement, innovation and change towards a self-determined improvement. The results are in table 4-5.

Table 4-5 What Drives the Agenda Benchmarking

Drivers of Benchmarking	Frequency	Percentage
Professional processes	24	80
Public accountability processes that are founded on action research	2	7
Overall capacity of the systems to develop, improve and regulate itself	5	13
Total	31	100

Source: Research Data

Higher education operations have ever emphasized professionalism as opposed to other issues like accountability and holistic systems. From table 4-6, 80% of the respondents indicated that it was indeed the issue of professionalism, a major aspect of the academic function that drives their agenda of benchmarking. 13% indicated overall capacity as 7% indicated public accountability, which is not an academic function. Thus professionalism triggers adoption of benchmarking systems. This is in line with Jackson (2000) observations that the growth of benchmarking in higher education reflects a number of imperatives including: the search for a more effective way of regulating standards in a diverse, multipurpose mass system of higher education, the need to ensure that public resources are used as effectively as possible, provision of information to drive change in line with the government's social and economic agenda and to the public to inform choice and with market requirements. He further noted that benchmarking can and does serve a different agenda driven by a need to learn in order to understand, improve, change and innovate: a commitment to self-determined improvement; models of working that are based on professional rather than public accountability and processes that are founded on action research.

4.3.4 The Activities that Make Up the Definition of Benchmarking Complete

The respondents were asked to indicate whether they perform the activities that make up the definition of benchmarking. From the research data, all the activities that make a complete definition of benchmarking process are all well done, thus indeed the universities do a complete benchmark cycle.

4.3.5 Areas to be Benchmarked in Priority to Achieve World Class Status

The academic process of higher education has four key areas that make the process of training complete. The respondents were asked to indicate in priory the areas to be emulated, required creativity and innovation to achieve World Class Status and the results are in table 4-6. Under the quality of the outputs from the process, Result profiles were given priority. Under the quality of inputs to the educational process, Quality of Staff was given priority. Under the way in which quality is defined, Capacity to transform learners was also prioritized. Lastly, for the quality of the process itself, Assessment, Recruitment and marketing and Research supervision were given priority.

Table 4-6 Areas to Be Benchmarked in Priority to Achieve World Class Status

The quality of the outputs from the process	Frequency	Percentage	Ranking
Result profiles	11	35	1
Progression rates	10	29	2
Progression to employment	6	20	3
Progression to further studies	4	14	4
The quality of inputs to the educational process			
Staff	20	65	1
Resources	9	29	2
Students	2	7	3
The way in which quality is defined			
Capacity to transform learners	29	94	1
Equivalent to "best in class"	10	32	2
Consistency	9	29	3
Fitness of purpose	6	19	4
Value for money	4	13	5
The quality of the process itself			
Assessment	29	94	1
Recruitment and marketing	29	94	1
Research supervision	29	94	1
Curriculum design	11	35	2
Teaching and learning methods	9	29	3
Support and guidance	9	29	3
Management and administration	2	7	4

Source: Research Data

Indeed the Quality of Staff. Result profiles and Assessment Capacity to transform learners. Recruitment and marketing and Research supervision are the major areas that make a sustainable university. This is true as evidenced globally in aspects ranging from, benchmarking for quality or standards (Lund. 1998:Town. 2000: Price, 2000), benchmarking assessment practice (QAA. 1998c). credit and assessment regulations (Margham, 1998). benchmarking academic practice creation of directories or online database (Hounsell et al., 1996). departmental academic management (Burge et al, 1996: Jackson et al 1997), the outcomes of learning (QAA subject benchmarking). benchmarking key skills (Hodgkinson. 1996; 2000). quality assurance practice codes, negotiable work-based learning (Coleman and Viggars 2000).

4.3.6 The Most Common Learning Experience of the University Students

In developing economies, online learning is the most common experience for the students to avoid bed based admissions and traveling expenses. The respondents were asked to indicate one the most common learning experience of the university students.

Table 4-7 The Most Common Learning Experience of the University Students

Learning Experience	Frequency	Percentage
Campus-based	16	52
Distance learning	1	3
Boarding	4	13
Day scholars	9	29
Conducted in the work environment	1	3
Total	31	100

Source: Research Data

This was to measure the potentiality of the Kenyan public universities to move from traditional learning experience to the modern e-learning. 53% of the respondents indicated that the most common learning experience is campus based/school based, out of which, 13% indicated boarders, while 29 % indicated day scholars as 3 % indicated distance learning and conducted in the work environment, as shown in Table 4-7 above.

4.3.7 Factors that Influence the Success of Benchmarking

The success or failure of any benchmarking systems and processes depend on five major factors. The question intended respondents to indicate how each of the factors influences the success of benchmarking/the process of emulating the best practices. Each factor was rated on a scale of affects and don't affect. The results in table 4-8 were obtained. The standard deviations all appear insignificant (less than 0.5) which implies that all the factors that influence the success of benchmarking process influence/affect the success of benchmarking in the public universities. Thus when participating in a benchmarking system, success largely depends on five factors (Laeven and Smit, 2000).

Table 4-8 Factors Influence the Success of Benchmarking

Factor	Mean	Standard dev.
The added value offered by the method /cost-benefit analysis	1.00	0.00
Objective identification of opportunities and bottlenecks	1.00	0.00
The organization's own former performance	1.00	0.00
The support of the method to internal quality management within	1.1379	0.14
The contribution to a greater accountability to the outside world	1.1379	0.14

Source: Research Data

4.3.8 Expectations of Participation in Benchmarking

There are many expectations when organizations participate in benchmarking processes and activities. The three below are the major expectations. The respondents were asked to indicate what they expect to achieve in participating in any benchmarking/systematic comparison exercise.

Graph 4-1 Expectations of Participation in Benchmarking
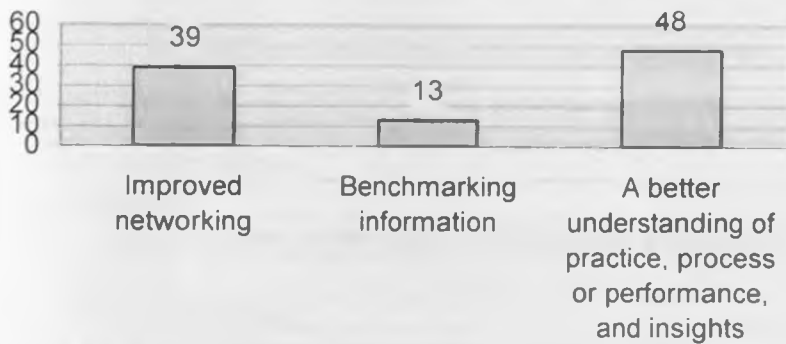
Source: Research Data

From Graph 4-1. a significant proportion thinks that participating in benchmarking will give them a better understanding of practice. process or performance. and insights of the academic operations and functions. This affirms Tapas' (1998) proposition that benchmarking is undoubtedly a very important tool for organizations to establish their goals. developing methods for achieving the goals, and measuring performance.

4.3.9 Higher Education Quality Aspects to be Fully Benchmarked

On the areas of higher education (public universities) that need to be addressed fully through benchmarking: regarding practices, processes, procedures and activities to protect quality and standards of the education, table 4-9 shows the results that were obtained after ranking. Not all aspects of higher education can be fully addressed through benchmarking. Some are critical while others are not. The respondents were to rank the aspects of higher education on a scale of three level scale. i.e. Critical, Not critical and Don't know.

Table 4-9 Higher Education Quality Aspects to be Fully Benchmarked

Higher Education Quality Aspects	Mean	Ranking
Structure of assessment boards	1.80	1
Deployment of external examiners.	1.80	1
Formal mechanism to facilitate staff-student communication	1.80	1
Rules for using credit (number of credits required for an award, number of credit levels)	1.77	2
Rules for compensation or Condonement of failure	1.73	2
Arrangements for supervising research students	1.63	3
The standards attained by students	1.53	4
Number of normal learning hours at undergraduate and postgraduate levels	1.50	5
The quality mechanism and standards of any collaborative programmes	1.33	6
Strategies for guiding and supporting students	1.33	6
Arrangements for managing service teaching	1.33	6
Progression with module failure	1.33	6
Rights to re-assessment	1.33	6
Formal mechanisms for reviewing the quality of education and teaching	1.20	7
Module pass mark.	1.2	7
Admissions and entry standards	1.07	7
Arrangements for the delivery and management of programmes	1.07	7
Substitution of failed modules	1.03	8
Arrangement for reporting and dealing with problems	1.03	8
Contribution to honours classification of marks at different levels,	1.14	9
Policies for assessing students and for determination of academic standards	1.00	10
How programmes and modules are designed and approved	1.00	10

Source: Research Data

All the factors were found to be critical (Mean =1). The top six aspects considered critical (Ranks 1-3) have to do with Examinations and Research. In any academic systems,

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Examinations in relation to external examiners, assessment boards, managing service teaching, rules for using credit, condonement of failure and arrangements for supervising research students constitutes the key patents and reputation. Arrangement for reporting, substitution of failed modules, policies for assessing students and determination of academic standards ranked lowly since this being policy matters, they have good guidelines which supplement the academia function. This concurs with Carr's (2000) demonstration that, in the global market of higher education, there are clearly competitive advantages in establishing and maintaining a reputation for providing good quality education, high academic standards and world-class research output.

4.3.10. General Responsiveness of the University/Institution

Public universities utilize public resources. They are also supposed to respond to the changes in their surrounding environment. There is the social, economic and political environment. The level of effectiveness differs among institutions in their responses. The respondents were asked to rank their institutions' responsiveness on a four-likert scale. i.e. Excellent, Good, Bad and Fair. The results are indicated in table 4-10.

Table 4-10 General Responsiveness of the University/Institution

Aspect	Mean	Rank
Effective use of public resources	2.2.	1
Provisions of information to the public to enable them make informed choice	1.83	2
Provision of information to drive change to the government for social and economic agendas	1.67	3
Your ability to meet market requirements.	1.63	4

Source: Research Data

Effective use of public resources and the provision of information to drive change to the government for social and economic agendas ranked high, this probably is because public universities are state utilities.

4.3.11. The Challenges Why other Public Universities Receive Few Candidates

The respondents except those from the university of Nairobi were asked to give reasons/challenges that have caused this. The results are shown in table 4-11.

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Table 4-11 The Challenges that have made other Public Universities Receive Few Candidates from JAB admissions.

The Challenge	Frequency	Percentage
Nature of programmes differ in numbers and capacity	9	47
Relevance of the curriculum to the job market	6	32
Redundancy of agriculture based courses	4	21
Total	19	100

Source: Research Data

The university of Nairobi has been receiving more than half the number of form four graduates. The other five universities are equally well developed but they have not managed to attract more students from the JAB. where chancellors allocate their universities candidates for training. From table 4-10. the nature of programmes differing in numbers and capacities was the major reason. This probably because the University of Nairobi is the mother of all universities in Kenya and it has well-established base in terms of its infrastructures and staff capacity (www.uonbi.co.ke).

4.3.12. Agreement with the 2005 Academic Ranking of the World Universities

The 2005 academic ranking of the world universities is the most recent spotlight evaluation of the world-renowned universities. The respondents were asked to indicate their degree of agreement on yes/no with reasons. From the research data. 63% of the respondents seemed to agree with the outcomes of the survey, as 37% seemed to disagree citing assessment was done without visiting the individual universities.

4.3.13. Why Kenyan Universities Scored Lowly in the 2005 World Universities Academic Ranking

During the recent ranking, the Kenyan Public universities scored lowly in the world and continental list. It is the university of Nairobi that managed the 20th position. The respondents were asked to indicate generally. what they thought made Kenyan universities rank lowly. The results are as shown on table 4-12.

Table 4-12 Why Kenyan Universities Scored Lowly in the 2005 World Universities Academic Ranking

The Reason	Frequency	Percentage
Lack of ICT connectivity/Resources	13	41
Brain drain, Diminishing government funding	9	29
Inactive participation in international forums	6	20
Inability to disseminate information/Poor websites	3	10
Total	31	100

Source: Research Data

From table 4.12, lack of ICT connectivity, limited resources, and brain drain coupled with diminishing government funding were the major reason of the low score. This is probably true since Internet connections in Kenya are very expensive and slow in speed, since they are via satellite since we don't have optic-fiber cable connectivity to the other part of the world.

4.3.14. Financing Educational and Training Programme and Research Needs

Public universities are faced with the problem of declining funding from the exchequer. They have resolved to seek other means of funding their academic programmes. The respondents were asked to indicate more than one source on how they are financing their programmes. Table 4-13 shows the results.

Table 4-13 Financing Educational and Training Programme Needs

The Source	Frequency	Rank
Government	24	1
NGOs	16	2
Development Partners	15	3
Partnership	11	4
Households	0	5
The Private Sector	0	5
Communities	0	5

Source: Research Data

From table 4-13, still public universities depend on the government to finance their academic programmes, but there are some efforts to seek funds from NGOs. Secondly, from the data, the government is the major supplier of money for any university research. The responds were asked to indicate how they finance their research. Government grants are still the major source followed by NGOs with 35 % and 32% respectively.

The above scenario affirms that the ability of the government to finance education and other social services has continued to decline; there is need for a more balanced and equitable educational system through benchmarking (Government of Kenya, 1993; 2005).

4.3.15. The Most Underutilized Opportunity

The Kenya public universities have the resources but some are underutilized, something they need to benchmark against what other public universities are doing in the world. The respondents were asked to indicate the underutilized opportunity in the Kenyan higher education.

Table 4-14 The Most Underutilized Opportunity

Underutilized Opportunity	Frequency	Rank
A very large base in higher education capacity	11	1
A number of institutions with infrastructural capacity	10	2
Adequately trained human resource	10	2

Source: Research Data

From table 4-14, a very large base in higher education capacity is the most underutilized opportunity, but on average it holds that; a very large base in higher education capacity, a number of institutions with infrastructures capacity and adequately trained human resource, and the underutilized existing infrastructures and human resources capacity (Nyaigoti-Chacha, 2004).

4.3.16. Presence of International Academic practices

The Kenya system of education does not allow some practices that might make other international systems compatible in academia. The respondents were asked to indicate the presence of world recognized academic practices in place and the results are in table 4.15.

Table 4-15 Presence on International Academic practices

Academic practices	Mean	Rank
Pegging admissions to bed capacity	1.77	1
Unilateral picking and assigning candidates to courses not suited for	1.70	2
Converting experience into grades for mature students	1.37	3
Allow students transfer grades to universities offering similar courses	1.30	4
Online learning systems	1.23	5

Source: Research Data

From table 4-15, the universities Pegging admissions to bed capacity with unilateral picking and assigning candidates to courses they are not suited for. But they don't allow students transfer their grades to other universities (outside) that offer similar courses: coupled with non-existence of online learning systems. This is owing to the fact that, benchmarking is one of the performance management strategies to setting realistic performance standards (Nahmia. 2000). It is also concerned with searching new ideas and practices, which must be able to be copied or adapted. The success of benchmarking, however, is largely due to more than its ability to set performance standards and enable organizations to copy one another. It is essentially about emulating, creativity and innovation (Cartin. 2000).

4.3.17. Enrollment of Foreign Students and their Percentage

Most universities of the world have attracted students beyond their continents. This is a test of international reputation based on the quality and standards. From the data, 70% indicated that they don't attract students beyond the continent. This is probably why the Kenyan universities scored lowly in the recent ranking.

Chart 4-3The Percentage of Foreign Students in Public Universities

Foreign
Students
3%

Local
students
97%
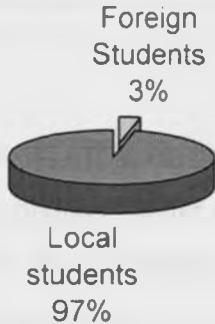
Source: Research Data

The respondents were asked to quantify the enrollment/amount of foreign student. From chart 4-3 there is an average of 3.30% foreign students composition in the public universities, supposedly because the Kenyan public universities have a good number of challenges facing them (Sifuna. 1998).

4.3.18. The Potential and Recommendations to Make Higher Education System a Net Exporter of Higher Education Services

The respondents were asked to indicate whether the Kenyan higher education has the potential of exporting its services, and any other recommendations to make it achieve best practices in the area. From the research data, of the 30 respondents, 24 of them indicated that the higher education sector has a potential of being a net exporter of the services to outmaneuver South African competitors or even overtake tourism as a major foreign exchange earner. Six of them indicated that there is no such possibility.

Table 4-16 Recommendations to be Make the Kenyan Higher Education (especially public universities) a Major Exporter

Recommendations	Frequency	Percentage
Enhance government support and staff development	9	29
Building infrastructure and excellent research laboratories	9	29
Recruit highly qualified staff with reasonable remuneration	6	19
Develop cross border and joint curriculum and degree programmes	4	13
Open private wings and commercialization	1	3
Introduce E-Learning	1	3
Expand open and distance learning	1	3
Total	31	100

Source: Research Data

Table 4-16 shows the recommendations that can transform the Kenyan higher education (especially public universities) sector a major exporter of academic service. Kenya depends on tourism a lot as major exporter to earn the government foreign exchange. The country has a potential to export its higher education services too. According to table 4-16 above, the major steps to be undertaken so as to achieve this goal basically include; enhancement of government support and staff development, Building infrastructure and excellent research laboratories, Recruiting highly qualified staff with reasonable remuneration and developing cross border and joint curriculum and degree programmes.

4.3.19. Steps Being Undertaken by Kenyan Public Universities to Achieve World-Class Status

The respondents were asked to indicate some of the steps being undertaken by Kenyan public universities to achieve the level of having best practices/world-class status in the endeavors to transform the Kenyan higher education sector into a major exporter of academic services. The results are as in table 4-17 below.

Table 4-17 Steps Being Undertaken to Achieve Best Practices/World-Class Status

Steps Being Undertaken	Frequency	Percentage
Putting quality assurance mechanisms in place-benchmarking	11	36
Strict following of the strategic plans	10	32
Improving the use of ICT	5	16
Developing market driven programmes	5	16
Total	31	100

Source: Research Data

From table 4-17, the majority indicated that it could be only through benchmarking and strict adhering to their strategic plans.

4.3.20. Continuous Comparisons Within and Outside the Management

There are some key areas of management that affect the academia function directly and indirectly. Failure to focus on them may lead to total failure of any system in place aimed at improving the academia function of the universities. The respondents were asked to indicate the whether they make continuous comparison on such areas or not, and table 4-18 shows the outcomes.

Table 4-18 Continuous Comparisons Within and Outside the Management

Management Areas	Frequency	Rank
Improvement in the quality and standards of education	19	1
Library	17	2
Facilities (Sports, Accommodation etc)	12	3
Estates	10	4
Energy & Treasury	1	5

Source: Research Data

Improvement in the quality, standards of education and Library services management were key areas that seemed to demand continuous comparisons. This is probable since the two go hand in hand in the academia function. Estates and energy management scored lowly.

4.3.21. The Perception of the Universities' Strategies

Public universities have visions and missions, which might emphasize quality and other aspects of their operations. There is always the customers' perception on the operations and activities of the institutions. The respondents were asked to indicate who their strategies are perceived.

Table 4-19 The Perception of the Universities' Strategies

Perception	Frequency	Rank
As strongest competitors in higher education	19	1
As the most admired in higher education	9	2
As most profitable in higher education	1	3

Source: Research Data

From table 4-19, the respondents indicated that the public universities are perceived in terms on the quality of education in higher education other than reputation and profit. This is visible since they are public institutions. This affirms that Public universities are under increasing pressure to show how they perform relative to others in the globally and making reliable international comparisons and learn from others (Wragg, 1998: Lund and Jackson, 2000a).

4.3.22. How Comparisons/Benchmarks are Done Now

The respondents were asked to indicate how they are carrying out their comparisons at the moment when benchmarking.

Table 4-20 How Comparisons/benchmarks are Done Now

How	Frequency	Rank
Comparing processes with those of competitors in higher education	29	1
Systematic evaluation of alternatives and adopting successful strategies from external partners	6	2
Breaking/tearing down the courses offered and technical analysis	3	3
Learning from companies outside the education	2	4

Source: Research Data

From table 4-20, comparing processes with those of competitors in higher education seemed to be the main way, probably because of the similar nature of processes, as opposed to those outside the academic function.

4.3.23. Benchmarking Practice Models

The respondents were asked to indicate the benchmarking practice model they emphasize on while adopting the best practices, and the results are as in table 4.21.

Table 4-21 Benchmarking Practice Models

Models	Frequency	Rank
Collaborative group partnership	10	1
Collaborative one- to – one partnership	9	2
Brokered models (involving an individual or agency intervening)	10	1
Independent self-referencing	2	3

Source: Research Data

There are various models that can be used when benchmarking. They can be done independently where there is no direct involvement of partners or collaboratively where there is an active involvement of partners. The respondents were asked to indicate how they model their benchmarks and table 4-21 shows the outcomes. Collaborative group partnership, brokered models involving an individual or agency intervening and collaborative one- to – one partnership are the most common models used in the benchmarking towards improvement in the quality and standards of education. This is probable as opposed to independent self-referencing since no organization can survive in a vacuum and holds substantial expertise to go it alone, hence satisfying the criteria of amenable checklists and pro-formas, decision making controlled by regulation often integral to quality management strategies (Jackson, 2001; 1997).

4.3.24 Sources of Benchmarking Process Ideas

Sources of information about other organizations' processes can be obtained from data centers, libraries or through direct contact. The respondents were asked to indicate the major sources of ideas and the results are as in table 4-22.

Table 4-22 Sources of Benchmarking Process Ideas

Sources	Frequency	Rank
From data centers	10	1
From libraries	9	2
Through direct contact	10	1
Internet/websites	2	3

Source: Research Data

Benchmarking. as a method of self-evaluation is based on searching for and creating reference points or benchmarks and understanding the reasons why they are reference points. Table 4-22 shows that data centers and direct contact are the major sources followed by libraries. The Internet received the least response probably because the universities lack good infrastructures for ICT. This is in conformity with Cartin's (2000) position that sources of information about other organizations' processes can be obtained from data centers. libraries or through direct contact.

4.3.25 Referencing Processes Use as a Mechanism for Comparison

Benchmarking activities can be classified according to the referencing processes as a mechanism for comparison that is used. The respondents were asked to indicate ant of the four different reference processes in place. Table 4-23 shows the results.

Table 4-23 Referencing Processes Use as a Mechanism for Comparison

Referencing Processes	Frequency	Rank
Action research: - focused surveys supported by discussion	9	1
Performance indicators: - statistical measures and online databases	9	1
Specification. codes of practice. descriptors and examples of good practice	6	2
Performance criteria and scoring systems: - standardized testing	4	3

Source: Research Data

From table 4-23. action research and performance indicators have the highest attention as the sources of information on benchmarks. Indeed. the last two decades have witnessed a stream of initiatives and policies aimed at promoting the conditions for performance assessment in higher education through the application of management statistics and performance indicators (Cave et al.. 1997: Lund and Jackson. 2000b).

4.3.26 The Extent of Use of the Different Types of Benchmarking

There are various types of benchmarking. They can be implemented concurrently or one at a time. The respondents were asked to indicate the extent of use, whether they are in use or they are planning to make use of them.

Table 4-24 The Extent of Use of the Different Types of Benchmarking

Types of Benchmarking	Frequency In Use	Rank	Frequency for Plan to Use	Rank
Development/Improvement benchmarking	29	1	1	7
Internal benchmarking	28	2	2	6
Competitive/performance benchmarking	20	3	2	6
Process benchmarking	20	3	8	5
Collaborative benchmarking	19	4	2	6
Bureaucratic benchmarking	18	5	1	7
Strategic benchmarking	12	6	9	4
International benchmarking	1	7	29	1
Functional/Generic benchmarking	1	7	28	2
External benchmarking	1	7	9	4
Independent benchmarking	1	7	19	3

Source: Research Data

The main types of benchmarking are: Strategic Benchmarking which involves examining the long-term strategies and general a approaches: Performance benchmarking or competitive benchmarking where institutions consider their position in relation to performance characteristics of key products and services; Process benchmarking which involves producing process maps to facilitate comparison: Functional/generic benchmarking where partners are drawn from different business sector: Internal benchmarking seeking partners within the same organization: External Benchmarking/Best Practice Benchmarking which is done with outside organizations that are known to be best in class; International Benchmarking whereby good practice organizations are located in other countries.

From the results in table 4-24 the most common types of benchmarking in use are Development/Improvement benchmarking. Internal benchmarking. Competitive/performance benchmarking. Process benchmarking and Collaborative benchmarking. this is highly related to

the outcomes from the objectives and strategies of most public universities. Most public universities are also planning to make use of Functional/Generic benchmarking, International benchmarking and Independent benchmarking. this is the reason why they are not recognized internationally. their quality of education has been on the down ward trend and none has peculiar characteristics as they are all classified as public institutions. This is as per the different ways of classifying benchmarking processes as tackled in works of Spendolini (1992), Appleby (1999), Jackson and Lund (2000).

4.3.27 Critical Factors Influencing the Choice of the Various Benchmarking Tools/Scope

Benchmarking is a simple concept but quite complex in application thus not all benchmarking attempts succeed due to undisciplined planning approach and limited resources. The choice of benchmarking tools and scope depends on the how excellent. good, bad or indifferent an organization's operations are. Most critical factors influencing the choice of the various benchmarking tools and scope in an organization acts as challenges to benchmarking (Camp. 1989). The respondents were asked to indicate three critical factors that have influenced the success of their benchmarking practices in their environs. The results are as in table 4.24.

Table 4-25Critical Factors Influencing the Choice of Benchmarking Tools/ Scope

Critical Factors	Frequency	Rank
Time and resource availability; Limited duration	21	1
Comparability of companies and process	19	2
Compatibility with local conditions	18	3
Level of experience in benchmarking	14	4
Objectives to be achieved and aspects to be reviewed	12	5

Source: Research Data

From table 4-25,the three major challenge facing the benchmarking processes in Kenya are time and resource availability; limited duration. comparability and compatibility which is the probable reason why the institutions don't practice international benchmarking. Indeed. benchmarking is a simple concept but quite complex in application thus not all benchmarking attempts succeed due to undisciplined planning approach and limited resources (Cartin, 2000).

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CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The study found out that the greater percentage of the staff in the academic function has a strong academic background majority of them with PhDs. The graduates' congruency to the market place was found to be good. The teaching and learning media commonly used was also found to be chalk and board. The rating and renewal of the (continuous) improvement systems in the universities was found to be good and annually. respectively. on how the universities' academic programmes compare to other universities globally. it was found that that they are fairly good and not excellent. The internal and external drivers of change in the university were found to be students and actual performance respectively.

The study also found out that the public universities have benchmarking systems. the major reason of benchmarking was to achieve development and continuous improvement. Professional processes. not public accountability processes that are founded on action research. drove the agenda of benchmarking. The areas to be benchmarked in priority to achieve world-class status were found to be result profiles. staff. and capacity to transform learners. research supervision and assessment.

It was also found that the universities have very little potentiality to move from traditional learning experience to the modern e-learning since the most common learning experience of the university students is actually campus-based. It was also found that all the factors that influence the success of benchmarking process influence/affect the success of benchmarking in the public universities. It was also found that participating in benchmarking would give Kenyan public universities a better understanding of practice. process or performance. and insights of the academic operations and functions. Higher education quality aspects to be fully benchmarked. regarding practices. processes. procedures and activities to protect quality and standards of the education were found to be structure of assessment boards. deployment of external examiners and formal mechanism to facilitate staff-student communication. The nature of programmes

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differing in numbers and capacities was the major reason why other public universities receive few students except the university of Nairobi.

Majority of the respondents also agreed with the 2005 academic ranking of the world universities, recent spotlight evaluation of the world-renowned universities. The Kenyan public universities ranked lowly due to lack of ICT connectivity, limited resources, and brain drain coupled with diminishing government funding. The most underutilized opportunity in the Kenyan public universities is a very large base in higher education capacity. The challenge of international academic practices with respect to admissions is that the Kenya system of education does not allow some practices that might make other international systems compatible in academia for example the universities peg admissions to bed capacity with unilateral picking and assigning candidates to courses they are not suited for.

It was also established that, the average number of foreign student population is 3% in the Kenyan public universities a probable reason why the Kenyan universities scored lowly in the recent ranking. The higher education sector has a potential of being a net exporter of the services to outmaneuver south African competitors or even overtake tourism as a major foreign exchange earner and the major steps to be undertaken so as to achieve this goal basically include; enhancement of government support and staff development, building infrastructure and excellent research laboratories, recruiting highly qualified staff with reasonable remuneration and developing cross border and joint curriculum and degree programmes. The major step being undertaken by Kenyan public universities to achieve world-class status is benchmarking and strict adhering to their strategic plans. Improvement in the quality, standards of education and library services management were key areas that seemed to demand continuous comparisons. This is probable since the two go hand in hand in the academia function. Estates and energy management scored lowly. The public universities are perceived in terms on the quality of education in higher education other than reputation and profit. Comparing processes with those of competitors in higher education seemed to be the main way of making comparisons, probably because of the similar nature of processes, as opposed to those outside the academic function.

Collaborative group partnership. brokered models involving an individual or agency intervening and collaborative one- to – one partnership are the most common models used in the benchmarking towards improvement in the quality and standards of the Kenyan higher education. Data centers and direct contact are the major sources of information on benchmarking processes. Action research and performance indicators have the highest attention as the sources of information on benchmarks. The most common types of benchmarking in use are development/improvement benchmarking. internal benchmarking. competitive/performance benchmarking. process benchmarking and collaborative benchmarking: this is highly related to the outcomes from the objectives and strategies of most public universities. Most public universities are also planning to make use of functional/generic benchmarking. international benchmarking and independent benchmarking. this is the reason why they are not recognized internationally. their quality of education has been on the down ward trend and none has peculiar characteristics as they are all classified as public institutions. The three most critical factors facing the benchmarking processes in Kenya are time and resource availability; limited duration. comparability and compatibility which is the probable reason why the institutions don't practice international benchmarking.

5.2 Conclusions

Based on the results from data analysis and findings of the research. one can safely conclude the following: First. Continuous improvement systems in Kenyan public universities are good and renewed annually. The external drivers of change/continuous improvements in public universities are the customers/students as opposed to legislation. while the major internal trigger of change is the actual performance. The public universities effectively and successfully benchmark for continuous improvement. Most academic programmes have not reached excellent levels in the global market scale since there is a very big gap to make Kenyan public universities international Centers of Excellence. This concurs with Sarkis' (2001) observations that benchmarking is a continuous. systematic process for evaluating the products, services and work process of organizations that are recognized as representing best practices. for the purpose of organizational improvement.

Secondly, the study also found out that, those who benchmark, their agenda emphasizes professionalism as opposed to other issues like accountability and holistic systems. Thus professionalism triggers adoption of benchmarking systems. The areas that need to be given first priority in benchmarking the Kenyan higher education were found to be: the quality of the outputs from the process where result profiles should be given priority; the quality of inputs to the educational process where quality of staff should be given priority; the way in which quality is defined where capacity to transform learners should be prioritized. Lastly, under the quality of the process itself, assessment, recruitment, marketing and research supervision should be given priority. These being the major areas that make a sustainable university. Increasingly, benchmarking is occurring at the input, process stage, which is otherwise known as upstream elements of the organization whereby lead benchmarks of performance are readily identified. Therefore this is clearly evident that benchmarking must evolve from being backward looking to forward looking (Sarkis, 2001). Thirdly, all the five major factors that influence the success or failure of any benchmarking systems and process hold while benchmarking the Kenyan public education. The public universities' objectives of participating in benchmarking processes and activities are aimed at a better understanding of practice, process or performance, and insights of the academic operations and functions. The steps being undertaken to achieve world-class status especially after the recent low score in the 2005 world ranking of public universities is only through benchmarking and strict adhering to their strategic plans.

Fourthly, the Kenyan public universities' visions and missions are perceived as the strongest competitors in higher education as opposed to the most admired in higher education. They only tailor their benchmarks through a comparing process with those of competitors in higher opposed to other best practices outside the academic function. Out of the various models that can be used when benchmarking with the competitors, collaborative group partnership, brokered models involving an individual or agency intervening and collaborative one- to – one partnership are the most common models used by Kenyan Public universities in the benchmarking towards improvement in the quality and standards of education. This was possible since no universities can survive in a vacuum and hold substantial expertise to go it alone using independent self-referencing models. This is in line with the literature on benchmarking typologies, which looked

at benchmarking as a structured process, a step-by-step process model, which provides a common language within organizations (Spendolini, 1992).

Fifthly, the Kenyan public universities source information about other organizations' processes from: data centers, libraries and through direct contact. Benchmarking, as a method of self-evaluation is based on searching for and creating reference points or benchmarks and understanding the reasons why they are reference points. There is little usage of Internet due to lack of a good infrastructure for ICT. Benchmarking activities can be classified according to the referencing processes as a mechanism for comparison that is used. The Kenyan public universities use action research and performance indicators as the sources of referencing information on benchmarks.

Sixthly, in spite of the various types of benchmarking which can be implemented concurrently or one at a time, the study found out that the most common types of benchmarking in use are development/improvement benchmarking, internal benchmarking, competitive/performance benchmarking, process benchmarking and collaborative benchmarking, this is highly related to the outcomes from the objectives and strategies of most public universities. Most public universities are also planning to make use of functional/generic benchmarking, international benchmarking and independent benchmarking, this is why most Kenyan public universities are not recognized internationally, their quality of education has been on the downward trend and none has peculiar characteristics as they are all classified as public institutions.

Finally, the three critical factors that have influenced the success of public universities' benchmarking practices in their environs are: time and resource availability: limited duration, comparability and compatibility which is the reason why the institutions don't practice international benchmarking.

5.3 Recommendations

The research recommends to the heads of academic function that the following six aspects of academia should be fully addressed through benchmarking to protect quality and standards of the education:

With respect to examinations and research, there should be clear academic systems regarding external examiners, assessment boards, managing service teaching, rules for using credit, condonement of failure and arrangements for supervising research students which constitutes the key patents in higher education and reputation; Arrangement for reporting, substitution of failed modules, policies for assessing students and determination of academic standards, being policy matters, they should be given good guidelines for them to supplement the academia function; For the public universities to respond to the changes in their surrounding environment, there should be sound mechanisms in place based on the social, economic and political wills. This will enable them make effective use of public resources and provide information to drive change in the government's social and economic agendas.

The JAB should do the following to avoid the imbalance that exists in the number of admissions to the public universities:

The JAB's chancellors should encourage and enhance their universities in terms of the nature of programmes, which differ in numbers and capacities from those in the University of Nairobi, now admitting half the candidates admissible for higher education; It will also be helpful if the JAB could prepare how-to do-it manual in terms of allowing students transfer their grades to other universities that offer similar courses. Converting experience into grades for mature students, mechanisms of not pegging admissions to bed capacity and unilateral picking and assigning candidates to courses they are not suited for. Lastly, JAB should enhance online learning and admission systems to utilize a very large base in Kenyan higher education capacity; Encourage enrolment beyond the continent since at the moment there is only 3% in the total student population; yet the Kenyan higher education sector has a potential of being a net exporter of the services to outmaneuver South African competitors or even overtake tourism as a major foreign exchange earner. Six of them indicated that there is no such possibility.

Kenyan higher education has a potential of being a major exporter to earn the government foreign exchange if it can: Enhance of government support and staff development. Building infrastructure and excellent research laboratories. Recruiting highly qualified staff with reasonable remuneration and Developing cross border and joint curriculum and degree programmes. Introduce E-Learning, open private wings and commercialization.

The government being the key player in the Kenyan higher education sector, should carry out the following responsibilities: Champion the ICT connectivity in all public and private universities. This is because ICT connections in Kenya are very expensive and slow in speed, since they are via satellite, which is a limitation due to the absence of optic-fiber cable connectivity to the other part of the world: Increase the volume of resources and financing form the exchequer the public universities' expenditure kit. The government should increase its research grants and mobilize the local authorities, NGOs, Household, communities and private sectors to assist in the financing and development of academic programmes: Curb the problem of brain drain through excellent remuneration to the universities' staff. The academic staff should be paid internationally competitive salaries to reverse the current trends of high brain drain; To strengthen the creditability of the conclusions, the government should deploy a task force to collect data relating to challenges facing the higher education sector and document what might have caused the low score of most public universities during the 2005 world academia ranking.

The following key areas of management that affect the academia function directly and indirectly should be improved through benchmarking to improve the academia function of the universities: Improve the quality and standards of education through sound library services management through continuous comparisons since the two go hand in hand in the academia function. Estates and energy management should follow this.

5.4   Limitations of the Study

1.   There was time and financial constraint in carrying out the research. Most heads of the academic function chairpersons, deans of Faculties, principals and registrars (Academic Affairs) who were targets for the questionnaire were very busy most of the time and kept turning down the appointments. Given the geographical disperse of the universities and their schools/campuses; very limited time coupled with insufficient funds to meet commuting expenses for the research, this was a major constraint.

2.   Use of descriptive statistics. The use of descriptive statistics tended to combine characteristics together hence individual characteristics of the public universities do out come

out. It generalized the responses of the different categories of informants who may not share the same experience in the academia function.

3.   Most of the informants were reluctant to participate in the research and had to be really convinced that it was only an academic exercise. Some could not fully fill the questionnaire claiming it the work of idlers theirs could be an interview.

5.5 Suggestion for Further Research

1. This study documents the benchmarking activities, as a continuous improvement tool in the Kenyan higher universities particularly the public universities. It was based on only the public universities that are accredited by the act of parliament and recognized by the commission of higher education. Benchmarking as a continuous improvement tool is applicable in all industries. The researcher recommends a study to be conducted to determine the extent other companies outside the higher education sector use benchmarking as a continuous tool. Such studies will help in highlighting challenges facing Kenyan organizations in the implementation of benchmarking. This might shade some light as to why Kenyan organizations have not been able to reach world-class status in their operations. Policy markers would then be able to initiate appropriate reforms based on this challenges:

2. This research covered a small part of the higher education sector; the researcher therefore recommends a study to be conducted to determine the extent to which private universities, which are many in number as opposed to public universities, use benchmarking as a continuous tool. Such studies will help in highlighting private universities preposition on benchmarking. This might shade some light as to why Kenyan private universities have not been able to reach world-class status in their operations too.

3. This was a survey of all public universities meaning that it did not emphasize so much on a specific university. It would therefore be necessary to undertake a research that takes real cases of individual universities in which benchmarking was claimed to have been done and go into the finer details of how it was done and whether it was being done correctly, and in particular see whether there exists any correlation with the performance of the university.

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APPENDICES:

APPENDIX 1: LETTER OF INTRODUCTION

Dear Respondent,...

I am a student pursuing Masters Studies in Business Administration [MBA], Operations Management in the School of Business, University of Nairobi. The title of my study is "**A survey of Benchmarking Practices in Higher Education in Kenya: The Case of Public Universities**". Your organization was selected to participate in this study since it falls in the above scope and category, and you have been selected because of your position as a key player/head/manager in the operations management of your organization.

The questionnaire attached asks questions about your organization's benchmarking processes, practices and tools with respect to operations management, its performance in the higher education sector and a few about the characteristics of your organization [The term "Benchmarking" has been defined at the top of the first page of the Questionnaire for the sake of simplicity]. Based on your experience and knowledge, please indicate the extent to which you agree or disagree with a given statement.

Your participation is essential to this study and will enhance our knowledge of operations management in Kenya and Kenyan Public Universities. I also wish to assure you that all information with respect to this research will be treated with the strictest confidence it deserves and will only be used for academic purposes, and in no circumstance will your name be mentioned in the report without your prior permission. If you would like, we can send you the report of the findings on request. My address is provided below.

Kindly assist in providing the required information. Thank you very much.

Peterson O. Magutu. [MBA Student]   **S. O. Nyamwange**. [Supervisor]

P o Box 3850-00200. Nairobi.

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APPENDIX 2: QUESTIONNAIRE

Organization Questionnaire on Benchmarking:

[N/B 1: This questionnaire consists of two parts *All parts are to be answered by all informants.* **N/B 2: Benchmarking** *is a systematic and collaborative comparisons of practices and performance with competitors to learn, identify strengths and weaknesses for continuous improvement and enhanced quality i.e. it's a continuous systematic measurement and comparisons aimed at seeking fresh approaches, implementing improvements and reviewing the benefits]*

PART ONE: GENERAL QUESTIONS

[To be answered by all informants]

1.1   Name of the university.....................................Job Title....................................

   Number of years in the present organization............Your Level of Education............

   (Indicate your responses by checking the boxes/cells provided below)

1.2   How is your graduates' congruence with the market requirements and the marketability of your degree programmes?

   a) Excellent   [   ]   b) Good   [   ]

   c) Fair   [   ]   d) Bad   [   ]

1.3   Which teaching and learning media do most of the university use?

   a) Chalk and Board   [   ]

   b) Overhead Projectors/ Transparencies   [   ]

   c) Computers and LCD Projectors   [   ]

   d) Sliding and White or Felt-Boards   [   ]

1.4   How will you rate the (continuous) improvement systems in your university?

   a) Good [   ]   b) Bad [   ]   c) Fair   [   ]

1.5   How often are your improvement practices renewed/ reviewed?

   a) Monthly   [   ]   c) Semi-annually   [   ]

   b) Annually   [   ]   d) Continuously   [   ]   e) Other..........................

1.6   How do your university programmes compare to other universities globally?

   b) Excellent   [   ]   b) Good   [   ]

   d) Fair   [   ]   d) Bad   [   ]

1.7 What are some of the external drivers of change in your organization?

    a) Customers/Students   [   ]   b) Market place   [   ]

    c) Legislation   [   ]   d) Other...

1.8 Which are some of the internal drivers of change?

    a) Actual Performance   [   ]   c) Monitoring systems [   ]

    b) Dysfunctional behavior   [   ]   d) Other...

PART TWO: BENCHMARKING PRACTICES

2.1. Are there systems that facilitate the systematic comparison and evaluation of practice. process and performance with any "best practices or smarter" institutions in improvement and self-regulation? Yes   [   ]   No   [   ]

2.2. What is the major reason for the systematic comparison and evaluation of your practice. process and performance with any "best practices or smarter" institutions?

    a) For regulatory purposes   [   ]   b) For development and improvement [   ]

2.3. Do you do the following during the systematic comparison and evaluation of your practice. process and performance?

Statement	Yes	No
A thorough search to identify best-practice-organizations		
The careful study of your own practices and performance		
Systematic site visits and interviews		
An analysis of results		
Development of recommendations and implementation		

2.4. What drives the agenda of learning. improvement. innovation and change towards a self-determined improvement?

    a) Professional processes   [   ]

    b) Public accountability processes that are founded on action research   [   ]

    c) Overall capacity of the systems to develop. improve and regulate itself [   ]

2.5 Which areas will you emulate. and require creativity and innovation to achieve world class status?

The quality of the outputs from the process		The quality of inputs to the educational process	
Result profiles	[ ]	Students	[ ]
Progression rates	[ ]	Staff	[ ]
Progression to further studies	[ ]	Resources	[ ]
Progression to employment	[ ]	**The quality of the process itself**	
The way in which quality is defined		Curriculum design	[ ]
Equivalent to ''best in class''	[ ]	Teaching and learning methods	[ ]
Consistency	[ ]	Support and guidance	[ ]
Fitness of purpose	[ ]	Assessment	[ ]
Value for money	[ ]	Recruitment and marketing	[ ]
Capacity to transform learners	[ ]	Research supervision	[ ]
		Management and administration	[ ]

2.6. Which one is the most common experience of the student in your university in their learning experience?

      a) Campus-based   [   ]   d) Distance learning   [   ]

      b) Boarding   [   ]   e) Day scholars   [   ]

      c) Conducted in the work environment   [   ]

2.7. Indicate how each of the following factors influence the success of you benchmarking/the process of emulating the best practices

Statement/Factor	Affects	No effect
The added value offered by the method /cost-benefit analysis		
Objective identification of opportunities and bottlenecks		
The organization's own former performance		
The support of the method to internal quality management within		
The contribution to a greater accountability to the outside world		

2.8. What do you expect to achieve in participating in any benchmarking/systematic comparison exercise?

      a) Improved networking   [   ]

      b) Benchmarking information   [   ]

      c) A better understanding of practice. process or performance. and insights [   ]

2.9. Which of the following areas of higher education (public universities) regarding practices. processes. procedures and activities to protect quality and standards of the education it provides need to addressed fully through benchmarking in you university?

Practices/Statement	Critical	Not critical	Don't know
How programmes and modules are designed and approved			
Admissions and entry standards			
Arrangements for the delivery and management of programmes			
Strategies for guiding and supporting students			
Arrangements for managing service teaching			
Formal mechanism to facilitate staff-student communication			
Arrangement for reporting and dealing with problems			
Policies for assessing students and for determination of academic standards			
Arrangements for supervising research students			
Formal mechanisms for reviewing the quality of education and teaching			
The standards attained by students			
The quality mechanism and standards of any collaborative programmes			
Number of normal learning hours at undergraduate and postgraduate levels			
Rules for using credit (number of credits required for an award. number of credit levels)			
Contribution to honours classification of marks at different levels.			
Module pass mark.			
Rules for compensation or condonement of failure			
Progression with module failure			
Rights to re-assessment			
Substitution of failed modules			
Structure of assessment boards			
Deployment of external examiners.			

2.10. How can you rank your university in the following aspects?

Statement	Excellent	Good	Bad	Fair
Effective use of public resources				
Provision of information to drive change to the government for social and economic agendas				
Provisions of information to the public to enable them make informed choice				
Your ability to meet market requirements.				

2.11. What are some of the challenges that have made your university receive few candidates from JAB admissions? (Except, the University of Nairobi)

....

....

2.12. Do you agree/concur with the recent 2005 academic ranking of the world universities?

Yes   [   ]   No   [   ]

Why..

....

2.13. Generally, what do you think made Kenyan universities rank lowly in the recent 2005 academic ranking of the world universities?

....

....

2.14. How do you finance your Educational and Training programme needs? (Tick more than one)

a) Government   [   ]   e) The Private Sector [   ]

b) NGOs   [   ]   f) Communities   [   ]

c) Households   [   ]   g) Development Partners[   ] h) Partnership [   ]

2.15. Where do you get most of your research grants? (Tick more than one)

a) Grants and contracts from government   [   ]

b) Grants and contracts from local authorities   [   ]

c) Grants and contracts from industry and commerce   [   ]

d) Non governmental organizations   [   ]

2.16. Which one of the following is the most underutilized opportunity in your university?

  a) A very large base in higher education capacity   [   ]
  b) A number of institutions with infrastructural capacity   [   ]
  c) Adequately trained human resource   [   ]

2.17. Do you allow the following practices in your university's operations?

Statement	Yes	No
Allow students transfer their grades to other universities that offer similar courses		
Converting experience into grades for mature students		
Pegging admissions to bed capacity		
Online learning systems and		
Unilateral picking and assigning candidates to courses they are not suited for		

2.18. Do you enroll students beyond the continent?   Yes   [   ]   No [   ]

2.19. What is the percentage of foreign students in your university? (For Registrars only)............

2.20. Is it possible to make you university and the whole higher education system a net exporter of higher education services (to outmaneuver South African competitors or even overtake tourism as a major foreign exchange earner)?   Yes   [   ]   No   [   ]

2.21. What can you recommend to be done to make the Kenyan higher education (especially public universities) a major exporter of higher education services?
....
....

2.22. What is your institution as a Kenyan public universities doing to achieve the level of having best practices, processes and opportunities for continuous improvement to meet world-class status/to be recognized as the best in the world?

  ....
  ....

2.23. Do you make any continuous comparisons within and outside the management of the following areas?

Statement	Yes	No
Library		
Facilities (Sports. Accommodation etc)		
Estates		
Energy & Treasury		
Improvement in the quality and standards of education		

2.24. What is the perception of your university's strategies?

    a) As the most admired in higher education   [   ]

    b) As most profitable in higher education   [   ]

    c) As strongest competitors in higher education   [   ]

2.25. How are you doing your comparisons *now*? (Please tick only one)

    a) Breaking/tearing down the courses offered and technical product analysis [   ]

    b) Comparing processes with those of competitors in higher education   [   ]

    c) Learning from companies outside the education   [   ]

    d) Systematic evaluation of alternatives and adopting successful strategies from external partners   [   ]

2.26. How do you model your comparisons?

    a) Collaborative group partnership   [   ]

    b) Collaborative one- to – one partnership   [   ]

    c) Brokered models (involving an individual or agency intervening)   [   ]

    d) Independent self-referencing   [   ]

(Independently -no direct involvement of partners, collaboratively - there is an active involvement of partners)

2.27. What are some of the sources of information about other organizations' processes?

    a) From data centers [   ]   c) Through direct contact   [   ]

    b) From libraries   [   ]   d) Internet/websites   [   ]

2.28. Which referencing processes do you use as a mechanism for comparison?

    a) Action research: - focused surveys supported by discussion   [   ]

    b) Performance indicators: - statistical measures and online databases   [   ]

    c) Specification, codes of practice, descriptors and examples of good practice [ ]

    d) Performance criteria and scoring systems: - standardized testing   [   ]

2.29. Please indicate the extent of use and knowing/awareness of the following types of benchmarking schemes/systematic comparison exercises in your organization.

Benchmarking schemes/systematic comparison exercises	In Use	Plan to use	Known but not in use	Don't know
Competitive/performance benchmarking				
Process benchmarking				
Functional/Generic benchmarking				
Internal benchmarking				
Development/Improvement benchmarking				
Collaborative benchmarking				
External benchmarking				
Strategic benchmarking				
International benchmarking				
Bureaucratic benchmarking				
Independent benchmarking				

{Key: Strategic Benchmarking- examining the long-term strategies and general a approaches, Performance benchmarking or competitive benchmarking -consider their position in relation to performance characteristics of key products and services, Process benchmarking- producing process maps to facilitate comparison, Functional/generic benchmarking -with partners drawn from different business sector, Internal benchmarking seeking partners within the same organization, External Benchmarking/Best Practice Benchmarking- outside organizations that are known to be best in class, International Benchmarking- good practice organizations are located in other countries}

2.30. Please tick the **THREE** most critical factors influencing the choice of the various benchmarking Tools and scope in your organization

    a) Compatibility with local conditions   [   ]

    b) Comparability of companies and process   [   ]

    c) Time and resource availability; Limited duration   [   ]

    d) Level of experience in benchmarking   [   ]

    e) Objectives to be achieved and aspects to be reviewed   [   ]

<u>I would like to take this opportunity to sincerely thank you for taking your time off your busy schedules to complete the above questionnaire.</u>

APPENDIX 3: LIST CONTAINING THE MAIN PUBLIC/ OR STATE UNIVERSITIES IN KENYA

1. The University of Nairobi-   UON
2. Kenyatta University-   KU
3. Jomo Kenyatta University of Agriculture and Technology-   JKUAT
4. Moi University-   MU
5. Egerton University-   EU
6. Maseno University-   MA
7. Western University College of Science and Technology-   WECSO