

**EFFECTS OF OPERATIONS MANAGEMENT PRACTICES ON THE  
QUALITY OF MASTER OF BUSINESS ADMINISTRATION PROGRAMS  
IN KENYAN UNIVERSITIES, CAMPUSES BASED IN NAKURU TOWN**

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**A Research Project Submitted to the School of Business and Economics in Partial  
Fulfillment of the Requirements for the Award of Master of Business Administration  
(Operations Management) Degree of Kabarak University**

**2016**

## DECLARATION AND APPROVAL

### Declaration

This project is my original work and has not been presented for examination or awards in any other university or academic institution.

Signature..... Date .....

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GMB/NE/0646/05/15

### Approval by Supervisors

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

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## **DEDICATION**

I dedicate this project to my parents, family and friends for their unending support and encouragements throughout this academic journey. I am and will be forever grateful.

## **ACKNOWLEDGEMENT**

My greatest of appreciations, thanks goes to the Almighty God for his grace provisions. Secondly, to my supervisors Dr. Hellene Sang and Mr. Philip Ragama who have passionately encouraged and guided me and for the assistance accorded to me by the staff of Kabarak University, Town campus; the Librarians and Information Technology departments. To my dear friends, family and my colleagues at Kabarak University MBA Operations Management group who encouraged and stood with me on many occasions. Thank you.

## **LIST OF ABBREVIATIONS**

<b>APICS -</b>	American Production and Inventory Control Society
<b>BCOM-</b>	Bachelor of Commerce
<b>CUE -</b>	Commission of University Education
<b>GDP -</b>	Gross Domestic Product
<b>JITT-</b>	Just-In-Time Teaching
<b>KSAs -</b>	Knowledge, Skills and Abilities
<b>MBA -</b>	Master of Business Administration
<b>OM -</b>	Operations Management
<b>QA -</b>	Quality Assurance
<b>TQM -</b>	Total Quality Management
<b>WCM -</b>	World Class Manufacturing

## ABSTRACT

Master of business administration (MBA) programs are under intense pressure to improve efficiencies, lower tuition, and offer refreshed curriculum that is of high quality and regarded as relevant by the marketplace. In light of this environment, this study proposes a framework for effectively employing operations management (OM) practices in the design and execution of MBA programs. The study investigated the important role that operation management practices play in curriculum design and faculty utilization, how operation efficiency can create quality of student experience, assurance of learning and how operation management practices can lead to high quality MBA program design. OM practices are shown to be applicable in key areas including curriculum design, faculty utilization, quality of student experience, assurance of learning, and program redesign. The study examined the usage of OM practices in running MBA programs in universities based in Nakuru town. The study concentrated on 10 universities offering MBA within Nakuru town. Descriptive survey design was used in this study. Previous surveys from European and American Business Schools indicate that most MBA programs are not fully utilizing OM practices in their operations. Therefore this study sought to find out if this is the case in Kenya, more specifically in Business schools in Nakuru town. For empirical assessment, a questionnaire with items corresponding to each objective-method in the framework were developed and sent to administrators of MBA Business Schools of Universities based in Nakuru town. These administrators are considered a critical section in administration decisions at many business schools as their main roles demonstrate a commitment to providing quality graduate management education through accreditation by the CUE and other certifying bodies. Analysis of the collected data was carried out using Statistical Package for Sciences (SPSS), computer software. Descriptive as well as inferential statistics were used to analyze data. Frequency distributions, chi-square tests were used to present the data. Inferential statistics; Pearson's correlations and multiple regressions were used to assess the role of OM Practices in MBA program administration of Universities in Nakuru Town.

Keywords: *MBAQuality, Operations Management Practices, Operations Efficiency, Capacity Planning, Learning Assurance. Just-In-Time Teaching*

## TABLE OF CONTENTS

<b>DECLARATION</b> .....	<b>ii</b>
<b>DEDICATION</b> .....	<b>iii</b>
<b>ACKNOWLEDGEMENT</b> .....	<b>iv</b>
<b>LIST OF ABBREVIATIONS</b> .....	<b>v</b>
<b>ABSTRACT</b> .....	Error! Bookmark not defined.
<b>TABLE OF CONTENTS</b> .....	<b>vi</b>
<b>LIST OF TABLES</b> .....	Error! Bookmark not defined.
<b>LIST OF FIGURES</b> .....	<b>xi</b>
<b>CHAPTER ONE</b> .....	<b>1</b>
<b>INTRODUCTION</b> .....	<b>1</b>
1.1 Background of the Study .....	1
1.2 Statement of the problem .....	9
1.4 Research Hypothesis .....	11
1.5 Scope of the Study .....	11
1.6 Limitations of the Study.....	12
1.7 Significance of the Study .....	12
1.8 Definition of Operational Terms.....	12
<b>CHAPTER TWO</b> .....	<b>14</b>
<b>LITERATURE REVIEW</b> .....	<b>14</b>
2.1 Introduction.....	14
2.2 Theoretical Literature.....	14
2.2.1 Deming's Theory of Management.....	14
2.2.2 Crosby's Theory: .....	15
2.2.3 Joseph Juran's Theory .....	17
2.2.4 Ishikawa's Theory .....	19
2.3 The Effectiveness of OM Practices.....	20
2.4 Total Quality Management .....	21
2.4.1 Capacity Planning .....	22
2.4.2 Just In Time Teaching.....	24
2.4.4.1 Assurance of Learning Process Mapping .....	28

2.5 Faculty and Student Quality Circles .....	29
2.6 Scheduling for Predictable Flow of Students.....	30
2.7 Concurrent Engineering for Curriculum Design.....	31
2.8 Research Gap .....	33
2.9 Conceptual Framework.....	34
<b>CHAPTER THREE .....</b>	<b>35</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>35</b>
3.1 Introduction.....	35
3. 2 Research Design.....	35
3.3 The Study Area .....	35
3.4 Target Population.....	35
3.5 Sampling Design and Procedures .....	35
3.6 Data Collection Instruments and procedures .....	36
3.7 Validity and Reliability of rresearch iinstruments .....	36
3.7.1 Validity of Research Instruments.....	36
3.7.2 Reliability of the Research Instruments.....	37
3.8 Data Analysis and Presentation .....	37
3.9 Operationalization of the Variables. ....	38
<b>CHAPTER FOUR.....</b>	<b>39</b>
<b>DATA ANALYSIS, INTERPRETATIONS AND DISCUSSIONS .....</b>	<b>39</b>
4.1 Introduction.....	39
4.2 Response Rate.....	39
4.3 Background information .....	39
4.3.1 Gender of the respondents .....	39
4.3.2 Age of the respondents.....	40
4.3.3 Position in organization .....	40
4.3.4 Education level.....	41
4.4 Effects of operations management on MBA Programs. ....	41
4.4.1 Just-In-Time Teaching and Quality .....	41
JITT and Quality.....	42
4. 4. 2 Quality assurance and student experience .....	43



4. 4. 3 Capacity Planning influences Quality of MBA Programs .....	45
4.4.4 Operational Efficiency and Quality .....	47
4.5 Quality MBA program .....	49
4.5.1 Research output.....	51
4.5.2 Market Acceptance .....	53
4.6 Reliability Test.....	54
4.7. Correlation Analysis .....	<b>Error! Bookmark not defined.</b>
4.8 Regression Analysis.....	<b>Error! Bookmark not defined.</b>
4.9 Hypothesis Testing.....	<b>Error! Bookmark not defined.</b>
<b>CHAPTER FIVE .....</b>	<b>Error! Bookmark not defined.</b>
<b>SUMMARY, CONCLUSION AND RECOMMENDATIONS....</b>	<b>Error! Bookmark not defined.</b>
5.1 Introduction.....	<b>Error! Bookmark not defined.</b>
5.2 Summary of the Findings.....	<b>Error! Bookmark not defined.</b>
5.3 Conclusion of the study .....	<b>Error! Bookmark not defined.</b>
5.4 Recommendations.....	<b>Error! Bookmark not defined.</b>
5.5 Suggestions for Further Research .....	<b>Error! Bookmark not defined.</b>
<b>REFERENCES.....</b>	<b>Error! Bookmark not defined.</b>
<b>APPENDIX I: Letter of Introduction .....</b>	<b>Error! Bookmark not defined.</b>
<b>APPENDEX II: Questionnaire .....</b>	<b>Error! Bookmark not defined.</b>
<b>APPENDIX III: Universities Offering MBA in Nakuru Town .....</b>	<b>85</b>

## LIST OF TABLES

Table 4.1 Just-In-Time Teaching and Quality .....	<b>Error! Bookmark not defined.</b>
Table 4.2 Quality assurance and student experience .....	<b>Error! Bookmark not defined.</b>
Table 4. 3 Capacity Planning influences Quality of MBA Programs.....	<b>Error! Bookmark not defined.</b>
Table 4. 4 Operational efficiency and Quality .....	<b>Error! Bookmark not defined.</b>
Table 4. 5 Quality MBA program.....	<b>Error! Bookmark not defined.</b>
Table 4. 6 Research output.....	<b>Error! Bookmark not defined.</b>
Table 4.7: Market acceptance .....	<b>Error! Bookmark not defined.</b>
Table 4. 8 Reliability Test.....	54
Table 4. 9 Correlation Analysis .....	<b>Error! Bookmark not defined.</b>
Table 4. 10 Model Summary .....	<b>Error! Bookmark not defined.</b>
Table 4. 11 Model Analysis of Variance .....	<b>Error! Bookmark not defined.</b>
Table 4. 12: Model Coefficients .....	<b>Error! Bookmark not defined.</b>
Table 4. 13 Summary of Hypotheses Testing .....	<b>Error! Bookmark not defined.</b>

## LIST OF FIGURES

Figure 2.1 Conceptual framework.....	33
Figure 4. 1 Gender of the respondents.....	39
Figure 4. 2 Age .....	40
Figure 4. 3 Position in organization.....	41
Figure 4. 4 Education level.....	41

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Master of Business Administration (MBA) is one of the most popular degree programs in Kenyan universities (Alvesson & Benner, 2016). Most faculties of commerce have reinvented themselves to schools of business to accommodate BCOM and MBA programs. The students may select a specialization in Finance, Accounting, Operations, Strategic, Human resources, Marketing, International Business, Information systems, Health Care Administration and many more (Nyasani, 2015). Nyasani further poses a question whether these are specializations or options? Most MBA degree requirements are course work and a research thesis/project (Azure, 2016). The course is expected to cover a number of issues in economics, business strategy, finance, accounting and many more foundations of management theory. After course work, the students proceed to the development of their research projects which will be eventually compiled into a thesis/project report. Upon completion of the degree requirements, the graduate are presumably prepared for progressively challenging/rewarding careers in business, industry, government, health and some many other fields (Bonnie, Stroud, Breiner & Council, 2015).

Then where is the specialization? Based on three global objectives of any MBA degree program, the graduate is first expected to learn and internalize the theory, principles, and knowledge required for effective management in today's dynamic environment (Bedford, 2013). Secondly, the learner is expected to develop techniques for basing decision and action on careful analysis of pertinent data; and lastly the learner should develop a philosophy of responsible leadership and an appreciation of business ethics (Nettles, 2015).

Most of the MBA programs in Kenya have not embraced the best practices that can enable learners acquire techniques for basing their decisions and action on careful analyzed pertinent data, rendering them without any leadership philosophy for any future responsibilities that require strong ethical appreciations (Bruce, 2010). Most MBA degree programs don't have a course unit in Business Ethics as it should be the case. Ethics goes hand-in-hand with practice (Reyes, Kim, & Weaver, 2016). Most of the MBA graduates are hardly thirty years old, do they go for attachment or they are treated as those who are already working as they study? The specialization should be in the MBA Research Project/Thesis. Most MBA graduates are

“theorists” and not “specialists” who can practice in their thematic areas for example someone claiming that to be a specialist in Operations Management (Magutu, 2013).

This is wrong since operations management has ten key decision areas which may include: Goods & service design, Quality, Process & capacity design, Location selection, Layout design, Human resource and job design, Supply-chain management, Inventory, Scheduling and Maintenance (Schönsleben, 2016). Given the short semester hours available for student to take their core courses and other graduate business courses in the selected area, the student is expected to choose a specific area of interest where he/she can conduct a practical research on for example “location selection” which will be the area of specialization within operations management option (Magutu, 2016). The supervisors assist the students’ effort of narrowing the gap between the theory taught in class and best practices in business (Hopkins, 2014). The research efforts gives students a chance to focus in a specific area of interest where they can learn and internalize the theory and knowledge required for effective management through literature review and in line with the last objective any MBA degree program to inculcate techniques for basing decision/action based on careful analyses of pertinent data (Borg, 2015).

(Magutu, 2016) further explains that MBA graduates should stop specializing on “MBA Options” but on “specific decision areas” within their options. There is need for specialization in “Quality Management” and not “Operations Management” or a specialist in “Green Marketing” and not “Marketing Management” (Moliner, Ortega, Tarí, & Azorín, 2016). “A good MBA Research Project/Thesis topic ought to test on two concepts to show some relationship between them” (Safieddine, 2015). The undergraduate Management Research Project (MRP) can test on a single concept without necessarily showing any relationship (Liu, 2015). But in most cases, most MBA students are doing MRPs using very simplistic data analysis techniques. Many MBA theses/project reports in most universities have been archived since they are of poor quality, or a replica of previous research (Azure, 2016). This is aimed at reducing chances of students replicating other people’s work and to help supervisors. All faculties/schools should circulate to their students/lecturers a list of faculty approved journals where those papers can be published. The same list as proof of quality should be used to promote faculty members (Magutu, 2016). There are a number of important challenges facing universities in Kenya and include the demand for access to social equity, funding and the cost to students, governance and internal

management, the changing roles of academics, demographic changes among academics, inefficiency, and ethnicity (Odhiambo, 2014).

The growth in enrolment has resulted in a situation where in many universities in the country, physical facilities cannot cope with the number of students (Ochumo, 2015). Libraries are overcrowded, books are outdated, journal holdings lag years behind, laboratories and equipment are outdated and inadequate, rooms in hostels are overcrowded, and academic staffs are not compensated appropriately (Tucker, Fisher & Gerrity, 2014). In addition, massification; overcrowding; ever-growing demand; erosion of technical colleges due to acquisitions and takeovers by public universities in search of space; insufficient/declining public funding; curricula that are not responsive to modern-day needs of the labor market; declining quality; crumbling infrastructure; poor governance; rigid management structures pose major challenges to the provision of quality education in Kenyan universities (Kremer, Brannen, & Glennerster, 2013.. This perhaps explains why universities offering professional courses are under siege from professional bodies' standard criteria that at times assume more than utopian circumstances in our struggling institutions (Ochumo, 2015).

The main causes for this include: Pressures of massification that require expansion to cater for the large increase in student numbers (as evident from the demand, it can be expected that this situation will deteriorate further), economic problems faced by our country arising out of insecurity and the subsequent decline of some sectors in the economy, a changed fiscal climate induced by the policies of multilateral lending agencies, inability of students to afford the tuition required for financial stability, misallocation and poor use of available financial resources by some of the universities (Ochumo, 2015). Shortage of Academics; In addition, the number of academic staff in Kenyan universities has not kept pace with the increasing student population; the situation has deteriorated to a point where the balance between productivity gains and the quality of teaching is under threat. The student-to-lecturer ratio in the universities has deteriorated from 25:1 in 1986 to 52:1 in 2013 (Datar, Garvin & Cullen 2014). This, of course, has strong implications for quality of lecturer interaction with students as well as concerns about overall teaching learning process (Méndez & Gummesson, 2012).

The issue of brain-drain has also played a part in the current crisis. In Kenya alone, the World Bank reports that nearly 40 per cent of the country's highly skilled professionals immigrate to

rich countries (Clinebell, 2008). The migration of the highly skilled cadre of academic professionals and students has led to an acute shortage of academics in Kenya's universities, especially in key fields such as science and engineering (Mbirithi, 2013). The number of non-academic (support) staff is excessive in many Kenyan universities, an aspect that is attributed to skewed human resource policies. (Boyle, Hermanson & Mensah, 2011) postulate that in universities where resources are already scarce this is viewed as unaffordable in light of other academic needs. Some of our universities suffer in general from poor, inefficient, and highly bureaucratic management systems. Challenges attributed to scholarly research in most Kenyan universities include the descriptive nature of research and the lack of empirical rigor (in part due to a lack of resources); paucity of cross-disciplinary research endeavors; limited collaborations between practitioners and academics; limited linkage between research and the national development agenda; decreasing state subsidies; shortage of research expertise and experienced supervisors; high subscription costs of scholarly journals; limited publishing infrastructure; lack of incentives for researchers; inadequate mentoring frameworks; and weak or non-existent partnerships (Kilonzo & Magak, 2013).

Applied Research; (Darley & Luethge, 2015) argue that research done in Kenyan universities tends to focus on local or national development issues by putting an emphasis on applied research at the expense of basic research. The focus on national or regional issues may mean that research outcomes are generally not widely applicable to international issues (Zikmund, Babin, Carr, & Griffin, 2013). Inadequately equipped libraries exacerbate this, with limited access to modern journals and the internet (Taylor, Jaeger, McDermott, Kodama, & Bertot, 2012). Neither doctoral students nor their local faculty supervisors are likely to have access to current theoretical and comparative literature that might provide new and valuable insights in their research projects. In most libraries, books are ancient, unavailable or the pages largely mutilated (Lacy, 2014). (Ng'ang'a, Kabethi & Leonard, 2015) found out that University presses are underfunded or non-existent, and university journals are either few or unavailable. Saint (2015) asserts that indeed, a recent World Bank report makes this point strongly by admitting: "Sub-Saharan Africa is at the bottom of almost every knowledge economy indicator.

(Kimani, 2015) asserts that the massification phenomenon signals a long way to go to create the foundation for high-quality research, graduate education, and knowledge creation in our universities in Kenya. As a measure towards survival and sustainability, universities in Kenya

have shifted from the public-good paradigm, primarily concerned with national development pervasive in the literature on higher education, to a market model that engages the neoliberal ideal of development, one in which the economic survival of the institution becomes paramount. (Githinji, 2014) notes that Module II programs have been a boon for universities in Kenya by increasing funding for and broadened access to university goods and services to consumers. Additionally, the Module II service has opened up access to students previously unable to obtain post-secondary education at public institutions. Indeed it is noted that Module II revenue has engendered enhancements for the institutions, expanding their ability to provide services. Moreover, (Oanda, 2013) agrees that marketization has enabled these institutions to retain and attract qualified staff by providing opportunities for ancillary income as an incentive. The flip side to the Module II initiative is when prudent and frugal management and utilization of the resources in a given institution wanes. The massification phenomenon then becomes a burden due to limited facilities and requisite human resource. The quality of the instruction is hampered and the desired outcomes of the learning processes as well the impact of the graduates in society becomes insignificant in measure (Reuben, 2014).

**Research Development;** It is encouraging to note that most universities in Kenya like the rest in the world are now thinking strategically by developing strategic plans and mission statements that aspire to produce highly skilled and globally competitive graduates functional in the knowledge economy; relate curriculum to labor demand; reconstruct the curriculum to meet Kenyan needs; support critical, basic research, theory building, experimentation and teaching; deal with emerging issues; lead in social transformation rather than act as conservative or elitist institutions; forge links with industry and government to become more innovative and relevant to society; and participate in or form part of government policy making organs (Sila, & Gichinga, 2016). The Commission for University Education has made remarkable differences in terms of the quality of teaching, programmes and facilities particularly in the public universities. For Kenya to accelerate its development and achieve the Sustainable Development Goals, the government will have to increase its investment in science and technology at the universities and in turn demand prudent management of resources (Wambui, Ngari, & Waititu, 2016).

The challenges that face Kenyan universities are serious, but there are certainly opportunities, and with appropriate research and creative effort, a long and bright future could be waiting for the Kenyan higher education (Odhiambo, 2014). The master of business administration (MBA)



degree continues to grow in popularity in response to organizational needs for employees who can navigate the complexities of current and future business environments (Byrne, 2014). However, serious questions have been raised about the value of today's MBA program offerings (Prince, Burns, & Manolis, 2014). Additionally, MBA programs face a threat from emergence of for-profit providers, combined with reduction of government funds, and increased competitive pressures between business schools with an emphasis on rankings (Thomas, Thomas, & Wilson, 2013). The need to reduce costs, together with a debatable value proposition, has many business schools scrambling to improve operational efficiency while also critically examining the relevance of their curricula. The discipline of operations management (OM) includes the design, execution and control of processes that transform inputs into value-added outputs (Stevenson, 2015).

Adam Smith, a Scottish economist, is often credited with the introduction of production management in the late eighteenth century. He advocated for division of labor which resulted in repetitive tasks, specialization, and improved efficiency of operations. Subsequent industrial developments such as interchangeable and standardized parts, stopwatch timing of task activities, assembly line production, and statistical quality control contributed to a scientific orientation for production OM. Historically, OM was almost exclusively applied to manufacturing until the mid-20th century when the number of service jobs accounted for nearly half of the employment workforce. However, today 63% of gross domestic product in the Kenya is from the service industry (KNBS, 2015) and OM is widely applied in service-focused businesses. According to London-based The Times World University Rankings, 15 of the top 20 universities in the world hail from the US (Jöns, & Hoyler, 2013). Interestingly, American institutions do not require a master's theses for most graduate programmes. Students, especially in professional disciplines, may complete purely on taught programmes (Monk, Foote, & Schlemper, 2012). However, due to the Commission for University Education's forced standardization across universities, Kenyans desiring master's degrees must complete a research-based thesis even for professional courses that does not relate to their later employability (Kimathi, & Henry, 2014).

Unfortunately, requiring a student to conduct research but holding no meaningful criteria on the quality of the research is akin to testing whether a chef can slaughter a chicken but with no consideration as to whether the chef sickens consumers who eat his poorly prepared meal (Peters, Howard, & Sharp, 2012). Many students pursue non-academic topics and try mental

gymnastics to try and fit them into a research project. Thousands of Kenyan graduate students ask simple yes or no questions with answers already found hundreds if not thousands of times in literature (Kivunja, 2016). The same students also possess little or no concept of testing a theory or contributing to a body of knowledge by refining a theory. Even when writing a non-research case study, a shortened training manual, or an opinion piece may all receive publication in some Kenyan peer-reviewed academic journals and qualify under Commission for University Education criteria (Bailey, 2014). Furthermore, most Kenyan universities do not run anti-plagiarism checks on research projects, utilizing powerful available industry software (Larsson, & Hansson, 2013). External investigators find rampant copying and cases where others are paid to write one's research project, even among doctoral theses (Addisu, 2012).

The situation is so serious that some top Kenyan universities even run plagiarism software on PhD holders seeking faculty job placements and find that many professors seeking employment plagiarized their doctoral thesis and many of their publications. Similarly, they have to drill lecturers on the content of their doctoral theses to see if they were the actual authors (Talam, 2014). Many students, confused by the lack of clarity in research methods courses and untrained supervisors, then produce low quality research (Wicker, 2012). Despite setbacks in many university settings, Kenya holds some phenomenal centers' of research excellence that rival any other nation. The challenge faced entail raising the level of research rigour across the entire sector. Kenya has the brains and the will; now Kenya needs a way (Kearney, & Lincoln, 2013). So instead of gauging the success of our universities based on preposterous non-credible websites that produce laughable ratings, There is a need to empower university lecturers, doctoral researchers, graduate degree students and undergraduate learners on how to design research projects that may propel Kenya forward and set us up to compete on a global scale. Simple tools, conceptualizations and literature review techniques may dramatically boost research output and lift our rigour. (Scott & Bellow, 2015)

Kenya's universities are expanding their facilities and seeking collaborations to tap into a rapidly growing Masters in Business Administration market (Nyangau, 2016). The MBA has increasing currency among the working class of East Africa's biggest economy (Odhiambo, 2014). Over the past few months Kenya's leading universities have spent tens of millions of shillings to boost their capacity to enroll a soaring number of students seeking additional qualifications. More universities have entered the MBA market. Strathmore University/Strathmore Business School

offers a four-year-old executive MBA programme, which is unique in being associated with several leading international business schools including Spain's globally ranked IESE Business School, which is in turn associated with Harvard (Basu, 2016). Statistics show that Kenyan universities offering MBA programmes are churning out at least 2,500 graduates annually more than double five years ago. At least half of the country's universities are now offering MBAs, compared with around eight universities five years ago (Sila, 2016).

Experts say increasing interest in MBAs among the working class is informed by desire on the part of workers to boost their careers and get better pay, in a market where salaries have not kept pace with inflation. Statistics in the Kenyan Economic Survey 2015 show that household incomes grew at the rate of 6.4% in 2010, 7.5% in 2011 and 8.7% in 2012 before peaking at 8.4% in 2014. But high inflationary pressure that almost tripled from 11.9% in 2010 to 29.3% 2014 has eroded purchasing power "As a growing economy Kenya needs highly qualified skills, and the labor market is becoming very competitive thus requiring the working class to upgrade their educational qualifications to remain relevant (Odhiambo, 2014). The traditional players in the MBA market, the biggest higher education institutions in the country attract the largest MBA classes. Upcoming, smaller public universities have also joined the fray, heightening competition in the field. Institutions are also rushing to roll out differentiated degrees, with some such as Strathmore sending students abroad for periods for training (Weinstein, 2013). The competition front is on differentiation of the MBA programmes because at the end of the day, they all sound the same (Odhiambo, 2014) while executive MBA programmes in conjunction with. The MBA market in Kenya is highly competitive, and focus is on producing all-round graduates who, instead of specializing in specific disciplines, goes through all relevant units (Maina, 2015), KCA's Deputy Vice-chancellor in charge of academic affairs.

Firms seeking human capital prefer MBA graduates for management positions. The Kenyan government is banking on education to drive its long-term growth targets under Vision 2030, the development blueprint that is aimed at making Kenya a middle-income country in the next two decades (Odhiambo, 2016). "Education is one of the key sectors that will deliver growth in Kenya," according to a just-published government progress report on Vision 2030. However, it's faced with key concerns of access, retention, quality, relevance and equity as well as internal and external inefficiencies, which must be dealt with. (Njeru, 2005) adds that with the demand for MBA degrees rising, universities are spending heavily on advertising their courses. The growth

in the MBA market comes at a time when Kenya's universities are grappling with an admissions crisis due to growing student numbers, which have not been matched by expansion of facilities. As a result, quality concerns dog the higher education sector (Bloom, Canning, Chan, & Luca, 2014). Kenya's universities continue to perform poorly in global rankings.

## **1.2 Statement of the problem**

With increased competition for students, limited faculty resources, and budgetary constraints, MBA programs are under intense pressure to maximize their operational efficiency. This study aims to pair strategic program objectives with proven OM Practices in critical areas, including curriculum development, capacity planning, and quality assurance. Framing the administration of MBA programs in this context provides a foundation for evaluating current practices and establishing best practice guidance (Sultan & Wong 2012). This study intends to describe a conceptual framework based on key OM practices and illustrate how employment of these practices can assist MBA programs with improving operational efficiency, program quality, effective timing of curriculum enhancements to form an assessment of the degree to which business schools apply these OM practices in design and implementation of their programs.

According to (Busing & Palocsay, 2016), preliminary investigations and studies show evidently that the adoption of OM in the MBA setting has been limited to date. Therefore, opportunities exist for deliberate application of OM practices. A lack of program ownership, internal rivalries for faculty resources, and enrollment growth are significant challenges facing MBA programs. Therefore this study is directed towards elaborating these themes, to shed additional light on how business schools can relate OM concepts and principles as they run MBA programs in Nakuru.

Many faculties in Kenyan universities only publish questionable-quality research that does not stand up to international standards (Scott & Bellow 2015). The landscape is changing and Higher education is being reshaped by globalization and the digital revolution. There are growing pressures related to declining sources of income and rising costs. There is heightened competition for share of the global student market. Institutions are seeing a lasting effect from the global financial crisis impacting both enrolment numbers and philanthropy, and students have increasing demands and expectations of their educational experience. Prospective students are becoming more consumer-orientated and making decisions about education accordingly. University rankings will increasingly have more influence on positioning institutions in the

international market, and graduate career-readiness is a growing student concern. Students are looking for access to services and education across new technologies and more flexible delivery options. In order to be competitive and to meet these expectations, universities will need to invest in expensive facilities and infrastructure (Bryant, 2013).

Challenges facing Kenya's higher education institutions: It explores the struggle to develop quality and quality assurance mechanisms against a background of rapidly diminishing income, brain drain, political interference and the negative aspects of globalization (Mwangi, & Owino, 2012). The challenges have consequently led to a decline in the quality of education and left higher education hanging on a thread. This study argues that the higher education sector requires clear policies of rewarding and retaining talented staff and ways of dealing with the politically instigated expansion (Chun, & Evans, 2013). It provides an opportunity for reflection on policies and practices in Kenya's higher education sector and suggests an urgent need for reforms. Quality assurance plays a key role in initiating these reforms. Higher education in many developing countries is no longer a luxury but an essential for survival. However, education policy-makers in developing countries continue to express concern about the poor state of higher education.

Given the historical development of higher education institutions in Africa, the universities have been at the centre of higher education challenges. It is also important to note that many narratives of higher education development in different parts of Africa demonstrate similarities in many aspects. African universities, like their counterparts elsewhere, have the responsibility of advancing the frontiers of knowledge through teaching and research. However, it is important to note that African universities play a more significant role in national development than they do in other parts of the world, as they are often the only institutions with some capacity to undertake research and to generate the knowledge required for development (Bloom, Canning & Chan 2016). Recent university rankings generally show that Kenyan universities save for the two oldest are performing poorly (CUE, 2015). Other than research, ranking takes into account the teacher-student ratio, proportion of international faculty members in relation to local staff, and the number of international students.

### **1.3 Objectives of the study**

The aim of this study was to determine effects of Operations Management Practices on the Quality of MBA Programs of Kenyan Universities.

#### **1.3.1 Specific Objectives**

- i. To determine how Just-In-Time Teaching (JITT) can improve quality of MBA programs in Kenyan Universities.
- ii. To find out how operation efficiency affects quality of MBA programs in Kenyan Universities.
- iii. To find out how quality assurance affects quality of MBA programs in Kenyan Universities.
- iv. To investigate how capacity planning can lead to high quality MBA program in Kenyan Universities.

#### **1.4 Research Hypothesis**

In order to achieve the objectives, the study developed the following hypothesis:

- H<sub>01</sub>. Just in Time Teaching has no significant impact on the improvement of the quality of MBA program in Kenyan Universities.
- H<sub>02</sub>. Operation efficiency has no significant effect on the quality of MBA programs in Kenyan Universities.
- H<sub>03</sub>. Quality assurance has no significant effect on the quality of MBA programs in Kenyan Universities.
- H<sub>04</sub>. Capacity planning has no significant effect on the emergence of high quality MBA program design in Kenyan Universities.

#### **1.5 Scope of the Study**

The study aimed to establish the how operations management Practices affects the quality of MBA programs taking the consideration a period of five years (2011-2015). This time frame was chosen so as to enable determination of the operation management practices that were pre-existing and those that have recently emerged. This study was limited to Universities in Nakuru County offering MBA programs in their business schools and the population of the study is staff from all universities offering MBA program in Nakuru town. The location is choosing due to proximity and convenience. The

## **1.6 Limitations and Delimitations of the Study**

It is expected that universities were hesitant to avail information sort by the study as they consider their differentiation strategies to be proprietary in nature however the researcher created a good rapport with the respondents and assure them of the anonymity of the institutions they represent and their very identities as well. Furthermore they were assured that the information gathered will be used solely for the purposes of academic research.

## **1.7 Significance of the Study**

This study intends to discuss the implications for the future role of OM in the context of MBA program management, as well as opportunities for expanding the framework to incorporate principles from other functional business areas. While this work will primarily be of interest to administrators and faculty responsible for MBA program development, it will have relevance across academic disciplines. CUE ranks graduate business programs based on faculty credentials, admissions selectivity, student engagement, and recruiter ratings. These criteria are all directly related to the quality of the business program's operation, from curriculum design to student acquisition of knowledge, skills and abilities (KSAs). In an early instance of promoting educational quality initiatives, Wharton School faculty applied total quality management principles in designing their MBA curriculum (Kleindorfer, 1994). (Hillmer & Kocabasoglu, 2008) described the benefits of incorporating the voice of the customer by obtaining executive input on expectations of an ideal manager during MBA program redesign. With respect to sustainability of MBA programs, (Page & Nodoushani, 2006) suggested that effective use of OM may facilitate both low cost and program distinction.

## **1.8 Operational Definition of Terms**

The following terms were used as follows;

**Capacity Planning** is the process of determining the production capacity needed by an organization to meet changing demands for its products. In the context of capacity planning, design capacity is the maximum amount of work that an organization is capable of completing in a given period. Effective capacity is the maximum amount of work that an organization is

capable of completing in a given period due to constraints such as quality problems, delays, material handling, etc, (Krajewski, Ritzman, Larry, 2005).

**Just in Time Teaching** is an instructional strategy that combines online study assignments with interactive classroom environment to improve student learning and understanding (Clark, 2016)

**MBA;**A master of business administration (MBA) is a graduate degree achieved at a university or college that provides theoretical and practical training to help graduates gain a better understanding of general business management functions. The MBA degree can have a specific focus, such as accounting, finance or marketing (Alvesson & Benner, 2016).

**Operations Management;** According to (Heizer, Render & Munson, 2016) OM is an area of management concerned with designing and controlling the process of production, redesigning business operations in the production of goods or services. It involves the responsibility of ensuring that business operations are efficient in terms of using as few resources as needed and effective in terms of meeting customer requirements. It is concerned with managing the process that converts inputs (in the forms of raw materials, labor, and energy) into outputs (in the form of goods and/or services).

**Operations Practices;** these are the specific methods/tools of OM that are used to come up desirable results as an end product of using OM strategies (Machado & Davim, 2016).

**Operational efficiency** is the capability of an enterprise to deliver products or services to its customers in the most cost-effective manner possible while still ensuring the high quality of its products, service and support, (Vangie, 2016).

**Quality** is a product or service's ability to meet the customers' need or want or fitness for use (Juran, 2008)



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This Chapter discusses theories, specific objectives and the conceptual framework.

#### 2.2 Theoretical Literature

##### 2.2.1 Deming's Theory of Management

(Deming, 1982) offered 14 key principles for management to follow for significantly improving the effectiveness of a business or organization. As much as many of the principles are philosophical, others are more programmatic. All are transformative in nature. The points were first presented in his book *Out of the Crisis* (Deming, 1985). The condensation of the 14 Points for Management are: Create constancy of purpose toward improvement of product and service, with the aim to become competitive and to stay in business, and to provide jobs; adopt the new philosophy. We are in a new economic age. Western management must awaken to the challenge, must learn their responsibilities, and take on leadership for change; Cease dependence on inspection to achieve quality. Eliminate the need for inspection on a mass basis by building quality into the product in the first place; End the practice of awarding business on the basis of price tag. Instead, minimize total cost. Move toward a single supplier for any one item, on a long-term relationship of loyalty and trust; Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease costs; Institute training on the job; Institute leadership, the aim of supervision should be to help people and machines and gadgets to do a better job.

Deming (2016) Supervision of management is in need of overhaul, as well as supervision of production workers; Drive out fear, so that everyone may work effectively for the company; Break down barriers between departments. People in research, design, sales, and production must work as a team, to foresee problems of production and in use that may be encountered with the product or service; Eliminate slogans, exhortations, and targets for the work force asking for zero defects and new levels of productivity. Such exhortations only create adversarial relationships, as the bulk of the causes of low quality and low productivity belong to the system and thus lie beyond the power of the work force which includes: Eliminate work standards (quotas) on the

factory floor. Substitute leadership, Eliminate management by objective and Eliminate management by numbers, numerical goals. Substitute leadership; Remove barriers that rob the hourly worker of his right to pride of workmanship. The responsibility of supervisors must be changed from sheer numbers to quality; Remove barriers that rob people in management and in engineering of their right to pride of workmanship. This means, inter alia, abolishment of the annual or merit rating and of management by objective; Institute a vigorous program of education and self-improvement; Put everybody in the company to work to accomplish the transformation. The transformation is everybody's job (Deming, 2013).

### **2.2.2 Crosby's Theory:**

On quality, (Crosby, 1982) emphasized, is neither intangible nor immeasurable. It is a strategic imperative that can be quantified and put back to work to improve the bottom line. Acceptable quality or defect levels and traditional quality control measures represent evidence of failure rather than assurance of success. The emphasis, for him, is on prevention, not inspection and cure. The goal is to meet requirements on time, first time and every time. He believes that the prime responsibility for poor quality lies with management, and that management sets the tone for the quality initiative from the top.

His approaches to quality are unambiguous and in his view, good, bad, high and low quality are meaningless concepts, and the meaning of quality is conformance to requirements. Non-conforming products are ones that management has failed to specify or control. The cost of non-conformance equals the cost of not doing it right first time, and not rooting out any defects in processes. Zero defects do not mean that people never make mistakes, but that companies should not begin with allowances or sub-standard targets with mistakes as an in-built expectation. Instead, work should be seen as a series of activities or processes, defined by clear requirements, carried out to produce identified outcomes. Systems that allow things to go wrong - so that those things have to be done again - can cost organizations between 20% and 35% of their revenues, in his estimation.

Crosby (1982) seminal approach to quality was laid out in Quality is free and is often summarized as the 14 steps: Management commitment: The need for quality improvement must be recognized and adopted by management, with an emphasis on the need for defect prevention. Quality improvement is equated with profit improvement. A quality policy is needed which

states that ' each individual is expected to perform exactly like the requirement or cause the requirement to be officially changed to what we and the customer really need. Quality improvement team: Representatives from each department or function should be brought together to form a quality improvement team. Crosby (1982), these should be people who have sufficient authority to commit the area they represent to action.

Quality measurement: The status of quality should be determined throughout the company. This means establishing quality measures for each area of activity that are recorded to show where improvement is possible, and where corrective action is necessary. He advocates delegation of this task to the people who actually do the job, so setting the stage for defect prevention on the job, where it really counts. Cost of quality evaluation: The cost of quality is not an absolute performance measurement, but an indication of where the action necessary to correct a defect will result in greater profitability. Quality awareness: This involves, through training and the provision of visible evidence of the concern for quality improvement, making employees aware of the cost to the company of defects. He stresses that this sharing process is a - or even the - key step in his view of quality.

Corrective action: Discussion about problems will bring solutions to light and also raise other elements for improvement. People need to see that problems are being resolved on a regular basis. Corrective action should then become a habit. Establish an ad-hoc committee for the Zero Defects Programme: Zero Defects is not a motivation programme its purpose is to communicate and instill the notion that everyone should do things right first time. Supervisor training: All managers should undergo formal training on the 14 steps before they are implemented. A manager should understand each of the 14 steps well enough to be able to explain them to his or her people. Zero Defects Day: It is important that the commitment to Zero Defects as the performance standard of the company makes an impact, and that everyone gets the same message in the same way. Zero Defects Day, when supervisors explain the programme to their people, should make a lasting impression as a 'new attitude' day.

Goal setting: Each supervisor gets his or her people to establish specific, measurable goals to strive for. Usually, these comprise 30-, 60-, and 90-day goals. Error cause removal: Employees are asked to describe, on a simple, one-page form, any problems that prevent them from carrying out error-free work. Problems should be acknowledged within twenty-four hours by the function

or unit to which the problem is addressed. This constitutes a key step in building up trust, as people will begin to grow more confident that their problems will be addressed and dealt with.

Recognition: It is important to recognize those who meet their goals or perform outstanding acts with a prize or award, although this should not be in financial form. The act of recognition is what is important. Quality Councils: The quality professionals and team-leaders should meet regularly to discuss improvements and upgrades to the quality programme. Do it over again: During the course of a typical programme, lasting from 12 to 18 months, turnover and change will dissipate much of the educational process. It is important to set up a new team of representatives and begin the programme over again, starting with Zero Defects day. This 'starting over again' helps quality to become ingrained in the organisation.

### **2.2.3 Joseph Juran's Theory**

Juran (2008) was a charismatic figure, acknowledged worldwide for his extensive contribution to quality management. While often referred to as one of the leading figures of total quality management, much of his work actually preceded the total quality concept. He became a legend in his own time, and has been instrumental in shaping many of our current ideas about quality. He is recognized, along with Deming, as greatly accelerating the development of the quality movement in Japan. His influence on manufacturing throughout the world has been substantial.

Pareto Principle: In his early days as a young engineer he noted that when a list of defects was arranged in the order of frequency, relatively few types of defects accounted for the bulk of those found. As his career in management progressed he noted the occurrence of this phenomenon in other areas. The idea of 'the vital few and the trivial many' was forming. In the 1930s he was introduced to the work of Pareto (1935) an Italian economist, who had produced a mathematical model to explain the unequal distribution of wealth. Pareto had not promoted his model as a universal one and did not talk of an 80:20 split, but in preparing the first edition of the Quality control handbook he needed a form of shorthand to describe his idea. Remembering Pareto's work he captioned his description as 'Pareto's principle of unequal distribution'. Since then 'the Pareto Principle' has become a standard term to describe any situation where a relatively small percentage of factors are responsible for the substantial percentage of effect. He later published an explanation of his error in attributing more to Pareto than the latter had originally claimed, at the same time recognizing the contribution of another economist, Lorenz (1916). He was, in

reality, the first to identify and popularize the 80:20 rules (as it has colloquially become known) as a universal principle.

**Breakthrough:** In his classic work, *Managerial breakthrough*, He presented his general theory of quality control. Central to this was the idea of an improvement breakthrough. He defines a breakthrough as 'change, a dynamic, decisive movement to new, higher levels of performance' (Juran, 1994). This he contrasts with control, which means 'staying on course, adherence to standard, prevention of change' (Juran, 1994). Not all control is viewed as negative and not all breakthroughs are expected to be for the good. Breakthrough and control are seen as part of a continuing cycle of events. He highlighted the importance of managers' understanding of the attitudes, the organisation and the methodology used to achieve breakthrough, and of how they differ from those used to achieve control.

**The Juran Trilogy and Quality Planning Road Map:** His message on quality covers a number of different aspects. He focused on the wider issues of planning and organisation, managerial responsibility for quality, and the importance of setting targets for improvement. Intrinsic to these, however, was his belief that quality does not happen by accident and needs to be planned. The process of quality improvement is best summarized in his 'trilogy' concept, based on the three financial management processes of financial planning, financial control and financial improvement. Various interpretations of the trilogy have been published, and the following represents one version.

**Quality planning:** Identify who the customers are, Determine the needs of those customers, Translate those needs into our language and Optimize the product features so as to meet our needs and customer needs. **Quality control:** Develop a process which is able to produce the product and optimize the process. **Quality improvement:** Prove that the process can produce the product under operating conditions and Transfer the process to operations. His road map provides a more detailed approach to the steps within the quality planning element of the trilogy. It is made up of a series of actions with corresponding outputs, and emphasizes the need for measurement throughout. **Juran on quality by design,** He describes six activities in the road map: Establish quality goals; identify the customer; determine customer needs; develop product features; develop process features; establish process controls; and transfer to operations.

Quality campaigns: He has never been a fan of quality campaigns based on slogans and praise. He viewed the Western quality crisis of the early 1980s as being a result of too many quality initiatives based on campaigns with too little planning and substance. In his view planning and action should make up 90% of an initiative, with the remaining 10% being exhortation. His formula for success is: Establish specific goals to be reached, establish plans for reaching those goals, Assign clear responsibility for meeting the goals, Base the rewards on the results achieved.

#### **2.2.4 Ishikawa's Theory**

Creator of the last theory, Isikawa (1985) is often known for his namesake diagram, but he also developed a theory of how companies should handle their quality improvement projects. Ishikawa takes a look at quality from a human standpoint. Kaoru Ishikawa wanted to change the way people think about work. He urged managers to resist becoming content with merely improving a product's quality, insisting that quality improvement can always go one step further. His notion of company-wide quality control called for continued customer service. This meant that a customer would continue receiving service even after receiving the product. This service would extend across the company itself in all levels of management, and even beyond the company to the everyday lives of those involved. According to Ishikawa, quality improvement is a continuous process, and it can always be taken one step further.

With his cause and effect diagram (also called the "Ishikawa" or "fishbone" diagram) this management leader made significant and specific advancements in quality improvement. With the use of this new diagram, the user can see all possible causes of a result, and hopefully find the root of process imperfections. By pinpointing root problems, this diagram provides quality improvement from the "bottom up." Dr. W. Edwards Deming one of his colleagues adopted this diagram and used it to teach Total Quality Control in Japan as early as World War II. Both him and Deming use this diagram as one the first tools in the quality management process.

He also showed the importance of the seven quality tools: control chart, run chart, histogram, scatter diagram, Pareto chart, and flowchart. Additionally, Ishikawa explored the concept of quality circles- a Japanese philosophy which he drew from obscurity into world wide acceptance. He believed in the importance of support and leadership from top level management. He continually urged top level executives to take quality control courses, knowing that without the support of the management, these programs would ultimately fail. He stressed that it would take

firm commitment from the entire hierarchy of employees to reach the company's potential for success. Another area of quality improvement that he emphasized is quality throughout a product's life cycle - not just during production. Although he believed strongly in creating standards, he felt that standards were like continuous quality improvement programs -- they too should be constantly evaluated and changed. Standards are not the ultimate source of decision making; customer satisfaction is. He wanted managers to consistently meet consumer needs; from these needs, all other decisions should stem.

### **2.3 The Effectiveness of OM Practices**

The most commonly used OM practices meant to enhance quality of MBA programs will be discussed. Operation Management practices are the procedures or methodological solutions which is meant to improve efficiency. General approaches like the “World Class Manufacturing” (WCM) approach which embraces detailed tools conceived to optimize workplace organization, professional maintenance and so on are also considered. More specific practices are also considered, such as the “Total Quality Management” (TQM) approach with regard to quality management and the “Total Productive Maintenance” (TPM) approach, with regard to maintenance practices, or the “Just-in-Time” (JIT) approach, with regard to production operations (Heijunka & Kanban, 2014).

As an example, the case of Total Quality Management (TQM) is described. The adoption of this approach will be shown to be positively associated with the improvement of general performance, with higher operation efficiency and with better financial results. Such a positive association increases in the manufacturing sector, when managers use a reward system actually based on OM process outcomes.

It is also a powerful ally for the optimal exploitation of economic assets and of human capital. Yet, the statistical tools offered to control the production processes can bring about a positive effect on the quality level perceived by the final customer (business or consumer) and can dramatically reduce production waste this altogether leading to better economical results (Battistoni, Bonacelli, Colladon, & Schiraldi, 2013). In order to succeed with TQM it is extremely important to provide employees with a basic training in quality management.

## **2.4 Total Quality Management**

Continuous and never ending improvements, Organizations using a TQM system engage in incremental improvements continuously to affect the quality of the business's processes and products (Sallis, 2014). A continuous improvement approach requires employees to strive for zero defects and efficiency in all processes. Continuous-improvement activities seek areas requiring improvement in a proactive manner. External and internal customers are the focus of TQM systems. External customers are businesses or individuals who place orders for products from an organization. Internal customers in an organization are co-workers or departments that accept work as it moves through the company. For example, in a production line, an internal customer is the co-worker at the next stage in the manufacturing process. In a business that practices Total Quality Management, each employee must identify his customers and determine the best way to satisfy their quality needs (Oakland, 2014). Employees must identify their suppliers and communicate their quality needs to the supplier.

TQM systems rely on the people working in an organization to improve quality and processes. Every individual from top-level managers to the lowest level employee is involved in the continuous improvement process in organizations using this system (Nawelwa, Sichinsambwe, & Mwanza, 2015). Companies provide training in the tools, concepts and techniques of the quality management system to all employees. TQM companies create an atmosphere of teamwork and empower workers to take the initiative to improve processes and quality (Talib, Rahman, & Qureshi, 2013). These systems cannot function without the involvement and encouragement of upper management. TQM organizations use measurable data to make decisions for the company's improvement efforts. Tools such as statistical process control, process mapping and bar graphs help employees and management identify quality issues and provide a method to measure the success of a quality initiative (Dale, Bamford, Bamford, & Wiele, 2016). Flow charts help quality improvement teams understand a process and identify weaknesses such as duplications of steps in the workflow. Businesses use data to track quality defects and find areas that need improvement.



## **2.4.1 Capacity Planning**

Capacity Planning is the process of determining the production capacity needed by an organization to meet changing demands for its products. In the context of capacity planning, design capacity is the maximum amount of work that an organization is capable of completing in a given period. Effective capacity is the maximum amount of work that an organization is capable of completing in a given period due to constraints such as quality problems, delays, material handling, etc, (Krajewski, Ritzman, and Larry 2005). A discrepancy between the capacity of an organization and the demands of its customers results in inefficiency, either in under-utilized resources or unfulfilled customers (Wairimu, 2014). The goal of capacity planning is to minimize this discrepancy. Demand for an organization's capacity varies based on changes in production output, such as increasing or decreasing the production quantity of an existing product, or producing new products (Banker, Byzalov, & Dujowich, 2013). Better utilization of existing capacity can be accomplished through improvements in overall enterprise efficiency. When making capacity decisions, managers must answer the simple question, "How much?" Determining the organization's capacity to produce goods and services involves both long-term and short-term decisions. Long-term capacity decisions involve facilities and major equipment investments.

### **2.4.1.1 Long-Term Capacity Planning**

Capacity can be increased through introducing new techniques, equipment and materials, increasing the number of workers or machines, increasing the number of shifts, or acquiring additional production facilities Capacity Planning (Georgiadis, & Athanasiou, 2013). Over the long term, capacity planning relates primarily to strategic issues involving the firm's major production facilities. In addition, long-term capacity issues are interrelated with location decisions (Fleischmann, Meyr, & Wagner, 2015). If the firm's addition of a third shift to its current two-Technology and transferability of the process to other products is also intertwined with long-term capacity planning. Long-term capacity planning may evolve when short-term changes in capacity are insufficient shift plan still does not produce enough output, and subcontracting arrangements cannot be made, one feasible alternative is to add capital equipment and modify the layout of the plant (long-term actions) (Kerzner, 2013). It may even be desirable to add additional plant space or to construct a new facility (long-term alternatives).

### **2.4.1.2 Short-Term Capacity Planning**

In the short term, capacity planning concerns issues of scheduling, labor shifts, and balancing resource capacities. The goal of short-term capacity planning is to handle unexpected shifts in demand in an efficient economic manner. The time frame for short-term planning is frequently only a few days but may run as long as six months (Fleischmann, Meyr, & Wagner, 2015). Alternatives for making short-term changes in capacity are fairly numerous and can even include the decision to not meet demand at all (Chien, & Kuo, 2013). The easiest and most commonly-used method to increase capacity in the short term is working overtime. This is a flexible and inexpensive alternative. While the firm has to pay one and one half times the normal labor rate, it foregoes the expense of hiring, training, and paying additional benefits. When not used abusively, most workers appreciate the opportunity to earn extra wages. If overtime does not provide enough short-term capacity, other resource-increasing alternatives are available (Fleischmann, Meyr, & Wagner, 2015). These include adding shifts, employing casual or part-time workers, the use of floating workers, leasing workers, and facilities subcontracting.

As internationalization becomes increasingly integral to university operations, it raises the question of institutional capacity and whether the university is in fact able to respond to the new challenges it is facing (Sahay, & Kumar, 2014). Capacity planning is often proposed as a key tool for a more rational and systematic approach to bringing about the necessary changes for greater internationalization in institutional direction and daily operations. However, many people in universities are cynical about the value of capacity planning in higher education, believing that it does not fit with academic cultures and traditions. When an appropriate model is adopted, it not only aligns with the specific needs and behaviors of universities, but also has the potential to turn what is often rhetoric into reality. While it is true that the practice of capacity planning has been imported from the business world (which had adapted it from the original military model), it is essential to take the specific nature and modes of operation of a university into consideration if capacity planning is to be accepted and embraced both as a concept and a system that can provide direction and facilitate progress (Fleischmann, Meyr, & Wagner, 2015).

## 2.4.2 Just In Time Teaching

Just-in-time teaching (JiTT) is a pedagogical strategy that uses feedback between classroom activities and work that students do at home, in preparation for the classroom meeting (Duker, Gawboy, Hughes, & Shaffer, 2015). Just in time teaching is an instructional strategy that combines online study assignments with interactive classroom environment to improve student learning and understanding (Clark, 2016). The goals are to increase learning during classroom time, to enhance student motivation, to encourage students to prepare for class, and to allow the instructor to fine-tune the classroom activities to best meet students' needs (Tucker, 2013). These are listed as some benefits. Do you observe that your students gain these or other benefits? Maximizes the efficacy of the classroom session, where human instructors are present. Structures the out of class time for maximum learning benefit and creates/sustains team spirit. Students and instructors work as a team toward the same objective, to help all students pass the course and retains maximum amount of knowledge (Li, & Xin, 2012).

Just-in-time teaching is very useful for effective use of class time and works as a good gauge to ascertain where students are in their learning (Clark, 2016). It also helps identify common areas of interest or confusion, and provides opportunities to define key areas that need further attention not just for teachers but also for students themselves, since they get some time to connect new knowledge with prior knowledge and make independent and personalized connections with the material before hearing someone else's (trainer's or classmate's) views (Brame, 2013). This facilitates self-regulated learning and meta-cognition. A further modification, which could be a bit more time-consuming, could include a two-tier mechanism where they could work on their own, provide feedback, and then have classmates add reflections or critiques to their feedback, which could then be further refined and sharpened based on the interplay of ideas (Tucker, 2013). All this of course requires dedicated participation and a shared belief in punctuality and collaborative support (McGraw, 2015).

Just-in-Time Teaching improves student learning and increases in-class teaching efficiency and effectiveness. JiTT does this by incorporating research-based knowledge about effective teaching and learning practices. Specifically, JiTT: Improves students' preparation for class, enhances student motivation for learning, promotes ongoing formative assessment of student learning (by both instructors and students), and informs in-class activities that target student learning gaps

(Borrego, Cutler, Froyd, Prince, & Henderson, 2011). Because of its flexibility this strategy can be applied to variety of context, curriculum, and disciplines. It can be combined with other innovative student-centered teaching practices including flipped classrooms, cooperative learning strategies, peer instructions practices and interactive lecture demonstrations. Before implementing the JiTT, the instructor must consider his or her own style, classroom setting and use of technology (Clark, 2016). The instructor must decide which courses will use the strategy, how often to assign the exercise, which technology tools will be used, and what teaching and methods will be used to conduct the lessons.

### **2.4.3 Operational efficiency**

Operational efficiency is the capability of an enterprise to deliver product or services to its customers in the most cost-effective manner possible while still ensuring the high quality of its products, service and support (Vangie, 2014). Operational efficiency is often achieved by streamlining a company's core processes in order to more effectively respond to continually changing market forces in a cost-effective manner. To attain operational efficiency a company needs to minimize redundancy and waste while leveraging the resources that contribute most to its success and utilizing the best of its workforce, technology and business processes (Muriuki, 2015). The reduced internal costs that result from operational efficiency enable a company to achieve higher profit margins or be successful in highly competitive markets, (Vangie, 2014).

Leaders across the higher education space are under more pressure than ever before to do more with less. After all, student expectations and needs are growing, as are external expectations for the performance of higher education institutions. However, the operating budgets for institutions across the country are dwindling. Improving operational efficiency and streamlining outdated processes are emerging as silver bullets for the long-term viability of colleges and universities, but what does it take to make efficiency effective? (Cathy, 2014). The most important thing for Institutions to do is to focus on what they're trying to achieve. The outcomes are to help students learn, achieve and complete degrees and credentials and then we back up from there. What are all the things that can make the process better and more efficient? To see higher education leaders looking at the whole picture but definitely looking at some of the back-office operations and ways they can be leaner, more efficient and deploy people in areas that actually add value to the student experience.

The degree to which institutions are able to serve more students and help them progress in a timely fashion toward their degrees and credentials will allow institutions to expand enrollments, and that will increase revenues (Cathy, 2016). Overall, this will create a more financially sustainable institution, one operating at peak efficiency. This will also allow institutions to have some investment capital, R&D funding, in order to try innovative new practices. Operational efficiencies and systems and so forth can help higher education. Another point is the importance of all the data institutions are now collecting from different places and their ability to analyze this data and to identify places where they can intervene that will make the most difference. Here's where they'd like to see a lot of growth, where there's a lot of work in terms of learning analytics, predictive analytics and more customized, personalized learning. This is helping more students more quickly, more efficiently, more effectively gain mastery of the knowledge they need in order to graduate and be successful, (Cathy, 2014).

#### **2.4.4 Quality Assurance**

Quality assurance is an organization's guarantee that the product or service it offers meets the accepted quality standards. It is achieved by identifying what "quality" means in context; specifying methods by which its presence can be ensured; and specifying ways in which it can be measured to ensure conformance (Eurostat, 2009). Quality is an important factor when it comes to any product or service. With the high market competition, quality has become the market differentiator for almost all products and services. Quality Assurance is a broad practice used for assuring the quality of products or services. There are many differences between quality control and quality assurance. In quality assurance, a constant effort is made to enhance the quality practices in the organization.

Therefore, continuous improvements are expected in quality functions in the company. For this, there is a dedicated quality assurance team commissioned. Sometimes, in larger organizations, a 'Process' team is also allocated for enhancing the processes and procedures in addition to the quality assurance team (McLaughlin, McLaughlin, & Kaluzny, 2004). Quality assurance team of the organization has many responsibilities. First and foremost responsibility is to define a process for achieving and improving quality. Some organizations come up with their own process and others adopt a standard processes. Quality assurance function of an organization uses a number of tools for enhancing the quality practices. These tools vary from simple techniques to sophisticated software systems. The quality assurance professionals also should

go through formal industrial trainings and get them certified (Gunasekaran, Korukonda, Virtanen, & Yli-Olli, 1994). This is especially applicable for quality assurance functions in software development houses. Since quality is a relative term; there is plenty of opportunity to enhance the quality of products and services, (Eurostat, 2009.) The quality assurance teams of organizations constantly work to enhance the existing quality of products and services by optimizing the existing production processes and introducing new processes. Quality assurance (QA) mechanisms used to be highly dependent on national administrative traditions but nowadays there is a convergence of mechanisms. Compared to more developed higher education (HE) systems in the world, QA systems in Africa are still at an infant stage and thus confronted by many challenges (Odhiambo, 2014)

The Value of Student Engagement Data for Quality Assurance Interest in the quality of university education has grown considerably over the last decade or two (Green, 2014). Although the specification, assurance and enhancement of quality are often complex and problematic, strong interest in the phenomenon has been stimulated and maintained by a range of factors. Students need accurate information about educational quality to help them choose between different courses of study (Brown, Bull, & Pendlebury, 2013). Academics and university administrators need information to help them monitor and improve their courses and programmes. Institutions need information about quality to help them benchmark and market their performance. Governments and other bodies need information to assist with funding, policy development and accountability.

For these and other reasons, quality assurance has become part of the fabric of many higher education systems (Green, 2014). As the principles and practices of quality assurance become more and more embedded in higher education, methodological questions about evaluating quality become increasingly important. There is accordingly, an ongoing need to examine the cogency of such indicators and to ensure that they are salient, sufficient and sound. While universities routinely collect a considerable and often increasing amount of data for the purposes of quality assurance, it is, at the same time, important to keep reviewing the indicators and other measures that are at the heart of such routines (Coates, 2005).

#### **2.4.4.1 Assurance of Learning Process Mapping**

Many organizations use mapping to conceptualize and analyze processes for change management initiatives (Busing & Palocsay, 2016). It is frequently used as a platform to devise the best process with attention to both cost and quality. Diagramming a process often uncovers inefficiencies (e.g., redundant operations, documentation, and other non-value added activities) and can also be applied to new product or service development. Formal assurance of learning is required for business school accreditation (Association to Advance Collegiate Schools of Business International, 2013). Stakeholders believe that taking part in assurance of learning activities improves the quality of their MBA programs. These objectives are developed by gathering data from a variety of sources including potential employers, market analyses, and faculty expert opinions. Program level learning objectives should be revisited for relevance every two to three years or more often, if needed. Course-specific touch points associate learning objectives with a class or group of classes in the curriculum and thus require faculty buy-in (Brenton, 2015). Program-level learning objectives with corresponding touch points are used for assurance of learning by 72% of MBA programs that responded to the survey.

Course-specific instruments are developed to measure students' mastery of the learning objectives. Embedded measures such as exam questions are popular and, in OM process flow terms, fall below the line of visibility for the student (Radnor & Osborne, 2016). Grading rubrics are constructed prior to administering an assessment instrument to stipulate levels of proficiency. Our survey indicated that learning objectives are evaluated with faculty-designed assessments in 58% of MBA programs. Pedagogical change(s) aimed at improving teaching effectiveness are suggested based on assessment results. It is critical to document instructional reforms so that the effects of any modifications can be measured and decisions about permanent adoption can be made.

However, we found that faculty in only 36% of the MBA programs surveyed are currently engaged in documenting pedagogical changes for assessment purposes. Faculty meetings bring MBA instructors back together to discuss mastery of each learning objective, as evaluated by multiple raters, in the last step before the entire process repeats itself. Ideas for how to better achieve each learning objective via pedagogy are shared, vetted, and proposed for experimentation and implementation (Busing, & Palocsay, 2016). This also provides an

opportunity to revisit course-specific touch points and ensure learning objectives are appropriately tied to courses.

## **2.5 Faculty and Student Quality Circles**

Quality circles, originally used in Japan and brought to the United States in the 1970s, offer a voluntary way for employees to participate in resolving quality and productivity issues. Circle members are normally charged with identifying problems' root causes and generating solutions. In the United States, quality circles have had varying degrees of success. Based on extensive survey research, (Gray, 1993) concluded that quality circles are dependent upon top management support and involvement, organizational goals that are clearly defined and understood, a shared responsibility for products and processes, and effective communication throughout the organization.

Student quality circles have several potential benefits when evaluating MBA programs. Root cause analysis can be effective as quality improvement for the program and simultaneously provide engaged learning for the students (Busing, & Palocsay, 2016). A student circle was especially helpful during the introductory stage of a redesigned MBA program at our institution. This program was based on four 10-week quarters, while the rest of the university followed a 16-week semester format. A student-led quality circle noted that many of the university's facilities, such as libraries and food services, were sometimes unavailable to them. They also complained about an overly complex financial aid process with significant delays and identified problems with course registration and transcript updating by the registrar. The root cause of these problems was determined to be the incompatibility of the MBA program schedule with university operations. The quality circle proposed a change to eight-week blocks with Saturday sessions to resolve the schedule conflicts and achieve equivalent class time.

Faculty quality circles can serve to enhance MBA program pedagogy, content, and delivery as well as operations strategy. Shared teaching expertise and deliberation around competitive priorities such as coping with changes in demand, technical support for online courses, and meeting launch dates for new programs fall within their scope (Rubin & Dierdorff, 2013). Bringing student and faculty circles together can also affect operational improvements. This is promoted by (Currie & Knights, 2003), whose study suggested that management professors and students, especially those with significant work experience, prefer to learn about problems and



work collaboratively to find solutions. Our survey results show that 65% of MBA programs are currently incorporating faculty or student quality circles to support continuous improvement.

## **2.6 Scheduling for Predictable Flow of Students**

(Back, 2012) postulates that there are two extremes to facilities layout and associated operations flow: product orientation and process orientation. Product-oriented layout provides necessary resources in a sequence that corresponds to the routing for the product or service. This is an excellent choice when little or no customization in the product or service exists (e.g., electronics, automobiles, airport security checkpoints). These operations are typically associated with relatively high volumes and have the operational advantage of low cost. In contrast, process-oriented layout allows the required steps for a product or service to be completed in almost any sequence, allowing for more tailoring to customer preferences (Busing, & Palocsay, 2016). While the main advantage of process-oriented flow is flexibility, it is generally not as cost effective as product-oriented flow.

(Finch, 2008) explains that flow of students through the MBA program is one of the most critical design features for cost effectiveness. A product orientation is characterized by cohort-style MBA programs where students follow a pre-specified routing through the courses. It assists in five important efficiencies: Students are more likely to stay on track for graduation, Faculty requirements are known well in advance, Courses can be sequenced to balance instructors' teaching schedules, Instructors in downstream courses can make assumptions about the KSAs of incoming students, beyond that of prerequisite coursework and Classes can be filled closer to their capacities.

(Allen, 2002) agrees that Cohort-based programs have the added benefit of fostering teamwork and collaboration among students. From an operational perspective, consistent and logical operational flow not only leads to efficiencies in terms of cost, but also increases quality of the experience. However, only 46% of the respondents reported use of a cohort system for all MBA programs. Another 22% do not have a predictable sequence of course offerings, while the remainder employs a mixture, with students taking core courses in groups. Difficulty in scheduling electives combined with inadequate faculty resources was frequently cited as problematic.

## **2.7 Concurrent Engineering for Curriculum Design**

To improve efficiency, many companies have embraced a concurrent engineering approach using cross-functional teams for development and delivery of completed goods and services (Stevenson, 2015). (Cooke & Barnard, 2013) show that new product development often fails as a direct result of an organization's functional specialization or silo approach to product development. Conversely, cross-functional design teams can serve to improve communication, reduce errors, and speed up the design process; thus, significantly reducing time to market. A study of Malaysian electronics manufacturers found that product development activities are positively and significantly influenced by cross-functional teamwork in a parallel, integrated mode (Ng & Jee, 2014). This collaboration is even more important in designing services since customer contact occurs during the transformation process, where errors are not likely discovered and corrected without their knowledge.

Outstanding MBA programs must have curriculum that is valued in the marketplace along with effective instruction that is error-free in terms of delivery. Program development success therefore depends upon input of faculty from all functional areas, thus integrating traditionally silo disciplines (Navarro, 2008). (Haskins, 2005) described how University of Virginia's Darden School faculty worked together to develop and continuously improve the required-curriculum phase of the MBA program. The key to their successful design was a shared values statement that is indicative of collaboration, communication, and cross-functional efforts. (Barker, 2011) further described this as a culture where the MBA program is central to the school's mission as a catalyst for world-class programs.

An equally important participant group on the cross-functional design team is those who will ultimately employ the program graduates. They are, perhaps, in the best position to help predict the KSAs that are critical for expert business leadership. As (Molinero & Portillo, 2010) noted, global companies have varying KSA needs for employees, depending on region. Additionally, most programs fail to cultivate a global view of business among their graduates (Bareket, 2011). Therefore, the program should explicitly incorporate needs of employers from all geographical regions served by the program. Involving employers in program design also has the potential for valuable partnerships between degree-granting institutions and industry.

Some have argued that prospective students should have a hand in the curriculum design process because of their professional work and international savvy (Wilson, 2002). These individuals may indeed offer valuable input on program structure (e.g., scheduling, location, balance of online vs. face-to-face class time). Supporting this point, (Rydzewski, Eastman, & Bocchi, 2010) conducted a study of prospective MBA student perception. Results of that research indicate that actual courses offered are of less importance to prospects than are all other factors, including program quality, length, and cost.

MBA curriculum design is mainly done by administrators (associate dean and/or MBA director). In most programs, faculty from management (92%), finance (92%) marketing (89%), and accounting (84%) also participate. Representation from other business disciplines included economics (65%), information systems (65%), and international business (49%). But surprisingly, only about half of the programs currently integrate employers or executive advisory boards into the design process for external validation. The primary means of obtaining input from advisory boards are periodic campus visits (76%) and surveys (52%). Student involvement is more limited with approximately 20% of programs using current students and/or alumni and 5% using prospective students.

Life cycles describe the behavior of products and services from conception through end of existence. The typical stages of a life cycle (Stevenson, 2015) as they relate to MBA concentrations or programs: an initial phase with small enrollments followed by steep growth, maturity, and eventually decline. At our institution, life cycles for both MBA curricula and program structure have become shorter due to competition for student enrollment, a need for online delivery of management education, changing accreditation standards, and an increased emphasis on building programs in response to employers' changing needs (Thomas & Corneul, 2011). (Schlegelmilch & Thomas, 2011) described the MBA of the future as quite different in content and delivery mode. They predict greater emphasis on corporate social responsibility, ethics, and soft skills that allow complex dialog between business and multiple stakeholder groups. From an operational standpoint, shorter life cycles will require agility and speed in both curriculum development and execution (Busing, & Palocsay, 2016).

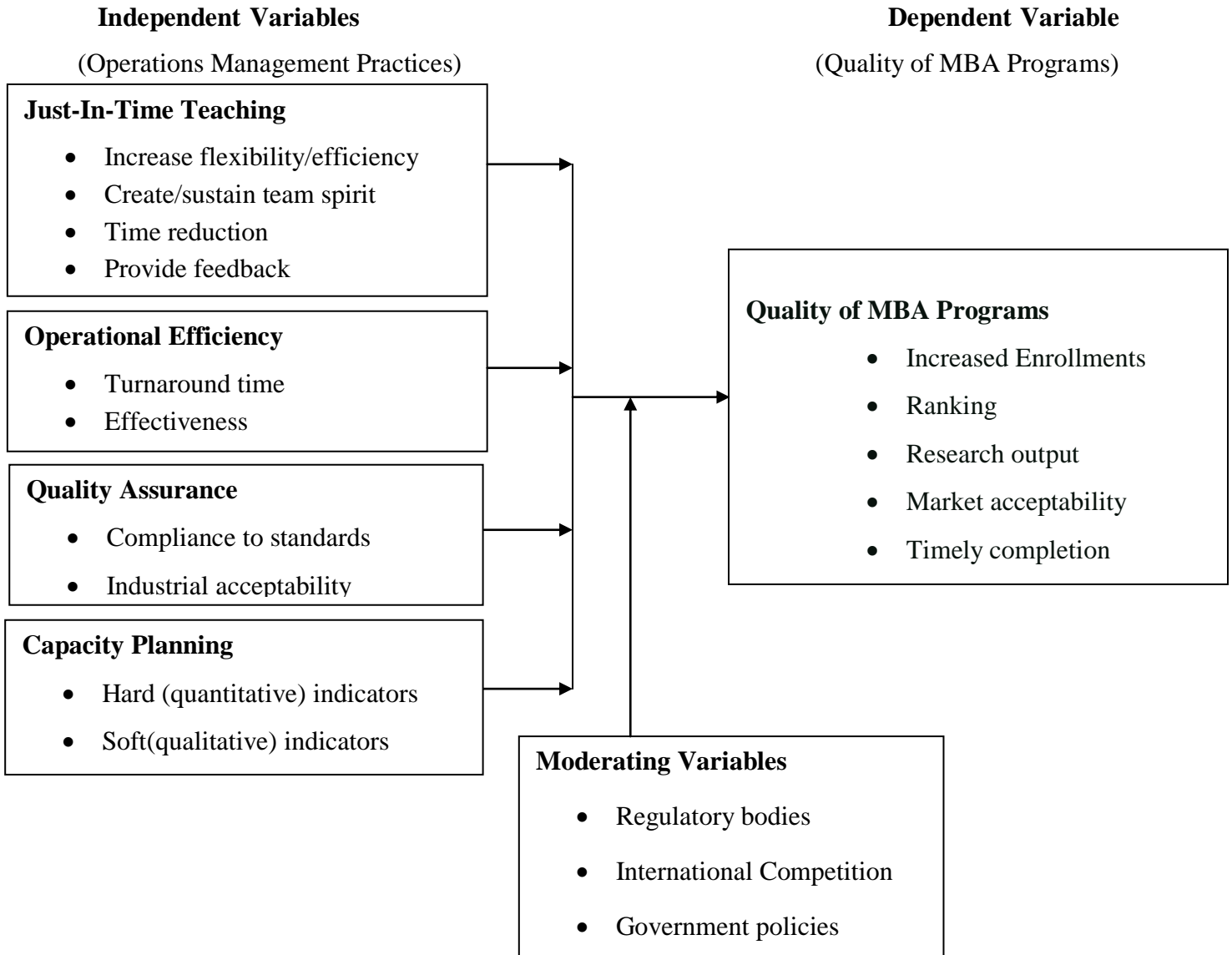
## **2.8 Research Gap**

The master of business administration (MBA) degree continues to grow in popularity in response to organizational needs for employees who can navigate the complexities of current and future business environments (Byrne, 2014). However, serious questions have been raised about the value of today's MBA program offerings (Bruce, 2010; Prince, Burns, & Manolis, 2014).

Overall, however, discussion or demonstration of OM practices in higher education sector in Kenya has not been adequately addressed in available literature. To fill this gap, this study identified major objectives for MBA programs (Rubin & Dierdorff, 2013) and maps them to well-grounded OM methods (Jacobs & Chase, 2014; Stevenson, 2015).

## 2.9 Conceptual Framework

The study was guided by a conceptual framework, which identifies the independent and dependent variables. The independent variables were Just in Time practices, Operation Efficiency, Quality Assurance and Capacity Planning. The dependent variable was Quality of MBA Programs.



**Figure 2.1: Conceptual Framework**

**Source: Researcher (2016)**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter covers the methodology, procedures that was used, a description of the research area, an outline of the study population, sample size, sampling techniques, data sources, research instruments, data collection procedures, data analysis and presentation.

#### **3. 2 Research Design**

This study will used descriptive survey design to describe the characteristics of the variables under the study. This design is appropriate for this study because it analyzed the relationship between operations management practices and quality of MBA Programs. The study concentrated on universities offering MBA within Nakuru town. The data was gathered at a particular point in time with the intention of describing the nature of the existing conditions, identifying the standards against which existing conditions can be compared and determining the relationship that exists between specific events (Orodho, 2009).

#### **3.3 The Study Area**

The study was carried out in Universities based in Nakuru Town, Kenya. This area of the study is chosen as it has witnessed an increase in the number of universities setting up in Nakuru Town in the last ten years and is dubbed to be the fastest growing towns in Africa much of which is attributable to educational and commercial activities as well as being a metropolitan city, a melting pot of diverse cultures and economic sectors.

#### **3.4 Target Population**

Mugenda and Mugenda (2008) describe a population as a complete set of individuals, cases or objects with some common observable characteristics. The total population comprised (60 staffs) of all universities within Nakuru town offering MBA. .

#### **3.5 Sampling Design and Procedures**

The study was a census of all universities within Nakuru town offering MBA. This study used purposive sampling technique to select sixty respondents from the target population. The population was stratified into two stratum, public and private Universities and form each stratum, six respondents was selected. This sampling technique was appropriate since these respondents are the one responsible in making MBA programs for Universities. The survey addressed six (6)

individuals at each of the 10 business schools offering MBA in Nakuru town in the sample, with a title of Deans, HODs, CODs, Coordinators and two (2) senior lecturers of School of Business teaching MBA courses. To encourage openness, survey answers were anonymous unless respondents choose to indicate school affiliation. The following section details how a particular OM practices can be instrumental in achieving the framework's corresponding MBA program objective.

### **3.6 Data Collection Instruments and procedures**

The data collection instruments are tools to collect information from the intended target population (sample size). The data collection instruments to be used in this study were developed by the researcher. The study used questionnaires for data collection. This is a collection of items to which a respondent is expected to react in writing. The designed questions or items were distributed to the respondents. This method collects a lot of information over a short period of time. The method is suitable when the information needed can be easily described in writing and if time is limited. In this study, the respondents were given enough time to complete the questionnaires before they can be used for analysis. The questionnaire included both structured and semi-structured questions. This enabled the respondents to give their own/institutional opinions. The questionnaires were in three parts. The first part sought to highlight demographic data; the next part to obtain specific information in relation to factors affecting MBA effectiveness and the third part was the questions on MBA program success. Likert scales and semantic differentials also incorporated to gauge the attitudes of the respondents.

### **3.7 Validity and Reliability of rresearch iinstruments**

#### **3.7.1 Validity of Research Instruments**

Validity is the degree to which results obtained from analysis of the data actually represent the phenomenon under study (Best and Khan, 1993). It is the accuracy and meaningfulness of inferences, based on research results; agreement between value of measurements and its true value. Validity is quantified by comparing measurements with values that are as close to the true values as possible. Poor validity also degrades the precision of a single measurement, and it reduces the ability to characterize relationships between variables in descriptive studies. The researcher will ensure the content validity of the questionnaire by involving the supervisors and other consultants to ensure relevance, preciseness and clarity of questions.

In order to ascertain validity of the research instruments, the researcher will pilot the instruments by distributing ten (10) questionnaires to other learning institutions in Kericho and Naivasha towns, which are not part of the sample. The results of the pilot questionnaires enabled the researcher to determine the consistency of responses to be made by respondents and adjust the items accordingly by revising the document.

### **3.7.2 Reliability of the Research Instruments**

Reliability is the measure of the degree to which a research yields consistent results or data after repeated trials, degree of consistency that the research instruments or procedures demonstrate. It is qualified by taking several measurements on the same subjects. Poor reliability degrades the precision of a single measurement and reduces the ability to track changes in measurement in a study (Mislevy, 2004). The reliability of data collection instruments was determined from the pilot study as well as use of Cronbach's alpha. The research instruments were administered to the same respondents twice in a span of two weeks. Pearson correlation was used to test the reliability of research instruments. The reliability statistics reveals a reliability coefficient that exceeds 0.70 which is acceptable.

### **3.8 Data Analysis and Presentation**

The data was analyzed using, using descriptive statistics and inferential statistics, Correlation and chi square test for goodness of fit and agreement was used for frequency distribution. The analysis was done using SPSS and the results presented in frequency tables and graphs and percentages. For inferential statistics, multiple regression and correlations was used.

The regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon_i$$

Where;

Y= MBA success

$\beta_0$ =constant

$\beta_1 \dots \dots \beta_4$  = parameter estimates

$X_1$  = Just-In-Time Teaching



X<sub>2</sub> = Operational Efficiency

X<sub>3</sub> = Quality Assurance

X<sub>4</sub> = Capacity planning

ε = Error term, normally distributed, with mean zero and a constant variance

### 3.9 Operationalization of the Variables.

<b>Objectives</b>	<b>Variables</b>	<b>Indicators</b>	<b>Measuring scale</b>	<b>Data collection tools</b>	<b>Data analysis methods</b>
Just-In-Time Practices	Processes involved	Policy Needs Strategy	Categorical	Closed questionnaire	Descriptive & inferential statistics
Quality Assurance	Processes involved	Satisfaction Programmes Rewards	Categorical	Closed questionnaire	Descriptive, inferential statistics
Capacity Planning	Processes involved	management Support	Categorical	Closed questionnaire	Descriptive & inferential statistics
Operation Efficiency	Processes involved	Benchmark Analysis	Categorical	Closed questionnaire	Descriptive & inferential statistics

## CHAPTER FOUR

### DATA ANALYSIS, INTERPRETATIONS AND DISCUSSIONS

#### 4.1 Introduction

This chapter presents the results of the findings and discussions on the

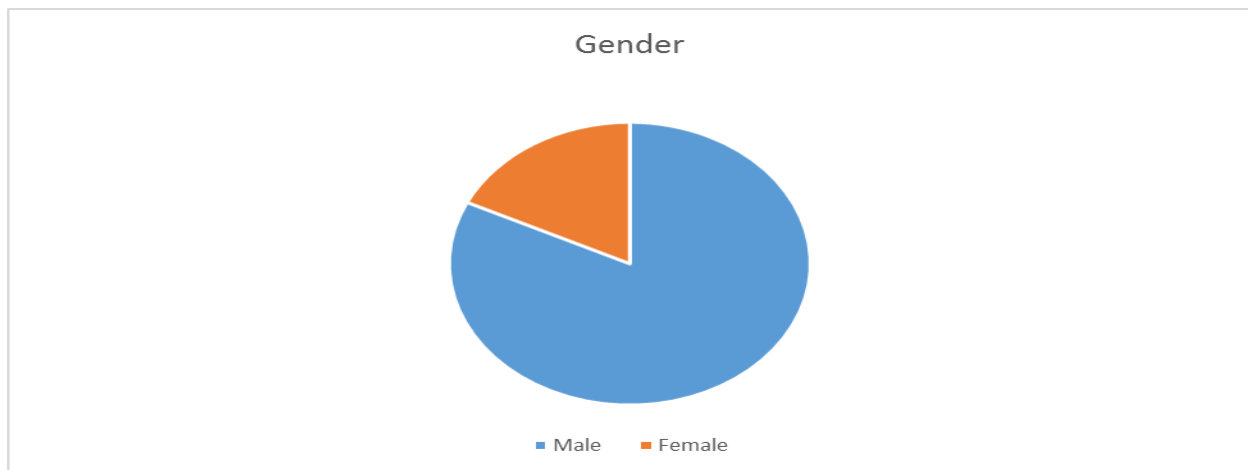
#### 4.2 Response Rate

The study used purely primary data collection. This was through the use of questionnaires, whereby 60 questionnaires were issued. However, only 52 were returned translating to a response rate of 87%. This population size was good enough and justified as it was in line with Mugenda and Mugenda, (2008) assentation.

#### 4.3 Background information

##### 4.3.1 Gender of the respondents

This section sought to establish the respondents' gender. The results obtained as presented by Figure 4.1 show that 82% were male while 18% were female. This thus implies that their responses obtained that there was male dominance among the respondents.

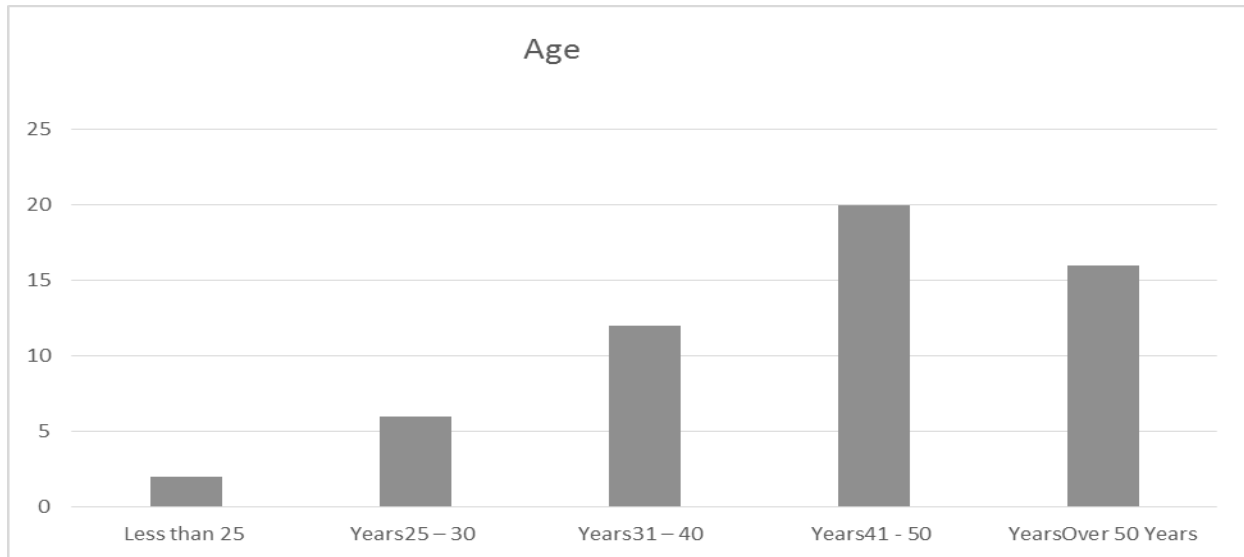


*Source; Research data (2016)*

**Figure 4. 1 Gender of the respondents**

### 4.3.2 Age of the respondents

This section aimed at establishing the respondents' age. The results are as presented by Figure 4.1. This shows that most of the respondents were above 30 years, and thus gave valid and accurate information.



**Figure 4. 2: Age**

*Source; Research data (2016)*

### 4.3.3 Position in organization

This section aimed at establishing the respondents' position in their respective organizations. The results that were obtained are as represented by Figure 4.3. This thus shows that majority of the respondents held managerial positions and was thus well conversant of the organization's operations.

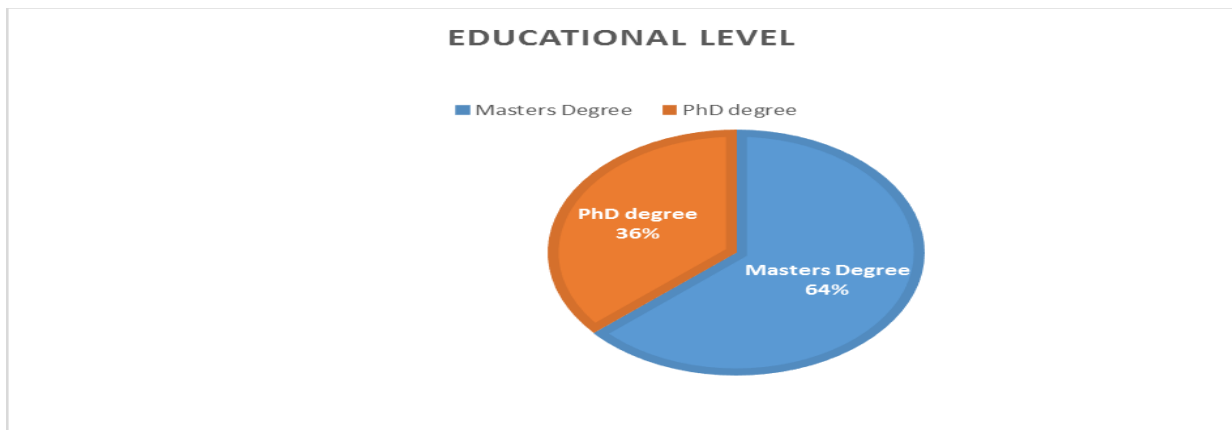


**Figure 4. 3 Position in organization**

*Source; Researcher, 2016*

#### 4.3.4 Education level

This section sought at determining the education qualifications of the respondents. The results obtained are as presented by Figure 4.4. This implies that most of the respondents were well qualified of their respective positions. Thus they provided accurate information.



**Figure 4. 4 Education level**

*Source; Research (2016)*

#### 4.4 Effects of operations management on MBA Programs.

##### 4.4.1 Just-In-Time Teaching and Quality

The study sought to determine how Just-In-Time Teaching and Quality affects the MBA programs' quality. The results obtained are as per Table 4.1.

**Table 4.1 Just-In-Time Teaching and Quality**

<b>JITT and Quality</b>	<b>SD</b>	<b>D</b>	<b>N</b>	<b>A</b>	<b>SA</b>	<b>Chisq</b>	<b>P&gt;Chisq</b>
We maximize the or effectiveness efficiency of classroom sessions	16.07%	21.42%	12.5%	35.71%	14.28%	9.89	0.05
We create and sustain team spirit among faculty;	3.57%	16.07%	26.78%	32.14%	21.42%	13.4	0.025
Students together with our faculty/instructors work as a team toward the same objectives	10.71%	21.42%	17.85%	32.14%	17.85%	6.85	<0.01
We structure out-of-class time for maximum learning benefit.	1.78%	3.57%	37.5%	33.92%	23.21%	31.14	<0.01
We start with Warm-up (student assignments) in preparation for the classroom activity.	3.57%	3.57%	19.64%	39.28%	33.92%	30.96	<0.01
We structure the out-of-class time for maximum learning benefit.	16.07%	21.42%	12.5%	46.42%	3.57%	29.17	<0.01
Our MBA program is complemented by the availability of online services	1.78%	3.57%	14.27%	44.64%	35.714%	41.67	<0.01

**(Keys: SD-Strongly Disagree, D-Disagree, N- Neutral, A-Agree, SA- Strongly agreed)**

*Source; Research data (2016)*

The findings as presented in table 4.1 shows that (50%) of the respondents (strongly agree and agree) significantly ( $\chi^2 = 9.89, p \leq 0.05$ ) that implies they maximize the effectiveness efficiency of classroom sessions. Majority (80%) of the respondents (agreed and strongly agreed)

significantly ( $\chi^2 = 41.67, p \leq 0.01$ ) that MBA program is being complemented by the availability of online services. 54% of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 13.4, p \leq 0.025$ ) that the sustain team spirit among faculty members. Majority (50%) of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 6.85, p \leq 0.01$ ) that students work together with our faculty/instructors as a team toward the same. 73% of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 30.96, p \leq 0.01$ ) that starting with Warm-up (student assignments) in preparation for the classroom activity about. On structuring out-of-class time for maximum learning benefit, 57% of the respondents (agreed and strongly agreed) ( $\chi^2 = 31.14, p \leq 0.01$ ). Majority (53%) of the respondents (agreed and strongly agreed) significantly ( $\chi^2 = 13.4, p \leq 0.025$ ) that there was a team spirit among faculty. 60% of the respondents (agreed and strongly agreed) significantly ( $\chi^2 = 9.85, p \leq 0.05$ ) that maximizing the effectiveness/efficiency of classroom sessions.

This thus implies that the MBA program being online had the greatest impact Just-In-Time Teaching and Quality while maximizing the classroom effectiveness/efficiency had the least. The p-values obtained were all less than 0.5 thus showing a positive relationship between the variable and the MBA success. This positive relationship is due to Just-in-time teaching being very useful for effective use of class time and works as a good gauge to ascertain where students are in their learning (Clark, 2016). This in return helps in identification of common areas of interest or confusion, and provides opportunities to define key areas that need further attention not just for teachers but also for students themselves. Similarly, Borrego et al, (2011) established that it improves students' preparation for class, enhances student motivation for learning and promotes ongoing formative assessment of student learning.

#### **4. 4. 2 Quality assurance and student experience**

The study sought to determine how quality assurance and student experience affects the MBA programs' quality. The results obtained are as per Table 4.2;

**Table 4.2 Quality assurance and student experience**

Statement	SD	D	N	A	SA	Chisq	P>Chisq
We support student learning (initiatives helping students to work efficiently).	5.35%	7.12%	23.21%	39.28%	25%	22.03	<0.01
We support teaching and learning environment (libraries, computing facilities, virtual learning)	12.5%	8.92%	16.07%	58.92%	3.57%	55.42	<0.01
We ensure Quality assurance of teaching staff, facilities and resources.	14.28%	21.42%	14.28%	42.85%	7.14%	21.14	<0.01
We focus on student satisfaction and steered towards a market-oriented environment	8.92%	17.85%	21.42%	33.92%	17.85%	9.17	0.005
Our keys stakeholders are able to anonymously report any events likely to compromise Quality of our programs	8.92%	17.87%	26.78%	32.14%	14.28%	9.89	0.005
There is continuous open door policy with regards to stakeholder engagement thus they are assured of quality	3.57%	17.85%	21.42%	51.78%	5.35%	42.03	<0.01

**(Keys: SD-Strongly Disagree, D-Disagree, N- Neutral, A-Agree, SA- Strongly agreed)**

*Source; Research data (2016)*

The findings as presented show that majority (61%) of the respondents (agreed and strongly agreed) significantly ( $\chi^2 = 55.42, p \leq 0.01$ ) that on supporting student learning (initiatives helping students to work efficiently). About 54% of the respondents (agreed and strongly agreed) significantly ( $\chi^2 = 42.03, p \leq 0.0001$ ) that there being a continuous open door policy with regards to stakeholder engagement thus they are assured of quality. 50% of the respondents (agreed and strongly agreed) significantly ( $\chi^2 = 9.89, p = 0.05$ ) that focus on student satisfaction and steered towards a market-oriented environment. Majority (51%) of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 9.17, p \leq 0.05$ ) that focus on student satisfaction and steered towards a market-oriented environment. About 56% of the respondents (agreed and strongly agreed) significantly ( $\chi^2 = 13.4, p \leq 0.025$ ) that the keys stakeholders being able to anonymously report any events likely to compromise Quality of our programs. About 57% of the respondents (agreed and strongly agreed) significantly ( $\chi^2 = 13.4, p \leq 0.025$ ) that ensuring Quality assurance of teaching staff, facilities and resources.

Thus meaning all the practices had moderate impacts on Quality assurance and student experience. This is attributed to the fact that academics and university administrators need information to help them monitor and improve their courses and programmes. The quality assurance teams of organizations constantly work to enhance the existing quality of products and services by optimizing the existing production processes and introducing new processes. Institutions need information about quality to help them benchmark and market their performance. This is in line with Green, (2014) who established the same in his study. The p-values obtained were all less than 0.5 thus showing a positive relationship between the variable and the MBA success.

#### **4. 4. 3 Capacity Planning influences Quality of MBA Programs**

The study sought to determine how capacity planning influences quality of MBA Programs. The results obtained are as per Table 4.3;



**Table 4. 3 Capacity Planning influences Quality of MBA Programs**

Statement	SD	D	N	A	SA	Chisq	P>Chisq
Capacity Planning positively influences the Quality of our MBA Program	0%	17.85%	21.42%	46.42%	14.28%	31.85	<0.01
We are more involved with long-term capacity planning for successful MBA program	0%	0%	44.64%	37.5%	17.85%	48.10	<0.01
We are more involved with long-term capacity planning for successful MBA program	1.78%	23.21%	0%	46.42%	28.57%	42.39	<0.01
We closely examine the services and the cost of services offered to their customers when making capacity decisions	16.07%	17.85%	17.85%	48.21%	0%	34.17	<0.01

**(Keys: SD-Strongly Disagree, D-Disagree, N- Neutral, A-Agree, SA- Strongly agreed)**

*Source; Research data (2016)*

The findings as presented show that on being involved with long-term capacity planning for successful MBA program about 60% of the respondents (agreed and strongly agreed) significantly ( $\chi^2 = 31.85, p \leq 0.01$ ). On capacity planning positively influences the Quality of our MBA Program about 55% of the respondents (agreed and strongly agreed)

significantly ( $\chi^2 = 48.10, p \leq 0.01$ ). On closely examining the services and the cost of services offered to their customers when making capacity decisions about 48% of the respondents (agreed and strongly agreed) significantly ( $\chi^2 = 34.17, p \leq 0.01$ ). About 75% of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 42.39, p \leq 0.0001$ ) that they are more involved with long-term capacity planning for successful MBA program

Thus showing that closely examine the services and the cost of services offered to their customers when making capacity decisions had the least impact on capacity planning influences. The p-values obtained were all less than 0.05 thus showing a positive relationship between the variable and the MBA success. This is because capacity planning is often proposed as a key tool for a more rational and systematic approach to bringing about the necessary changes for greater internationalization. However, it is essential to take the specific nature and modes of operation of a university into consideration if capacity planning is to be accepted and embraced both as a concept and a system in operations.

#### **4.4.4 Operational Efficiency and Quality**

The study sought to determine how operational efficiency influences quality of MBA Programs. The results obtained are as per Table 4.4.

**Table 4. 4 Operational efficiency and Quality**

Statement	SD	D	N	A	SA	Chisq	P>Chisq
We produce quality MBA students readily acceptable in the job market	16.07%	17.85%	25%	37.5%	3.57%	17.39	0.001
We develop a long-term plan	10.71%	5.35%	21.42%	57.14%	5.35%	53.10	<0.01
We improve our faculty Retention and satisfaction	8.92%	14.28%	17.85%	58.92%	0%	58.10	<0.01
Our turn-around time is the shortest in the market	8.92%	14.28%	21.42%	51.78%	3.57%	40.25	<0.01
We are a market leader in terms of efficiency/effectiveness of service	1.78%	10.71%	25%	48.21%	14.28%	35.60	<0.01
We are fully compliant with CUE standards on curriculum content	8.92%	14.28%	26.78%	44.64%	5.35%	28.64	<0.01

**(Keys: SD-Strongly Disagree, D-Disagree, N- Neutral, A-Agree, SA- Strongly agreed)**

*Source; Research data (2016)*

The findings as presented show that majority 48% of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 35.5, p \leq 0.01$ ) that our most respondents agreed on being a market leader in terms of efficiency/effectiveness of service. 54% of the respondents (agreed and strongly agreed) significantly ( $\chi^2 = 40.25, p \leq 0.01$ ) that the turn-around time being the shortest in the market about 49% of the respondents (agreed and strongly agreed) significantly ( $\chi^2 = 28.64, p \leq 0.01$ ) that they have fully compliant with CUE standards on curriculum content. About 40% of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 17.39, p \leq 0.01$ ) that they producing quality MBA students' readily acceptable in the market

This shows that none of the practices had a great extent of impact on the operational efficiency and quality. The p-values obtained were all less than 0.5 thus showing a positive relationship between the variable and the MBA success. This concurs with Vangie, (2014) argue that the reduced internal costs that result from operational efficiency enable a company to achieve higher profit margins or be successful in highly competitive markets. Overall, this will create a more financially sustainable institution, one operating at peak efficiency.

#### **4.5 Quality MBA program**

This section sought to establish the quality of MBA programs being offered in the universities. The results obtained are as shown by Table 4.5.

**Table 4. 5 Quality MBA program**

Statement	SD	D	N	A	SA	Chisq	P>Chisq
Based on the clarity of admission process we enroll more students every semester	1.78%	17.85%	16.07%	41.07%	23.21%	22.57	<0.01
We are fully compliant with CUE standards on faculty	0%	25%	23.21%	39.28%	12.5%	24.17	<0.01
We are fully compliant with CUE standards on student admissions	0%	16.07%	17.85%	50%	16.07%	37.39	<0.01
We are ranked among the top 10 universities in Kenya	0%	10.71%	23.21%	51.78%	14.28%	43.10	<0.01
Most students use ranking to choose our university	1.78%	14.28%	30.35%	35.71%	17.85%	20.25	<0.01
We are ranked better this year than last year	0%	21.42%	32.14%	30.35%	16.07%	18.825	<0.01
We conduct continuing and never ending improvements to boost our ranking	0%	25%	21.42%	32.14%	21.42%	16.14	0.025
We collaborate with other international universities to boost our academia and ranking scores	1.78%	7.14%	30.35%	39.28%	21.42%	27.39	<0.01

**(Keys: SD-Strongly Disagree, D-Disagree, N- Neutral, A-Agree, SA- Strongly agreed)**

*Source; Research data (2016)*

The findings as presented show that (35%) of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 18.85, p \leq 0.01$ ) that they have ranked better this year than last year. About 49% of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 27.39, p \leq 0.01$ ) that they are collaborating with other international universities to boost the academia and ranking scores. About 64% of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 22.5, p \leq 0.01$ ) that basing the clarity of admission process we enroll more students every semester about. Majority (66%) of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 37.4, p \leq 0.01$ ) that they are fully complying with CUE standards on student admissions. 60% of the respondents (strongly agreed and agreed) ( $\chi^2 = 16.14, p \leq 0.025$ ) that they conduct continuing and never ending improvements to boost our ranking. About 66% of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 43.1, p \leq 0.01$ ) that they are ranked among the top 10 universities in Kenya. About 54% of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 20.25, p \leq 0.01$ ) that most students using ranking to choose our university.

This thus implies that though most universities were ranked well than last year, they are yet to be fully compliant with CUE standards on faculty as it had the lowest mean. This is in line with Datar, *et al* (2014) who established that despite the enhanced importance of the MBAs', the desired quality is yet to be attained. This may be largely due to most of the MBA programs in Kenya have not embraced the best practices that can enable learners acquire techniques for basing their decisions and action on careful analyzed pertinent data, rendering them without any leadership philosophy. In addition, massification; overcrowding; ever-growing demand; erosion of technical colleges due to acquisitions and takeovers by public universities in search of space; crumbling infrastructure; poor governance; rigid management structures pose major challenges to the provision of quality MBAs. This indicates the need to improve the MBA quality if the desired effect were to be attained.

#### **4.5.1 Research output**

This section aimed at establishing the research output in the universities as measure of their reliability. The results obtained are as shown by table 4.6.

**Table 4. 6 Research output**

Statement	SD	D	N	A	SA	Chisq	P>Chisq
Our In-house journals attract outside researchers	16.07%	25%	7.14%	39.28%	12.5%	17.75	0.01
Our academia and teaching staff are world renowned	14.28%	16.07%	8.92%	46.42%	14.28%	25.25	0.01
Our MBAs are peer reviewed by international peers	1.785%	14.28%	28.57%	41.07%	14.28%	25.60	<0.01
Our Faculty are involved in peer reviewing international scholars and scholarly works	1.78%	7.14%	33.92%	41.07%	16.07%	32.21	<0.01

**(Keys: SD-Strongly Disagree, D-Disagree, N- Neutral, A-Agree, SA- Strongly agreed)**

*Source; Researcher (2016)*

The findings as presented show that; 55% % of the respondents (agreed and strongly agreed) significantly ( $\chi^2 = 25.6, p \leq 0.01$ ) that the MBAs being peer reviewed by international peers while about 57% of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 32.21, p \leq 0.01$ ) the faculty being involved in peer reviewing international scholars and scholarly works. 50% (strongly agreed and agreed) significantly ( $\chi^2 = 25.25, p \leq 0.01$ ) and the in-house journals attracting outside researchers with about 51% (agreed and strongly agreed) ( $\chi^2 = 17.75, p \leq 0.01$ ) that the academia and teaching staff being world renowned.

The research forms a crucial part in any MBA project. However, it still proves to be a milestone in most students. The universities therefore ought to put in place more measures so as to improve its knowledge ability among students. Hence shows moderate impact of all the variables on the research output. The p-values obtained were all less than 0.5 thus showing a positive relationship between the variable and the MBA success.

### 4.5.2 Market Acceptance

The market acceptance was used as a measure of the student's preference to the universities. The results that were obtained are as presented by Table 4.7.

**Table 4.7: Market acceptance**

Statement	SD	D	N	A	SA	Chisq	P>Chisq
Corporate bodies come to us for direct placement of our MBA graduates	16.07%	21.42%	26.78%	19.64%	16.07%	2.21	$p > 0.05$
More students and the general public are readily willing to be associated with our institution	16.07%	10.71%	25%	21.42%	26.78%	13.4	$p \leq 0.025$
We are rapidly expanding to other regions because we have found acceptance in many regions	17.85%	7.14%	21.42%	30.35%	23.21%	8.10	0.1
Our Graduates are very marketable in commerce and industry	14.28	23.21	25	33.92	3.57	14.89	0.025

**(Keys: SD-Strongly Disagree, D-Disagree, N- Neutral, A-Agree, SA- Strongly agreed)**

*Source; Research (2016)*

The findings show that 48% of the respondents (Strongly agreed and agreed) significantly ( $\chi^2 = 13.4, p \leq 0.025$ ) that more students and the general public is readily willing to be associated with our institution. 53% of the respondents (were neutral) significantly ( $\chi^2 = 8.1, p \leq 0.10$ ) that rapidly expanding to other regions because we have found acceptance in many regions about. While the respondents significantly ( $\chi^2 = 2.21, p > 0.05$ ) that corporate bodies come to us for direct placement of our MBA graduates. About (37%) of the respondents (strongly agreed and agreed) significantly ( $\chi^2 = 14.9, p \leq 0.025$ ) that graduates being very marketable in commerce and industry



Hence shows that the graduates being marketable had the least impact on market acceptance. Without the market acceptance, the MBAs the value of MBA attained get diminished. This thus necessitates those universities to put various approaches so as to ensure acceptance not only locally but also internationally.

#### 4.6 Reliability Test

Reliability test was conducted using Cronbach Alpha, the results obtained are as shown in Table 4.8. Just-In-Time teaching had a Cronbach alpha of 0.788, operation efficiency had 0.773, and quality assurance had 0.715, while capacity planning had 0.755. This shows that all the variables passed the reliability test and could be able to explain the relationship that existed between the variables.

**Table 4. 8 Reliability Test**

Variable	Cronbach Alpha	Decision
Just-In-Time teaching	0.788	Accepted
Operation efficiency	0.773	Accepted
Quality Assurance	0.715	Accepted
Capacity planning	0.755	Accepted

*Source: Research datas (2016)*

#### 4.7. Correlation Analysis

Correlation analysis was used to determine the nature of the relationship between study variables and hence achieve the specific objectives. Correlation was used to establish the the relationship that exists between operations management practices and quality MBA programs. Correlation analysis results are presented in Table 4.8.

Just-In-Time Teaching had a Pearson Correlation 0.758 and p-value of 0.001. The positive correlation indicated Just-In-Time Teaching had positive effect on MBA Quality. The coefficient of correlation is greater than 0.5 indicating that the relationship was strong. The p-value obtained on 0.001 indicated that the positive relationship between Just-In-Time Teaching and Quality

MBA programs was significant at 95% confidence level since it was less than 0.05. Therefore, Just-In-Time Teaching practices were key in ensuring that universities had Quality MBA programs.

Operational Efficiency had a Pearson Correlation of 0.333 and a p-value of 0.031. This indicated that the operational efficiency had positive relationship with Quality MBA programs though the relationship was not very strong since it was less than 0.5. The p-value of 0.031 implied that the relationship between operational efficiency and Quality MBA programs was significant at 95% confidence level.

Quality Assurance had a Pearson Correlation of 0.465 and p-value of 0.002. The coefficient of correlation of 0.465 which is positive indicated that Quality Assurance positively affects Quality MBA programs at the universities. Hence, observing maintaining quality assurance at universities will greatly improve the MBA quality. The p-value of 0.002 indicates that Quality Assurance significantly affected Quality MBA programs at 95% confidence level.

Capacity planning had a Pearson Correlation of 0.750 and a p-value of 0. This indicated that the capacity planning had positive relationship with Quality MBA programs. The relationship established was very strong since it was greater than 0.5. The p-value of 0 implied that the relationship between capacity planning and Quality MBA programs was significant at 95% confidence level. This thus shows that all the independent variables had a positive relation with the MBA quality. This relates to Wambui, et al (2016) who established the same in their study on factors affecting the quality of university education in public universities in Kenya.

**Table 4. 9 Correlation Analysis**

		Just-In-Time Teaching	Operational Efficiency	Quality Assurance	Capacity Planning
Just-In-Time Teaching	Pearson Correlation	.758**	1		
	Sig. (2-tailed)	0.001			
Operational Efficiency	Pearson Correlation	.333*	.693**	1	
	Sig. (2-tailed)	0.031	0.000		
Quality Assurance	Pearson Correlation	.465**	.718**	.642**	1
	Sig. (2-tailed)	0.002	0	0	
Capacity planning	Pearson Correlation	.750**	0.156	.635**	.370*
	Sig. (2-tailed)	0	0.323	0	0.016
N		52	52	52	52

\*\**. Correlation is significant at the 0.01 level (2-tailed).*

*Source: Research data (2016)*

#### 4.8 Regression Analysis

Multiple regression analysis was used to establish the relationship that exists between operations management practices and quality MBA programs. The multiple linear regression model was used as it allows simultaneous investigation of the effect of two or more independent variables on a dependent variable.

The following are the results of the fitted model.

**Table 4. 10 Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.763a	0.755	0.741	0.03999

Predictors: (Constant), Just-In-Time Teaching, Operational Efficiency, Quality Assurance and Capacity planning (*Source: Research Data, 2016*)

The adjusted R square value is 0.741 implying that about 74.1% of the variation seen in MBA's quality is explained by the variables in the regression model. This further means that only 25.9% of the variation seen in MBA's quality is unexplained by other variables which are not in the model.

**Table 4. 11 Model Analysis of Variance**

	Sum of Squares	d.f	Mean Square	F	Sig.
Regression	1.608	4	0.402	322.00	.000a
Residual	0.058	48	0.001		
Total	1.666	52			

a. Predictors: (Constant), Just-In-Time Teaching, Operational Efficiency, Quality Assurance and Capacity planning

b. Dependent Variable: MBA success

*Source: Research Data, (2016)*

From Table 4.9 above, results indicate that overall, the model is highly significant. This is because the p-value obtained of 0.000 is less than both 0.01 and 0.05. Thus implying that at 5% level of significance, at least one of the variables included in the model is useful in predicting the MBA's quality.

The model coefficients obtained by the study are shown in table 4.10. As shown in the model, Just-In-Time teaching has Pearson coefficients of 0.0100 and a p-value of 0.0050. This thus implies it had a significant positive impact at 5% level on MBA quality since p-value is less than 0.05. Operational efficiency has Pearson coefficients of 0.0130 and a p-value of 0.0260. This thus implies it had a significant positive impact at 5% level on MBA quality since p-value is less than 0.05. Quality assurance has Pearson coefficients of 0.4320 and a p-value of 0.1310. This thus implies it had a no significant positive impact at 5% level on MBA quality since p-value is more than 0.05. Capacity planning has Pearson coefficients of 0.9920 and a p-value of 0.000.

This thus implies it had a significant positive impact at 5% level on MBA quality since p-value is less than 0.05.

This thus shows that all the models except quality assurance are significant at 5% level since their p-values are less than 0.05. These finding compares with that of Bloom, *et al*, (2016) who established the same in their study. The predictive model thus developed by the study is  $Y = -0.5230 + 0.0100 \text{ Just-In-Time Teaching} + 0.0130 \text{ Operational Efficiency} + 0.4320 \text{ Quality Assurance} + 0.9920 \text{ Capacity planning}$ .

**Table 4. 12: Model Coefficients**

Unstructured coefficients	Standard Coefficients				Multicollinearity		
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	-0.5230	0.2940		-1.7810	0.0830		
Just-In-Time Teaching	0.0100	0.0030	0.1100	2.9910	0.0050	0.618	1.409
Operational Efficiency	0.0130	0.0060	0.1330	2.3250	0.0260	0.545	1.618
Quality assurance	0.4320	0.2800	0.1210	1.5450	0.1310	0.506	1.834
Capacity planning	0.9920	0.0890	1.0290	11.1210	0.000	0.71	1.976

a. Dependent Variable: MBA success

*Source: Research Data, (2016)*

#### 4.9 Hypothesis Testing

Hypothesis is a specific statement of prediction. It describes in concrete terms what researcher expects will happen in the study. Based on the results and formulation of the hypotheses the decision to accept or reject the null hypothesis is made. The results of hypothesis testing show

that all the four hypothesized relationships were significant. This meant that the all the variables significantly contributed to quality MBA programs. The hypothesized relationship on Just-In-Time Teaching, Operational Efficiency and Capacity planning were statistically significant at 5%  $\alpha$ -level. Summary of the hypothesis testing results are shown in Table 4.12

**Table 4. 13 Summary of Hypotheses Testing**

<b>Hypothesis</b>	<b>Std. Error</b>	<b>t</b>	<b>P-Value</b>	<b>Conclusion</b>
H <sub>01</sub> : Just in Time practices has no significant impact on the improvement of the quality of MBA programs.	0.003	2.991	0.005	Reject H <sub>01</sub>
H <sub>02</sub> : Operation efficiency has no significant effect on the quality of MBA programs.	0.006	2.325	0.026	Reject H <sub>02</sub>
H <sub>03</sub> : Quality assurance has no significant effect on the quality of MBA programs.	0.28	1.545	0.131	Reject H <sub>03</sub>
H <sub>04</sub> : Capacity planning has no significant effect on the emergence of high quality MBA program.	0.089	11.121	0	Reject H <sub>04</sub>

*Source: Research Data, (2016)*

**H<sub>01</sub>: Just in Time practices has no significant impact on the improvement of the quality of MBA programs.**

According to the results, the p-value .005 is less than 0.05 ( $p < 0.05$ ). The hypothesis was therefore rejected and concluded that Just in Time practices have significant effect on the quality of MBA programs. Additionally, the ANOVA test was done to establish the overall significance of the regression model which confirmed a significance of .003 which is less than 0.05 ( $P < 0.05$ ). The null hypothesis was therefore rejected and concluded that Just in Time practices have significant effect on the quality of MBA.

**H<sub>02</sub>: Operation efficiency has no significant effect on the quality of MBA programs**

According to the results, the p-value .026 is less than 0.05 ( $p < 0.05$ ). The hypothesis was therefore rejected and concluded that operation efficiency have significant effect on the quality of MBA programs. Additionally, the ANOVA test was done to establish the overall significance of the regression model which confirmed a significance of .006 which is less than 0.05 ( $P < 0.05$ ). The null hypothesis was therefore rejected and concluded that operation efficiency have significant effect on the quality of MBA.

**H<sub>03</sub>: Quality assurance has no significant effect on the quality of MBA programs.**

According to the results, the p-value 0.131 is more than 0.01 ( $p < 0.05$ ). The hypothesis was therefore accepted and concluded that quality assurance has no significant effect on the quality of MBA programs. Additionally, the ANOVA test was done to establish the overall significance of the regression model which obtained a significance of 0.28 which is more than 0.05 ( $P < 0.05$ ). This indicates that the model was not significant in establishing the relationship that exists. The null hypothesis was therefore accepted and concluded that quality assurance practices have no significant effect on the quality of MBA.

**H<sub>04</sub>: Capacity planning has no significant effect on the emergence of high quality MBA program.**

According to the results, the p-value .00 is less than 0.01 ( $p < 0.05$ ). The hypothesis was therefore rejected and concluded that capacity planning practices have significant effect on the quality of MBA programs. Additionally, the ANOVA test was done to establish the overall significance of the regression model which confirmed a significance of 0.089 which is more than 0.05 ( $P < 0.05$ ). This indicates that the model was not significant in establishing the relationship that exists. The null hypothesis was therefore rejected and concluded that capacity planning practices have significant effect on the quality of MBA.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter contains summary of the study, conclusion and recommendation for policy and areas for further research. Data analysis and summary and conclusions were made in line to the study objective which was to determine the the relationship that exists between operations management practices and quality MBA programs in universities.

#### 5.2 Summary of the Findings

The study sought to determine effect of the relationship that exists between operations management practices and quality MBA programs. The data was gathered using the questionnaire as the research instrument of which a response rate of 87% was obtained. The study was a census of all universities within Nakuru town offering MBA. This study used purposive sampling technique to select sixty respondents from the target population. Descriptive and correlation and regression analysis was used present the result in tables and figures.

The study also aimed at establishing the various practices put in place by the universities. The findings obtained showed that Just-In-Time Teaching, Operational Efficiency, Quality Assurance and Capacity planning. Particularly, MBA program being online had the greatest impact Just-In-Time Teaching and Quality while maximizing the classroom effectiveness/efficiency had the least. On the quality assurance and research output, all the practices had moderate impacts. While on quality planning, closely examine the services and the cost of services offered to their customers when making capacity decisions had the least impact while none of the practices had a great extent of impact on the operational efficiency and quality. Whereas graduates being marketable had the least impact on market acceptance. In addition, the findings implied that though most universities were ranked better than last year, they are yet to be fully compliant with CUE standards on faculty as it had the lowest mean. Hence showing moderate impact of all the variables on the research output. Hence showing that the practices put is a huge pre-determining factor on how the success of MBA projects.



The regression analysis was further used to establish the direction of relationship that existed between the dependent and independent variables. The R square value was 0.755 implying that about 75.5% of the variation seen in MBA's quality is explained by the variables in the study. This further means that only 24.5% of the variation seen in MBA's quality is explained by other variables which are not in the model. The relationship was significant as the p value obtained was less than 0.5. Additionally, the model coefficients obtained revealed that all the variables had significant positive relationship with MBAs success and quality. Whereby; Just-In-Time teaching has 0.0100, operational efficiency 0.0130, quality assurance 0.4320 and capacity planning 0.9920. The constant on the other hand is the predicted value when all the other predictors are set to zero (B= -0.5230) The positive coefficient shows that all the variables have a positive effect on the MBA's success. This implies that an increase in these variables would result in increased MBA's quality. All the models except quality assurance are significant at 95% since their p-values are less than 0.05. The predictive model thus developed by the study is  $Y = -0.5230 + 0.0100 \text{ Just-In-Time Teaching} + 0.0130 \text{ Operational Efficiency} + 0.4320 \text{ Quality Assurance} + 0.9920 \text{ Capacity planning}$ .

### **5.3 Conclusion of the study**

The study concludes that Just-In-Time Teaching, Operational Efficiency, Quality Assurance and Capacity planning are the main practices put in place in ensuring the MBA quality. This is mainly because these practices are aimed to overcome the challenges facing the universities, mainly massification; overcrowding; ever-growing demand; erosion of technical colleges due to acquisitions and takeovers by public universities in search of space; insufficient/declining public funding; curricula that are not responsive to modern-day needs of the labor market; declining quality; crumbling infrastructure; poor governance; rigid management structures which affect quality education in Kenyan universities. On the relationship that exists between operations management practices and quality MBA programs, the study concludes that a significant positive relationship exists. This is because all the variables were established to have positive coefficients. Hence so as to improve the quality of MBA projects the universities ought to put in place proper operational strategies.

### **5.4 Recommendations**

From the findings, several recommendations are made. The study established that the MBA quality may be determined greatly by the type operational practices employed. The study thus

recommends that the implementation process of these operation strategies should be given top priority during the strategy formulation process. Particularly, adequate time and resources should be allocated in ensuring that the practices are implemented successfully. Additionally, the organizations should focus more on the practices that are likely to accrue more benefits. This will go a long way in not only boosting but also improving the MBA quality at large.

### **5.5 Suggestions for Further Research**

Despite the research questions being well answered, several areas remain unclear and require further research. The study only focused the operation strategies, without giving much consideration how they were implemented. The study thus suggests further research should be done on the implementation process of the operation strategies, also investigating the various challenges that may occur. The study was only limited to universities in Nakuru County. So as to enable generalization of the findings, the study suggests that further study to be conducted on universities in other parts of the country. Additionally, a study could be conducted on other organizations other than the universities so as to establish whether the similar phenomena prevails in these organizations

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## APPENDIX I: LETTER OF INTRODUCTION

KABARAK UNIVERSITY,  
PRIVATE BAG – 20157,  
NAKURU, KENYA.

October 2016.

Dear Respondent,

### **RE: REQUEST TO CARRY OUT A RESEARCH STUDY.**

I am a Master of Business Administration student at Kabarak University doing a research on the **effects of Operations Management Practices on the Quality of MBA Programs of Kenyan Universities, survey based in Nakuru town.** As an empirical investigation constitutes a major portion of the study, your assistance will go a long way in making this study a success. Your identity, information provided was treated with utmost confidentiality and will not be used for any other purposes other than this academic paper. Your participation and cooperation was highly appreciated.

Thank you in advance.

Yours faithfully,

**Bosco J Verbs**

## APPENDIX II: QUESTIONNAIRE

### **SECTION A: Personal information**

1. What is your gender? Male [  ] Female [  ]
2. How old are you? \_\_\_\_\_yrs\_\_\_\_\_
3. What is your highest level of education? Tick where appropriate.
  - a) Secondary [  ]
  - b) Tertiary(certificate) [  ]
  - c) Diploma [  ]
  - d) Undergraduate Degree [  ]
  - e) Masters Degree [  ]
  - f) PhD degree [  ]
  - g) Other(s) – Specify\_\_\_\_\_
4. In what capacity (position) do you hold at your university?
  - a) Top management [  ]
  - b) Middle level management [  ]
  - c) Non managerial staff/Student [  ]

### **SECTION B**

You are kindly requested to state your degree of agreement or disagreement to each of the given items on a 5-point Likert scale. Insert a cross(x) or tick in the most appropriate column where:

- |                   |     |
|-------------------|-----|
| Strongly agree    | [5] |
| Agree             | [4] |
| Neutral           | [3] |
| Disagree          | [2] |
| Strongly Disagree | [1] |

**Part 1: EFFETS OF OPERATIONS MANAGEMENT ON MBA PROGRAMS.**

**To what extent do you agree about the following statements?**

<b>Just-In-Time Teaching</b>	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
We maximize the effectiveness/efficiency of classroom sessions	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We create and sustain team spirit among faculty;	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Students together with our faculty/instructors work as a team toward the same objectives	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We start with Warm-up (student assignments) in preparation for the classroom activity.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We structure the out-of-class time for maximum learning benefit.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Our MBA program is complemented by the availability of online services	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

**Part 2. To what extent do you agree about the following statements?**

<b>QUALITY ASSURANCE</b>	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
We support student learning (initiatives helping students to work efficiently).	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We support teaching and learning environment (libraries, computing facilities, virtual learning)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We ensure Quality assurance of teaching staff, facilities and resources.	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We focus on student satisfaction and steered towards a market-oriented environment	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Our keys stakeholders are able to anonymously report any events likely to compromise Quality of our programs	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
There is continuous open door policy with regards to stakeholder engagement thus they are assured of quality	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

**Part 3: To what extent do you agree about the following statements?**

<b>Capacity Planning</b>	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
We capacity build our MBA students by offering them academic scholarships (PhDs)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We capacity build our academic staff by offering training/sponsoring their further studies to world renowned institutions	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Capacity Planning positively influences the Quality of our MBA Program	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We are more involved with long-term capacity planning for successful MBA program	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We closely examine the services and the cost of services offered to their customers when making capacity decisions	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

**Part4. To what extent do you agree about the following statements?**

<b>Operational Efficiency</b>	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
We offer professional course to complement our MBA program					
We are competitive in this Highly dynamic market	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We produce quality MBA students readily acceptable in the job market	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We develop a long-term plan					
We improve our faculty Retention and satisfaction					
Our turn-around time is the shortest in the market					
We are a market leader in terms of efficiency/effectiveness of service				<input type="checkbox"/> 4	<input type="checkbox"/> 5
We are fully compliant with CUE standards on curriculum content	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

**Part5: QUALITY MBA PROGRAM**

**To what extent do you agree about the following statement?**

<b>Increased Enrollments</b>	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
We have both online and class room MBA programs					
We have enrolled more students because of our quality programs					
Based on the clarity of admission process we enroll more students every semester					
We are fully compliant with CUE standards on faculty					
We are fully compliant with CUE standards on student admissions					

**To what extent do you agree about the following statement?**

<b>Ranking</b>	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
We are ranked among the top 10 universities in Kenya	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Most students use ranking to choose our university	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

We are ranked better this year than last year	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We conduct continuing and never ending improvements to boost our ranking	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We collaborate with other international universities to boost our academia and ranking scores	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

**To what extent do you agree about the following statement?**

<b>Research output</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>
Our institution publishes research papers in international journals	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Our In-house journals attract outside researchers	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Our academia and teaching staff are world renowned	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Our MBAs are peer reviewed by international peers	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5



Our Faculty are involved in peer reviewing international scholars and scholarly works	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
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**To what extent do you agree about the following statement?**

<b>Market acceptance</b>	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
We satisfy the needs of our key stakeholders	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Based on the quality of our MBA we are competitive as compared to other institutions	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Corporate bodies come to us for direct placement of our MBA graduates	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
More students and the general public are readily willing to be associated with our institution	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
We are rapidly expanding to other regions because we have found acceptance in many regions	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Our Graduates are very marketable in commerce and industry	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

### APPENDIX III: UNIVERSITIES OFFERING MBA IN NAKURU TOWN

<u>Institution Name</u>	<u>Campuses</u>	<u>Category</u>
1. Egerton University	Nakuru	Public
2. Jomo Kenyatta University of Agriculture and Technology	Nakuru	Public
3. Kabarak University	Nakuru	Private
4. Kenya Methodist University	Nakuru	Private
5. Kenyatta University	Nakuru	Public
6. Laikipia University	Nakuru	Public
7. Mount Kenya University	Nakuru	Private
8. PCEA University	Nakuru	Private
9. St. Paul's University	Nakuru	Private
10. University of Nairobi	Nakuru	Public

*Source: KenyaPlex, (2016)*