

**INNOVATION STRATEGIES AND SUSTAINABLE COMPETITIVE
ADVANTAGE AMONG KENYAN UNIVERSITIES**

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DECLARATION

I hereby declare that this research project is my original work and has not been presented in any other institution.

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DEDICATION

This project is devoted to my loving parents who have been a source of encouragement and inspiration for always believing in me and setting a strong education foundation for me and my siblings.

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TABLE OF CONTENTS

DECLARATION	2
DEDICATION	3
ACKNOWLEDGEMENTS	4
LIST OF TABLES	8
ABSTRACT	10
CHAPTER ONE: INTRODUCTION	1
1.1 Background of the Study.....	1
1.1.1 Innovation Strategy	2
1.1.2 Sustainable Competitive Advantage	4
1.1.3 Universities in Kenya.....	5
1.2 Research Problem.....	7
1.3 Research objective	9
1.4 Value of study	9
CHAPTER TWO:LITERATURE REVIEW	11
2.1 Introduction	11
2.2 Theoretical Foundation of the Study.....	11
2.2.1 Porter’s Theory of Competitive Advantage	11
2.2.2 Schumpeter Theory of Innovation	13

2.3 Innovation Strategy and Sustainable Competitive Advantage.....	14
CHAPTER THREE:RESEARCH METHODOLOGY.....	18
3.1 Introduction	18
3.2 Research Design.....	18
3.3 Population	18
3.4 Sample Design	19
3.5 Data Collection.....	19
3.6 Data Analysis	19
CHAPTER FOUR:DATA ANALYSIS, FINDINGS INTERPRETATION AND DISCUSSION OF RESULTS.....	21
4.1 Introduction	21
4.2 Response Rate	21
4.3 General Information	21
4.3.1 Gender of Respondents	22
4.3.2 Level of Education	22
4.3.3 Age Bracket.....	23
4.3.4 Length of Continuous Service.....	24
4.4 Innovation Strategies.....	25
4.4.1 Product innovation	26
4.4.2 Administrative Innovation	27
4.4.3 Marketing Innovation.....	29
4.4.4 Process Innovation	31

4.5 Sustainable Competitive Advantage	33
4.6 Correlation Analysis.....	35
4.6.1 Correlation Analysis.....	35
4.7 Regression	37
4.7.1 Model Summary.....	37
4.7.2 Goodness of Fit of the Model.....	38
4.7.3 Model Regression Coefficients	38
4.8 Discussion of Findings.....	41
CHAPTER FIVE:SUMMARY, CONCLUSION AND RECOMMENDATIONS	43
5.1 Introduction	43
5.2 Summary of the Findings.....	43
5.3 Conclusion of the study.....	44
5.4 Recommendation of the Study.....	44
5.5 Limitations of the study	45
5.6 Recommendation for Further Studies	46
REFERENCES.....	47
APPENDICES	52
Appendix I: Questionnaire	52
Appendix 2.Accredited Universities in Kenya.....	56

LIST OF TABLES

Table 4. 1: Gender	22
Table 4. 2: Level of Education	23
Table 4. 3: Age bracket	24
Table 4.4: Length of Service	25
Table 4. 5: Product Innovation	26
Table 4.6: Administration Innovation	28
Table 4. 7: Market Innovation.....	30
Table 4. 8: Process Innovation	32
Table 4.9: Sustainable Competitive Advantage	34
Table 4.10: Correlation Analysis	36
Table 4. 11: Model Summary.....	37
Table 4.12: ANOVA	38
Table 4.13: Regression Coefficients	39

ABBREVIATIONS

CBOs	Community Based Organizations
HIV	Human Immunodeficiency Virus
NGOs	Non-Governmental Organisations
S.P.S.S	Statistical Package for Social Science
DOI	Diffusion of Innovation
EPS	Earnings per Share

ABSTRACT

The business environment triggers need for change and innovative responses to match the organizations operation, resources and the environment; innovations can be incremental, radical or descriptive, hence the organization must be accommodative if it's to sustain its operations optimally. The government through the Ministry of Education (MOE) has, over time, proven its dedication to growing education and having constant distribution of resources for this education sector. The Universities all over the world is going through a period characterized by radical and rapid changes as a result of influential impacts of IT and overwhelming advancement in telecommunications technology and electronic processing of data. The general aim of this research was to assess the influence of innovation approaches and sustainable competitive advantage of universities operating in Kenya. This work was anchored on two theories namely; theory of competitive advantage and Schumpeter theory of innovation. The population of this study was 40 respondents among Kenyan Universities operating in Kenya. Target respondents was the Academic register and ICT office. Analysis was done using descriptive statistics as well as multiple linear regression and correlation analysis. It was established that product innovation greatly influences sustainable competitive advantage. On the other hand, administration innovation technological moderately influences sustainable competitive advantage. The findings established the existence of a strong positive correlation between innovation strategies and sustainable competitive advantage. It was concluded that product innovation practices, process innovation practices and market innovation practices were used to a large extent. It was also concluded that process innovation was significant while product and market innovations were insignificant. The study recommends that there is need for Universities to carry out a comparison of what their competitors are offering in the market. This is because their competitors might be offering similar service with more favorable attributes. The study also recommends that Universities should control marketing expenses. This will boost efficiency.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Innovation strategies among industries have become instruments of competition and determiner of what level of competitive positions a firm in an industry holds for two decades. Laperche, Lefebvre and Langlet (2014) assert that in the present day competitive business environment, innovation has become a key element of determining the sustainability of a business and also it is very rare to find an organization that has not implanted or have a potential to adopt technological innovation either periodically or continuously. However, despite the critical role that innovation strategy plays in determining a firms competitive advantage, Sharif and Huang (2012) found that innovation has remained elusive to many companies.

The research is based on two main theories. Schumpeter Theory of Innovation used to explain innovation strategies and why organization adopts innovation strategies. The theory of competitive advantage assist the study to explain sustainable competitive advantage. Sustainable competitive advantage theory which was coined in 1984 by Day reveals that a firm is termed as a workable competitive advantage conscious if it can implement a value creating strategy that is superior to its potential or current competitors (Barney, 1991).

This study has been motivated by the fact that although there are several studies conducted both locally and internationally on various innovation strategies on sustainable competitive advantage, most of these studies have focused on different contexts and their outcomes may be generalized to represent colleges in Kenya. Previous studies also differed on the innovation strategies. Khan (2015) cited failure of translation of innovation strategy to daily operations as a root problem while Imbach et al. (2015) posits that lack of communication poses a great challenge to successful innovation strategy.

The failure for firms to innovate or sustain its competitive product has been cited to be due to a lack of an effective innovation strategy. Lendel and Varmus (2012) argue that innovative approach of any firm facilitates decision making process regarding resource allocation towards specific organizational projects aimed at achievement of objective and establishment of sustainable competitive advantage. Additionally, innovation techniques have enhanced creation of more strategies giving companies more alternatives to select the best strategy that will gear organizational activities in achieving its objectives in an economical and efficient manner (Dodgson, Gann, & Salter, 2016). Hence, it can be claimed that a firm's ability to establish a coherent innovation strategy will influence its ability to compete in an ever changing business environment.

1.1.1 Innovation Strategy

This is considered as creating, implementing and accepting new product/services, procedures and ideas. Therefore, innovation strategy guides the decision of how an organization would use available resource to meet its objective for innovation thus delivering value and creating competitive advantage (Dodgson and Salter, 2017). In management discipline, innovation focuses on the mission of organization to search for opportunities which are unique and they are able to fit strategic decision of organization (Gaynor, 2002). Management are required to create a strategy and share the importance of innovation in an organization, make decisions regarding, when and when to employ appropriate technology as well as improve performance enhancement by deploying appropriate performance indicators. According to Oke (2016), an initial consideration in drafting an innovation approach is to outline the importance of innovation is meant to

achieve and area of focus. A firm that is capable to understand the drivers of innovation is in position to achieve the goals of innovation strategies.

Innovation strategy provides an organization with clear focus and direction with an effort to increase productivity as the fundamental source of increasing wealth. Firstly, innovation strategy enables an organization to launch innovative services and products as well as finding innovative ways of entering new markets and at the same time enhance internal efficiencies. The second importance of innovation strategies is that a company is able to change company direction when needed. In this sense, instead of innovation being utilized to achieve organization corporate objective, it can be used as mechanism for altering corporate objectives and direction (Katz et al., 2015). Therefore, an organization can take proactive technique to achieve strategic market position or it may consider taking reactive technique to innovation so as not to miss market share to innovative competitors (OECD, 2019).

There are various types of innovation strategies namely process marketing, product/service, business model, market and organizational innovations (Adriopoulos and Dawson, 2015). This research focuses on product/service, process and market innovation strategies. Product innovation is the process in which an organization produces and develops latest product or service which can results to organizational success (Valencia, Valle, and Jimenez, 2010). Process innovation is the introduction of technology, mechanization and changes in the procedures of work units so as to come up with new product or services (Molina et al., 2015). Marketing innovation is defined as continuous process that entails enhancing current marketing capability of organization products and services through learning process (Mahmod, Ibrahim & Rodina, 2016).

1.1.2 Sustainable Competitive Advantage

Sustainable competitive advantage (SCA) is continued benefit derived from implementing unique value creation strategy that is based on the inimitable and unique combination organizational resources which are held internally as well as their capabilities that cannot be imitated or replicated by competitors in the industry. According to Kihumba (2015), these benefits compromise the ability of the organization to meet its future objectives and needs. This advantage enable organization to survive in the market against its competitor for a long period of time. The swiftness at which distinctiveness and uniqueness of organization resources becomes accessible will dictate the rate at which organization will loss it competitive advantage.

In a fast moving competitive environment like university education, the issue of sustaining competitive advantage embroils building safe-haven from aggressive competition through constantly creating gaps by utilizing unique resources that their competitors cannot easily bridge. As results, an organization is considered to have acquired sustainable competitive advantage if it has upper hand in securing customer as well as protecting against competitive power over its rivals (Damanpour, (2015). Sustainable competitive advantage of an organization is born out of core competencies that are expected to produce long term return to the organization. Core competence has three main characteristics; first it offers an organization access to various kind of market, it also improves perceived benefits to customer and it is difficult to imitate. The source of competitive advantage includes superior customer service, achieving lower cost in comparison to its rivals and producing high quality products/service.

SCA framework utilizes principals and concepts developed in macroeconomics so as to derive 5 forces which are meant to determine the desirability of a market (Barney, 2016). These forces are derived with aim to affect organization ability to save their customers as well as make profit. Alteration in any one of these forces would require an organization to reconsider their marketplace. They include new entrant threat, suppliers bargaining power, buyers bargaining power and product substitute threat (Caroline, 2015). The above named four forces in combination with other factors to have an influence on the level of competition in the industry which is the fifth force. If the industry as low rivalry, then the industry is termed as disciplined and any change will not affect other firms in the industry (Porter, 1980).

1.1.3 Universities in Kenya

Globally, university education is a key vital elements needed in technological, socio-economic and political development (Republic of Kenya, 2019). Accessibility to university education is considered not only one of the essential and fundamental human rights but also a critical tool for unrelenting socio-economic development as well as a vital tool to alleviate poverty. The realization of Millennium Development Goals is fundamentally hinged on improved investment in basic education and more importantly at higher education level (Republic of Kenya, 2019). Several factors have fuelled growth of private university sector in Kenya. These factors include bed capacity which has limited available opportunities in public universities, constant closure of public university due to students, teaching and non-teaching staff unrest and the need to complement public universities for their largely followers. However, private universities exist solely for profit making and the fees charged in these institutions strictly depend on market forces with aim of full cost recovery.

The university education was started in the year 1961 where the Royal College Nairobi was transformed into a university which was facilitated through a special arrangement that was formed with the University of London that facilitated its ability to offer degrees through the University of London, (Kamau, 2015). The over alarming increase in demand for university education and the country's system of education and high increasing population, were the driving factors to the growth of universities in Kenya this has been since the mid-1980s. There are 31 public universities which provide quality education to the country's multitudes facilitated by high number of students. In Kenya, over 100,000 students qualify for admission in university courses yearly. However, the government can sponsor about 40,000 students through Kenya Universities and Colleges Central Placement Service in both public and selected private universities. In 1996, there was a sharp increase worldwide in number of student enrolled in sub Saharan Africa universities indicating a more than 7.5% increase (Banya, 2016). Kenya has witnessed fastest growth in higher education sector in last ten years with an average growth of 6.2% annually (Republic of Kenya, 2019).

This study focused on the role of innovation strategies in sustainable competitive advantage of universities operating in Kenya. According to Poddar and Gadhave (2015) competitive advantage is the advantage of one institution relative to her competitor institutions in the same industry. The institution which has advantage over the other is able to pace out other players in the market to attract consumers or clients. Competitive advantage affords institutions to increase and at the same retain their market share. This implies that an institution can achieve competitive advantage if it's able to offer its market greater value by lowering prices or justifying the benefits of charging higher prices through value creation.

1.2 Research Problem

The business environment triggers need for change and innovative responses to match the organizations operation, resources and the environment; innovations can be incremental, radical or descriptive, hence the organization must be accommodative if it's to sustain its operations optimally. Various innovative responses faces resistance and obstacles which becomes quite challenging to the organization's operations and performance, effective implementation of the innovative strategy is the only solution to organizational success (Jones & Hill (1977)). The need to innovate new strategy could hardly be more urgent.

The government through the Ministry of Education (MOE) has, over time, proven its dedication to improving education and training regular distribution of resources for education sector. Nonetheless, in spite of the sustained resource distribution and certain key success factors, huge challenges are still being felt for this sector. Fraud is dominantly occurring in many universities and especially the public universities (Mahinda, 2012). These violations are hard to discover, examine or reduce and many senior public servants in these universities are unwilling to perform such tasks because of the outcomes the institutions would experience upon such exposure. The Universities all over the world is going through a period characterized by radical and rapid changes as a result of influential impacts of IT and overwhelming advancement in telecommunications technology and electronic processing of data.

Although there are previous studies conducted in this area, there are significant research gaps along conceptual, contextual and methodological spheres which are what this study focused on. In India, Sahay, Yamini Prakash and Gupta (2015) carried a research on organisation structure and innovation in the Indian bulk drug industry. Using a survey research design, the study obtained data from 15 bulk drug firms. They found that generally innovation is critical for survival and has positive effect on the bottom lines. Also,

Innovative firms receive highest financial returns. Nilufer Ergeneli , Asli Goksoy and Ozalp Vayvay (2017) conducted a research on Gaining Competitive Advantage through Innovation Strategies. The study made use of an exploratory qualitative methodology. They concluded that in today's economy sustainable competitive advantage is through innovation.

Muzaffer (2019) in his research to investigated the role and technological innovation in determining the competitiveness and profitability of the firms. The study used descriptive and inferential statistics. He found out that technological innovation has to be successfully managed putting into consideration internal and external factors of a firm. Also, Technological innovation is important ingredient in sustaining competitive advantage in a competitive global economy conditions.

Locally, Gathai (2019) undertook a case study on the innovation strategies adopted by Equity bank Ltd. The study was able to adopt a cases study design. It was found that for a firm to embrace innovation, top management should be involved and direct resources to the team involved in the innovation processes. Odhiambo(2018) undertook a case study on Innovation strategies at the Standard Chartered (K) Ltd. He found out that for a firm to be innovative it should encourage creativity. This leads to a higher platform of quality and innovative mindset. Mwikali`s (2016) research to study insurance industry in Kenya and innovation processes. The study employed both descriptive and cross-sectional research designs and the target number was 51 insurance firms in Nairobi. He found out, all companies in the insurance industry have same level of innovation process understanding that involve everyone in the firm. Arising from above its clear a lot of work has been done in this area however a lot of issues remain unresolved.

This current study employed descriptive cross sectional survey research to describe the relationship between the two variables innovation strategies and sustainable competitive advantage. Cross sectional survey was used because it cut across universities in Nairobi. Primary data was used to establish the effect of innovation strategies on sustainable competitive advantage of universities operating in Kenya. This study attempted to address the gaps demonstrated along conceptual, contextual and methodological front. The research attempted to answer the research question; does innovation strategies enhance sustainable competitive advantage of universities operating in Kenya?

1.3 Research objective

An aim of this research was determining the association amid innovation strategies and sustainable competitive advantage of universities operating in Kenya.

1.4 Value of study

This research contributed to theory of competitive advantage by determining the effect of innovation on organization continued competitive advantage. The findings add to the body of knowledge on the contingency by determining the environmental reactions that lead to sustained competitive advantage. The study provides information on effective competitive strategies among various universities in Kenya to potential and current scholars. This expands their knowledge on strategic responses in education institutions and identifies areas of further study.

This study provides a hint to the government to understand the challenge in the education sector and the effect on Innovation in the sector. This allows the government to develop strategies that encourage fair competition in the industry as well as focusing on improvement of public universities services and product offerings.

Future scholars may employ the findings from this research study as a reference. Outcomes from the research show ways an organization can respond to its environment forces. This

research enriches and contribute a theory especially in the science of strategic management that has a significant role in an organization that undergoes organizational changes. These outcomes may enable management to create processes that foster increased recognition and comprehension of the idea of innovation to encourage competitive advantage for this sector.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The section provides a literature assessment of the study. This includes theoretical foundation, innovation approaches, empirical literature summary as well as the knowledge gap.

2.2 Theoretical Foundation of the Study

This research is anchored on these theories: theory of competitive advantage and Schumpeter theory of innovation. This section discusses the relevant theories that are related to innovation strategies and competitive advantage.

2.2.1 Porter's Theory of Competitive Advantage

The kind of competition as well as the origin of competitive advantage differs among industries and among various segments within the same industry. Porters (1980) argued that an organization either singly or in conjunction with other organization within the same industry can create an unassailable position in the industry so as to outdo the competitors (Thompson, and Strickland, 2007). In 1984, day coined the sustainable competitive advantage idea. He suggested that the type of strategy an organization adopts may help it sustain its competitive advantage in the industry. In 1984, the idea of sustainable competitive advantage was reinforced by Porter when he discussed various primary categories of competitive advantage an organization can possess so that they can attain sustainable advantage which is long term. As per Barney (1991) a firm is considered to have competitive advantage which is sustained when it can implement value creation approach that is not being concurrently implemented by any existing or present competitors. The value creation strategy should also not be duplicable by other firms in the industry.

In pursuant of the importance of effectiveness of organization strategy, Day and Wensley (2003) concentrated on fundamentals that comprise competitive advantage. Particularly they focused on two typical sources of competitive advantage which included superior resources that went beyond tangible requirements needed for advantage to enable an organization to apply its capabilities. Another source is the superior skills which are considered the unique and stand out capabilities of its personnel that differentiate them from the competing firm in terms of human resource pool. In support to sustainable competitive advantage, the construction of framework by Day and Wensley (2003) which was used to assess the competitive advantage situation of a firm was the premier step in attaining sustainable competitive advantage. In contrast to previous attempts of performance results measures which include market share and profitability, the authors indicated that there is need to use the perspective of both the customers and competitors in assessing organization performance.

This theory provides an appropriate guideline in understanding innovation strategies and sustainable competitive advantage in higher learning institutions. The current higher education market is characterized by the entry of many players offering the same program from a similar pool of potential clients (students). The universities have a challenge of ever increasing customers' expectations and needs as well as market demand. According to Porter (1980) an organization can obtain sustainable competitive advantage by ensuring they implement a value creation strategy which none of the player in the market is implementing at that particular time and it is imitable.

2.2.2 Schumpeter Theory of Innovation

Schumpetero(1934) points out that innovation are progress of activity that involves modifications which are usually structural and he spread them into 5 types. The type level is the applying of immediate production or methods of sale and this period is when then innovation is not yet in the field. The second type of innovation is the launching or unveiling of new product or adding extra feature on already existing product. The third type of innovation is the initiating current market which has not being existing in the industry. The fourth is the procuring of up-to-date sources of raw materials or partly completed materials. The last type is the composition of modern industry which entails destruction or creation of supremacy position.

Any firm that is after profit making endeavors need to innovate not only in product, process, market but also in its human resource. Innovation is considered as vital driver of economic dynamics as it is an industrial alteration action that relentlessly do away with obsolete systems, persistently generating up to date actions as well as transforming system of economic from within (Schumpeter, 1912). Schumpeter (1934) further indicated the process of innovation divided into 4 dimensions: Invention, innovation, diffusion and imitation. According to Schumpeter's Theory, action and probability of the merchant, deriving upon the outcomes of originators and investors, produce extremely new likelihoods for development, investment and employment.

In conclusion, organizations which are extremely innovative are able to create new opportunities which help them to acquire competitive advantage hence new profits. The new innovation end up to be new product/service inothe market forcing the competitors and followers to imitate due to abnormal returns experienced by the creator of the idea. The

application of this theory in the current context is that organizations are adopting various innovation strategies to gain competitive advantage. According to this theory, there are five types of innovations and four dimensions of innovation. For An organization to achieve a sustainable competitive advantage, the five types of innovation will depend on the four dimensions of innovations.

2.3 Innovation Strategy and Sustainable Competitive Advantage

Wanyoike (2016) investigated the connection between competitive advantage and innovation strategies in the logistics companies operating in Mombasa County, Kenya. The findings indicate innovation approaches impact competitive advantage in Logistic companies in Mombasa County, Kenya with product innovation being the most significant strategy. Further, Shejero, (2016) assessed impact of novelty techniques on competitive advantage among SACCOs in Mombasa County, Kenya. From findings of the study, it is evident that cost saving approaches and increase in firms' range of products are among the major factors that affect implementation of innovation strategies with the aim of achieving sustainable competitive advantage.

Wei and Wang (2011) note that companies such as Apple Ltd structures alternatives between the device itself and the services offered so that the owner of an iPhone will be satisfied with its services rather than going for another gadget from different company. Through such strategies, the company establishes a strong competitive advantage in the digital market environment. Similarly, a strategy that spearheads customer-partnering approach promotes protection the company's innovations from imitators because the moment core components are installed in customer's system, the customer will be reluctant to switch to another product because of the attendant switching cost.

As the Resource Based View (Barney, 1991) suggest, a firms competitiveness rests in an organization ability to manage internal resources. This is because since organizational

resources are unique and cannot be imitated easily, resources bring disparities among firms. This distinctiveness is fundamentally the leading factor of competitive advantage. However, the major concern is that firms are perceived as a pool of resources that are concurrently are non-substitutable, imperfectly imitable and valuable; as a result, superior organizational performance can be achieved if these factors are enhanced (Bowman & Ambrosini 2003). Hence the ability of the management to analyze the prevailing business environment and innovate products that meet market demands will enhance its competitive advantage.

Cheptegei (2016) examined innovation strategies used by Coca Cola Kenya Limited. The study used a case study research design. From the findings, Coca Cola Company has come up with several entry strategies that aim at its profits and customer base. Empirical studies reviewed mostly focused on multinationals in different sectors, which operate under different business environments and hence the findings cannot be generalized. In addition, different studies conducted on marketing entry strategies used and the challenges they face have used a case study research design and others have used quantitative research, which is different from what has been used in this study.

According to Kibor (2017) association amid novelty approaches and competitive advantage is framed on primary factors. First one is that innovations are difficult to imitate and thereby results in sustainable competitive advantage. The study adopted a census approach in which all the 6 banks that underwent mergers and acquisitions between 2010 and 2017 were considered. Conceptual gap exists as this research dwelt on impact of innovation strategies on financial outcomes; gaps arise since it focuses on banks in Kenya, it used a census approach and on secondary data. Secondly, innovation strategies precisely reflect realities in the market and firms are likely to achieve sustainable competitive advantage through these market realities (Porter, 1985). The third factor is that innovation strategies allow organization to exploit control features in this sector that may make it achieve competitive

advantage. Timing of innovation activities in the industry can be used as valuable arsenal in achieving competitive advantage. Lastly, innovation strategies that depend on technologies and capabilities that firms can readily access are likely to attain sustainable competitive advantage (Miller,2015). This factor shape association amid novelty approaches and competitive advantage as it enables organizational resources to be exploited depending on organization capabilities.

Bwaley (2016) found out that innovation strategies have significant relationship with competitive advantage for banks listed at Nairobi stock exchange. Majority of the listed banks were found to have adopted technological innovation resulting in increased customer satisfaction, increased profits and market share expansion. Guthaiya (2016) found out that United Bank of Africa has adopted process, market and product innovation strategies. These strategies have made the bank to advance superior and distinct services and products in the market thus acquiring competitive advantage. The competitive advantage of the UBA was realized through increased return on investment as well as increase in customer base. Wanyoike (2016) concluded that product innovation is a crucial innovation strategy in improving the competitive advantage of logistic companies found in Mombasa County. Muita (2017) revealed that companies in the telecommunication industry in Kenya were found to have adopted technological innovation for them to gain superior competitive advantage.

Mwangi (2017) found out that product innovation, process innovation and market innovation greatly influences the competitive advantage of firms in the Fast moving consumer goods. Therefore, innovation strategies make a firm to compete favorably in the market and out perform its competitors. Nauwankas (2013) indicated that innovation strategies are key element for firms to gain competitive advantage. He found that National Bank of Kenya (NBK) had adopted various innovation strategies which have increased

performance by improving service, products, process, marketing strategies and business models. Further, Wachiuri (2016) revealed that innovation strategies are positively and significantly related with competitive advantage and therefore it is important for organization to adopt various innovation strategies for its sustainability.

There have been several studies on innovation strategies in the universities but some of these were carried out in other parts of the world. The environment in the USA and other regions of the world are so different from Kenya and the findings cannot be applied in this context without further studies. The local studies focused on aspects other than how innovation strategies impact sustainable competitive advantage of the firm. Therefore there exists a knowledge gap which this study addresses.

CHAPTER THREE:

RESEARCH METHODOLOGY

3.1 Introduction

The section outlines in detail methods of research which employed during research. A justification of methods selected under each methodology is also provided. The research objective outlined in chapter one guided the research methodology. Research design and tools that were used in collecting data are also described in this chapter. In addition, this chapter outlines the data collection method, as well as a justification of the data collection method adopted. Finally the chapter gives an insight of the data analysis methods and tools which were employed during the study.

3.2 Research Design

This research employed a cross-sectional questionnaire as it describes data and varied characteristics of the population and the phenomenon being studied. This design methodology was used because large samples are realistic and give statistically significant results even when analyzed using several variables. Surveys are important since they give a good description of a large population. The design responded to key queries like when, who, where and how enabling the respondents to respond freely.

3.3 Population

As per Kumar (2005), population refers to the group, families dwelling in the city or electorates from which you pick a small number of families, students, electors to respond to your investigation question. All the universities in Kenya were employed as the population of research. Therefore, the research targeted a population of 71 universities accredited to undertake university education in Kenya according to CUE (2019). There Are 30 public universities which are chartered, 15 public universities which are constituent colleges, 17

private universities which are chartered and 5 are Constituents College of private universities (CUEA). In addition, there are 13 universities which have Letter of Interim Authority (LIA).

3.4 Sample Design

The study used simple random sampling to select universities which are located in Nairobi County so as to control the cost of carrying out the research. Twenty Universities located within Nairobi which are both private and public were randomly selected. According to Dooley (2017), a sample scope of 10% and 40% as regarded enough for thorough research hence 28.1% of the universities is adequate for analysis.

3.5 Data Collection

This research used primary data, which was gathered through a questionnaire which was structured. The questionnaire had close ended questions. It was structured to three parts; the initial segment holds the demographic data of respondents while the other segment covers the adaptive innovation strategies and the third part covers competitive advantage. The researcher emailed the questionnaire to various universities due to covid 19.

3.6 Data Analysis

Questionnaires were edited for consistency to be termed complete. Data was cleaned up through editing, tabulation and coding to detect any anomalies in the responses as well as input specific numerical values on the responses for further analysis. Descriptive statistics is used to analyze the data, these included, mean and variances and standard deviation. Information to be gathered through surveys was checked for accuracy and completeness.

In finding out importance of novelty strategies in creating sustainable competitive advantage, multiple regression model is employed in estimating effect of independent variables (innovation strategies) on dependent variable which is building sustainable competitive advantage. The regression model was represented by;

$$Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + \varepsilon$$

Where: Y is sustainable competitive advantage;

B₀ is model's constant

B₁ to B₄ are the regression coefficients;

X₁= is marketing innovation

X₂= is product innovation

X₃ =is process innovation

X₄= is administrative innovation

E= is error term.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS INTERPRETATION AND DISCUSSION OF RESULTS

4.1 Introduction

The segment focuses on analysis and explanation of the data gathered from target respondents. Data was obtained through questionnaires, which were shared on email containing a brief introduction of the study objectives. The target respondents were Academic register and ICT officer. Two questionnaires were issued to each University. The aim of this research was to determine the association amid innovation strategies and sustainable competitive advantage of universities operating in Kenya.

4.2 Response Rate

The surveys sent out to 20 Universities in Nairobi, two questionnaires were to be filled by the ICT officer and academic register in each University bringing a total of 40 questionnaires. Only 35 questionnaires were duly completed and returned from seventeen Universities making a response rate of 85%. The results are in line with Mugenda and Mugenda (2013) affirmation showing rates greater than 50% is satisfactory in the analysis. Babbie (2010) also claims that a 60% return rate is decent and a 70% return rate as excellent. Findings were adequate to analyze the data. This is a sufficient response rate and therefore the researcher proceeded with the data analysis.

4.3 General Information

The segment is concerned with general data of the organization and respondent. The information helps in understanding the background of the organization and the respondents under review. It assessed information on gender, education, role in the firm, duration service in the firm.

4.3.1 Gender of Respondents

Contributors provided data on their gender as indicated Table 4.1

Table 4. 1: Gender

Class	Frequency	Percentage
Male	25	71
Female	10	28
Total	35	100

Findings in Table 4.1 indicate the majority of the respondents were male at 71% and female were 28%. This shows that universities senior position are dominated by male compared to female. This agrees with Aleke (2013) who asserted that most top government positions are managed by male because of their domination in managerial positions which is not a good thing considering the need for equity and may imply that Parastatals are biased as regards to management.

4.3.2 Level of Education

Participants were able to give information concerning education levels. Outcomes are provided in Table: 4.2

Table 4. 2: Level of Education

Years	Frequency	Percentage
Undergraduate	8	22
Masters	15	42
Post-Graduate	12	34
Total	35	100.0

Outcomes showed Table 4.2 indicated the majority (42%) had attained a master degree level of education while 34% had postgraduate level of education and lastly 22% had attained undergraduate. This implies that since all of the respondents had university level of education and they can be deemed to be knowledgeable on the research subject area and therefore useful to the research. This shows that Universities hire highly qualified employees due to the level of professionalism required, an indication that reliable data was sought. This is consistent to Wanyama (2013) that managers in national government have attained master's degrees making them to be more knowledgeable than others hence most of the employees were willing to further their education so as to fit the job market which is dynamic.

4.3.3 Age Bracket

The segment of the survey aimed to assess age of participants. Outcomes are indicated in Table 4.3

Table 4. 3: Age bracket

Age bracket	Frequency	Percent
18-30 years	4	11
30-45 years	10	28
45-60 years	15	42
60 and above	6	17
Total	35	100.0

Outcomes in Table 4.3 indicate that 42% of the participants were 45-60 years while 28% of the respondents were aged between 30–45years. Similarly, 17% of the respondents were above 60 years and lastly, 11% of the respondents were between 18-30 years. This indicates that the majority were mature, thus making them cooperative in giving reliable information concerning the subject under study. The advancement in years is positively related to the amount of knowledge and hence the respondents involved in this study gave valuable information about the study.

4.3.4 Length of Continuous Service

Participants were able to give information about worked in the University.

Outcomes are presented in Table 4.4.

Table 4.4: Length of Service

Years	Frequency	Percentage
0-3 years	4	11
4-7 years	6	17
8-11 years	10	28
above 12 years	15	42
Total	35	100.0

Outcomes in Table 4.4 show that the majority (42%) had worked in the university more than 12 year and 28% highlighted that they have worked in the University 8-11 years. In addition, the study also found that 17% of the respondents have worked in University between 4-7 years and lastly 0-312 years was at 11%. This indicates the majority had worked with University for long enough to comprehend and provide true and accurate data on the subject under research .This is consistent to Mworu (2013) that most government employees have worked with the government more than 20 years thus have a better understanding of the industry.

4.4 Innovation Strategies

Innovation as a strategy is considered as creating, implementing and accepting new products/services, procedures and ideas. Therefore, innovation strategy guides the decision of how an organization would use available resources to meet its objective for innovation thus delivering value and creating competitive advantage. In management discipline, innovation focuses on the mission of organization to search for opportunities which are unique and they are able to fit strategic decisions of organization.

4.4.1 Product innovation

The respondents were given eight statements to gauge the extent to which product innovation influences sustainable competitive advantage and requested to show their level of agreement. Findings are as indicated in Table 4.5

Table 4. 5: Product Innovation

Product Innovation	N	Mean	S.D
Creating newness in existing products to facilitate ease of use for clients and better customer satisfaction.	35	4.70	.497
Shortening product cycles	35	4.59	.562
Offering low price for your products than competitors.	35	4.31	.471
There is increased service delivery in the university	35	4,21	.456
Changing services to reflect changing customer tastes and preferences.	35	4.51	.463
The University innovates products that in the short-term might not be profitable but in the long-term beneficial to the organization	35	4.71	.453
The University innovates new products and services for a higher rate in comparison to other competitors	35	4.23	.421
Overall average mean		4.46	.520

From the findings, the university innovates products that in the short-term might not be profitable but in the long-term beneficial to the organization with a mean of 4.71 and S.D of .453. Creating newness for existing products to facilitate better ease of use in customers and improved customer satisfaction by a mean of 4.70 and S.D of .497. Shortening product cycles with a mean of 4.59 and S.D of .562. Changing services to reflect changing customer tastes and preferences with a mean of 4.51 and .463. A low price for one's products than competitors with a mean of 4.31 and .471. The University innovates new products and services in the market at a higher rate in comparison to other competitors by a mean of 4.23 and S.D of .421 and lastly there is increased service delivery in the university with a mean of 4.21 and S.D of .456. The overall mean was at 4.46. This implies that product innovation is implemented by Universities at great extent. The findings agree with Tavassoli and Karlsson (2015) it is observed that product innovation strategies integrate analytical improvements in mechanical confirmation, division and substances, joined, or eases of use among different capacities.

4.4.2 Administrative Innovation

The respondents were given eight statements relating to administrative innovation influence sustainable competitive advantage and requested to show their level of agreement. Results are indicated in Table 4.5

Table 4.6: Administration Innovation

Administrative Innovation	N	Mean	S.D
Changing the organization structure to facilitate team work.	35	4.57	.502
Changing or upgrading the human resource management system.	35	4.49	.562
Increasing investment in innovative technology	35	4.40	.497
The University encourages coordination between different departments in order to hasten innovation process as well as get more feedback of the launched product	35	4.34	.591
The University employs analytical methods in its innovation process to help in decision making process	35	4.32	.502
Changing or upgrading the supply chain management system	35	4.63	.567
Integration of the University systems	35	4.35	.542
The university has upgraded its administrative system	35	4.41	.532
Overall average mean	35	4.43	.520

From the findings, changing or upgrading the supply chain management system by a mean of 4.63 and S.D of .567, and also, changing the organization structure to facilitate team work with a mean of 4.57 and .S.D .502. Likewise, changing or upgrading human resource management system with a mean of 4.49 and S.D of .562. The university has upgraded its

administrative system with a mean of 4.41 and S.D .532. Increasing investment in innovative technology with a mean of 4.40 and S.D of .497. Integration of University systems with a mean of 4.35 and S.D of .542. The University encourages coordination between different departments in order to hasten the innovation process as well as get more feedback of the launched product by mean of 4.34 and S.D of .691. The University employs analytical methods for innovation procedure to help in decision making process with a mean of 4.32 and S.D of .591. The overall mean was at 4.43 at moderate extent. There findings agree with Vargas(2015) that for a firm to be competitive it has to implement administrative innovation such as integration of the systems.

4.4.3 Marketing Innovation

The respondents were given eight statements relating to market innovation influence sustainable competitive advantage and requested to show their level of agreement. Results are as shown in Table 4.7

Table 4. 7:Market Innovation

Market Innovation	N	Mean	S.D
Renewal of the techniques of promotion of services employed in promotion of new and existing services offered.	35	4.53	.714
Renewal of the channels of the distribution but not changing the processes of logistics related to the produce delivery.	35	4.63	.767
Renewing general marketing management activities.	35	4.60	.604.
We look for opportunities based on customer future needs and develop products to meet this need	35	4.44	.767
The university tries to forecast future market trends in order to come up with appropriate strategies	35	4.71	.567
Changing market pricing strategies	35	4.21	.675
Coming up with new product placement strategies	35	4.31	.456
Introducing innovative promotion activities	35	4.69	.458
Average		4.51	.784

From the findings, the university tries to forecast future market trends in order to come up with appropriate strategies with a mean of 4.71,S.D .567. Introducing innovative promotion happenings by a mean of 4.69 and S.D of .458. Renewing general marketing management

happenings by a mean of 4.60 And S.D of .604. Renewal of the techniques of promotion of services used for the promotion of current and / or new services offered by a mean of 4.53 and S.D of .714. On the other hand, look for opportunities based on customer future needs and develop products to meet this need with a mean of 4.44 and S.D of .767. Coming up with new product placement strategies with a mean of 4.31 and S.D of .456. Lastly changing market pricing strategies with a mean of 4.21 and S.D of .675. Overall mean was 4.51 at great extent. This implies that universities focus on market innovation and understand the future market trends in order to come up with appropriate strategies. The findings agree with Tavassoli and Karsson (2015) that market innovation is essential for any organization in the 21st century.

4.4.4 Process Innovation

The respondents were given eight statements relating to process innovation influence sustainable competitive advantage and requested to show their agreement level. Results are indicated in Table 4.8

Table 4. 8: Process Innovation

Process Innovation	N	Mean	S.D
Identifying in order to eliminate non-value-added activities in processes of delivery.	35	4.70	.497
Education of variable costs and / or increase the speed of delivery in the logistics process related to delivery.	35	4.59	.562
Installation of a robust and superior processing system	35	4.31	.471
Reviewing operational process	35	4.21	.456
Identifying in order to eliminate non-value-added activities in processes of production.	35	4.51	.463
The University continually improve the quality of our its product to match competitor changes and customer demands	35	4.71	.453
The University uses modern management techniques in making innovation changes to its products	35	4.23	.421
Installation of a robust and superior processing system	35	4.45	.567
Overall average mean		4.50	.520

From the findings, the University continually improves the quality of its product to match competitor changes and customer demands with a mean of 4.71 and S.D of .453. Identifying in order to eliminate non-value-added activities in processes of delivery with a mean of 4.70 and S.D of .497. Education of variable costs and / or increase the speed of delivery in the logistics process related to delivery with a mean of 4.59 and S.D of .562. Identifying in order to eliminate non-value-added activities in processes of production with a mean of 4.51 and .463. Installation of a robust and superior processing system with mean a mean of 4.45 and S.D of .567. Giving low price for one's products and services with a mean of 4.31 and .471. The University uses modern management techniques in making innovation changes to its products by mean of 4.23 and S.D of .421 and lastly reviewing operational process with mean of 4.21 and S.D of .456. The overall mean was at 4.50. This implies that process innovation is implemented by Universities at great extent.

4.5 Sustainable Competitive Advantage

Sustainable competitive advantage (SCA) is continued benefit derived from implementing a unique value creation strategy that is based on the inimitable and unique combination organizational resources which are held internally as well as their capabilities are not imitable or replicable by competitors in this sector.

Table 4.9: Sustainable Competitive Advantage

Sustainable Competitive Advantage	N	Mean	S. D
The University gains competitive advantage through efficiency	35	4.53	.714
The University gains competitive advantage through customer responsiveness	35	4.63	.767
The University gains competitive advantage through employee satisfaction.	35	4.60	.604.
The University quality of service delivery has increased in the last Improved quality of service delivery	35	4.44	.767
The student satisfaction level has improved due to the innovative services offered by the university	35	4.71	.567
The University quality control process results in better decision making	35	4.21	.675
The University has achieved a competitive advantage through its cost leadership strategy	35	4.31	.456
The University market share has been increasing in the last five years	35	4.69	.458
Average		4.51	.784

From the findings, the student satisfaction level has improved due to the innovative services offered by the university with a mean of 4.71,S.D .567. The University market share has

been increasing in the last five years by mean of 4.69 and S.D of .458. The University gains competitive advantage through employee satisfaction with a mean of 4.60 And S.D of .604. The University gains competitive advantage through efficiency with a mean of 4.53 and S.D of .714. Besides, the University quality of service delivery has increased in the last Improved quality of service delivery by mean of 4.44 and S.D of 767. The University has achieved a competitive advantage through its cost leadership strategy with a mean of 4.31 and S.D of .456. Lastly the university quality control procedure results in better decision making by mean of 4.21 and S.D of .675. The overall mean was 4.51 at great extent.

4.6 Correlation Analysis

Correlation analysis was done to show correlation amid response and predictor variables, and to determine the link amid predictor and dependent variables..

4.6.1 Correlation Analysis

Correlation analysis was conducted to find out the links amid predictor and response variables. In this study it helped in determining the association between the variables. Pearson Correlation analysis was employed by the study to determine the association between the study variables. The results were as indicated in Table 4.10

Table 4.10: Correlation Analysis

		PI	AI	MI	PI	SCA
PI-Product Innovation	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	35				
AI-Administration innovation	Pearson Correlation	.523*	1			
	Sig. (2-tailed)	.05				
	N	35	35			
MI-Market innovation	Pearson Correlation	.583**	.141*	1		
	Sig. (2-tailed)	.01	.05			
	N	35	35	35		
PI-Process innovation	Pearson Correlation	.650**	.324**	.215*	1	
	Sig. (2-tailed)	.01	.01	.05		
	N	35	35	35	35	
SCA-Sustainable Competitive Advantage	Pearson Correlation	.783**	.638**	.466*	.625**	1
	Sig. (2-tailed)	.01	.01	.05	.01	
	N	35	35	35	35	1

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

* . Correlation is significant at 0.05 level (2-tailed).

As in the above Table 4.10, Table 4.9, a positive correlation is seen amid product innovation and sustainable competitive advantage at Pearson's correlation coefficient of $r=0.783$. Administration innovation and competitive advantage with Pearson's correlation coefficient of 0.638 and level of significance as 0.01. Besides, Market innovation had moderately significant positive association correlation with sustainable competitive advantage at a Pearson's correlation coefficient of 0.466 and level of significance of 0.05. Lastly, Process

innovation has a noteworthy association with sustainable competitive advantage at a Pearson's correlation of 0.625 and p-value as 0.05.

It was found out that strategies influence competitive with product innovation being the most significant strategy. The findings agree with Wanyoike (2016) innovation approaches that impact competitive advantage in Logistic companies in Mombasa County.

4.7 Regression

Regression analysis was employed in establishing variance accounted for by one variable in predicting other variables. Multiple Linear Regression analysis was done to establish the proportion of dependent variable (sustainable competitive advantage) to be assessed from independent variable (innovation strategies). It was done to establish using R^2 , coefficient of determination.

4.7.1 Model Summary

Sustainable competitive advantage of Universities was regressed against novelty approaches. Table 4.11 shows model summarization.

Table 4. 11: Model Summary

Model	R	R ²	Adjusted R Square	Std. Error of the Estimate
1	.876 ^a	.767	.684	.419

Predictors: (Constant), Product innovation, administration innovation, market innovation and process innovation

Indicated in Table 4.11, it can be observed that R was 0.867 and $R^2=0.867$ at 0.005 level of significance. A robust association exists amid strategic change management practices and competitive advantage indicated by $R=0.767$. Outcomes also show that 76.7% of variation in

competitive advantage is shown by predictors in model, while 23.3% variation is unsolved because of aspects not in the model.

4.7.2 Goodness of Fit of the Model

Regarding if the regression model used was suitable for data collated, this study did Analysis of Variance (ANOVA) indicated in Table 4.12

Table 4.12: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	8.090	4	1.618	2.427	.000 ^b
1	Residual	2.460	30	.176		
	Total	10.550	34			

As shown in Table 4.11, $F(4,34) = 2.427$ was credible at 95% level of confidence, postulating model used could explain the association amid innovation strategies and competitive advantage. Significance explains the usefulness of regression model at 95% level of confidence in which p-value of ANOVA is less than alpha ($P < 0.05$) hence it was concluded that innovation strategies is significant predictor of competitive advantage.

4.7.3 Model Regression Coefficients

Shown for Table 4.13 indicates unstandardized coefficients, standardized coefficients, t statistic and significant values

Table 4.13: Regression Coefficients

Model	Unstandardized		Standardize	t	Sig.
	Coefficients		d		
	B (β)	Std. Error	Beta (β)		
(Constant)	.179	.756		.236	.817
Product innovation	.149	.239	.165	.623	.543
1 Administrative Innovation	.239	.125	.305	1.906	.037
Market innovation	.200	.273	.126	.733	.476
Process Innovation	.289	.156	.145	1.857	.074

a. Dependent Variable: Sustainable Competitive Advantage

In Table 4.11, all variables had positive predictive power although a variation existed in significance level. Outcomes indicate communication change had a positive and noteworthy outcome on competitive advantage ($\beta = 0.305$, $p=0.037$). Seen above, it highlights when other variables are controlled, a unit change would mean competitive advantage change greatly by 0.305 units in the same direction. Resistance to change had positive and insignificant impact on competitive advantage ($\beta = 0.126$, $p=0.476$). From regression equation it meant when other variables are controlled, a unit change in resistance to change would mean competitive advantage change insignificantly by 0.126 units in the same direction. Likewise, Coaching and feedback had a positive and insignificant impact on

competitive advantage ($\beta = 0.165, p=0.543$). From regression equation it implied that when other variables are controlled, a unit change in the coaching and feedback would result to competitive advantage change insignificantly by 0.165 units in the same direction. Lastly, training had a positive and relative effect on competitive advantage ($\beta = 0.272, p=0.012$). From regression equation, it meant that when other variables are controlled, unit change in the training would end to competitive advantage change insignificantly by 0.272 units in the same direction. Overall regression equation was this way;

$$Y = 0.179 + 0.165X_1 + 0.272X_2 + 0.305X_3 + 0.126X_4$$

Where:

Y = Sustainable Competitive Advantage

X₁ = Product Innovation

X₂ = Administrative Innovation

X₃ = Market innovation

X₄= Process Innovation

E=Error Term

The overall model shows that innovation strategy influences sustainable competitive advantage p-value of <0.005 other than product innovation at 0.543 and each variable completely predicted sustainable competitive advantage. However, only administration innovation was significant in predicting sustainable competitive advantage.

4.8 Discussion of Findings

In general the study sought to determine the influence of innovation strategies and sustainable competitive advantage of universities operating in Kenya. Outcomes revealed that majority respondents had obtained a master's degree deemed to be knowledgeable on the research subject area and therefore useful to the research. The study used descriptive and inferential statistics. He found out that technological innovation has to be successfully managed putting into consideration internal and external factors of a firm. Also, Technological innovation is an important ingredient in sustaining competitive advantage in a competitive global economy.

The theories that anchored this study were in line with the findings. Theory of competitive advantage focused on collection of capabilities that improve sustainable competitive advantage and innovation practices from the study revealed it is true. The second theory, Schumpeter theory of innovation explains how innovation creates new opportunities which help to acquire competitive advantage hence new profits. The new innovation ends up to be a new product/service in the market forcing the competitors and followers to imitate due to abnormal returns experienced by the creator of the idea.

Most of the respondents have served the university for more than eleven years. This shows that majority had worked with the University for long enough to comprehend and give reliable and accurate information on the subject under study. This is consistent to Nilufer Ergeneli , Asli Goksoy and Özalp Vayvay (2017) conducted research on Gaining Competitive advantage through Innovation Strategies. The study made use of an exploratory qualitative methodology. They concluded that in today's economy sustainable competitive advantage is through innovation. Their findings agree with Vargas(2015) that for a firm to be competitive it has to implement administrative innovation such as integration of the systems.

It was revealed that market innovation was used to a great extent. This was affected by opportunities based on customer future needs and developed products. The findings agree with Tavassoli and Karsson (2015) that market innovation is essential for any organization in the 21st century. Lastly, process innovation influences performance to a great extent. In the studies of Sahay, Yamini Prakash and Gupta (2015) carried a research on organisation structure and innovation in the Indian bulk drug industry. Using a survey research design, the study obtained data from 15 bulk drug firms. They found that generally innovation is critical for survival and had positive impact on the bottom lines.

This research established the universities surveyed used business process re-engineering, change organizational strategy, and business information technology as part of their process innovation strategy. These innovation strategies were established to have a positive impact on the Universities. In accordance with Debela (2009) study, process innovations empower usage of advanced techniques and enhance the human action in the production process resulting in enhanced performance.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The section dwells on summary of outcomes, conclusions and recommendations from the study and for more study.

5.2 Summary of the Findings

Most universities senior positions are dominated by male compared to females and have a masters degree. Most of the respondents were above 45 year old indicating the majority of respondents were mature enough making them cooperative in giving reliable information concerning the subject under study. Lastly, most respondents who had worked for the university between 8-11 years gave reliable and accurate information on the subject under study.

It was revealed that administrative innovation was used at a moderate extent in which Universities focus on analytical methods. It was also revealed that market innovation was used at a great extent. This was affected by opportunities based on customer future needs and developing products to meet this need and with new product placement strategies. The study established that the universities surveyed used business process re-engineering, change organizational strategy, and business information technology as part of their process innovation strategy. These innovation strategies were established to have a positive impact on the Universities.

The findings established the existence of a strong positive correlation between innovation strategies and sustainable competitive advantage. It was found out that attuned R squared was 0.684 implying a 68.4% variance of sustainable competitive advantage due to the changes of innovation strategy. The remaining 31.6% imply other factors which lead to sustainable competitive advantage existed and were not captured in the study. It was

revealed that innovation strategy is significant to sustainable competitive advantage of organizations in Kenya by ($\beta = 0.428$, $P = 0.009$). This implies that unit surge in novelty strategy will increase sustainable competitive advantage.

5.3 Conclusion of the study

The study finds that innovation strategies; product novelty practices, process novelty practices and market novelty practices were used to a large extent. Process innovation recorded the highest mean as compared to product and market innovation. The extent of implementation of these innovation practices is driven by the need for universities to accommodate the changing customer needs, improving efficiency, cost reduction and value addition.

The adopted regression equation was significant. The model was found to be a reliable predictor and fit for the data as evidenced by the coefficient of determination. Product, process and market innovations were positively related to sustainable competitive advantage. On whether the variables were significant, it was found that process innovation was significant while product and market innovations were insignificant.

Process innovation practices comprised extensive use of information technology. Ease of making payments through mobile phones and provision of policy documents with clear terms and conditions attracted good number of business. The process of buying the products became convenient for clients. They should innovate products to have different features and also target new markets.

5.4 Recommendation of the Study

It is recommended that there is a need for Universities to carry out a comparison of what their competitors are offering in the market. This is because their competitors might be offering similar service. This will help in service innovation especially when remodeling

products to meet customers' evolving needs. Universities will have the same services but distinct features to serve different needs of the customers.

When doing marketing innovation, Universities should control marketing expenses. This will boost efficiency and effectiveness. Universities should balance paying employees or recruiting a lot while opening new university branches.

The study found out that product innovations have a positive and significant influence on sustainable competitive advantage. The study therefore recommends that support staff and teaching staff of universities be encouraged to continually innovate their product offerings. Universities should invest in research and development so as to upgrade the quality and variety of their products.

With the increasingly evolving environment, there's a need for Universities to devise ways that can enable them to boost their sustainable competitive advantage and address evolving customer needs. Influence of innovation strategies on sustainable competitive advantage as discussed in the study will be of value to support staff and teaching staff.

5.5 Limitations of the study

One of the challenges was that, the target respondents for this study were managers. Majority of them were quite busy and had tight schedule due to work pressure and could not therefore have adequate time to answer the questionnaires at the time the researcher presented the questionnaire to them. To ensure that they adequately answered the questionnaire, the validity of the instrument was examined to ensure they are simple, concise and addressing study objective before sending the same via email.

The study was limited only to universities in Nairobi as it could also have covered all the universities. This research was limited only to universities since this research could also

have extended to other business industries like tourism, agriculture, mining, and farming among other sectors in Kenya.

Another limitation of this study is that it only focused on innovation strategies. However, there are other factors that are very instrumental in the management of strategic change. These factors include but not limited to communication change, coaching and feedback and training.

5.6 Recommendation for Further Studies

The study is perceived as a cross-sectional research that used quantitative approach: capturing perceptions and opinions of respondents. The cross-sectional study utilizing a quantitative approach was chosen as it was the most appropriate way available to chart the problems given limited time and finances. There is need for a similar research to be carried out based on qualitative approaches such as interviews.

The focus of the research was on the association amid novelty approaches on competitive advantage of by universities in Nairobi County. Another research is needed to be done in financial entities to establish the similarity of the finding. The research also suggests that the future studies should focus on different variables other than those used in this study such as organizational leadership, effects of stakeholder involvement, corporate governance and organization design in relation to strategic change.

REFERENCES

- Afonina, A., Chalupsky, V. (2012), "The current strategic management tools and techniques: The evidence from Czech Republic", *Economics and Management*, 13(1), 20-23.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 5(3),23-25
- Barney, J. B. (2001). Is the resource-based view a useful perspective for strategic management research? Yes. *Academy of Management Review*, 26(1), 41–56
- Bassett, L., Giannozzi, S, L., & Ringold, D. (2012). Rules, roles, and controls: governance in social protection with an application to social assistance. *International Journal of Productivity and Performance Management*, 60(5), 493-511.
- Becker, L. (2014). *Effect Size(ES)*. University of Colorado at Colorado Springs. Retrieved from the World Wide Web, <http://davidmlane.com> on 24 November 2014.
- Bolden, R., & Gosling, J. (2013). Leadership competencies: Time to change the tune? *Leadership*, 2:147-163.
- Bowman, C. and Asch, D. (2007). *Managing Change*. Macmillan Press Ltd.
- Bowmanoando, C. (2016). Citizen science: How ordinary people are changing the face of discovery. *Accounting, Organizations and Society* 32.7-8 (2007): 735-756.
- Bryman, A., & Bell, E. (2011). Ethics in business research. *Business Research Methods*, 7(5), 23-56.
- Burke, P. (2009). *Popular culture in early modern Europe*. Ash gate Publishing, Ltd.
- Burke, W. (2002). *Organization change: Theory and practice*. California: Sage

- Burnes, B. (2004). *Managing Change: A Strategic approach to Organizational Dynamics*, 4th Ed. Harlow: Prentice Hall.
- Burns, N. & Grove, S. K. (2003). The practice of nursing research: conduct, critique and utilization. Toronto, WB Saunders. *Business Administration and Management*, 2(10), 697-703.
- Butler, J.P., (2001), *Resource based theory*. Boston: Harvard business school press
- Carnall C A (2014). Managing strategic change: An integrated approach. *Journal of Contemporary Management*, 19(6), 105-115.
- Carnall, P. (2014), *Managing change, creativity and innovation*. *Academy of Management Journal*, 49(6), 1173-1193.
- Chandler, A. D.(1962). *Strategy and structure: chapters in the history of American industrial enterprise*. MIT Press, Cambridge, M.A.
- Click, R. & Duening, T.(2005), *Outsourcing the Competitive Advantage*. John Wiley & Sons. Hoboken, New Jersey
- Coe, R. (2010). *What is an "Effect Size"?* A Guide for Users. Retrieved from the World Wide Web, <http://www.davidmlane.com> on 22 Feb 2013
- Cooper, D. R. & Schindler, P.S. (2000), *Business Research methods*, seventh edition, New York: Irwin/ McGraw-Hill.
- Creswell, J. W., & Creswell, J. D. (2017), *Research design: Qualitative, quantitative and mixed methods approaches*. Sage publications.
- Dauda, Y. A., Akingbade, W. A., & Akinlabi, H. B. (2010). Strategic Management Practice and Corporate Performance of Selected Small Business Enterprises in Lagos Metropolis. *International Journal of Business and Management*, 5(11), 97 -105

- Davies, P. (2014). "Porter's generic strategies as determinants of strategic group membership and performance." *Academic Management Journal*. 26(3),467-488
- Dawson, P. (2013). *Understanding organization change: The contemporary experience of people at work*. London: Sage Publications
- De Wit, B., & Meyer, R. (2010). *Strategy synthesis: Resolving strategy paradoxes to create competitive advantage: Text and readings*. Cengage Learning EMEA.
- Dibrell, C., Craig, J., & Neubaum, D. (2014). Linking the formal strategic planning process, planning, flexibility and innovation to firms performance. *Journal of Business Research*, 67(9), 2000-2007.
- Edmonds, J. (2011). Managing successful change. *Industrial and commercial training*. 43(6), 349-353
- Elving, W., & Hansma, L. (2008). Leading organizational change: On the role of top management and supervisors in communicating organizational change. Paper presented at the annual meeting of the International Communication Association, Montreal, Quebec, 1-45.
- Galbraith, J. (1991), *Strategy and Organization Planning*, in Mintzberg H. and Quinn, J. (Eds), *The Strategy Process: Concepts, Contexts, Cases*, 2nd edition Prentice-Hall, Englewood Cliffs, NJ, pp. 315-24.
- Grant, R. (1991). The Resource Based Theory of Competitive Advantage: Implication of Strategy formulation. *California Management Review*, 33(3), 26-29,
- Griffin, R. and Ebert, R. (1993), *Business*. 3rd edition, Prentice- Hall, New York, NY, p. 412.

- Hamel, A. Tokuda, (2012).The critical assessment of the resource-based view of strategic management. The source of heterogeneity of the firm, institute of international relations and area studies. Ritsumeikan university,
- Henderson R, Ray S, Aulakh P S, and Fredrickson M B (2001).Strategic responses to institutional changes: Indigenous growth model of the Indian pharmaceutical industry. *Journal of International Management*, 14(3), 252-269.
- Heracleous, L. (2002). The contribution of a discursive view in understanding and managing organisational change. *Strategic Change*, 11: 253-262
- Hill, C. and Jones, G. (2011), *Strategic Management Theory*, 5thEdition, Houghton Mifflin Company. Management.
- Ho, M.H. and Wang, F. (2015), “Unpacking knowledge transfer and learning paradoxes in international strategic alliances: contextual differences matter”, *International Business Review*, 24 (2), 287-297.
- Hollesenn,S.(2007.).Global marketing (4th ed.).New Jersey, USA: Pearson education limited.
- Irungu, V. (2017). *Turnaround Strategies Influencing Recovery of Commercial Banks Under Receivership Programme in Kenya: a Case of Chase Bank* (Doctoral dissertation, University of Nairobi).
- Kalyani, D. J., &Sahoo, A. Q. (2011). *Governance in the Twenty-first-century University: Approaches to effective leadership and strategic management: ASHE-ERIC Higher Education Report* (14). John Wiley & Sons.
- Khalid, N. (2015). Competitive Strategies Adopted by Supermarket Retail Chains. A Case study of Supermarkets Operating within Nairobi. *Unpublished MBA Project, University of Nairobi*.

- Klein, S. M. (2016). A management communication strategy for change. *Journal of organizational change management*. 3(4), 307-318.
- Kombo, D.K. & Tromp, D.L. A. (2006). *Proposal and Thesis Writing*. Nairobi: Pauline Publications.
- Kondra, A. Z. & Hinings, C. R. (1998). Organizational diversity and change in institutional theory. *Journal of Organization Studies*, 19(5), 743-769.
- Kothari C.R. (2004). *Research Methodology: Methods & Techniques*, 2nd Revised Edition, New Age International Publishers
- Kothari, C. G. Garg (2014). *Research Methodology and Techniques*. New Delhi. New Age International (P), Limited.
- Kotter, J. P. (2011), *Why do change efforts lose momentum?* Forbes (online ed.).
- Kotter, J.P. (2007). *Leading Change: Why transformation efforts fail*. Harvard business review Press
- Kotter, J.P. (1996), *leading change*. Boston: Harvard business school press
- Lewis, L. K. (2010). Communicating change: Four cases of quality programs. *Journal of Business Communication*, 37, 128-155.
- Massele, J., Darroux, G., Jonathan, H., & Fengju, XU. (2015). Challenges faced by Dar es Salaam Stock Exchange marketing Tanzania. *Research Journal of Finance and Accounting*, 4(15), 36-42.
- Matokho.S & Anyieni. B (2018). Effect of strategic change management on financial performance of banks in Kenya. *Unpublished MBA Project. Nairobi: University of Nairobi*

APPENDICES

Appendix I: Questionnaire

SECTION A: GENERAL QUESTIONS

1.State your gender?

Male [] Female []

2. Highest level of education.

Secondary [] Diploma [] Degree [] Masters [] Phd []

3. Please write your age bracket?

Less than 20 [] 20-30 [] 31- 40 [] 41-50 [] 51-60 [] older than 61 []

4. Number of years worked in the university?

Less than 1 year [] 1 year – 5 yrs [] 6 – 10 yrs [] >10 yrs []

SECTION B: INNOVATION STRATEGIES

PRODUCT INNOVATION

5.To what extent do you agree with the following attributes product innovation on exhibited by your firm? Using a scale of 1 - 5, tick the appropriate answer from the alternatives provided. 1 = strongly disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5= strongly agree

Component	1	2	3	4	5
Creating novelty in existing products thus improving ease of use for customer and better client satisfaction.					
Changing products to reflect changing customer tastes and preferences.					
Shortening product cycles					
Offering low price for your products than competitors.					
There is increased service delivery in the university					

Changing services to reflect changing customer tastes and preferences.					
The University innovates products that in the short-term might not be profitable but in the long-term beneficial to the organization					
The University innovates new products and services to the market at a higher rate in comparison to other competitors					

ADMINISTRATIVE INNOVATION

6. To what extent do you agree with the following attributes administrative innovation on exhibited by your firm? Using a scale of 1 - 5, tick the appropriate answer from the alternatives provided. 1=Strongly disagree, 2 = Disagree, 3 = Uncertain, 4=Agree and 5=Strongly agree

Component	1	2	3	4	5
Changing the firm structure to enable team work.					
Changing or upgrading the human resource management system.					
Increasing investment in innovative technology					
The University encourages coordination between different departments in order to hasten innovation process as well as get more feedback of the launched product					
The University employs analytical methods in its innovation process to help in decision making process					
Changing or upgrading the supply chain management system					
Intergration of the University systems					
The university has upgraded its administrative system					

MARKETING INNOVATION

7. To what degree do you agree with the attributes marketing innovation strategies on exhibited by your firm? From a scale of 1 - 5, tick the suitable response from substitutes given. 1=Strongly disagree, 2 = Disagree, 3 = Uncertain, 4=Agree and 5=Strongly agree

Component	1	2	3	4	5
Renewal of techniques of promotion of services employed in promoting existing and / or new services offered.					
Renewal of the channels of the distribution but not changing the processes of logistics related to the produce delivery.					
Renewing general marketing management activities.					
We look for opportunities based on customer future needs and develop products to meet this need					
The university tries to forecast future market trends in order to come up with appropriate strategies					
Changing market pricing strategies					
Coming up with new product placement strategies					
Introducing innovative promotion activities					

PROCESS INNOVATION

8. To what proportion do you agree with attributes process innovation strategies on exhibited by your firm? Scale of 1 - 5, choose the right response from options given.. 1=Strongly disagree, 2 = Disagree, 3 = Uncertain, 4=Agree and 5=Strongly agree

Component	1	2	3	4	5
Identifying in order to eliminate non-value-added activities in processes of delivery.					
Education of variable costs and / or increase the speed of delivery in the logistics process related to delivery.					
Installation of a robust and superior processing system					
Reviewing operational process					

Identifying in order to eliminate non-value-added activities in processes of production.					
The University continually improve the quality of ourits product to match competitor changes and customer demands					
The University uses modern management techniques in making innovation changes to its products					
Installation of a robust and superior processing system					

SECTION C: SUSTAINABLE COMPETITIVE ADVANTAGE

9. To what proportion do you agree with attributes process innovation strategies on exhibited by your firm? Scale of 1 - 5, choose the right response from options given.. 1=Strongly disagree, 2 = Disagree, 3 = Uncertain, 4=Agree and 5=Strongly agree

Component	1	2	3	4	5
The University gains competitive advantage through efficiency					
The University gains competitive advantage through customer responsiveness					
The University gains competitive advantage through employee satisfaction.					
The University quality of service delivery has increased in the last Improved quality of service delivery					
The student satisfaction level has improved due to the innovative services offered by the university					
The University quality control process results in better decision making					
The University has achieved a competitive advantage through its cost leadership strategy					
The University market share has been increasing in the last five years					

Appendix 2. Accredited Universities in Kenya

- 1 University of Nairobi
- 2 Kenyatta University
- 3 Stratmore University
- 4 United States international University
- 5 Daystar University
- 6 Technical University of Kenya
- 7 Multimedia university
- 8 Cooperative university
- 9 Aga Khan University LIA: 15th July 2002
- 10 Management University of Africa
- 11 KCA University
- 12 Africa Nazerane University
- 13 Jomo Kenyatta University
- 14 Kiriri Women University
- 15 Riaru University
- 16 Zetech University
- 17 Africa Nazarene University
18. The Catholic University of Eastern Africa
19. Tangaza University