STRATEGY IMPLEMENTATION, PLANNING TYPOLOGIES AND PERFORMANCE OF UNIVERSITIES IN KENYA

BY

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MOI UNIVERSITY

2017
DECLARATION

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DEDICATION

This work has been dedicated to my late father and mother whose support and encouragement has enabled me to keep pursuing my dream.

Also, I appreciate the support and encouragement I received from my wife Stellah, my daughter Lorraine and son Kelvin during the entire study period.
ACKNOWLEDGEMENT

I thank the almighty God for having enabled me to come this far in the pursuit of my academic goals. I am indebted to my able supervisors; Prof. Loice Maru and Prof. Thomas Cheruiyot of Department of Management Science of Moi University for dedicating their time to read and make the necessary suggestions and corrections in the course of writing this thesis. Finally, I thank the lecturers of School of Business and Economics who assisted and supported me during my studies.
ABSTRACT

Universities are catalysts for development through production of human capital in Kenya and have adopted strategic planning to enhance their competitiveness and to improve their performance. However, the role of planning typologies in enhancing performance in universities has not been established. There is lack of a strong empirical work that has focused on the moderating role of planning typologies on the relationship between strategy implementation and performance of universities in Kenya. The purpose of this study was to determine the moderating effects of planning typologies on the relationship between strategy implementation and performance of universities in Kenya. The objectives of the study were to: establish the effect of organizational leadership on performance of universities in Kenya; determine the effect of organizational culture on performance of universities; assess the moderating effect of reactive planning typology on the relationship between organizational leadership and performance of universities; assess the moderating effect of reactive planning typology on the relationship between organizational culture and performance of universities; assess the moderating effect of proactive planning typology on the relationship between organizational culture and performance of universities; and assess the moderating effect of reactive planning typology on the relationship between organizational culture and research performance of the universities.

The study was guided by the Balanced Scorecard Model. The study employed explanatory research design. The population of the universities was 39 where a sample 12 universities was selected for this study. Structured questionnaires were administered to 490 employees selected from a population of 2652 middle level staff of universities using stratified and simple random techniques. Data was coded and analyzed using descriptive and inferential statistics. The study found significant relationship between: organizational leadership and research performance ($\beta = 0.772, p < 0.05$), organizational leadership and financial sustainability ($\beta = 0.829, p < 0.05$); organizational leadership and society expectations ($\beta = 0.833, p < 0.05$); organizational culture and society expectations ($\beta = -0.324, p < 0.05$); organizational leadership and employee effectiveness ($\beta = 0.928, p < 0.05$); organizational culture and employee effectiveness ($\beta = -0.305, p < 0.05$); organizational leadership and financial sustainability ($\beta = -0.374, p < 0.05$); organizational leadership and financial sustainability ($\beta = -0.220, p < 0.05$). However, there was no significant relationship between organizational culture and research performance ($\beta = 0.104, p > 0.05$), organizational culture and financial sustainability ($\beta = -0.151, p > 0.05$). Subsequently, proactive planning typology was found to significantly moderate the relationship between organizational leadership and research ($\beta = -0.288, p < 0.05$); organizational culture and research ($\beta = 0.313, p < 0.05$); organizational leadership and financial sustainability ($\beta = 0.355, p < 0.05$) and organizational culture and financial sustainability ($\beta = 0.196, p < 0.05$); organizational leadership and employee effectiveness ($\beta = -0.204, p < 0.05$). The study concluded that reactive planning typology significantly and positively moderated the relationship between organizational leadership, organizational culture and the overall performance of the universities. In this study, the use of the Balanced Scorecard Model was extended to non-profit organizations to measure performance. Subsequently, moderating variables were added to extend the literature on the match between strategy implementation and university performance. The study established that reactive planning typology moderated the relationship between leadership and society expectations, leadership and employee effectiveness, culture and society expectations and culture and employee effectiveness. Proactive typology also moderated the relationship between leadership and research and leadership and financial sustainability. The study will benefit policy makers and implementers in formulation of policies relating to strategic planning and strategy implementation. Further research can be done based on the mediating effects of planning typologies on the relationship between strategy implementation and performance of organizations.
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<td>Commission of University Education</td>
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<td>EFQM</td>
<td>European Foundation for Quality Management</td>
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<td>FTE</td>
<td>Full-Time Equivalent</td>
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<td>HODs</td>
<td>Heads of Departments</td>
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<td>NACOSTI</td>
<td>National Council for Science, Technology and Innovation</td>
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<td>RBV</td>
<td>Resource Based View</td>
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<td>SD</td>
<td>Standard Deviation</td>
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<td>Small and Medium Enterprises</td>
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<td>TQM</td>
<td>Total Quality Management</td>
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<td>UMIST</td>
<td>University of Manchester Institute of Science and Technology</td>
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OPERATIONAL DEFINITION OF TERMS

Organizational Leadership - The perceived co-operation or non-cooperation of the leader with employees in strategy implementation.

Organizational culture – A pattern of basic assumptions, values, beliefs and procedures that are considered valid and that are taught to new members of the organization as the way they perceive, feel and think about the organization.

Strategy implementation - This is the sum total of the activities and choices required for the execution of a strategic plan of an organization on its strategies and policies into action.

Organizational Performance – This is the process in which an organization attains what is planned to achieve in a given period of time in regard with revenue collection, service delivery and employee satisfaction. In this study, this entails research, financial sustainability, societal expectations and employee effectiveness.

Re-active planning – Is a planning typology which focuses on the past rather than the future and resists change by not accepting the demands of the new dynamic environment.

Pro-active Planning – A planning approach which considers the future by predicting, preventing, participating and performing.

Strategic Plan – This is a guide developed by the organization in a systematic process as a formal plan in order to achieve goals over specified period of time.

Strategic planning – is a process for creating and describing a better future in measurable terms and the selection of the best means to achieve the desired results (Kaufman et al., 2003).
CHAPTER ONE

INTRODUCTION

1.1 Overview
This chapter presents the background of the study, statement of the problem, research objectives and hypotheses, significance of the study and scope of the study.

1.2 Background to the Study
Organizations in the 21st century are facing various challenges and opportunities in their environment due to increased technological, economic and shift in customer preference have led to stiff competition among organizations as they struggle to survive. The forces have compelled organizations to revise and rethink their way of conducting business. Gachunga (2008) and Garvin, Edmondson and Gino (2008) observed that increasing business complexity, advances in technology and globalization have led to stiff competition among organizations which are struggling to survive. Today’s organizational assessment has been taken to a higher level. In order to sustain a high performance organization, managers are no longer implementing traditional valuation indicators, even if they successfully have been used for years. Consequently, management in organizations must be cognizant of the prevailing market factors as they plan strategically for better performance. Khademfar and Amiri (2013) suggest a model of high performance organization, which maintains five major approaches: Strategic, Customer, Leadership, Processes and Structure and, culture.

According to 2013 -2014 Baltridge Performance Excellence Program, it is crucial for organizations to self-assess their performance, since it can help the organization to achieve the excellence in their operations. It is generally acknowledged that strategy implementation and planning are critical in achieving performance (Khademfar and Amiri, 2013). Various studies have been done in an effort to establish the relationship between strategy implementation and performance. Most of these studies have concluded that organizational performance depend on organizational leadership and organizational culture (Aldehayyat and Anchor, 2010; Li et al, 2008; Compton, 2005 and Ansoff et al, 2001).
Various studies have concluded that there is a positive relationship between strategic planning and organizational performance. (McIlquham-Schmidt (2010), Robbins, Bergman, Stagg and Coulter (2008), Pearce and Robinson (2007), Danson (2005), Hill, Jones and Galvin (2004), Silverman (2000), and Smith and Golden (1989). In management, strategy is a unified, comprehensive and integrated plan designed to achieve a firm’s objectives (Glueck, Jauch and Osborn, 1980). Crittenden and Crittenden, (2000) have defined strategic planning as “attempt to systematize the process then enable an organization to achieve its goals and objectives”. Veskaisri, Chan and Pollard (2007) posited that without a clearly defined strategy, a business will have no sustainable basis for creating and maintaining a competitive advantage in the industry where it operates. They are also of the opinion that effective planning and implementation has positive contribution to the financial performance of organizations.

Fehnel (2000) in his position paper on “Strategic Planning and the Nigeria University System Innovation Project” observed that most senior managers “now appear willing to consider the use of strategic planning as an important tool in determining how best to revitalize and modernize their institutions”. However, Owolabi and Makinde (2012) observed that most researches on strategic planning and performance relationship focused on the profitability of the organization, market share, earnings per share, net asset, working capital and expansion as measures of performance. Also, they observe that the indicators in the business sector are not necessarily applicable to institutions of higher learning. This may be attributed to the lack of understanding of the concept of strategic planning by the university internal stakeholders, especially the employees hence it is unpopular and its compliance a difficult issue.

Strategic planning is all about an enabling environment to achieve and sustain superior overall performance and returns (Johnson, Scholes and Whittington, 2008). Miles and Snow (1978) developed four typologies for strategic planning approaches for business organizations. They proposed that firms in general develop relatively stable patterns of strategic behaviour in order to accomplish a good alignment with the perceived environmental conditions. Their typologies involved four strategic types: inactive, proactive, pre-active and reactive.

According to Miles and Snow (1978), inactive (defender) type achieves competitive advantage by becoming more successful in existing markets with existing products, with the lowest level of
uncertainty compared to other strategic types. The company maintains internal focus by concentrating on a narrowly defined product-market domain with a corresponding loss of adaptability to changes in the environment. Preactive (Prospector) type achieves competitive advantage by company entering markets with new products, by being innovative and by quickly embracing new technologies. The company maintains external focus on constantly adapting to market changes, but with a possible significant loss in operational efficiency. Proactive (Analyzer) type is a strategic combination of the first two types. Reactive (Reactor) type does not achieve a competitive advantage due to the lack of a clear and concise connection between structure and strategy.

Miles and Snow strategic typology is unique because it looks at an organization as a complete and integrated system in a dynamic interaction with its environment, which Hambrick (1983) once called the most permanent available strategic classification tool. Many authors emphasize the relevance of Miles and Snow's typology, describing it as an integrated idea of other schools of strategic management (Mintzberg et al., 1998) that can measure the strategy in a way that is suitable for a variety of businesses and industries (Shortell and Zajac, 1990), making it thus one of the most notable strategic typologies (Miller, 1996).

Kargar and Parnell (1987) argued that planning is a multidimensional management system and strongly advocate for a multidimensional treatment (seven dimensions) of planning as effective strategic planning. They further argued that early research studies have generally tended to view planning as “planner” versus “non-planner” or “formal planner” (Thune and House, 1970; Herold, 1972). Although, these notions may have been appropriate in the early stages of formal planning, they are not quite appropriate in these later stages of formal planning in which almost all large corporations belong to a “planner” category. In addition, many strategic planning processes tend to be either too narrow in focus to build a complete organizational strategy or too general and abstract to be applicable to specific situations. Ramanujam and Venkatraman (1987), Kargar and Parnell, (1987) added that Strategic Planning is an effective way of planning as it leads to increased Firm Performance.
Strategic planning can help organizations in maintaining their stability in the ever-changing market and respond to competition effectively. Steiner (1979) asserted that the framework for formulating and implementing strategies is the formal strategic planning system. Porter (1985) explained that despite the criticism leveled against strategic planning during the 1970s and 80s, it was still useful and it only needed to be improved and recanted. Greenley (1986) established that strategic planning has potential advantages and intrinsic values that eventually translate into improved firm performance. It is, therefore, a vehicle that facilitates improved firm performance.

For many years organizations globally have established and implemented strategic planning to appreciate their strengths, weaknesses, opportunities and threats that exists in their existing environment (Yabs, 2007). Strategic planning implementation helped organizations to improve performance. The concept of strategy has been employed by business policy and management researchers for more than two decades. Strategic management is seen to encompass strategic planning, direction setting for the organization as a whole and the formulation, implementation and evaluation of specific organizational strategies. Organizational strategies reflect the actual pattern of choices and actions made in guiding the organization through time (Miles and Snow, 1980). Therefore, Strategic planning is arguably important ingredient in the conduct of strategic management. Strategic planning is a means of establishing major directions for the university, college, school or department. Through strategic planning, resources are concentrated in a limited number of major directions in order to maximize benefits to stakeholders those they exist to serve and who are affected by the choices made.

The strategic plan should chart the broad course for the entire university for the next five years. It is a process for ensuring that the budget follows the plan rather than vice versa. Strategic planning is not just a plan for growth and expansion. A strategic plan can and often does guide retrenchment and reallocation (Kathleen, 2003). Strategic planning is to predict the future and develop plans for interacting with the competitive environment to achieve that future. It has been observed that most organizations are more concerned with the formulation of strategic plan and not how to implement them (Douglas (2003) The primary goal of strategic planning is to guide a firm in setting out its strategic intent and priorities and focus itself towards realizing the same (Kotter, 1996). St-Hilaire (2011) points out that the usage of a strategic plan is very important to organization’s ability to achieve and maintain competitive advantage over other Organizations.
Strategic planning implementation and performance in the public sector has its origins in France where performance contracting was used in 1970 (Nafukho et al., 2009). The practice has since spread to other parts of the world such as Canada, India, Nigeria, Senegal and Kenya (Kobia and Mohammed, 2006). Poister and Streib 2005 have asserted that in the USA the Government enacted use of performance and Results Act of 1993 that required federal agencies to develop strategic plans for implementation and duplicated in their budgets and performance measures.

Today organizations from both the public and private sectors have embraced the practice of strategic planning seriously as a tool that can be utilized to fast track their performances. Organizations ensure that performance levels have been achieved by developing strategic plans in order to achieve efficiency and ensure that performance levels have been achieved. Strategy is positioning a business in a given industry structure, (Porter 1980, 1985). Strategic planning is to envision the future and develop plans for interacting with the competitive environment to achieve that future, (Pearce and Robinson, 1995). The primary goal of strategic planning is to guide a firm in setting out its strategic intent, priorities and focus itself towards realizing the same (Kotter, 1996).

Organizations have used various approaches in pursuit of attaining the requisite performance standards. These approaches include strategic management business process re-engineering and total quality management among others. Strategic management is embraced by many organizations as a mechanism for managing performance to ensure their continued existence in the competitive business environment (Kirimi and Munyinyi, 2004, GOK, 2007 and Gachunga, 2008) According to Hunger and Wheelen (2008) Strategic management is a process entailing planning, implementation and control of strategies by organizations to determine their long term performance.

In Kenya, strategic planning and implementation was initiated by the government under economic recovery strategy for wealth and employment creation (GOK, 2003). The main objective was to offer service delivery and prudent utilization of resources to enhance accountability and focus attention to the attainment of key national policy priorities. Kenya’s strategic plans have been developed by the government on a framework of a five year period and implementation of such plans done by ministries and state corporations through performance
contracting to ensure that the plans are implemented. This has helped to the government to
achieve set targets (GOK 2008, Mutunga, 2008). The plans are implemented and monitored
quarterly and annually. Over period of time, the concept and practice of strategic planning has
been embraced worldwide and across sectors because of its perceived contribution to
organizational effectiveness.

Lewa, Mutuku and Mutuku (2009) observed that Kenyan universities are essentially traditional
in orientation and must find new ways of dealing with the issues facing them including
increasing competition from other universities. They added that strategic planning is one of the
major steps the universities can take to address the challenges they face. Mintzberg (1994) view
the activity of strategic planning and the relationship of planning with thinking that provides a
useful background to an elaboration of what a sophisticated process designed to cope with an
uncertain contextual environment may look like. Peters & Waterman (1982) stated that
organizations tend to align organization strategy, structure, software, leadership style, systems,
staff and skills.

1.1.1 University Education in Kenya

Universities being part of state corporations have adopted strategic plans to enable them enhance
efficiency in service delivery, productivity and to respond to the changing needs in university
education. Universities operate in a competitive environment where they are required to attract
highly respected scholars, tap highly talented learners and donors as well as enhance their
visibility and reputation. In such an environment universities need to plan strategically in order
to remain competitive and relevant. The importance of strategic planning in the university has
been emphasized by several scholars. Keller (1983) has observed that strategic planning is a
conscious academic strategy which is seen as appropriate response to turbulence. He continues to
say that the modern university scene is one that is no longer fiercely disdainful of sound
economics and financial planning or so derisive of strategic management. Jurinksi (1993) has
echoed the observations by Keller when he says that strategic planning in the university is an
intellectual exercise. Therefore, strategic planning is most suited to public universities or higher
education and they cannot do without it. According to Owolabi and Makinde (2012 pointed out
that there is a significant positive correlation between strategic planning and corporate
performance. They established that strategic planning is beneficial to organizations in achieving
the set goals that universities and other corporate organizations should engage in strategic planning in order to enhance corporate performance.

Universities determine access to higher education by way of selecting examinations (Aziz, Elezi and Mazerek, 2013). Universities in Kenya are regulated by the state, both public and private. Public universities in Kenya are funded for their operational course of higher education from the exchequer. Students admitted to the public universities pay little or no tuition fees while those admitted to private universities are required to fund their higher education programs. Kenya has 23 accredited public universities and 17 private chartered universities (CUE, 2015).

The commission for university education (CUE) was established under the University Act No. 42 of 2012 a successor to the commission for higher education. It is a government agency mandated to regulate university education in Kenya. The commission ensures the adherence to quality standards and relevance in all aspects of university education, training and research. It also continues to mainstream quality assurance practices in the university education by carrying out inspection for improvement of programs (CUE, 2015).

The Commission for University Education sets standards and guidelines including institutional standards, standards for academic programs, physical infrastructure, resources, e-learning, libraries and degree awarding institutions.

Universities in Kenya have been actively formulating and implementing strategic plans. Chege (2009) observed that most higher education institutions such as universities have a mission, vision, core values and objectives that are well explained and some pasted on the office walls, in the receptions areas, institutions’ handbooks and websites. The universities visions, missions, core values and objectives are hoped to act as navigators for universities to achieve their desired goals and realization their thoughts. Public universities are expected to be a lead in education and research in any country.

Chege (2009) further established that vice chancellors in public universities have a role to move institutions forward by balancing task orientation and people orientation in embracing technological changes re-revision of university curriculum. Indeed Vice -chancellors to be
effective and being relevant should bring changes in the society for the true measure of university is change.

1.3 Statement of the Problem

Organizational performance has always been a priority in both public and private organizations, since it is directly associated with the value creation of the entity. Organizations are constantly striving for better results, influence and competitive advantage. However, most organizations, including universities, are struggling to get it right. Organizational management is not always aware of the adequate assessment of their organizational performance. Plethora of models, frameworks or methods for conducting entities valuation creates unnecessary stress for management to select the path that is congruent with the organizations leadership and cultural philosophy (Richard, 2009).

Universities play an important role in addressing many policy priorities as sources of new knowledge and centers of innovation and research. They are also providers of skilled human resource capital, agents of social justice and mobility and contributors to social and cultural vitality and determinants of health and well-being. Management of universities is becoming a challenge due to high competition occasioned by the prevailing economic situation and changes in technology both globally and locally. To overcome the challenges, universities in Kenya have started to put more emphasis on their strategy formulation and implementation process (GOK, 2006).

While most of the studies (Khan and Khalique, 2014; Hin, Kadir and Bohari, 2013; Abebe and Angriawan, 2013; Aldehayyat and Anchor, 2010; Obong’o, 2009; Kobia and Mohamed, 2006; Henry, 2001; Mintzberg, 1994; Porter, 1985, Adegbite, 1986; Fubara, 1986 and Woodburn, 1984) have established the impact of strategic planning on the performance of organizations, more so financial performance such as organization’s profitability, market share, earnings per share, net asset, working capital and expansion in an organization, no known studies have been done to establish the effect of planning typologies on performance of organizations. There is lack of a strong empirical work that has focused on the moderating role of planning typologies on the relationship between strategy implementation and performance of universities in Kenya.
Therefore, this study sought to investigate the moderating effects of planning typologies on the relationship between strategy implementation and the performance of universities in Kenya.

1.4 Research Objectives

1.3.1 General objective
This study sought to establish the moderating effects of planning typologies on the relationship between strategy implementation and the performance of universities in Kenya.

1.3.2 Specific Research Objectives
The study was guided by the following specific objectives:-

i. To establish the effect of organizational leadership on performance of universities in Kenya.
ii. To determine the effect of organizational culture on performance of universities in Kenya.
iii. To assess the moderating effect of reactive planning typology on the relationship between organizational leadership and performance of universities in Kenya.
iv. To evaluate the moderating effect of reactive planning typology on the relationship between organizational culture and performance of universities in Kenya.
v. To determine the moderating effect of proactive planning typology on the relationship between organizational leadership and performance of universities in Kenya.
vi. To establish the moderating effect of proactive planning typology on the relationship between organizational culture and performance of universities in Kenya.

1.5 Research Hypotheses
The study sought to test the following hypotheses.

H01. There is no significant effect of organizational leadership on organizational performance of universities in Kenya
H02. There is no significant effect of organizational culture on organizational performance of universities in Kenya
H03. Reactive planning typology has no moderating effect on the relationship between organizational leadership and performance of universities in Kenya.
H04. Reactive planning typology has no moderating effect on the relationship between organizational culture and performance of universities in Kenya.

H05. Proactive planning typology has no moderating effect on the relationship between organizational leadership and performance of universities in Kenya.

H06. Proactive planning typology has no moderating effect on the relationship between organizational culture and performance of universities in Kenya.

1.6 Significance of the Study

The study is significant in contributing to both research and practice related to strategic planning, implementation and performance of universities. This study highlighted the direct effect of strategy implementation moderating effects of planning typologies are used and how their implementation affects performance in the public universities. Scholars will benefit from this research as source of literature in strategic planning, implementation and performance. The study was important because its findings may assist universities and other policy makers when making decisions related to strategic planning and strategy implementation to make them responsive to the market competition dynamics. Therefore, university management will be able to establish efficient mechanisms towards strategy implementation while enhancing performance. This will enhance the level of strategic decision making in the universities in relation to employee effectiveness and meeting the societal expectations. Further, the study will assist policy makers to understand the strategy implementation factors that influence specific aspects of university performance.

1.7 Scope of the Study

The study was conducted in public and private chartered universities in Kenya. The unit of analysis was the employees of the universities. The selected universities were both public and private that were registered by Commission of University Education to operate and offer degree programmes (CUE, 2015). The universities are spread in different parts of the country. Among the issues investigated and discussed included university leadership, culture, planning typologies and university performance. The study was conducted between June and September 2016. The main data collection instrument was a structured questionnaire which was administered to Deans, Directors, Heads of Departments/Sections, Registrars and Administrators. The study used
explanatory research design since it sought to explain the moderating effect of planning typologies on the relationship between strategy implementation and university performance.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction
This chapter presents a review of the literature related to strategy implementation, planning typologies and organizational performance. It also presents the theoretical framework as well as the conceptual framework related to the variables of the study.

2.2 The Concept of Organizational Performance
According to Selvarajan et al, 2007, Hsu et al, 2007 and Rahman (2001) has defined organizational performance as an increase or decrease in the firm’s revenue on capital employed, returns on assets and profitability resulting from new produces. Also organizational performance is how well or badly an organization is performing both financially and non-financially. On the other hand, performance measures can include results, behaviors (criterion-based) and relative (normative) measures, education and training concepts and instruments, including management development and leadership training for building necessary skills and attitudes of performance management (Richard, 2002). Performance is a broader indicator that can include productivity, quality and consistence.

Organizational performance has attracted interest from a majority studies have used financial and non-financial indicators to measure performance by quantifying the outputs of organizations and examining the extent to which they satisfy the expectation of stakeholders (Sheng and Li, 2006, Compton, 2005 and Johneson et al, 1999 and Murphy et al, 1996). Organization performance should be ascertained and measured for example the financial measures are return on investment, return on assets and earnings per share (Sapienza et al, 1998). Therefore, due to limitation of financial measures, there is ongoing need to assess the organizational performance through non-financial indicators which include, customer satisfaction, productivity and service quality (Pizam and Ellis, 1999) Financial measures only tell about organization past performance while non-financial measures reflect the health and wealth creating performance of the organization (Kalafut and Low, 2001).

Pearson and Robinson (2002) argue that the traditional measures of financial performance, give inadequate or in some cases, an inaccurate perspective to the status of the business and its ability
to keep improving. They further contend that an organization should relentlessly try to find ways
to improve and enhance its qualitative measures. Kaplan and Norton (2008) concur with the view
that quality improvement must be a process forever. Muella and McCloskey, (1990) asserts that
for a firm to survive in the dynamic and turbulent environment, it should not only focus on
financial but also on qualitative factors.

2.3 Organizational Performance Models
Scholars have advanced different theories to explain why and how organizations achieve
performance. Niven (2005) pointed out that there is growing recognition of performance
measures to determine success in organizations in both the public and private sector. This is
because organizations are set up to attain different goals and performance standards that are to be
gauged using various measures that differ on the type of an organization. For instance business
enterprises may focus on making profits while the non-profit making organizations like
universities focus on service delivery. Therefore models and theories that have been advanced on
performance guided this study. They included the balance scored card model and 360 degree
feedback theory.

2.2.1 Balance Score Card Model
The Balanced score card model (BSC) is a performance model of goal setting that has been
widely used by organizations in measuring performance. Performance Measurement in
organizations is defined as accumulated end results of all the organization’s work processes and
activities (Stephen and Mary, 2002). The performance of a university is measured by how
effective it transforms inputs into outputs (Thursby, 2000). Balanced Scorecard (BSC) measures’
usage is referred to as the use of a combination of measures for assessing company performance
(Kaplan & Norton, 1992). Kaplan and Norton (1992) suggest that multiple performance
measures should be multidimensional in nature covering both financial and non-financial
measures. The Balanced Scorecard is a widely used method to diagnose and improve on an
organizations performance.

The model looks at the performance of an organization from four perspectives which include
financial, customer, internal business process and learning and growth (Sheng and Li 2006,
Kaplan and Norton, 2001). The model borrows from the goal setting theory and thus giving a
more elaborate and balanced view of the organization’s performance by linking to the organizational processes, objectives and stakeholders.

The balanced score card as tool was developed by Kaplan and Norton in the early 1990s (Kaplan and Norton, 2001). It was initially developed for the private sector to improve performance measurements and to clarify and align individual goals to organizational strategy, to link objectives to long term targets and implementing selected strategies (Andreadis, 2009 and Armstrong, 2006).

The focus of the model is to give a balanced report of organizational performance using financial and non-financial measures (Armstrong, 2006). The models helps managers of organizations to evaluate their financial status on operating income, profits, sales and revenue growth. On customers perceptive the efforts put in place to service and customer satisfaction In learning and growth how organizations can develop and retain human resources for new ideas for strategic planning and internal business processes in setting up and managing businesses process to meet the future for customer demands and delivery of services (Pearce and Robinson, 2008; Murby and Gould, 2005). The organization vision and strategy is at the center of the scorecard which is surrounded by four the perspectives to form the basic measure of organizational performance evaluation. For non-profit organizations such as universities the customer perspective is given prominence (Sheng and Li, 2006).

Kargar and Parnell, 1986) Ramanujam and Venkatraman, 1987 and Kaplan and Norton (2008) have observed further that balanced Scorecards Strategy considers financial indications as one of the critical measures of Firm Performance. They further argue that one of the goals of strategic planning is to make profits besides realizing other financial and non-financial benefits.

2.2.2 360 Degrees Feedback model

The 360 degree feedback model is a performance measurement tool that seeks to measure performance of employees based on data from different sources (Armstrong, 2006, Nelson and Quick 2009). According to the model an employee performance is evaluated using feedback from supervisors, peers, followers and customers. The multiplicity of evaluators removes bias
and provides a broad picture of an individual’s skills and performance through pointing out gaps in the individuals abilities that ought to be addressed (Shipper, Hoffman and Rotondo (2007).

The model evaluates organizational performance based on the views of its stakeholders such as the managers, employees, and customers. Because organizations determine goals and objectives in their strategic plans the evaluation by the various stakeholders will be based on how they will have satisfied their customers and attained the set goals and objectives. The evaluators of universities may include employees, customers, government ministries, suppliers, and the general public. The theory was used to guide the study in seeking to measure university performance based on data which was collected from the respondents.

2.2.3 Resource-Based View Model
As strategic management has become widely accepted with strategic planning in the public sector, there is a need to consider the strategic understanding and management of resources through the Resource Based View (RBV). Specifically, the RBV helps build a comprehensive theory of how various resources affect institutional performance, and how institutions rely on new resource arrangements in the public sector.

The Resource Based View emphasizes the importance of resources in organizational performance. According to Williamson (1999), the main hypothesis of the RBV is that ‘more’ of the resources have a positive influence on the growth and performance of the firm”. The RBV literature asks “why do firms in the same industry vary systematically in performance over time?” (Hoopes, Madsen, and Walker 2003: 889) or “Why do some firms persistently outperform others?” (Barney and Clark, 2007). The core argument of the RBV to these questions is that firms that possessed resources that were valuable and rare would attain a competitive advantage and enjoy improved performance in the short term (Barney 1991; Newbert 2007). The RBV observes that there are significant differences in the resources of firms within an industry for organizational survival, growth, and overall effectiveness (Wernerfelt 1984; Barney 1991; Peteraf 1993; Kraatz and Zajac 2001; Bryson et al. 2007). Distinctive organizational resources generate a sustainable competitive advantage and lead to better performance (Prahalad and Hamel 1990; Carmeli and Tishler 2004). Therefore, studies, especially in the private sector, have used the RBV to investigate the relationship between firm resources and organizational performance (Hansen, Perry, and Reese 2004).
Bryson et al. (2007) observed that public strategic management theorists have been strongly influenced either explicitly or implicitly by the RBV. Studies on the public sector have given considerable attention to the empirical impact of specific and individual resources, including human resources (Perry and Miller 1991; Pitts 2005; Peter and Søren forthcoming), financial resources (Evans, Murray, and Schwab 1997; Wenglinsky 1997; Henry and Rubenstein 2002), and real material resources (Lee and Perry 2002).

However, few studies have offered comprehensive theories of the role of various resources in organizational performance because they have focused on a single factor to explain variation in organizational performance (Carmeli and Tishler 2004). Also, some studies in the public sector recognize explicitly the importance of the RBV, but have not tested it to offer comprehensive understanding of the relative role of various resources in agency performance (Daley and Vasu 2005; Hackler and Saxton 2007).

Various studies on public administration and public management have paid systematic attention to the study of the black box between resources (inputs) and results (outputs) (Ingraham and Donahue 2000). Public management scholars have studied whether management matters in public administration and public management in transforming resources into results. In investigating this “traditional policy performance equation” (Ingraham and Donahue 2000), however, these studies have paid little attention to the role and importance of resources (inputs). One reason is that there is usually an assumption that resources positively influence performance. Yet, there is lack of comprehensive empirical evidence about their different roles and impacts. Kettl and Fesler (2005) and Fernandez and Rainey (2006) assert that sufficient resources are essential for successful organizational change and performance, though there is lack of comprehensive empirical knowledge about the relative roles and importance of different resources in achieving organizational goals. Previous studies by (O’Toole and Meier 1999; Lynn, Heinrich, and Hill 2000; Meier and O’Toole 2001; Pitts 2005) have observed that resources are a variable in general models of organizational performance, but in these studies resources are usually treated as environmental factors or constraints rather than the main variables of interest. That is, most studies do not focus on the relative influence of different resources on organizational performance.
In contrast, traditional organization theorists consider resources as central to understanding performance. Schumpeter (1942) argues that rich organizations and industries in resources are better able to survive external and environmental turbulence. Simon (1947) and Thompson (1967) presume a direct relationship between resources and organizational performance. In the field of policy implementation, many studies have thought that sufficient resources lead to the successful implementation of public policy (Montjoy and O’Toole 1979; Browne and Wildavsky 1983; Mazmanian and Sabatier 1989; Goggin, Bowman, Lester, and O’Toole 1990; Matland 1995).

Similarly, several previous studies in public management have emphasized the role and the importance of resources in achieving organizational goals. Rainey and Steinbauer (1999) hypothesize that agency effectiveness depends on the utilization of technological resources and the development of human resources. Holzer and Callahan (1998) also point out the importance of technology and human resources in government performance with detailed elaboration. Boyne (2003) argues that extra resources are one of five determinants (i.e., resources, regulation, markets, organization, and management) of public service performance. Boyne focuses on financial resources such as financial spending per capita or student and on real resources such as quantity of staff or teachers.

Broadly construed, resources are any assets that an organization might draw on to help it achieve its goals (Bryson et al. 2007). More specifically, “resources include all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. controlled by a firm that enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness” (Barney 1991). Also, resources are the tangible and intangible assets firms use to develop and implement their strategies (Ray, Barney, and Muhanna 2004).

Studies have offered a variety of classifications for resource types. Bozeman and Straussman (1990, 47) offer three types: personnel resources, financial resources, and organizational structure. Russo and Fouts (1997) classify resources as physical assets and technologies, human resources and organizational capabilities, and the intangible resources of reputation and political acumen. According to Rainey and Steinbauer (1999), organizational resources are divided into financial, human, and technological resources. Hansen et al. (2004) classify an organization’s
resources into two broad concepts based on Penrose’s (1959) argument: productive resources (which are needed for achieving goals) and administrative resources (which govern the use of productive resources). Fry, Stoner, and Hattwick (2004) divide resources into the people, physical materials, financial assets, and information.

This study reviewed literature on six types of organizational resources: administrative resources, human resources, financial resources, physical resources, political resources, and reputation resources. Human resources, financial resources, and physical resources are traditional inputs in any organization. Administrative resources serve as leadership structures for governing and managing these traditional resources. Political resources are key for government agencies and are distinctive to public organizations. Reputation is also an important intangible resource. This classification is used to investigate the impacts of various resources on federal agencies’ performance.

Administrative Resources: These include the top decision-making structure for an organization. Bozeman and Straussman (1990) point out that organizational structure is one type of organizational resources. According to Penrose (1959), the growth of a firm is limited by the bundle of productive resources controlled by a firm and by the administrative framework used to organize the use of these resources. Hansen et al. (2004) argue that administrative resources govern productive resources which directly contribute to achieving organizational goals. In other words, administrative resources make decisions about selecting and deploying other resources. Hansen et al. (2004) opine that the value of administrative resources is reflected in the quality of administrative decisions which ultimately influence firm performance. The top decision-making structure of an organization is often designed by stakeholders, but, once it is part of the organization, structure serves as an administrative resource governing productive resources.

Human resources: According Kraatz and Zajac (2001) using the RBV, observes that “scarce, valuable, and imperfectly imitable resources” create sustained performance differences by generating sustainable competitive advantages. In institutions of higher learning, there are basically two types of human resources (academic and non-academic staff). These two types of human resources in the universities are examples of distinctive and imperfectly imitable human resources of an institution which lead to competitive advantages and better performance. The study focused on both the academic and non-academic human resources in the universities.
Financial Resources: Fry et al. (2004) state that financial resources are basic resources that can be used to acquire other resources such as equipment, paying workers, and for advertising. Fernandez and Rainey (2006) observe that ample funding is indispensable to provide organizations with the administrative and technical capacity to make sure that they achieve statutory objectives.

Physical Resources: According to Barney (1991), physical resources include the physical technology used in an organization, an organization’s equipment, its geographic location, and raw materials. Similarly, Fry et al. (2004) argue that physical resources include fixed assets (such as land, building, and equipment), raw materials that will be used in creating products, and general supplies used in the operation of the organization. While financial resources can be used flexibly to purchase equipment, pay workers, and buy advertising, physical resources are relatively inflexible in that they are more directly connected with the operation of an organization and the achievement of organizational goals than financial resources.

Political Resources: The impact of political resources on organizational performance is considered important in as far as the operations of government-managed institutions are concerned. Bozeman (1987) argues that all organizations are subject to some level of external influence by political authority. According to Rainey (2003), there are various sources of political influence such as chief executives, legislative bodies, courts, interest groups, news media, citizens, and so on. Therefore, inevitably, public organizations need to consider the influence of political authorities. Especially, the political support of these authorities for an organization is a key factor of successful institutions, reducing the potential for micromanagement on the part of elected officials and allowing bureaucrats to focus consistently on long-term goals (Wolf 1993; Rainey and Steinbauer 1999; Moynihan and Pandey 2005). Moynihan and Pandey (2005) measure political support of an institution by elected official support of the institution, degree of client influence, and degree of public influence and show that elected official support of an institution and the degree of public influence have both significant and positive influences on organizational effectiveness.

Firm Reputation as a Resource: Reputation has been introduced as an important intangible resource (Russo and Fouts 1997; Huang and Provan 2007). Also, Teece, Pisano, and Shuen (1997) have argued that reputation represents an overall assessment of an organization’s operation and performance. According to Roberts and Dowling (1997), reputation is an extremely important strategic asset and superior performers with favorable reputation are able to
sustain superior outcomes for longer periods of time. Citizen opinions or evaluations of an agency’s operation or performance are important and critical to that agency because reputational effects can be a powerful force for controlling behavior in a social system (Granovetter 1985). According to bureaucratic reputation theory, reputation is a strong incentive for bureaucratic agencies to be concerned with their maintenance in order to protect themselves against being distinguished as inferior agents (Brehm and Gates 1997; March 1999; Whitford 2003; Krause and Douglas 2005, 282). The reasons are as follows. Institutional reputation can enhance bureaucratic autonomy (Carpenter 2001; Whitford 2002) and professional prestige (Wilson 1989). A good reputation of an institution is key to success in staff motivation, staff retention and overall organizational health and a bad reputation can often create irreversible damage to an institution (Huang and Provan 2007). Also, Scott (2001) pointed out that having a good reputation means enhanced legitimacy for an organization. These benefits that reputation can enhance, such as institutional legitimacy, professional prestige, staff motivation, and bureaucratic autonomy, are scarce, valuable, and imperfectly imitable resources of an agency which lead to sustainable competitive advantages and better performance.

2.2.4 Resource Based Theory
The resource based view of strategy is that the firm is a bundle of distinctive resource that are the keys to developing competitive advantage and strategic capability of the firm depends on its resources (Armstrong, 2011). The concept was developed by Barney (1991) who stated that ‘a firm is to have a competitive advantage when it is implementing a value creating strategy and not simultaneously being implemented by any current or potential competitors and when this other firms are unable to duplicate the benefits of the strategy. Armstrong (2011) asserts that will happen if the resources are valuable, rare, inimitable and non-substitutable. Barney (1995) noted that a complete understanding of sources of a firms competitive advantage requires the analysis of a firms internal strengths and weaknesses as well (SWOT). He emphasized that creating sustained competitive advantage depends on the unique resources and capabilities that a firm brings to competition in its environment. To discover these resources and capabilities managers must look inside their firm for valuable, rare and costly-to-imitate resources and then exploit these resources through the organization (Barney, 1995).
The resource based theory view argues that firms are able to outperform others if they can develop valuable resources or capabilities which cannot be imitated or substituted by its competitors (Teece, Pisano & Shauen, 2007). In this theory, the competitive advantage and superior performance of an organization is explained by the distinctiveness of its capabilities (Johnson, Scholes & Whittington, 2008).

Other scholars of the resource-based view argue that these resources are increasingly accessible and easy to imitate. (Jackson & Schuler, 1995; Pfeffer, 1994). They have a different opinion that sees resources as strategically valuable, rare, inimitable and organizationally embedded as sources of competitive advantage is not scientifically proven (Sanchez, 2008). On the other hand, Kraaijenbrink, Spender & Groen (2010) in their review and assessment of the debate of this theory have observed that not all theories should have direct managerial implications and that uniqueness cannot be generalized and resource based view can only apply to small firms. Furthermore, the definition of resources is all inclusive does not recognize the differences between resources as input and resources that enable the organization of such input (Habbersion & Williams, 2001).

Bryson, Ackermann and Eden (2007) propose that organizations need to develop applications of the Resource-Based View (RBV) for analysis of the performance of government organizations. They argue that “the Resource-Based View’s promise of improved organizational performance is worth further investigation”. There are few well-developed theories or frameworks to explain the performance of institutions of higher learning. Therefore, this study attempts to apply this Resource-Based View to understanding how various resources relate to the performance of universities. The endeavours to move the concept the study of resources in institutions of higher learning forward by examining the comprehensive and relative impacts of various resources on university performance through the Resource-Based View. The resource based theory can contribute to investigating how universities identify, develop different unique capabilities and how they may be transferred to new management and structures.

2.2.5 European Foundation for Quality Management’s (EFQM) Excellence Model

Hides & Davies (2002) reviewed the history and development of the EFQM model. The success of the Baldrige Model (USA) and the Deming prize (Japan) encouraged the formation of the European Foundation for Quality Management (EFQM) in 1988. The 14 founders of EFQM
were all Presidents of world-class organizations representing a number of different markets and were endorsed by the European Commission. The EFQM Excellence model, previously called the European Model for Business Excellence, was introduced in 1991 with the European Quality Award being awarded for the first time in 1992. From its inception, the adoption of Total Quality Management (TQM) principles has been at the heart of the EFQM vision.

The European Foundation for Quality Management model helps organizations to establish an appropriate management system to set them on the path of excellence. This model explains the gaps in performance and helps to identify improvements. The model is a non-prescriptive framework based on nine criteria as shown in Figure 2.1. The Model's nine boxes, as indicated in Figure 2.1, represent the criteria against which to assess an organization’s progress towards excellence. Each of the nine criteria has a definition, which explains the high level meaning of that criterion (EFQM, 2003a).

The EFQM model discerns five organizational areas (Enablers) and four performance areas (Results). The organizational areas are key elements in managing an organization. These include leadership, policy and strategy, people, partnerships, resources and processes. Performance areas in this model provide measuring indicators for the organization fitness and achievements. These include customer results, people results, society results as well as key financial results. The 'Enabler' criteria cover what an organization does. The 'Results' criteria cover what an organization achieves. 'Results' are caused by 'Enablers' and feedback from 'Results' helps to improve 'Enablers' (EFQM, 2003a).

*Figure 2.1: European Foundation for Quality Management Model*
The Model, which recognizes there are many approaches to achieving sustainable excellence in all aspects of performance, is based on the premise that excellent results with respect to Performance, Customers, People and Society are achieved through Leadership driving Policy and Strategy, People, Partnerships, Resources, and Processes. (EFQM, 2003a).

Ghobadian & Woo (1996) confirm that the model implicitly recognizes that the quality of the final offerings is the end result of a complex of integrated processes and employees' efforts and that it provides a useful audit framework against which organizations can evaluate their quality management methods, the deployment of these methods, and the end results. This view is supported by Gadd (1995) who observed that the model allows measurement of more than just performance. It also allows for measurement of how the organization operates.

This model is used by leaders in organizations as a tool for professionalism of the planning and control cycle. The use of the model enables managers in organizational to easily structure, analyze, assess and improve their organizations. The EFQM model is frequently portrayed as a model to assist with strategic decision making and planning. The model helps to realize improvements that lead to achievement of desired performance goals.

The main use of the EFQM Excellence model is to carry out self-assessment with the aim of identifying strengths and areas for improvement in an organization (Have, Have, Stevens, Elst and Pol-Coyne, 2003). However, there are a number of other possible uses for the EFQM Excellence model. These are its uses as a strategic tool, a means of providing a holistic and broader view of the business, a tool for performance management, a benchmarking tool, a means of integrating other quality and management initiatives and tools, a means of gaining a quality
award and its use to motivate staff to get involved in quality improvement activities. Some of these uses are being applied by institutions of higher learning such as universities to implement strategies and improve performance.

EFQM can be used by top university management to develop strategic plans, develop mission, vision and value statements, to turn universities into role models of a culture of excellence. They can also be used in developing strategic plans, implementing and improving the performance of the universities.

2.4 Performance in Universities

Common measures of the organizational performance are effectiveness and efficiency (Bartuševičienė and Šakalytė, 2013; Robbins, 2000). Each of these terms have their own distinct meaning (Mouzas, 2006). Most organizations assess their performance in terms of effectiveness and their main focus is to achieve their mission, goals and vision. At the same time, there is plethora of organizations, which value their performance in terms of their efficiency, which relates to the optimal use of resources to achieve the desired output (Chavan, 2009).

Usually high performance organizations have strong organizational leadership and organizational culture. Because of high organizational expectations, qualified employees are being hired to fill the positions. Employees are well aware of the performance measures and the importance to achieve the excellence in their duties. Due to a high level of employee involvement in the organizational processes, the entity is awarded with staff commitment which reduces rotation level and the cost associated with the hiring and training processes (Demartini, 2011). Employees devoted to the organization are well aware of necessary knowledge, skills and experience to create unique solution for customers (Harris, 2000).

Universities are non-profit making and service oriented organizations thus performance of universities is evaluated using non-financial measures. The balanced score card model informed the current study in providing the perspectives on which evaluation were done such as learning and growth (research), financial sustainability (financial sustainability), customer (society expectations) and internal business processes (employee effectiveness).
According to Heremans, (2007), financial performance is the employment of financial indicators to measure the extent of objective achievement and contribution to making available financial resources. Rutagi (1997) defines financial performance as to how well an organization is performing in terms of being able to sustain itself in relation to its financial needs.

Financial performance is the most widely used indicator in most organizations. In the Balanced Score Card Model, much emphasis is placed in the financial performance of an entity as well (Andreadis, 2009). Since universities are not meant to be profit making entities, their financial performance entails measures of endowment and expenses, advancement, financial aid and tuition (Terkla, 2011). However, Murage and Onyuma (2015) opined that for universities to effectively perform their roles there must be adequate funding.

Financial sustainability of universities in Kenya, particularly public universities, has been declining in the recent past due to underfunding by the government (Kiamba, 2005). This has limited the ability of the public Universities to effectively and efficiently perform their duties, particularly the traditional roles of teaching and research. Underfunding in universities is a consequence of the expansion of the higher education in response to the growing demand for university education and the intensifying needs of modern economy driven by knowledge, without an increase in the corresponding available resources. Kiamba (2005) further observed that this has an effect on universities’ core business of teaching and research where the quality has fallen considerably because of lack of adequate teaching and research materials. Furthermore, effects of inadequate funding are evident in the fact that the physical facilities in the universities are in a state of despair and several capital projects have been abandoned (Kiamba, 2005).

Universities have been compelled to innovate ways of generating additional revenue in order to cope up with ever increased competition and diminishing capitation from the government (Muchiri, 2010 and Johnstone, 2005). These innovations have focused more on generating revenue than delivering on their core mandate. An example of these innovations is the collaborations with other institutions and expansion of the universities’ campuses in order to enroll and accommodate more students (Teyie & Kariuki, 2009; Kiamba, 2005). This kind of expansion as a way of increasing revenue requires proper strategic planning and implementation
well ahead about resources expected to be forthcoming from sources other than the exchequer. The approach to planning and implementation of the strategic plans in the Kenyan universities is widely unknown. Thus, this study sought to establish the planning approaches used in the universities in Kenya and how they affected the relationship between strategy implementation and the actual performance of the universities.

While the success of university research can be viewed in measures of excellence, it can also be found in its economic, social, and environmental impacts.

The world over, universities are responsible for research, knowledge generation, scholarship and innovation that is necessary for driving local social, technological and economic development (CUE, 2016). They are also relied upon to serve as conduits for the transfer, adaptation and dissemination of knowledge that is generated worldwide. Kenyan universities are facing renewed external and internal pressure as the push for them to meet the changing needs of the country become more pronounced. The country is quickly moving towards a knowledge-based economy and there is urgent need for new products and services. This raises the need for good coordination of university research to facilitate a process of national dialogue on what information exists in the country, its storage and utilization as well as setting the agenda for future research to address our national development goals and dilemmas. Given the high cost of research, questions are now being asked about the relevance and impact of university on national development especially in developing countries.

The ability to attract research funds depends upon the research focus of the institution (whether that be at the university, faculty or school level) and whether or not these are aligned with National Research Priorities (Meek and Jeannet, 2005). In Kenya, scholars (Ngara, 1995; Chacha, 2002; Lungwangwa, 2002; Tiyambe, 2004 and Mwiria et al., 2007) have observed that universities are facing challenges on research in many ways. Key among the challenges are low levels of researcher funding by the universities, industry and government, inadequate and inappropriate research infrastructure, laboratories and equipment, poor university-industry linkages which undermine the relevance of teaching programs and rapidly expanding privately sponsored teaching programs that are pulling academic staff away from research into teaching only. This is compounded by the poor management, supervision, monitoring and evaluation of university
research programs. Further, the approach to strategic planning and the implementation of research activities in universities are mainly dependent on the adequacy of funding available.

In the recent past, there has been a paradigm shift from the traditional financial performance measurement approach to an approach integrating both financial and non-financial measures (Atkinson & Kaplan, 2003; Hoque & James, 2000; Malina & Selto, 2001; Simons, 2000). While the financial measures are well known, the non-financial measures include customer, shareholder, suppliers, employees, communities and the general society satisfaction, which constitutes the overall society expectations of an organization (Inkpen and Tsang, 2005). According to Inkpen and Tsang (2005), organizational societal expectations as a resource is a public good because the “members of an organization can tap into the resources derived from the organization's network of relationships without necessarily having participated in the development of those relationships”.

The purpose of measuring performance is not only to know how an organization is performing but also to enable it to perform better. The ultimate aim of implementing a performance measurement system is to improve the performance of an organization so that it may better serve its customers, employees, owners, and other stakeholders (Johnson, 1981). Recent management philosophy has shown an increasing realization of the importance of customer focus and customer satisfaction in any business. These are leading indicators: if customers are not satisfied, they will eventually find other suppliers that will meet their needs (Kumari, 2011). Poor performance from this perspective is thus a leading indicator of future decline, even though the current financial picture may look good. Kumari (2011) also observes that in developing metrics for satisfaction, customers should be analyzed in terms of kinds of customers and the kinds of processes for which we are providing a product or service to those customer groups. In this study, the performance of an organization includes its societal expectations.

Strategic planning practices enhance employee performance and the ability of organizations to achieve their mission. Integrating the use of personnel practices into the strategic planning process enables an organization to better achieve its goals and objectives. Arasa (2009) researched on strategic planning, employee participation and firm performance in the insurance
sector. His findings provided evidence that there is a strong link between strategic planning and firm performance.

Employee effectiveness is positively influenced by the compensation and an equitable reward system for promotion (Simonson et al, 2009). Financial reward is one of the factors that enhance employee effectiveness through job satisfaction (Kreitner and Kinicki, 2006). Miller and Lee., (2001) asserts that the top most factors in producing employee job satisfaction include financial resources, hence compensation systems may affect employees’ effectiveness and thus influence intentions as well as retention rates. Previous studies by Samad (2007) and Opkara (2004) concluded that if the workforce is satisfied with their job and the organizational environment including their organizational culture and organizational leadership, they will be more committed to their organization. This study suggests that employee effectiveness is greatly enhanced by the leadership and culture within the organization. Further, the approach to strategic planning and implementation can greatly enhance the employee effectiveness when organizational leadership and culture are encouraging.

2.5 Strategy Implementation

Scholars have not been able to agree on a single definition of strategy implementation due to the various aspects presented by the concept. Some view it as diverse (Noble, 1999). Others emphasize the process aspect through defining strategy implementation as a process of turning plans and strategies into actions to accomplish organizational objectives by utilization resources (Hannington, 2006; Pride and Ferrel, 2003). Still, others define it as an action oriented human behavior activity that calls for managerial skills, capacities and sound leadership in transforming the working plan into reality (Schaap, 2006). Other authors are of the view that good organizational structures and systems may turn strategic plans into actions (Pearce and Robinson, 2008). Noble (1999) has further observed that communication and cultural aspects of an organization will lead to expected outcomes from implementing the strategies. The current study adopted the definition by Hunger and Wheelen, (2007) who observed that strategy implementation is a combination of the activities and choices required for execution of a strategic plan by an organization by putting strategies and plans into action.

Both public and private organizations with increase in competition in the global environment have to think strategically so as to remain relevant. This is has not affected only private sector but also in public sector organizations (Plant, 2009; Akinyele and Fasogbon, 2007). The
strategies have to be formulated and implemented as planned by the organizations objectives (Pearce and Robinson, 2008). Martin (2010) observed that for strategies to be seen as good, they must actually be executed and that the failure in drawing a line between strategy and execution almost guarantees failure in achieving business success.

Implementation of strategies is equally important as it involves the allocation of responsibilities, having the right people in the right jobs, preparation and allocation of budgets, scheduling of activities on an annual or periodic basis, establishing of review points on how progress will be evaluated, determining the procedures for altering the plan as circumstances change, measuring and rewarding the attainment of the envisioned outcomes (Bennett, 1999, Kotter, 1998, Lake, 2002).

It has been observed that most problems in the area of strategic management do not arise from strategy formulation but strategy implementation. Flood, Dromgoole, Carrol & Gorma (2000) in their research found that high failure rates of organizational initiatives in most businesses are as a result of poor implementation of new strategies. Kanter (1984) has pointed out that many companies even the very sophisticated ones are much better at generating impressive plans on paper than they are at getting ‘ownership’ of the plan so that they can guide operational decisions. Gratton (2000) further emphasized on the importance of strategy when she said ‘there is no great strategy only great execution. Andrews (1987) observed that goal directed implementation is the essence of strategic management and noted that because of the neglect of implementation as integral to strategy the concept of strategy has been distorted. He also remarked that the belief that strategy formulation under the name of strategy planning is a staff activity. Thompson and Strickland (1966) observed that:

What makes strategy implementation a tougher, more time consuming challenge than the crafting strategy is the wide array of managerial activities that have to be attended to, the many ways managers can proceed, the demanding people management skills required, the perseverance it takes to get a variety of initiatives launched and moving, the number of bedeviling issues that must be worked out and the resistance to change that must be overcome (Thompson and Strickland 1966)
Kotter (1998), pointed out that employees often understand the new vision and want to make it happen, but blockages in the path of achieving the vision often occur. One such blockage is a lack of support and leadership by senior executives. Another challenge is poor execution of strategies (Bossidy and Charan, 2002).

Pearce and Robinson (2008) asserts that for successful implementation of strategy should be turned into guidelines for the daily activities of organizations which is reflected in the values and beliefs with managers being in charge of directing and controlling actions and results. David (2003) has pointed out that this calls for managers and employees to be involved and play their role in the making of decisions and communicating and executing selected strategies.

The aim of implementation is to make the strategic plans an operating reality by building the capacity of the organization to put into practice the intentions worked out in the planning stage. Strategy should be implementation oriented and should be designed with implementation in mind (Purcell, 1999).

The current study viewed strategy implementation aspects such as organizational leadership and organizational culture as having a significant relationship to organizational performance.

2.4.1 Organizational Leadership
According to Bass (1999), leadership can be seen as a group process, an attribute of personality, the art of inducing complaisance, an exercise of influence, a particular type of behavior, a form of persuasion, a power relationship, an instrument to achieve goals, the result of an interaction, a differentiated role or initiation of a structure (Bass, 2000). Hersey, Blanchard and Johnson (2001) also define leadership as the process of influencing the activities of an individual or a group in efforts toward goal accomplishment. According to Senge (1990), leadership is associated with stimulants and incentives that motivate people to reach common objectives. Hersey et al. (2001), states that the essence of leadership involves achieving objectives with and through people. Weihrich and Koontz (1994) define leadership as the process of influencing people so that they make an effort by their own will and enthusiasm towards obtaining the group’s goals. According to Kotter (1996), without leadership, the probability of mistakes occurring increases and the opportunities for success become more and more reduced. Leadership allows cooperation, diminishes conflicts, contributes to creativity and has an integrating role, as it keeps people
united. Therefore, leadership, together with stimulants and incentives, promotes people’s motivation towards achieving common goals, having a relevant role in the processes of forming, transmitting and changing organizational culture (Senge, 1990).

Leadership could broadly be defined as the art of mobilizing others to want to struggle for shared aspirations (Drucker, 1993). However, it could be argued this influence, mobilization and struggle is of little value in an organizational context unless it ultimately yields an outcome in line with the shared aspiration for leadership to be deemed successful. Drucker (1993) captures this notion by simply stating that leadership is all about results. Creating results in a changing environment and increasingly competitive organizations requires a very different kind of leadership from what has studied in the past. While leaders in the past managed perhaps complex organizations, this was in a world of relative stability and predictability.

With today’s globalization and organizations coping with rapidly changing environments, leaders face a new reality. Working in flexible contexts and with changes in information technology, increasingly mobile employees have themselves become the critical resource of their organizations (Reger, 2001). Leaders now must simultaneously be agents of change and centers of gravity keep internal focus and enable people and organization to adapt and be successful, be customer focused and have an external perspective (Alimo-Metcalfe, 1998). Furnham (2002) assert that the appropriate measurement outcome from leadership quality is effectiveness that reflects the leader’s efficacy in achieving organizational outcomes, objectives, goals and subordinates’ needs in their job. Thus, organizational leadership in the current study represented the influence that the management of universities would have on the employees to enhance their performance.

Various studies have been done in an effort to establish the relationship between strategic implementation and organization performance in organizations. Most of these studies conclude that organizational performance depends on successful strategy implementation through utilization of appropriate strategy implementation techniques and approaches (Li et al, 2008 and Aldehayyat and Anchor, 2010). Other scholars hold that strategic implementation factors such as leadership style and organization culture influence organization performance.
African countries like Kenya, Nigeria and Botswana have embraced strategic planning in their public sectors. Other public institutions such as universities formulate and implement strategic plans which are implemented and their performance evaluated through performance contracting. The concerned officers sign performance contracts binding them to work towards attaining the set targets (Dzimbiri 2008; Obong’o 2009). In Kenya, the practice of strategic planning and implementation in the public sector was adopted in 2004 through the Economic Recovery Strategy for Wealth and Employment Creation (GoK, 2003; GoK, 2006). Pretorious and Schurink (2007) pointed out that leadership helps in enhancing service delivery in organizations.

In the current age of rapidly changing business environments, leadership is an important critical key determining factor for businesses (Krishnan, 2004). Organizations without effective leaderships cannot be successful, so having effective leadership is a vital element in having an effective organization with high performance. According to Bass and Avolio, 1995 and Xirasagar (2008), there are three types of leadership branches which include; transformational, transactional and laisser-faire leadership. Transformational leadership contains behaviors that stimulate high motivation in followers which leads them to an exceptional performance and transcending self-interest. However, transactional leadership is a process based on exchanging valued rewards for performance. Laisser-faire is based on an indifferent approach to lack of leadership.

The present organizational focus on revitalizing and transforming organizations to meet competitive challenges ahead has been accompanied by increasing interest among researchers in studying transformational leadership” (Krishnan, 1994). Transformational leadership is a process of setting a foundation of commitment to organizational goals and enabling and encouraging followers by empowering them to complete the pre-set objectives and tasks (Yukl ,1998 and Paterson ,2003).

This conceptualization is important and useful not only in studying the organizational change and process in institutional but also, in explaining the occurrence of employee level of positive outcome such as employee effort and satisfaction( Bass, 1998, and Pawar 2002). Czernkowskiet al (2007) points out that transformational leadership aims to transform its followers by applying a process of involving their higher level of desires and stimulating change in their manner,
beliefs, assumptions and motivations. Paterson (2003), state that transformational leadership occurs when leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group, and when they stir their employees to look beyond their own self-interest for the good of the group. Braun (2006) asserts that in transformational leadership leaders hold charisma, intellectual stimulation, individuals’ consideration and inspirational motivation. Bass and Riggio 2006 and Boerners et al (2007) have expressed out that Transformational leaders encourage followers to achieve extraordinary results by providing both meaning and understanding. They align both individual followers and the larger organization’s goals and objectives, and support followers by providing mentoring and coaching.

The transactional style of leadership was propagated by Max Weber in 1947 and then by Bernard Bass in 1981. This style is most often used by the managers. It focuses on the basic management process of controlling, organizing, and short-term planning.

Paterson (2003) observed that transactional leadership is based on exchange promises of rewards and benefits to employees for the employees’ fulfillment of agreements with the leader. Transactional leadership involves motivating and directing followers primarily through appealing to their own self-interest. The power of transactional leaders comes from their formal authority and responsibility in the organization. The main goal of the follower is to obey the instructions of the leader.

Daft (2002) state that transactional leadership its main focus is in recognition of followers needs and then the definition of the exchange process for meeting those needs. Both the leader and the follower benefit from the exchange transaction. According to Tracey and Hinkin (1998) this type of leadership focuses on completion of assigned tasks and relies on reward and punishment. The leader believes in motivating through a system of rewards and punishment. If a subordinate does what is desired, a reward will follow and if he does not go as per the wishes of the leader, a punishment will follow. Here, the exchange between leader and follower takes place to achieve routine performance goals.

Also, Czernkowski et al (2007), argues that transactional leadership is an exchange process of value things between the leaders and their followers. Transactional leaders identify the needs of
their subordinates, clarify and negotiate the aspired goals and manage follower behavior by using contingent positive or negative reinforcement (Boerner and Grisser, 2007). Transactional leadership is based on an agreement that followers accept or comply with the leader in exchange for praise, rewards and resources or the avoidance of disciplinary action. Components of transactional leadership are contingent reward and management by exception (Avolio & Bass, 2002). Use of contingent reward, leaders specify and clarify goals which their subordinates are supposed to reach by linking the goal to rewards, clarify expectations, provide necessary resources, set mutually agreed upon goals, and provide various kinds of rewards for successful performance. They set SMART (specific, measurable, attainable, realistic, and timely) goals for their subordinates. Transactional leaders define clearly how followers’ requirements will be met in exchange for performance of the followers’ role; or the leader may react only if followers fail to meet their role requirements. Thus, transactional leaders have been supposed to take advantage of contingent reward and active or passive management-by-exception leadership approaches (Hater and Bass, 1988, Sosik et al. 1997 and Elenkov 2000).

The difference between active and passive management by expectation is based on the period of time that the leader interferes. In active form of management by expectation, the leader continuously checks, monitor and controls followers’ performances and outcomes to assure that the corrective action is taken to prevent mistakes to avoid any astray or mistake becoming a critical problem. Therefore, the leader keeps searching for deviation from what is expected to be normal delivery of the goal. The transactional leaders become passive management to intervene only when standards are not met or when the performance is not as per the expectations. They may even use punishment as a response to unacceptable performance. On this scenario, the leader waits until the task is completed before determining that a problem exists and then intervenes with criticism or takes more serious punitive actions (Elenkov 2000) On the Laissez-faire, The leader provides an environment where the subordinates get many opportunities to make decisions. The leader himself abdicates responsibilities and avoids making decisions and therefore the group often lacks direction.

Therefore, organizations differ in terms of leadership styles, management levels, geographic span and resources. Pierce & Robinson (2008) asserted that resources in an organization possesses, its
geographical location compared to that of its competitors and customers and management levels determine its success of or failure.

2.4.2 Organizational Culture

Organizational culture is a widely used term and cited as a major strategy implementation that affects successful strategy implementation (Aldehayyat and Anchor, 2010) Watson (2006) emphasizes that the concept of culture originally derived from a metaphor of the organization as ‘something cultivated’. Most academics and practitioners studying organizations suggest the concept of culture is the climate and practices that organizations develop around their handling of people or to the promoted values and statement of beliefs of an organization (Schein, 2004). Watson (2006) asserts that an important trend in managerial thinking in recent decades has been one of encouraging managers to try to create strong organizational cultures. Schein (2004) suggests that culture and leadership are conceptually intertwined.

Schein (2004) further, highlights that ‘the only thing of real importance that leaders do is to create and manage culture; that the unique talent of leaders is their ability to understand and work with culture and that it is an ultimate act of leadership to destroy culture when it is viewed as dysfunctional. O’Farrell (2006) supports that in his analysis of the Australian public service, where he concludes that ‘statements of values, codes of conduct, principles of public service management and so on set out in rules and regulation are simply rhetoric or aspiration statements. Without leadership that is what they will ever be rhetoric. It is the job of administrators, managers and leaders to turn them into reality’ (O’Farrell, 2006)

Mannion 2000 and Li et al (2008) defines organizational culture as a wide range of social phenomena including an organization’s customary dress, language, behavior, beliefs, values, assumptions, symbols of status and authority, myths, ceremonies and rituals and modes of deference and subversion all of which help to define an organization’s character and norms. Moorhead and Griffin (2002) observed that organization culture is a set of values that help the organization employees to understand which actions are considered as acceptable or unacceptable. This study embraced the definition of Schein (1993) that sees organizations culture
as a pattern of basic assumptions that are considered valid and that are taught to new members of
the organization as the way they perceive, feel and think about the organization.

Bartell, (2003), Deal and Kennedy(1999) urge that organization culture also can be defined as
the values and beliefs of university stakeholders such as administrators, faculty, students, council
members and support staff based on tradition and be communicated verbally and nonverbally.

Organizational culture is one of the resources that cannot be easily imitated. Organizational
culture is a collective, mutually shaping patterns of norms, values, beliefs, practices and
assumptions that guide behavior of individuals and groups (Kuh and Whitt, 1988; Sporn, 1996).
Bartell (2003) pointed out that culture can lead to successful governance through trust between
managers and employees. An effective university culture teaches and exhibits appropriate
behavior, motivates individuals and governs information processing. These components of
culture can shape internal relations and values (Li et al, 2008). In turn, strong values can give rise
to beliefs about preferred modes of conduct and desirable objective.

Brunet (2001) states that organizational culture is one factor that can affect how employees
respond to an organizational change affecting their work practices. Bardoel and Sohal (1999)
point out that, when implementing quality improvement programmes, the time needed to change
the organizational culture and attitudes should not be underestimated whilst Chin and Pun (2002)
indicate that an over-emphasis on the technical aspects of strategic plans without people
commitment and cultivation of the culture will often delay the real implementation of strategic
plan. Culture as part of strategy implementation should follow strategy unless strategy is in line
with the existing culture. If the planned strategy is on line with the existing culture it makes
strategy implementation to become easier (Siciliano and Hess, 2009 and Moorhead and Griffin,
2002).

Krasachol and Tannock (1999) argue that strategic plan implementation requires a culture change
in the organization and Buch and Rivers (2001) identify an understanding of the culture of an
organization as crucial to implementing the strategic plan. Munro-Faure and Munro-Faure (1994)
are of the opinion that the culture of an organization must be respected when implementing a
strategic plan. Anjard (1995) argues that the cultural realities of an organization need to be
understood and dealt with in strategic plan implementation. More specifically, Anjard (1995)
highlights that the behavior of managers often creates a culture in which quality and quality improvement systems are not valued at the same level as are other systems. These views are supported by Sousa-Poza et al (2001) who argue that unsuccessful implementation of strategic plans can be blamed on corporate culture and that the corporate culture of many organizations is not naturally suited to strategic plan implementation. One of the possible reasons offered for this is the relatively high tendency towards individualism in the workforce. Sousa-Poza et al (2001) identifies that group cultures were most facilitating for strategic plan implementation. Mersha (1997) warns that rigid socio-cultural systems tend to resist change, which may be occasioned by the implementation of strategic plans.

There is much support for carrying out a cultural assessment of an organization before implementing strategic plans or similar initiatives in order to identify potential barriers to change and to help in designing the implementation programme. Poirier and Tokarz (1996) argue the importance of understanding the internal personality or culture of an organization in order that allowances can be made for this in implementation. Atkinson (1990) supports this view and recommends assessing the culture and values of the organization using a feasibility study. Vermeulen (1997) advocates diagnosing and analyzing the character of the organization to identify potential barriers to change. Chin and Pun (2002), referring to the UMIST-TQM implementation framework, recommend an assessment of the current status of organizational culture before developing and implementing strategic plans. Bardoel and Sohal (1999) suggest that an analysis of the organization, using cultural auditing tools, can help with the design of a successful strategic plans implementation programme. Wright et al (1998) argue that clear understandings of perceptions are necessary for those advocating and implementing a strategic plan programme as this understanding reduces delays.

According to Silvestro (2001) use of a contingency sensitive approach to strategic plan implementation as much of the strategic plans literature is insensitive to the contingencies of the operational context. This view is supported by Chin & Pun (2002) who attributes the failure of many strategic plans implementations processes to a disregard for contextual factors. Melan (1998) is of the opinion that the contextual aspect of change suggests that strategic plan implementation should be approached in a contingent way. Savolainen (1999) identified that
industry-specific factors, which are related to the nature of the business, need to be taken into consideration in implementation. Savolainen (1999) contends that rather than assume there is a single way to change organizations we should specify alternative change strategies appropriate to an organization's stage of development.

Duke (2002) argues that, in managing universities, ignoring the rich organic under life and the uniqueness of each member and group invites resistance whilst Michael et at (1997) warn of the problem of failing to adapt business principles correctly to an academic setting. Taylor & Hill (1992) argue that higher education bodies wishing to embrace change must make an objective and critical assessment of the prevailing culture, with a view to establishing and implementing appropriate strategic plans.

Sousa-Poza et al (2001) say that it is unclear whether corporate culture determines the success of the strategic plans implementation or if strategic plans modifies corporate cultures. They conclude that there is a middle ground in which an adequate corporate culture must be present to effectively implement strategic plans and where the implementation process can include activities, such as training, designed to modify the corporate culture.

According to Kuh and Whitt (1988) points out that university culture can be defined as collective mutually shaping patterns of norms, values, practices, beliefs and assumptions that guide behavior of individuals and group. University culture allows us to see and understand interactions of people outside the organizations and special events, actions, objectives and situations in distinctive way. Schein (1993) pointed out that it is leaders who play the crucial role of shaping and reinforcing culture.

According to Kalyani, 2011 assert that organizations can rarely stand still for long. In highly competitive environment, where competition is global and innovation is continuous, change has become a core competency of organization. He further adds that organizations have characteristics that capture the essence of innovative culture will include; openness, collaboration, trust, authenticity, proactive, autonomy, confrontation and experimental. The universities culture comes from there sources that include; the beliefs, assumptions of the founders and the learning experience of group members as their organizations evolve. Values and beliefs are thought to greatly influence decision-making processes at universities and shape
individual and organizational behaviors (Tierney, 1988; Bartell, 2003). Behaviors based on underlying assumptions and beliefs are conveyed through stories, special language and institutional norms (Bartell, 2003, Sporn, 1996). The decision making processes at universities has great influence by beliefs, values and assumptions to shape individuals and organizational behaviors. Cameron and Freeman (1991) assert that conveyed stories, special language and institutional norms are based on behavior and beliefs.

According to Siciliano and Hess (2009), the implementation of a planned strategy is easier if the strategy is in line with the existing culture. Further, universities possess distinctive characteristics, which correlate strongly with their respective cultures. Unlike most business organizations, universities often possess goals that are unclear and difficult to measure (Bartell, 2003; Baldridge et al. 1978; Birnbaum 1988; Kosko, 1993). Further, the internal and external stakeholders are diverse and play extraordinary roles. Internal stakeholders range from domestic and foreign undergraduates to graduate, professional, and continuing education students. External stakeholders include those in the surrounding community, the political jurisdiction, granting and accrediting agencies, unions and the press (Bartell, 2003). In this context, the university can be thought of as an intricate web, where the role of managers is to link components of the web together (Bartell, 2003). As a web, the university can be considered interwoven and continuous, allowing communication among individuals who share responsibility and decision making power (Bartell, 2003; Mintzberg & Van der Hayden, 1999). According to Pearce and Robisonn, 2008, Hunger and Wheelen, 2007 communication can be used to manage organization culture during strategy implementation. This can be executed through newsletters, speeches, dissemination of stories and legends about the core values and institutionalizing practices that reinforces desired beliefs and values. Culture cab be also be reinforced through aligning it with formal and informal recognition, monetary rewards or other valuable incentives (Nelson and Quick, 2009).

Empirical studies have been carried out by scholars in the quest to establish the relationship between organizational culture as an implementation factor and organizational performance. Lok and Crawford (2003) and Rose, Kumar, Abdullah, and Ling, (2008) found that organizational culture significantly affect organizational performance in both public and private organizations. Rose et al (2008) found out that a higher degree of organizational performance during strategy
planning typology implementation was related to organization which had strong culture with a well-integrated and effective set of values, beliefs and behaviors.

Organization culture will often resist changes since it seeks to preserve stable relationships and patterns of behavior. As a result, when implementing strategic plans, care should be taken to assess the compatibility of the link between strategy and culture. Organization culture as a strategic plan implementation factor should follow strategy unless the strategy is in line with the existing culture. However, Ogbonna and Harris (2000) recognized the leaders’ role in shaping an appropriate organization culture that can guide organizational members towards attaining their desired goals during strategic planning typology implementation.

Organizational culture has the potential to enhance organizational performance, employee job satisfaction and the sense of certainty about problem solving (Kotter, 2012). If an organizational culture becomes incongruent with the changing expectations of internal or external stakeholders, the organization’s effectiveness can decline as has occurred with some organizations (Ernst, 2001). Organizational culture and performance clearly are related (Kopelman, Brief, & Guzzo, 1990), although the evidence regarding the exact nature of this relationship is mixed. Previous studies have shown that the relationship between many cultural attributes and high performance has not been consistent over time (Denison, 1990 and Sorenson, 2002). Bulach, Lunenburg, & Potter, 2012; Hellriegel & Slocum, 2011) have established that the effects of organizational culture on employee behavior and performance can be based on four (4) key ideas. These

i. Firstly, knowing the culture of an organization allows employees to understand both the organization’s history and current methods of operation. This insight provides guidance about expected future behaviors.

ii. Organizational culture can foster commitment to the organization’s philosophy and values. This commitment generates shared feelings of working toward common goals. That is, organizations can achieve effectiveness only when employees share values.

iii. Organizational culture, through its norms, serves as a control mechanism to channel behaviors toward desired behaviors and away from undesired behaviors. This can also be
accomplished by recruiting, selecting and retaining employees whose values best fit the values of the organization.

iv. Finally, certain types of organizational cultures may be related directly to greater effectiveness and productivity than others.

Therefore organizational culture and performance is advantageous since the cultural values are observable and measurable. Thus in studying of cultural effect on performance, it is vital that both financial and non-financial (i.e. cultural values, norms) measures can be used to get more comprehensive results. The literature from various scholars on organizational culture and performance reveals that organizations that know how to develop their cultures in an effective way most have the benefit of advancement in productivity and the quality of work life among the employees. Indeed, employees must absorb the organizational culture at the maximum strength and the top management should provide a precise guideline and direction to motivate the employees in achieving the organization’s objectives.

Organizations in the 21st Century have begun to recognize the importance of employee engagement and the contribution employees make toward the success of the organization. Communication has crucial impacts within or among work groups in the organization. Communication is a channel to flow information, resources and even policies. Organizational communication is defined as communication with one another in the context of an organization (Eisenberg & Goodall, 1997; Shockley-Zalabak, 2006) This type of communication, in turn, includes activities of sending and receiving messages through various layers of authority. Studies by (Garnett, Marlowe, & Pandey, 2008; Pandey & Garnett, 2006) emphasize that effective communication can enhance organizational outcomes. Communication can influence on the perceptions and opinions about employees, communities, organizations, governments and society. Communication of administrative in organization is related to the flow of information, regulations, policies and procedures. As a managerial tool, communication is helps to share information with employees so as to coordinate activities, reduce unnecessary managerial burdens and rules, and to improve organizational performance.
Communication can be defined as the exchange of an information, thought and emotion between individuals of groups, in other words, communication plays a fundamental role in balancing individual and organizational objectives (BOYACI, 1996). Communicating with employees is a useful and powerful way of engendering greater engagement of the propensity of the employee to want to come to work and want to contribute to the success of the company (Hopkins, 2006). Communication is the primary manner in which the human being interact or cooperate. From an organizational perspective, communication serves as the foundation for planning and organizing, stimulating motivation, shifting individual’s attitudes and in socialization. Regardless of the organization, communication is one of the most relevant factors to consider in regard to the success of an institution.

Studies by (Garnett, Marlowe, & Pandey, 2008; Pandey & Garnett, 2006) emphasize that effective communication can enhance organizational outcomes. Communication can influence on the perceptions and opinions about persons, communities, organizations, governments and even society. One of the outcomes of administrative communication is related to the flow of information, regulations, policies and procedures. As a managerial tool, communication helps to share information with employees so as to coordinate activities, reduce unnecessary managerial burdens and rules, and to improve organizational performance. Organizations cannot survive without communication. When there is no communication, employees would not be clear with their everyday jobs, management cannot get the information, group leaders and executives cannot lead and direct their employees. (Newstrom, 2007)

Through communication employees enhances better understanding of each other’s feelings, opinion, beliefs and principles. Communication helps the organizations to perform their daily management functions e.g. organizing, planning, controlling and leading. When there is no effective internal communication, co-ordination of work becomes impossible and organizations have to suffer a lot in this situation. Co-operation also becomes impossible because people will not discuss their ideas and feelings with others. This leads to low productivity and low performance in the organization. Innovation also stumps in this way.

From the scientific management viewpoint, communication is a tool of organizational design to facilitate and operate task completion so that the theorists had emphasis on communication flow.
from supervisors to subordinates (Shockley-Zalabak, 2006). Likewise, Taylor’s scientific management was operated by a well-defined chain of command and specific division of labour. His two principles were developed based on work standards and measurement of standards. From his point of view, communication can be explained as a tool to increase the efficiency and effectiveness of the chain of command, rules, and regulations.

The motive of internal communication is creating a dialogue with employees and giving them the opportunity to have an impact on the business through the sharing of ideas and involvement (Takenouchi, 2011). There are many different types of communication and methods in which they are utilized within an organization or group. Within an organization, communication can take the form of internal, external, formal and informal, upward and downward, lateral and diagonal, small group and nonverbal (Rawes, 2013). The importance of effective communication is extremely important to the success of an organization. Previous studies have shown that communication correlates positively with many organizational outputs, such as organizational performance and overall job satisfaction (Husain, 2013).

In contrast, the failure of communication may lead to detested results like stress, job dissatisfaction, low trust, the decrease in organizational commitment, severance intention, and absence (Zhang & Agarwal, 2009). Although it is challenging to gauge the effectiveness of all the strategies, tactics and tools that are part of today’s external communication options, organizations have a need to continuously adjust to a communication environment that is constantly changing (Newswire, 2011).

Downward communication is necessary in order for employees to know and understand what is expected of them from management. Important elements in information flow are factors that affect the level of downward communication, such as the relationship between superior and subordinate (Anderson & Level, 1980). Lateral communication in an organization is the communication that takes place between employees on the same level. The communication one may have with a co-employee in regard to job objectives would be an example of such a flow of communication. Diagonal communication is much like downward communication, but at an angle. A manager from a different department of an organization may request information from a lower level employee in the same organization, this would be an example of diagonal
communication. It is any interaction or more hierarchical levels apart or one hierarchical level apart but to an organizational member outside the individual’s direct chain of command. (Wilson, 1992). Therefore, in an organization with many employees or small groups can often give individuals a sense of belonging; however, communication within these groups must be effective in order for the group to be successful at accomplishing job objectives. In addition, it is the communication that takes place within the small group within organization. Its function is to group together and utilize different skill sets, job objectives, knowledge and expertise for the purpose of nurturing creativity and improving the efficiency and effectiveness of operations within an organization. Individuals within a group whom are unable to communicate effectively, will not be able to share ideas, brainstorm, or discuss direction or project solutions without running into problems. A group with lack of communication skills with likely fail, or have difficulty reaching its goal or completing the objective.

The lack of communication in a group or organization can be extremely detrimental for that group or organization. From the highest peak of upward communication downward, laterally, diagonally, in groups, verbal, non-verbal, formal or informal, effective communication is paramount when considering an organizations culture.

Communication involves a control or internal focus in which information management and communication are utilized in order to achieve stability and control. This model of communication is called a ‘hierarchical culture’ because it involves the enforcement of rules, conformity and attention to technical matters (Denison and Spreitzer, 1991). The internal process model most clearly reflects the traditional theoretical model of bureaucracy and public administration that relies on formal rules and procedures as control mechanisms (Weber, 1948; Zammuto, Gifford and Goodman, 1999, Bradley and Parker, 2006). The level of communication is the degree to which vertical and horizontal communication is slow, difficult and limited versus fast ,easy and abundant (Doll and Vonderembse, 1991). It consists of all process by which information is transferred and received (Graham and Bernett, 1998 and Terry et al, 2008) In control model of management the vertical and horizontal communication would increase and nature of communication could change. Vertical communication would shift from primary command and control to information and knowledge transfer. These changes become the basis for increased learning and responsiveness to customer requests. For the organizations to be
effective, it requires that internal communication facilitates dispersion of ideas within an organization and increases their amount and diversity (Gatti, 2011 and Cheney et al, 2004).

The level of communication seems to be impacted by other dimensions of organization structure (May and Mumby, 2005)

i) The open systems model involves a flexibility/external focus in which readiness and adaptability are utilized in order to achieve growth, resource acquisition and external support. This model has also been referred to as a ‘developmental culture’ because it is associated with innovative leaders with vision who also maintain a focus on the external environment (Denison and Spreitzer, 1991). These organizations are dynamic and entrepreneurial, their leaders are risk-takers, and organizational rewards are linked to individual initiative (Bradley and Parker, 2001, 2006).

ii) The human relations model involves a flexibility/internal focus in which training and the broader development of human resources are utilized to achieve cohesion and employee morale. This model of organizational culture has also been referred to as ‘group culture’ because it is associated with trust and participation through teamwork. Managers in organizations of this type seek to encourage and mentor employees (Bradley and Parker 2006).

iii) The rational goal model involves a control/external focus in which planning and goal setting are utilized to achieve productivity and efficiency. This model of organizational culture is referred to as a rational culture because of its emphasis on outcomes and goal fulfillment (Denison and Spreitzer, 1991). Organizations of this type are production oriented and managers organize employees in the pursuit of designated goals and objectives, and rewards are linked to outcomes (Bradley and Parker, 2001, 2006).

The importance of this understanding of types of culture is not that the types exist in any pure form in organizations. It is possible for organizations to display several cultural types. Rather, it
is that such typologies help in understanding of predominant cultures and thinking as to what re-balancing is needed if organizational culture is to be shifted to support new practices and values.

Zalami (2005) culture facilitates or inhibits institutional transformation depending on whether or not the existing culture is aligned with the goals of the proposed change. O’Donnell (2006) assert that culture facilitates innovative initiatives in the public sector and providing a supportive environment for developing ‘enterprising leaders’.

Some scholars’ studies and findings show that certain kinds of cultures correlate with economic performance (Kotter and Heskett, 1992). Boyne (2003) suggests that there is a link between organizational culture change and public service improvement. Organizational culture gives a sense of organization identity and determines through the organization’s legends, rituals beliefs, meanings, values, norms and language, the way in which ‘things are done around an organization. An organizations’ culture encapsulates what it has been good at and what has worked in the past. These practices can often be accepted without question by long serving employees of an organization. One of the first things a new employee learns is some of the organization’s legends. Legends stay with an organization and become part of the established way of doing things. Over time the organization will develop ‘norms’ i.e. established (normal) expected behavior patterns within the organization (Sorensen, 2002).

Deal and Kennedy (1982) emphasize the more visible levels of culture (heroes, rites, rituals, legends and ceremonies) because it is these attributes that shape behavior. But it is the invisible levels that are of more interest to public sector organizations in terms of their influence in progressing or impeding organizational change.

Denison, (1990) organizational culture, is made up of more ‘superficial’ aspects such as patterns of behaviour and observable symbols and ceremonies and deeper seated and underlying values, assumptions and beliefs. Organizational culture can be changed by focusing on the more visible aspects such as rites and rituals, as these help shape behaviour. The ‘deeper’ aspects of culture such as beliefs and feelings must be taken into account when considering organizational culture and potential changes to culture.
2.6 Planning Typologies

Drucker (1954) is among the first to address the issue of strategy and strategy formulation as an approach to managing organizations, where his concern was primarily with identifying the business of an organization. However, little attention was drawn to this concept of strategy until when Chandler (1962) defined strategic planning and outlined the processes by which strategy could be formulated. Today organizations from both the private and public sectors have taken the concept and practice of strategic planning seriously as a tool that can be utilized to fast track their performance.

Strategic planning has been explained by various writers and scholars in different but complementary ways. Drucker (1954) contends that strategic planning is management by plans, an analytical process and is focused in making optimal strategic plans. Porter (1985) has defined strategy as positioning a business in a given industry structure. In universities, stakeholders include students, teaching and non-teaching staff, funding agencies and communities/society, as well as internal stakeholders such as faculty and staff. Strategic planning is a structured approach to anticipating the future and "exploiting the inevitable." Through Strategic planning an organization can predict changes in the environment and act pro-actively (Adeleke, Ogundele and Oyenuga, 2008; Pearce and Robinson, 1995).

Most research from developing countries has factors that differentiate planning environment in developed countries from the rest of less developed. Such factors include: Absence of technology required to monitor the environment, high unstable economic and political environment, limited data information resources, absence of political and social infrastructures necessary for carrying out environmental scan activities (Adegbite, 1986; Fubara, 1986 and Woodburn, 1984).

The foundation of the study of strategy was started by Drucker (1955) in his seminar work: “The practice of management”. He argued that “the important decisions (the decisions that really matter) are strategic in nature”. Chandler (1962) made a major contribution to the study in his famous pronouncement that structure follows strategy and came up with a definition that ‘strategy is a determination of long term goals and objectives of an enterprise, and the adoption of course of action and allocation of resources is necessary for carrying out the goals.’
Ansoff (1965) pointed out that ‘strategy is about deciding what sort of business the firm is in and what kinds of business it will seek to enter’. He stated that the term strategy means ‘pertaining to the relationship between the firm and its environment (Ibid) and described as’ a rule for making decisions’ (Ibid).

Andrews (1987) explored in greater depth the concept of corporate strategy. He defined it comprehensively as;

….. the pattern of decision in a company that determines and reveals its objectives purposes or goals, produces the principal policies and plans for achieving these goals, and defines the range of business the company is to pursue, the kind of economic and human organization it is or intends to be and the nature of the economic or non economic contribution it intends to make to its shareholders, employees, customers, and communities.

The overall concept as defined by the pioneers, subsequent scholars explored more specific aspects of strategy. Porter (1995) developed the notion of competitive advantage and he was the most influential. He also introduced the idea of the value chain which is widely used today by financial institutions. Mintzberg (1978, 1987, 1994) distinguished between deliberate or intended strategies and emergent strategies and analyzed the process of strategy formulation. Wernefelt (1984) and Barney (1991, 1995) developed the highly influential resource idea of ‘resource based view’. Prahalad and Hamel (1990) argued that competitive advantage results in the long term when a firm builds ‘core competencies’ that are superior to those of its rivals and when it learns faster and applies its learning more effectively than its competitors do. More recently, John et al. (2008) popularized business model innovation as a strategic approach to developing a business.

Thompson and Strickland (1996) defined strategy as “The pattern of actions managers employ to achieve organizational objectives.” According to Armstrong (2011) strategy has two fundamental meanings one of them being forward looking and deciding about the future where one wants to go and how to get there. It is concerned with both ends and means. Quinn (1983) also defines strategy as ‘a pattern or plan that integrates organizations goals into a cohesive whole’. The second meaning of strategy is conveyed by the concept of strategic fit. The focus is on the organizations and the world around them. To maximize competitive advantage a firm must match
its capabilities and resources to the opportunities available in the external environment (Armstrong, 2011).

Ansoff (1970) conceptualizes strategic planning as the process of seeking a better match between a firm’s products or technology and its increasingly turbulent markets. He looks at it in terms of change from a familiar environment to an unfamiliar world of strange technologies, strange competitors, new consumer attitudes, new dimensions of social control and above all, a questioning of the firm’s role in society. Sharing this view, Hofer and Schendel (1978) define strategic planning as an evolution of managerial response to environmental change in a focus moving from internal structure and production efficiency, to the integration of strategy and structure and production innovation, multinational expansion and diversification.

Wendy (1997) explained strategic planning as the process of developing and maintaining consistency between the organization’s objectives and resources and its changing opportunities. Wendy further argues that strategic planning aims at defining and document an approach to doing business that will lead to satisfactory profits and growth. Steiner (1979) defines strategic planning as the systematic and more or less formalized effort of a company to establish basic company purposes, objectives, policies and strategies. It involves the development of detailed plans to implement policies and strategies to achieve objectives and basic company purposes.

Bateman & Zeithml (1993) view planning as a conscious, systematic process during which decisions are made about the goals and activities that an individual, group, work unit or organization will pursue in the future. It provides individuals and work units a map to follow in their future activities. Hax & Majluf (1996), supporting this argument, explains strategic planning as a disciplined and well-defined organizational effort aimed at the complete specification of a firm’s strategy and the assignment of responsibilities for execution. From these diverse views expressed above, strategic planning in its general and basic understanding can be said to be a process of selecting organizational goals and strategies, determining the necessary programs to achieve specific objectives enroute to the goals and establishing the methods necessary to ensure that the policies and programs are implemented.

Wendy (1997) explains that strategic planning process comprises of three main elements which helps turn an organizations vision or mission into concrete achievable. These are the strategic
analysis, strategic choice and strategic implementation. The strategic analysis encompasses setting the organization’s direction in terms of vision, mission and goals. Therefore this entails articulating the company’s strategic intent and directing efforts towards understanding the business environment.

Strategic choice stage involves generating, evaluating and selecting the most appropriate strategy. Strategy implementation stage consists of putting in place the relevant policies and formulating frameworks that will aid in translating chosen strategies into actionable forms. Strategic planning set objectives that can be measured on weekly and monthly basis to predict, what the end of the period will be like. The direct impact on financial performance is also used as a general measure of a firm’s overall financial health over the specific period. Without financial success, virtually no business survives for long. Therefore, the use of strategic plans leads to improved financial performance (Kargar and Parnell, 1996). The second measure of Firm Performance is non-financial (qualitative). In other words, these are intangible measures.

The concept of strategic planning grew out of budget exercises in America in 1950 and spread rapidly. By the mid-1960s and throughout the 70s, strategic planning in many forms was occurring in most organizations across the world. Organizations recognized the usefulness of strategy formulation during the 1980s, when the concept of marketing for public and non-profit organizations gained prominence. Most well-known models of public and nonprofit strategic planning have their roots in the Harvard policy model developed at the Harvard Business School (Bryson, 1988). The systematic analysis of strengths, weaknesses, opportunities and threats (SWOT) is a primary strength of the Harvard model and is a step in the strategic planning model used at UW-Madison.

Kathleen (2003) citing Rogers observe that during times of crisis, "Even if you're on the right track, you'll get run over if you just sit there." It is important to note that no organization such as the university can remain static for long. Neither can an institution survive for long with knee-jerk responses to change. Strategic planning should minimize crisis-mode decision-making.

Organizations are faced with social and cultural complexity and therefore one small group at the top cannot know the needs of students, employers and other stakeholder without their input. It is
also difficult for one small internal group to know all that is occurring in the external 
environment that will have an impact on the university.

Most university systems are interdependent and they have to depend on each other for the 
effective performance. Bryson (1988) provides three examples of formerly distinct arenas that 
are now very much interconnected domestic and international, public, private and nonprofit, 
educational and economic policies. The blur in of these distinctions means that although many 
organizations and institutions are involved, no one is fully in charge. This increased 
environmental ambiguity requires educational institutions and other public entities to think and 
act strategically as never before (Bryson, 1988).

Traditional financial resources for the support of higher education are changing and being 
replaced by new and current ones which were never thought of before. There is thus a lot of 
competition for resource for educational financing. At the same time demands for services 
continue to expand. Strategic planning can enable the university, the college, the department and 
the administrative unit the opportunity to chart its own course and to focus its own future. 
Jurinksi (1993) calls strategic planning an intellectual exercise. The process is therefore most 
suited to higher education.

Keller (1983) pointed out that strategic planning is a conscious academic strategy which is seen 
as an appropriate response to turbulence. The dogma of colleges as amiable, anarchic, self-
correcting collectives of scholars with a small contingent of dignified caretakers at the 
unavoidable business edge is crumbling. A new era of conscious academic strategy is being born. 
The modern college and university scene is one that is no longer so fiercely disdainful of sound 
economics and financial planning or so derisive of strategic management.

Effective strategic planning can accrue many benefits to the organization. First, it enables the 
organization to be proactive and to actively shape its own destiny. Because the process requires 
attention to trends and external developments, an educational institution or department is less 
likely to be taken by surprise by a new problem or development. Stakeholders those affected by 
the organization are involved in the planning process. Thus the institution or department receives 
valuable feedback both on successful efforts and on areas where improvements should be made.
Representatives from faculty, academic staff, and classified staff should be involved as each group brings a unique perspective to the process. This involvement throughout the process helps ensure that those who have major responsibilities to carry out the plan understand the plan and the reasons behind it. Being involved in the planning process can contribute greatly to employees’ commitment to mutual goals and a sense of organizational unity.

Similarly, the active involvement of stakeholders in the planning process creates external advocacy for the organization. Employers for example are much more likely to support an educational initiative such as a new degree program or a revamped curriculum if they have a first-hand role in a well-designed planning process. Note that the term is "active involvement." External stakeholders have traditionally served in advisory capacities to the educational enterprise. Involvement in strategic planning is much more substantive than the advisory role. Their involvement essentially lays the groundwork for continuing support and participation by those stakeholders.

According to Henry (2001), although strategic planning has been described as a “public-sector perennial” there is relatively little empirical research about how strategic planning is used in the public sector. He further argues that although strategic planning gives direction to an organization, it appears that strategic planning in its public mode is of limited use in the public sector as opposed to the private sector (Henry, 2001).

Strategic planning in higher educational institutions like universities can enhance stability to the organization in spite of increasingly frequent leadership changes. Simmons and Pohl (1994) found that from 1980 to 1994 at the University of Wisconsin-Madison, the average dean's tenure was five years. They further noted that the average length of leadership tenure was declining sharply with each year. They observed that strategic planning creates a broad decision-making group by actively involving middle and operational levels of management. By pushing decision-making down, a system for strategic planning can help the organization maintain a core purpose during times of changing leadership. Simmons and Pohl (1994) established that a broadly-based participative strategic planning process can actually make the most of the frequent leadership changes by coupling a new leader's external perspective with a stable core internal group that is committed to mutual goals and a shared vision of a successful future.
Theories and models from various studies have informed formulation of strategic plans and implementation by giving insight on how organizations come up with strategies on how to accomplish their tasks. However, Kralijenbrink, Spender and Groen (2010) presented that not all theories should have direct managerial implications and that uniqueness cannot be generalized. Anderson and Kleiner, (2003) asserted managers in public universities overseeing the academic programs and strategy planning process are better communicators so that issues can be resolved before they reach a crisis level. Thus, Smith, (2001; 2006) University managers in Kenya are perceived to increase monitor and review the strategic planning typologies in place as a way of assuring effectiveness and efficiency.

Steiner (1979) contends that formal Strategic Planning links short, intermediate and long range plans. The author further argues that a strategic effort should be able to align the organization with its short-term and long term goals. While some studies have limited empirical evidence showing that strategic planning positively influences organizational performance (Kudla, 1980, Leontiades and Tezel, 1980, Unni, 1981), other have established that there is a positive relationship between strategic planning and organization performance. (McIlquham-Schmidt, 2010, Stagg and Coulter, 2008, Silverman, 2000 Pearce and Robinson 2007, Smith and Golden, 1989; Hill, Jones and Galvin, 2004; Dansoh, 2005). The inconsistency results motivated some scholars to come up with the concept of multidimensional Strategic Planning and identified seven dimensions of Strategic Planning in their study, which contribute to increase in Firm Performance (Venkatraman and Ramanujam 1986, Kargar and Parnell 1996). In this study, the 2 major dimensions of strategic planning typologies as postulated by Miles and Snow (1978) were reviewed and their moderating influence on the relationship between strategy implementation and performance was empirically assessed.

2.5.1 Reactive Planning Typology
According to Miles and Snow (1994) the success of an organization depends on a process of external (the environment) and internal (strategy, structure, processes and ideology) adaptation. This process begins by a aligning the organization to the market in an attempt to answer to or help form the present and future needs of customers. This alignment sets the organization's strategy. This type of planning analysis seeks to assess the organizational adaptation to a
changing environment through the study of the relationship between strategies, structure and processes (Miles and Snow, 1978).

Strategic planning is a disciplined effort to produce decisions and actions that guide and shape what the organization is, what it does and why it does it (Bryson, 1995). Both strategic planning and long range planning cover several years. However, strategic planning requires the organization to examine what it is and the environment in which it is working. Strategic planning also helps the organization to focus its attention on the crucial issues and challenges. It, therefore, helps the organization's leaders decide what to do about those issues and challenges.

Previous studies such as Austin (2002); Keller (1983); Meredith (1985); Peterson (1999b); Rowley Lujan and Dolence (1997) stressed why it is advantageous for higher education institutions to engage in strategic planning as a process by which universities can strengthen their competitive advantage. According to Tan (1990), strategic planning may encourage the clarification of existing goals and serve to develop the institution’s mission and reduce ambiguity. According to Shirley (1988), strategic planning describes a type of process that focuses on a melding of external opportunities and trends, internal strengths and weaknesses and personal values of staff and community. Mintzberg, 1994; and Peterson, 1989 pointed out that the strategic concept presumes an ongoing substantive and purposeful moment whereby an organization seizes its strategic opportunity through design rather than chance. Mintzberg (1994) observed that strategic planning can play roles such as providing analysis to managers, helping translate intended strategies into realized ones, and providing a control device, but that it is not effective for the development of strategy. Peterson, 1989 elaborated that planning embodies the concept that the institution will be strengthened to achieve organizational success as a result. Strategic planning is often characterized as proactive with a principle that emphasizes the need for proactive movement and the strengthening of the organization. Gibson, (2002) asserts that an effective strategic planning process provides a framework within which quality tools and processes can be utilized.

Other studies by Keller, 1983; Rowley, Lujan and Dolence, 1997; Shirley, 1988; Schmidtlein, 1990) have established the factors that influence the adoption of planning such as organizational complexities and external constraints; scarce financial resources, a process that improves the
quality of decisions made as well as the quality of the decision making process; new technologies; developing cross-industry relationships; globalization of higher education; a conduit that keeps the units working in harmony toward the same end and finally the post-industrial environment’s turbulence, competitiveness, lean resources and unpredictability.

Rowley, Lujan and Dolence, 1997 pointed out some of the benefits involvement in strategic planning include clarification of the institution’s mission; improved ability for the institution to face challenges, to be proactive and to actively shape its own destiny; the capability to manage change and innovation; the capacity to support decision-making; the strengthening of leadership; help with the allocation of resources; the improvement of institutional quality assurance measures and overall enhancement of the ability of the institution to think and act strategically.

According to (Miles and Snow, 2003 and Porter, 1985) strategic planning typologies have had significant effect on private sector oriented research. Boyne and Walker, (2004) argued that there are two dimensions of public sector strategy stance and strategic planning actions. Strategic stance refers to the extent to which the organization is proactive or reactive whereas strategic actions focuses on substantive approaches to markets, services, revenue, both external and internal organization relations. Previous studies have applied the typologies with varying results (Andrews, Boyne, Law and Walker, 2009). Ackoff’s (1981) has pointed out four different approaches to planning which include: reactive, inactive, pre-active and proactive. The classification of planning into reactive, preactive and proactive is based on the organization’s response to environmental dynamics.

Reactive planning is not in the anticipation of the future but becomes active only when the problem is confronted or has already occurred. This is merely the corrective action that is taken. This approach of planning is useful in an environment which is fairly stable over a long period of time

Reactive planning approach, to which Ackoff’s refers as to ‘planning through the rear-view mirror’ occurs in historically static environments where well established, conservative, traditional organizations have a long history of success behind them. The classification of planning into reactive, preactive and proactive is based on the organization’s response to environmental dynamics.
They tend to focus on the past rather than the future thus resist and resent the demands of the new dynamic environment. The public universities believe that their own actions shape their future. Their planning is either aimed at preventing the imminent changes around them. Ramanujam and Venkatraman (1987); Kargar and Parnell, (1987), argued that planning is a multidimensional management system and strongly advocate for a multidimensional treatment (seven dimensions) of planning as effective strategic planning. They further argued that early research studies have generally tended to view planning as “planner” versus “non-planner” or “formal planner” (Thune and House, 1970; Herold, 1972). Although, these notions may have been appropriate in the early stages of formal planning, they are not quite apt in these later stages of formal planning in which almost all large corporations belong to a “planner” category. In addition, many strategic planning processes tend to be either too narrow in focus to build a complete organizational strategy or too general and abstract to be applicable to specific situations. Ramanujam and Venkatraman (1987), Kargar and Parnell, (1987), in their studies established that multidimensional (seven dimensions) of Strategic Planning is an effective way of planning as it leads to increased Firm Performance.

Pre-active planning approach involves the organization figuring out its future and how it will affect its operations and prepare for that set of events (Ansoff, et. al., 1970). Organizations with this approach presume that the future is guaranteed and thus their best strategy is to figure that future and prepare for it. Hamel and Prahalad, (1989), term this approach as ‘maintaining the strategic fit’, which involves following on how things will be different in the future.

Mintzberg (1994) challenged the planning process by questioning the validity of the usefulness of the various approaches to strategy analysis. A large number of theorists have provided recommendations on the improvement of Strategic Planning process (Stonich, 1975; Hedley, 1976; Higgins 1976; Hobbs and Heany 1977; Paul et al. 1978).
Hamel and Prahalad (1994) in their contribution said that strategy should be more active and interactive with less ‘armchair planning’. Michael Porter, (1987), added that although strategic planning had gone out of fashion in the late 1970s, it needed to be rediscovered, “re-thought”, “recast” and not discarded. He criticized the strategic planning process and not its concept.

2.5.2 Proactive Planning Typology
Proactive planning approach entails thinking about the future. In a proactive planning process situation include predict, prevent, plan, participate and perform. By anticipating future needs and future threats, universities are better equipped to develop strategic plans that optimize performance and prevent problems. Proactive planning is one of a strategy being widely used in by public universities to align them to their strategic set goals of competing favorably to achieve expected desired results to its customers. Johnson, Langley, Melin and Whittington (2007) observed that contingent planning of typologies to be performed depends on the situation and if typologies are to become useful in the public sector organizations they must be formulated in such a way that key contingencies and responses are articulated so they can be applied in practice.

2.7 Summary of Literature Review
Khan and Khalique (2014) asserts that the relationship between strategic planning and firm performance and the differing nature of small and medium enterprises (SMEs) from that of large organizations.

Kraus, Makela and Ronkko (2012) using data from 160 small and medium-sized Finnish IT companies presented in their results of study that participative strategic planning positively affects personnel commitment to strategy implementation, which thereby increases company performance. However, according to their analysis, the participative strategic planning does not impact organizational leadership and organizational culture and does have a positive impact on an organization performance.

Arasa and K’Obonyo (2012) pointed out the correlation analysis results indicate the existence of a strong relationship between strategic planning and firm performance in Kenya. Further, all the strategic planning steps (defining firm’s corporate purpose, scanning of business environment, identification of firm’s strategic issues, strategy choice and setting up of implementation,
evaluation and control systems) were found to be positively related to company performance hence implementation does not have positive relation to strategic planning typologies on performance.

Kobia and Mohamed (2006) and Obong’o (2009) assessed the success and challenges of implementing performance contracting in the public sector. They failed to address strategic planning typologies (Re-active, Inactive, Pre-active and Pro-active) and their implementation factors (Organizational Culture and Leadership Style) and how they influenced organizational performance.

Aldehayyat and Anchor (2010) also established the impediments to strategy execution and focused more on the impediments than how the strategic planning typologies affected organizational performance. Mintzberg (1994) in his studies explained how strategic planning affects organizational goals where he focused only on strategy formulation than implementations. He also did not focus on strategic planning typologies and their influence on performance. Ansoff (1965; 1987) similarly studied the reasons behind the success of American firms before and after the Second World War. He focused his study only on financial performance measures and those in the private sector. Porter (1980; 1985) also sought to establish how industry factors determined organizational performance. He did not consider strategic planning typologies, the implementation of strategic plans and their influence on organizational performance. Further, he focused only on the private sector.

This study sought to establish how the strategic planning typologies were used in public universities in Kenya and how they affected the relationship between strategy implementation and performance.
Table 2.1: Summary of Previous Studies and Identified Research Gap

<table>
<thead>
<tr>
<th>Authors</th>
<th>Purpose/Context</th>
<th>Research Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khan and Khalique (2014)</td>
<td>Studied the relationship between strategic planning and firm performance among small and medium enterprises (SMEs).</td>
<td>Focused only on SMEs and not large corporations such as Universities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focused only on the financial performance of SMEs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Did not focus on the strategic planning typologies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focused only on Strategic Planning and not strategic planning typologies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Did not address organizational leadership and organizational culture</td>
</tr>
<tr>
<td>Kraus, Makela and Ronkko (2012)</td>
<td>The study sought to establish how Participative strategic planning affects personnel commitment to strategy implementation and how this affected company performance.</td>
<td>Focused on the firm performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Did not focus on strategy implementation</td>
</tr>
<tr>
<td>Arasa and K'Obonyo (2012)</td>
<td>Studied the relationship between strategic planning and firm performance in Kenya.</td>
<td>Did not address strategy implementation issues such as organizational leadership and organizational culture</td>
</tr>
<tr>
<td>Kobia &amp; Mohamed (2006) &amp; Obong’o (2009)</td>
<td>Assessed the success and challenges of implementing performance contracting in the public sector.</td>
<td>Focused more on impediments than how to the strategic planning and organizational performance were affected by implementation factors</td>
</tr>
<tr>
<td>Aldehayyat and Anchor (2010)</td>
<td>Established the impediments to strategy execution and focused more on the impediments than how the strategic planning typologies affected organizational performance.</td>
<td>Focused only on strategy formulation than implementation.</td>
</tr>
<tr>
<td>Mintzberg (1994)</td>
<td>Studied how strategic planning affects organizational goals. where he He also</td>
<td>Did not focus on strategic planning typologies and their influence on performance</td>
</tr>
<tr>
<td>Ansoff (1965; 1987)</td>
<td>Studied the reasons behind the success of American firms before and after the Second World War.</td>
<td>Focused his study only on financial performance measures in the private sector.</td>
</tr>
<tr>
<td>Porter (1980; 1985)</td>
<td>Established how industry factors determined organizational performance.</td>
<td>Did not consider strategic planning typologies, the implementation of strategic plans and their influence on organizational performance.</td>
</tr>
</tbody>
</table>
2.8 Research Gap

This study dealt specifically with the planning typologies, effects of strategy implementation and performance of public universities in Kenya. Earlier studies have focused on institutions outside of Africa (Plant, 2009, Poister & Streib 2005) though in the same context as this study. Ansoff, (1965) studied on reasons behind the success of the American firms before and after the second world war focusing on only the financial aspect of performance measures and in the private sector. Porter (1985), looked at establishing how industry factors will determine organizational performance and disregarded strategic implementation and focused on the private sector while Mintzberg, (1994) tries to expound on how strategic planning affected organizational goals and over emphasized his focus on strategy formulation than implantation. Little attention has been paid to strategic planning typologies despite universities playing an important role in service delivery and provision of skilled manpower and research. Therefore, this study sought to fill this gap by evaluating planning typologies, strategy implementation and performance of public universities in Kenya. Specifically, the sought to evaluate the moderating effects of planning typologies on the relationship between strategy implementation and university performance in Kenya.

2.9 Conceptual Framework

The conceptual framework of this study from reviewed literature sought to establish the relationship between the dependent independent variables. The independent variable of the study was strategy implementation. This comprised of organizational leadership and organizational culture. On the other hand, the dependent variable was university performance which was determined by research, financial sustainability, societal expectations and employee effectiveness. Planning typologies moderated the relationship between strategy implementation and performance of universities. Size and the age of the universities were the control variables.

Moderation analysis using the planning typologies was used in this study in testing whether the magnitude of the independent variable's effect on the dependent variable depends on the influence of a third variable or set of variables (moderator). In this study, a conceptual
framework depicting the influence of the moderator variable on the relationship between the independent variable and dependent variable was developed.

The conceptual framework in Figure 2.2 shows the relationship between variables under study. The study focused on evaluating how planning typologies moderated the relationship between strategy implementation and universities’ performance.

**Figure 2.2: Conceptual Framework**

- **Independent Variable**
  - Strategic Implementation
  - Organizational Leadership
  - Organizational Culture

- **Dependent Variable**
  - Performance of Universities
  - Research
  - Financial sustainability
  - Society Expectations
  - Employees Effectiveness

- **Controls**
  - Size of University
  - Age of University

- **Strategic Planning Typologies**
  - Reactive and Proactive Typologies

**Hypotheses**

- **H01**
- **H02**
- **H03, 4, 5, 6**

**Source:** Researcher, 2016
The conceptual framework was supported by the Balanced Score Card Model (BSC) which was developed by Kaplan and Norton (1992). The BSC depicts that multiple performance measures should be multidimensional in nature covering both financial and non-financial measures. The model looks at the performance of an organization from four perspectives which include financial, customer, internal business process and learning and growth (Sheng and Li 2006, Kaplan and Norton, 2001). The conceptual framework for this study borrows from the Balanced Scorecard Model and thus giving a more elaborate and balanced view of universities performance. The dependent variables in the conceptual framework were financial sustainability represented financial sustainability in the BSC; societal expectations represented by customer; employee effectiveness represented by internal business process and research represented by learning and growth. The independent variables for the study were organizational leadership and organizational culture while the moderating variables were the planning typologies. The control variables were the size and the age of the universities.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction
This chapter outlines the methodology used in addressing the set objectives and hypotheses of the study. Specifically, it includes the research paradigm, research design, study area, target population, sample size and sampling design, data collection instruments and procedures, measurement of study variables, data analysis methods and modeling, limitations and ethical considerations for the study.

3.2 Research Paradigm
The Philosophical worldview underpinning this study is positivistic paradigm which is used in investing the reality that can be explained as the result of a cause that occurs before the effect temporally or simultaneously (Patton, 2002). In the world of science, two main approaches to research are distinguished, namely the positivistic and the phenomenological approaches (Collis & Hussey, 2003). The positivistic or quantitative approach attempts to explain social phenomena by establishing a relation between variables which are information converted into numbers. To put it somewhat differently by assigning numeric values to observed phenomena and counting the frequency of those phenomena, some conclusions about the characteristics of the populations may be inferred (Collis & Hussey, 2003). In relation of the quantitative approach, constructed hypotheses are formulated about the relationship between two or more variables. Data about these variables is collected through methods such as questionnaires, focus groups, interviews, case studies and experiments. The relationships between the variables are measured by means of statistical methods such as multiple regression analysis, structural equation analysis and the Pearson product-moment correlation analysis (Struwig and Stead, 2001).

The phenomenological or qualitative research paradigm suggests that social reality is within the unit of research and that the act of investigating the reality has an effect on that reality. This paradigm pays considerable regard to the subjective state of the individual. Researchers applying the phenomenological approach focus on the meaning rather than the measurement of social problems (Collis and Hussey, 2003). Qualitative research concerns itself with approaches such as ecological psychology, symbolic interactionism and postmodernism and employs statistical
methods, such as observation, archival source analysis, interviews, focus groups and content analysis (Struwig and Stead, 2001). 

The research objective of the present study was to evaluate Strategic implementation, planning typologies on performance of universities in Kenya. This study adopted the positivism or quantitative research paradigm so as to quantify the significance of the relationships among the stated variables. This study was based on the philosophical and methodological foundation of positivism. Positivist researcher reduces and formulates variables and hypotheses and operationalizes definitions based on existing theory (Durgee, 1984).

3.3 Research Design
The study was conducted using the explanatory survey design. There are several research designs that one can use depending on the nature of the study requirements that ranges from explanatory survey design, Cross –Sectional design, Longitudinal design, Experimental design, Case study design or Correlation design. An explanatory study which looks at a cross-section of each population at a single point in time and period enabled the gathering of data from a large number of respondents (Lebo, 2015).

Bayazit (2009) observed that there is no single design that should be seen as a universal solution. Kamukama et al (2010) pointed out that while there is a long standing debate on the most appropriate philosophical solutions from which research designs are derived, business organization have traditionally employed empirical research designs. This is because of the economic dominance of business objectives which exist within a quantitative paradigm where decisions are largely based on cost-benefit and rationalist analysis.

Explanatory theories may be developed after rational theories have been formulated (Fawcet and Downs, 1986). Creswell (2009) states that the design answers the “why” questions and involves developing an explanation of a causal relationship between independent and dependent variables. Causal explanations argue that a phenomenon $Y_1$ (university performance) is affected by factors $X_1$ and $X_2$ (strategy implementation: leadership and culture). Manoj and Varun (1998) agree that explanatory design can be done to explain the hypothesized relationships. Further, Hair et al (2006) confirms that explanatory design allows the use of inferential statistics to find out the relationship between the dependent and independent variables.
According to Lewis and Thornhill (2009) and Polonsky and Waller (2005), explanatory survey design enables quick data collection from the sample population and has the ability to help people understand the population from a part of it. Explanatory design includes data from a sample population and analyzing it to establish causal explanations between the independent and dependent variables. Kombo and Tromp (2006) also assert that the design establishes the relationship between the independent and dependent variables. The design was used to explain how planning typologies moderates the relationship between strategy implementation and university performance.

3.4 Study Area
The study was conducted in the chartered universities in Kenya. There were 22 public chartered universities and 17 private chartered universities in Kenya (CUE, 2015). The universities are spread across the counties in the country.

3.5 Target Population
The target population comprised of a total of 2652 middle level managers (staff) of the universities in Kenya. The middle level staff, who were the unit of analysis for the study, were chosen because they were directly involved in implementation of strategic plans and they had the relevant information needed for the study. Cooper and Schindler (2006) define the unit of analysis as the individual participant or object on which a measurement is taken.

3.6 Sample Size and Sampling Design
3.5.1 Sample Size
A sample size of 490 was selected for this study. The required sample size was influenced by the size of the population the sample sought to represent, the number of variables in the gathering of instruments, the requirements for statistical analysis and the degree of confidence required from the results of the study (Page and Meyer, 2000, Cohen and Manion, 1994). The sample size was obtained at 95% confidence level and margin error of 5%.

However, while there are no definite guidelines for sample size determination that have been established, scholars have proposed that an optimal ratio of numbers of research respondents to the number of parameters estimated in confirmatory factor analysis to be at least 1:4 and at most 1:10 (Kline, 2013 and Brown 2006). However, Kline (2013) further states that testing more
complex models that include moderating hypotheses require even larger sample sizes. Therefore, there is a consensus that for scientific studies, scientific methods should be used to arrive at a suitable sample size.

The study used Cochran’s (1977) sample size formula. The study assumed the alpha level a priori at .05, plans to use a proportional variable, set the level of acceptable error at 5%, and estimated the standard deviation of the scale as 0.5. Cochran’s sample size formula is presented here along with explanations as to how these decisions were made.

\[ n_0 = \frac{t^2 \times (p)(q)}{d^2} \]

Where

- \( t \) = value for selected alpha level of .025 in each tail = 1.96. (the alpha level of .05 indicates the level of risk the researcher is willing to take that true margin of error may exceed the acceptable margin of error).
- \( (p)(q) \) = estimate of variance = .25. (maximum possible proportion (.5) * 1-maximum possible proportion (.5) produces maximum possible sample size).
- \( d \) = acceptable margin of error for proportion being estimated = .05 (error a researcher is willing to expect).

\[ n_0 = \frac{1.96^2 \times (0.5)(0.5)}{0.05^2} = 384 \]

However, since this sample size exceeds 5% of the population, Cochran’s (1977) correction formula was used to calculate the final sample size. These calculations are as follows:

\[ \text{Sample} = \frac{n_0}{(1 + \frac{n_0}{\text{Population}})} \]

Where

- \( \text{Population} = 2652 \)
- \( n_0 = 384 \)
Therefore, Sample Size = 335 respondents

Despite having derived a sample size of 335, Kline (2013) argues that testing more complex models that may include mediation and moderation hypotheses require even larger sample sizes. According to Hinkin (1995), an ideal sample size should have an item-to-response ratios ranging from as low as 1:4 to as high as 1:10 for each set of scales to be factor analyzed. In this study, there were 49 items to be measured: hence a sample size between 196 and 490 respondents would be sufficient for factor analysis. Therefore, a higher sample of 490 was targeted. Table 3.1 shows the sample distribution among the respondents.

**Table 3.1: Sample Size Distribution**

<table>
<thead>
<tr>
<th>Target Population</th>
<th>Population</th>
<th>Ratio of Representation (%)</th>
<th>Sample Size (n = 490)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deans</td>
<td>390</td>
<td>14.71</td>
<td>72</td>
</tr>
<tr>
<td>Directors</td>
<td>156</td>
<td>5.88</td>
<td>29</td>
</tr>
<tr>
<td>Heads of Department/Section</td>
<td>1950</td>
<td>73.53</td>
<td>360</td>
</tr>
<tr>
<td>Registrars/Administrator</td>
<td>156</td>
<td>5.88</td>
<td>29</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2652</strong></td>
<td><strong>100</strong></td>
<td><strong>490</strong></td>
</tr>
</tbody>
</table>

*Source: Researcher, 2016*

The study used 30% to obtain a sample size from each category of universities as shown in Table 3.2 below. According to Ramenyi *et. al*, (2003) a sample of 10% to 30% is considered adequate for detailed studies. It is on this basis that the researcher decided to use 30% of the total number of universities from each category. Alreck and Settle (1995) have pointed out that it is rarely unnecessary to sample more than 10% of the population to obtain adequate confidence levels. The researchers have given examples of different populations and the expected sample sizes.

**Table 3.2: Distribution of Sample of Universities**

<table>
<thead>
<tr>
<th>Categories of Universities</th>
<th>Total Number of the Total</th>
<th>Actual Number sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old public</td>
<td>30.00</td>
<td>3</td>
</tr>
<tr>
<td>New public</td>
<td>30.00</td>
<td>4</td>
</tr>
<tr>
<td>Old private</td>
<td>30.00</td>
<td>4</td>
</tr>
</tbody>
</table>
New private | 4 | 30.00 | 1
---|---|---|---
Total | 39 | 30.00 | 12

Source: Researcher, 2016

The study sought to collect data from deans, directors, Heads of Departments (HODs) /Section and Registrars/Administrators of the sampled universities. Stratified random sampling was used to select respondents for the study. The strata consisted of age of university, type of university and job title of the respondents. Since the population of the study was divided into groups (strata), a random sample of proportionate size was selected from each group of the population as shown in Table 3.3.
Table 3.3: Sample Distribution

<table>
<thead>
<tr>
<th>University</th>
<th>Dean</th>
<th>Director</th>
<th>HoD/Section</th>
<th>Registrar/Administrator</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>S</td>
<td>A</td>
<td>S</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Old Public</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Nairobi</td>
<td>12</td>
<td>40</td>
<td>12</td>
<td>18</td>
<td>85</td>
</tr>
<tr>
<td>Moi University</td>
<td>10</td>
<td>15</td>
<td>9</td>
<td>15</td>
<td>75</td>
</tr>
<tr>
<td>Egerton University</td>
<td>8</td>
<td>12</td>
<td>9</td>
<td>12</td>
<td>55</td>
</tr>
<tr>
<td>Masinde Muliro University</td>
<td>5</td>
<td>13</td>
<td>7</td>
<td>9</td>
<td>44</td>
</tr>
<tr>
<td>New Public</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kisii University</td>
<td>5</td>
<td>10</td>
<td>4</td>
<td>6</td>
<td>39</td>
</tr>
<tr>
<td>University of Eldoret</td>
<td>7</td>
<td>10</td>
<td>4</td>
<td>6</td>
<td>44</td>
</tr>
<tr>
<td>Multimedia University</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>21</td>
</tr>
<tr>
<td>Kibabii University</td>
<td>4</td>
<td>9</td>
<td>2</td>
<td>4</td>
<td>27</td>
</tr>
<tr>
<td>Old Private</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baraton University</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>Catholic University</td>
<td>5</td>
<td>7</td>
<td>3</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>Kabarak University</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>22</td>
</tr>
<tr>
<td>New Private</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KCA</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>72</td>
<td>137</td>
<td>58</td>
<td>94</td>
<td>916</td>
</tr>
</tbody>
</table>

Source: Researcher, 2016

*Key: S – Sample Size; A-Actual Population

3.5.2 Sampling Design

Multi stage sampling methods were employed for this study. The first stage of sampling categorized the universities into Public and Private. Further, the universities were grouped into Old and New, as per their year of establishment (CUE, 2015). The universities were randomly selected from the emerging strata. In the second stage, stratified random sampling was used to select respondents from the 4 categories of respondents (Deans, Directors, HoDs and Registrars) within the universities. Simple random sampling techniques were employed to select the respondents from the universities. Simple random samples were taken from each stratum which represented the whole population. A sample design is a plan for getting a sample from a specific population (Kothari, 2004). Then, the researcher used stratified random sampling to select respondents from the 4 categories of respondents within the universities. From within each stratum, the researcher used simple random sampling method to select the respondents who participated in the study.
3.7 Data Collection Instruments and Procedures

3.6.1 Sources of Data
Data was collected from both primary and secondary sources. Secondary data was obtained through document analysis of the records from universities and Commission for University Education. Primary data was collected using structure questionnaires. These were administered on respondents from selected universities.

3.6.2 Data Collection Instruments and procedures
Structured questionnaires were used to collect data from the respondents in the selected universities. The questions in the questionnaires were developed based on the objectives of the study. Questionnaires are cheap and manageable to administer to respondents that are scattered over a large area (Mulusa, 1988). The questions had a five-point Likert scale items ranging from (1) strongly disagree to (5) strongly agree and have been successfully used in the Drory and Gluskinos (1980), and Gemmill and Heisler (1972) studies. They sought demographic information of the respondents and university as well as information relating to strategy implementation and performance in universities. They were administered to the respondents by the researcher and research assistants giving respondents sufficient time to fill the questionnaires. This method was appropriate for the respondents due to the fact that they were literate and the information needed could be provided through writing and it was easy to comprehend. It also catered for the population since it was large in relation to the available time (Oso and Onen, 2005).

3.6.3 Data Collection Procedures
The study collected both descriptive and qualitative data using the structured questionnaires. Because of the large number of the respondents, the researcher recruited and trained four (4) research assistants to assist in administering the questionnaires to the respondents. A research permit was obtained from the National Council for Science, Technology and Innovations allowing the study to be conducted in the universities. Also the researcher obtained an approval letter from Moi University for conducting the study. The selected universities where data was collected from issued the researcher with an Authorization Letter for the purpose of data collection.
3.6.4 Reliability of the Instruments

The reliability of the instruments was established through the Cronbach Alpha method and the test-retest method.

Cronbach Alpha method was done to establish the reliability of the data collected in this study. Cronbach's alpha is the most widely used measure of the reliability of instruments in the social sciences for establishing internal consistency of data. The Cronbach alpha is expressed in terms of a reliability coefficient and the Alpha values usually lie between 0 and 1 (Hair et al, 2006). It indicates the extent to which a set of test items can be treated as measuring a single latent variable (Malhotra, 1999). In addition, the Cronbach coefficient alpha has the advantage of producing a reliability estimate with only one administration. Although there is no prescribed standard, a scale that renders a reliability coefficient of above 0.70 is usually regarded as a reliable instrument (Nunnally and Bernstein, 1994). A Cronbach alpha of 0.50 has, however, been regarded in other studies as acceptable for basic research (Tharenou, 1993; Pierce and Dunham, 1987).

According to Cooper and Schindler (2006) reliability is the measure of the degree to which a research instrument yields consistent results or data after repeated trials. Hair et al, (2006) state that the test-retest reliability should give the same results whenever the test is applied. The two separate administrations should only be a few days or a few weeks apart; and that the time should be short enough so that the examinees’ skills in the area being assessed have not changed through additional learning. This type of reliability demonstrates the extent to which a test is able to produce stable, consistent scores across time. To estimate test-retest reliability, the study administered the questionnaire to a single group of respondents on two separate occasions at Technical University of Kenya. The period between the two administrations was two weeks.

To ensure reliability of the instruments, the respondents were randomly selected to give each member of the target population an equal chance to participate in the study. The researcher conducted a pilot study at The Technical University of Kenya. Based on the feedback from the respondents in the pilot sample, improvements were made to the questionnaire items. Reliability is important for credibility of the data collected.
3.6.5 Validity of the Instruments

This study reviewed literature to identify the relevant concepts and dimensions related to the themes of this study. Validity is the extent to which a research instrument measures what it was intended to measure (Nsubuga, 2000). Convergent validity is the ability of a scale to correlate with other scales that claim to measure the same construct (Schmidt & Hollensen, 2006). Discriminant validity is the magnitude of the relationship between the items and latent construct which should be statistically different from zero (Byrne, 2001). Validity recommended threshold value was 0.50 according to Hair et al. (1995). All the constructs had values greater than 0.50, demonstrating convergent and discriminant validity. Discriminant validity was established by the researcher by subjecting the questionnaire items to exploratory factor analysis. This reduced the items into a set of uncorrelated items to measure strategy implementation and performance constructs. These new constructs were renamed as leadership and culture (strategy implementation) and research, financial sustainability, society expectations and employee effectiveness (university performance). According to Cooper & Schindler (2003), discriminant validity seeks to isolate a construct so that it measures what others do not measure.

Content validity is the extent to which the instruments adequately cover the full range of the concepts’ meanings. Content validity of the instruments was established through expert opinion and suggestions from the study supervisors as well as other senior researchers and academicians within Moi University. Relevant improvements were thus made on the data collections tools based on their input.

Construct validity is defined by Kothari (2004) as the extent to which a set of items in the questionnaire reflect the theorized constructs it is supposed to measure. Construct validity of the instruments was established through a review of theories informing the major subjects of this study to establish the existence of the constructs. Expert opinion was also sought from the research supervisors and based on their input, improvement of the research instrument was done.

Face validity was established by inspecting the concepts being studied for their appropriateness to logically appear to reflect what was intended to be measured. The study also ensured external validity, which is the extent to which the study findings can be generalized (Kasomo, 2007). This
enabled the researcher to generalize the findings of the study to the population of the universities from which the samples were drawn.

3.8 Measurement of Study Variables
The principal aim of this study was to examine the moderating effect of planning typologies on the relationship between strategy implementation and performance of universities in Kenya. The study variables were based on the review of the existing literature which established that most of the tools were inadequately developed to measure the variables in this study. Therefore, the items were modified so as to be able to measure the study variables with the assistance of supervisors.

3.7.1 Dependent Variable
The dependent variable was University performance and was measured using 4 dimensions and 24 questions were developed to capture the four dimensions of performance under investigation. The dimensions were research, financial sustainability, societal expectations and employee effectiveness respectively as shown in Appendix ii. Each question on the dependent variable was assessed on a Likert scale of 1 to 5 ranging from 1 - strongly disagree to 5 - strongly agree. A total of 24 questions were developed to capture the four dimensions of performance under investigation. The questions were adapted from the work of Armstrong (2006) and Sapienza et al (1988) and modified to fit the context of university performance. Negatively worded items were also carefully reviewed and modified to fit the context of the study. Negatively worded items are important in reducing the response bias since the respondents have to read the items carefully in case they are phrased the other way round (Field, 2005).

3.7.2 Independent Variables
The independent variable for the study was Strategy Implementation which comprised of organizational leadership and organizational culture. Organizational leadership was measured using questions that were adapted from the works of Bass and Avolio (2000) and edited to fit the context of university leadership. Each question was measured in a five-point Likert scale ranging 1-5, 1 - strongly disagreed, 2 - disagree, 3 - neutral, 4 - agree and 5 - strongly agree using 5 questionnaire items adapted from the study. The questions were modified to fit the context of strategic management. Organizational culture was measured using 10 questionnaire items adapted from the study. The questions were adapted from reviewed literature and modified to fit the context of university culture.
3.7.3 Moderating Variable

The moderator variable was planning typologies which had two dimensions namely reactive and proactive typologies used in the hierarchical multi regression analysis. Each typology was measured using five (5) questionnaire items which were adapted from Miles & Snow (1978). Each question was measured by five-point Likert scale ranging from 1- Strongly disagree to 5- Strong agree. Multi regression analysis was used to test the moderating effect of planning typologies on the relationship between strategy implementation and performance of universities thus 16 hypotheses were formulated.

3.7.4 Control Variables

A control variable is any factor that remains unchanged and strongly influences values; it is held constant to test the relative impact of an independent variable, variable that is controlled because of possible influence but not studied. These variables were controlled because they could influence the decision whether or not the strategy implementation affects university performance (Topa et. al. 2009; Armstrong-Stassen, 2008). Previous studies have concluded that the size of an organization has an influence on the performance of the organization (Huang, Che, HashemSalarzadeh, Farihah & Son, 2013; Adinoyi, Yusof & Ernawati, 2014; Babalola, 2013). Further, studies by Kimberly & Evanisko, (1981) suggest that organizational size is usually considered as a control variable in studies relating to performance. Likewise, Shumway (2001), suggests that age can be used a control variable in studies relating to performance.

In this study, the age and size of the university were used as control variables. Kimberly & Evanisko (1981) propose that organization size should be included as a control variable to prevent it from biasing the findings of such studies as this. As proposed by Schminke, Cropanzano, & Rupp (2002), the study measured organization size by asking for the number of students in the selected universities. In addition, the study measured organization age by establishing the year of establishment from the Commission for University Education (2015). The control variables (size and age of the university) were entered first in the regression model.

3.9 Data Analysis Methods and Modeling

Data was analyzed using quantitative methods. Data was collected, screened for errors, coded and analyzed. Further, erroneous entries were cleaned through simple frequency runs. There were 431 usable questionnaires from the respondents of the study that were collected for
analysis. However, 1 questionnaire was unusable and thus was excluded from further analysis. SPSS enabled the researcher to manipulate and transform variables into desired forms through its set of procedures hence collected data was broadly analyzed. The variables were measured at individual level and the researcher was interested in the unit of analysis (university employee).

Descriptive statistics was used for data analysis methods to obtain means, standard deviations to measure central tendencies to show the degree of independent variable and dependent variable and dispersion for grouped frequency distribution for comparison purposes. Results were presented in tables in chapter four of this study.

Quantitative data analysis methods were used to analyze data. Pearson’s Product Moment Correlation Test was used to analyze data so as to establish the relationship between the variables of the study.

The hypotheses of the study testing the effects of specific independent variables on the specific dependent variables as well as the effect of the moderating variables on the relationship between the independent variables and dependent variables were tested using multiple regression analysis. Hierarchical multiple regression analysis was conducted to establish the moderating effect of planning typologies on the relationship between strategy implementation and university performance as posited in hypotheses H03-6.

The study had two analytical models. The first model had only dependent variables regressed on the independent variables. In the second model product terms (independent and moderator) were computed and regressed against the dependent variables. This method was applied to predict the relationship between a dependent and independent variables (Osen and Onen, 2009).

3.8.1 Pearson’s Product Moment Correlation Test
The study utilized the Pearson’s Product Moment Correlation Test to establish the relationship between independent and dependent variables by measures the strength of association between two ranked variables. This parametric test is performed on the data that is normally distributed,
having been obtained from a random sample of a population (Cooper and Schindler, 2011). The test also operates on the assumptions that there is linearity of the data and that the ratio or interval measurement scales were used to measure the data (Polonsky and Waller, 2005). The data that was used to test the hypotheses was measured on a 5-point attitudinal Likert scale. Such data, according to Cooper and Schindler (2011) is presumed to be interval in nature. This study further transformed the data collected for each Independent Variable (IV) and Dependent Variable (DV) measure into a composite variable for each variable to get a sum mean score that was later grouped into an interval scale for further analysis. After relationships were established, the data was subjected to multiple regression analysis.

3.8.2 Multiple Regression Analysis

Multiple regression analysis was used to test the hypotheses of the study. This parametric test is performed on data that has linearity and is normally distributed and measured on interval or ratio scale. This study used the multiple regression equation to test the general objective of the study which is to establish the extent to which strategic implementation and planning typologies affect the performance of universities in Kenya. A moderated regression analysis equation was formulated and used to test for the moderating effect of the planning typologies on the relationship between strategy implementation and university performance in Kenya.

3.8.3 Analytical Models

The models that explained the performance of universities were captured in the following hierarchical analytical regression equations. The models also constituted the control variables (size and age of university) which were first entered into the models.

Model I: \[ y = \alpha + \text{age} + \text{size} + e \] \hspace{1cm} (1)

Model II: \[ y = \alpha + \text{age} + \text{size} + \beta_1 x_1 + \beta_2 x_2 + e \] \hspace{1cm} (2)

Model III: \[ y = \alpha + \text{age} + \text{size} + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + e \] \hspace{1cm} (3)

Model IV: \[ y = \alpha + \text{age} + \text{size} + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + z_1 + z_2 + z_3 + z_4 + e \] \hspace{1cm} (4)
Where:

$y$ is Performance (utilized 4 dimensions i.e research, financial sustainability, society expectation and employee effectiveness)

$\alpha_1$ and $\alpha_2$ are constants

$x_1$ is Leadership (measured using 5 point likert scale)

$x_2$ is Culture (measured using 5 point likert scale)

$x_3$ is Reactive (measured using 5 point likert scale)

$x_4$ is Proactive (measured using 5 point likert scale)

Control Variables (measured using Age and Size of the university)

$z_1$ is Interaction between Leadership and Reactive

$z_2$ is Interaction between Leadership and Proactive

$z_3$ is Interaction between Culture and Reactive

$z_4$ is Interaction between Culture and Proactive

$\beta_1$ to $\beta_4$ represents coefficient values

$e$ is the standard error margins/terms

The moderating construct was planning typologies (reactive and proactive typologies). According to Sharma et al (1981), the construct is supposed to strengthen or alter the relationship between the independent variable (Strategy Implementation) and the dependent variable (Performance).

Moderation effects were tested with moderated multiple regression analysis, where all independent variables and their interaction terms were centered prior to model estimation to improve interpretation of regression coefficients (Cooper and Schindler, 2003). Equations III and IV have factored the moderating effects of planning typologies on the relationship between the independent and dependent variables.

The study looked at the F-statistic and its associated significance to determine if the regression equation was statistically appropriate as supported by Polonsky and Waller (2005). The R and R-squared values were used to determine the fitness of the model and if the observed value of R
was higher than 0, then the dependent variable and the independent variables were correlated. The degree of correlation was interpreted by R-squared which in also determined the fitness of the model by comparing it with the predictors values. A higher R-squared depicted a higher variance in the dependent variable (Cooper & Schindler, 2011).

The p-values were used to determine if the study could confidently report that the coefficients were statistically different from zero. If the p-value is less than 0.05 (for 1-tailed) or less than 0.001 (for 2-tailed), then the result is deemed to be significant and the null hypotheses are rejected.

### 3.8.4 Testing Assumptions of the Multiple Regression Analysis

All regression models have assumptions and violations of these assumptions can result in parameter estimates that may be biased, inconsistent and inefficient. Regression is robust to moderate with violations of normality, provided there are no outliers. According to Hair et al (2006) suggested that the assumption for multiple regression should be tested twice for the individual variables of the study and for the multiple regression models.

The testing assumptions for the Multiple Regression Analysis Model for the study included:

#### i. Normality of the Variables

Normality is the assumption that the scores on a continuous variable are normally distributed about the mean (Tharenou, Donohne and Cooper, 2007). Gravetter and Wallnau (2004) argue that the term normal is used to describe a symmetrical bell-shaped curve, which has the greatest frequency of the scores in the middle with smaller frequencies towards the extremes and that the scores are distributed about the mean (The bell-shaped distribution). Normality of data can be tested using both statistical and graphical methods. Statistical methods include Skewness and Kurtosis and Kolmogorv-Smirnof and Shapiro-Wilk measures as proposed by Tharenou, et. al., (2007); Tabachnick & Fidell, (2007) and Leech, et. al., (2011). As rule of thumb, the value of skewness should be less that +1 or greater than -1 (Leech, et. al. 2011). Variables that produce skewness outside the range of +1 or -1 can be transformed accordingly to see if they affect the regression results. The signs of skewness and kurtosis determine whether there are extremes. Positive skewness indicates that scores are clustered to the left of the low values; and negative skewness indicates clustering to higher values. Positive kurtosis indicate that the distribution is
rather peaked with long thin tail (leptokurtic) and negative kurtosis indicate extremes (platykurtic). Graphical methods include P-P Residual Histogram Plots and scatter plots. Normality of data was tested using P-P Plots and Scatter plots. Skewness and Kurtosis and Kolmogorov-Smirnof and Shapiro-Wilk measures were also used to test for the normality of the data. The data was found to be normally distributed.

ii. **Linearity**

Linearity refers to the degree to which the change in the dependent variable is related to the change in the independent variables (Hair, Black, Babin and Anderson, 2010). The relationship between each of the predictor for the independent variable and dependent variable could be linear. Linearity was tested using Pearson product moment correlation to test the correlation among the variables of this study. The aim of this was to see the inter-correlations among all pairs of predictors and determine whether multi-collinearity was likely to be a problem (Leech, et. al., 2011). Leech et. al. (2011) also argues that if the variables are highly correlated at 0.6 and above and the conceptually related are likely to be combined into composite variable of one or more of the highly correlated variables should be deleted.

However, Cohen, et al. (2003) argues that the cut-off point is at 0.8. In addition, the suggested cut-off point for determining multi-collinearity is a tolerance value of less that 0.10 or a Variance Inflation Factor (VIF) value of above 10 (Hair, et. al., 2006; Leech et. al. 2011). Tolerance refers to the amount of variability of the selected independent variable which is not explained by other independent variable, while VIF is the inverse of tolerance. Stone and Hollenbeck (1998) observed that linear by linear interaction terms were created by multiplying the proposed moderator by intended variable. For linear regression models, the degree of change should be consistent across all the data points. A line of best fit should be best linear unbiased estimator (BLUE). In this study, linearity was tested using P-P plots of regression standardized residuals, scatter plots and the $R^2$ value.

iii. **Independence of the Error Term**

This was meant to test the presence of serial correlation among the residuals. Independence of errors requires that residuals terms of any two observations are independent. Each case or observation should be independent of one another such that residuals or errors in prediction do not follow a particular pattern from case to case. This implies that the models could not suffer
from the problems associated with correlated errors. The regression model assumes that the errors from the prediction line are independent. This is an assumption for statistical tests to be accurate. Durbin Watson Test was used to determine the independence of errors. Durbin Watson Test value statistics ranges from 0 to 4 (Hair et al, 2010).

iv. Multi-collinearity.
According to William et al (2013), multi-collinearity refers to the presence of correlation between the predictor variables. Multi-collinearity occurs when two or more independent variables are highly correlated. Multi-collinearity makes it difficult to determine the separate effects of individual variables. Highly correlated independent variables cause computational and interpretational problems (Saunders et al, 2009, Lewis and Thornhill, 2009). In order to test for multi-collinearity among the predictor variables, variance-inflation factor (VIF) and tolerance were applied. Pearson’s Product Moment Correlation also was used to test for multi-collinearity. A higher correlation of greater than 0.8 depicted a mult-collinearity problem (Neter et al., 1996; Ott and Longnecker, 2001).

v. Homoscedasticity and Heteroscedasticity
Homoscedasticity was examined by visualizing scatter plots and partial regression plots for individual variables (Pallant, 2010). This means the dependent variable scores have the same dispersion/variability around the regression line through them, to mean they have equal spread. Outliers, which have been defined as cases that have a standardized residual value of more than 3.3 or less than -3.3 (Tabachnick & Fidell, 2007), were inspected. Also, the disturbances appearing in the population regression functions are homoscedastic meaning that they have the same variance regardless of the values taken by the exogenous variables. This assumption was checked by visual examination of a plot of the standardized residuals (the errors) by the regression standardized predicted value.

3.10 Limitations of the Study
The study should have been carried out in all chartered universities in Kenya as an ideal situation. However, the study selected a few chartered both public and private universities. This may limit the generalizability of the findings to other universities in the country. All universities operate under the Universities’ Act but only the government owned (public) universities receive funding from the government. As a result, there may be a difference in strategy formulation and
implementation between public and private universities, thus the findings may not be generalized to all institutions. Measurement of study variables using the perception of the respondents was found to be a limitation. However, collecting of data from many respondents from within the same university may enable the researcher to generalize the findings.

3.11 Ethical Considerations
Economic and Social Research Council (2015) defined research as the moral principles that guide research from its inception to completion and publication of the results. Ethics embody individual and communal codes of conduct based on set of principals which may be abstract and impersonal or personal (Zimbardo, 1984). Scholars (Mason, 2002; Hammersly & Athison, 2007; Bassey, 1999; Babie, 2001; Burgess, 1989; Gillham, 2000; Gregory, 2003; Stake, 2005; Yin, 2009; Walford, 2008b; Jwan and Ong’ondo, 2011) have identified several ethical issues to be considered while conducting social science research such as approval, voluntarily participation, no harm to participants, anonymity, privacy, confidentiality, deception and reporting.

In this study, an ethical approach to research was formulated with two considerations. The first consideration was founded on the basis of a set of belief systems about what was deemed to be in the best interest of the respondents. In view of this consideration, the respondents were fully informed of the nature and purpose of this research, the procedures that were to be used and the expected benefits to the participant and the university or society. The respondents were given an opportunity to ask questions, which were be answered. The respondent’s consent to participate in this research was obtained voluntarily.

The second consideration dealt with attending to processes and systems associated with the research procedure. The researcher obtained a letter of introduction from Moi University, to collect data and a research permit was obtained from National Council for Science Technology and Innovation (NACOSTI). A letter showing the authorization to collect data was issued by each selected university allowing the researcher to freely administer the questionnaires.
CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSIONS

4.1 Introduction

This chapter presents and describes analyzed data that was collected from the respondents of the study. The study sought to establish the extent to which strategy implementation affects performance of universities in Kenya. The respondents of the study selected employees of universities who are involved in strategic implementation of plans to improve university performance. This chapter is organized in terms of the preliminary data analysis, response rate, demographic characteristics of the respondents, descriptive statistics, reliability and validity of the instruments, regression assumptions tests, correlation analysis, multiple regression analysis, summary of hypotheses and discussion of findings. The results are presented in the context of the objectives and hypotheses of the study.

4.2 Preliminary Data Analysis

Data of all variables in the study were coded to enable grouping and analysis of the effects of the predictors on the measure of variables to ensure it met the minimum requirements for analysis. Data was screened for accuracy of entry and missing values were deleted for normality of the distribution while respondents’ profile was analyzed using frequencies.

4.2.1 Missing Values

The identified missing values were as a result of omissions made by respondents. From the data collected, there was only one missing value and this constituted less than 1% of the data and thus considered too trivial according to Little & Rubin (2002) and inconsequential to suppress the standard deviation (Field, 2009; Mushroom & Whatcom, 1998). The missing values were as a result of omissions which were unrelated to other values or variables (Little et al 2002; Acuna, Coaquira & Gouzalez, 2003). For this study, the missing value was replaced with the mean.

4.3 Response Rate

The study sought to get views of how planning typologies moderated the relationship between strategy implementation and university performance from 490 middle
level employees of public and private universities in Kenya. A total of 490 questionnaires were administered to the middle level employees in 12 universities. The respondents consisted of deans, directors, heads of departments/sections, registrars and administrators. The researcher managed to collect 431 questionnaires within the allowable timeframe on the work schedule. This represented a response rate of 87.95%. The researcher was unable to collect 59 questionnaires which represented 12.05% of the total questionnaires issued within the set timeframe. Nonetheless, screening and verification of data revealed that 1 questionnaire was not usable as the respondent did not answer all the questions. Thus, the final response rate for the study was 430 (87.75%). This was acceptable for the study.

4.4 Demographic Characteristics of the Respondents

It was necessary to understand the attributes of the unit of analysis for this study. This was done by analyzing the demographic characteristics of the respondents of the universities in Kenya. The respondents were required to provide information about their job title and the category of their university. The job title distribution of the respondents for Deans was 16.01%, Directors represented 12.99%, HoDs/Heads of Sections represented 50.58% while registrars and administrators were 20.19%. The results further indicate that the respondents from the public universities constituted 69.84% while those from the private universities constituted 30.16%. The demographics of the respondents are provided in Table 4.1.
Table 4.1: Job Title of Respondents per University

<table>
<thead>
<tr>
<th>Category of University</th>
<th>University</th>
<th>Dean</th>
<th>Director</th>
<th>HoD/Section</th>
<th>Registrar/Administrator</th>
<th>Missin g</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>University of Nairobi</td>
<td>10</td>
<td>4</td>
<td>31</td>
<td>10</td>
<td></td>
<td>55</td>
<td>12.76</td>
</tr>
<tr>
<td></td>
<td>Moi University</td>
<td>5</td>
<td>4</td>
<td>29</td>
<td>11</td>
<td></td>
<td>49</td>
<td>11.37</td>
</tr>
<tr>
<td></td>
<td>Egerton University</td>
<td>5</td>
<td>5</td>
<td>18</td>
<td>3</td>
<td></td>
<td>31</td>
<td>7.19</td>
</tr>
<tr>
<td></td>
<td>Masinde Muliro University</td>
<td>10</td>
<td>4</td>
<td>15</td>
<td>5</td>
<td></td>
<td>34</td>
<td>7.89</td>
</tr>
<tr>
<td></td>
<td>Kisii University</td>
<td>5</td>
<td>4</td>
<td>14</td>
<td>8</td>
<td>1</td>
<td>32</td>
<td>7.42</td>
</tr>
<tr>
<td></td>
<td>University of Eldoret</td>
<td>10</td>
<td>9</td>
<td>17</td>
<td>4</td>
<td></td>
<td>40</td>
<td>9.28</td>
</tr>
<tr>
<td></td>
<td>Multimedia University</td>
<td>2</td>
<td>1</td>
<td>23</td>
<td>5</td>
<td></td>
<td>31</td>
<td>7.19</td>
</tr>
<tr>
<td></td>
<td>Kibabii University</td>
<td>2</td>
<td>3</td>
<td>18</td>
<td>6</td>
<td></td>
<td>29</td>
<td>6.73</td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total</strong></td>
<td>49</td>
<td>34</td>
<td>165</td>
<td>52</td>
<td>1</td>
<td><strong>301</strong></td>
<td><strong>69.84</strong></td>
</tr>
<tr>
<td>Private</td>
<td>Baraton University</td>
<td>5</td>
<td>3</td>
<td>13</td>
<td>7</td>
<td></td>
<td>28</td>
<td>6.50</td>
</tr>
<tr>
<td></td>
<td>Catholic University</td>
<td>7</td>
<td>3</td>
<td>12</td>
<td>9</td>
<td></td>
<td>31</td>
<td>7.19</td>
</tr>
<tr>
<td></td>
<td>Kabarak University</td>
<td>4</td>
<td>7</td>
<td>13</td>
<td>4</td>
<td></td>
<td>28</td>
<td>6.50</td>
</tr>
<tr>
<td></td>
<td>KCA</td>
<td>4</td>
<td>9</td>
<td>15</td>
<td>15</td>
<td></td>
<td>43</td>
<td>9.98</td>
</tr>
<tr>
<td></td>
<td><strong>Sub Total</strong></td>
<td>20</td>
<td>22</td>
<td>53</td>
<td>35</td>
<td>0</td>
<td><strong>130</strong></td>
<td><strong>30.16</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>69</td>
<td>56</td>
<td>218</td>
<td>87</td>
<td>1</td>
<td>431</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Percentage of Respondent Category

<table>
<thead>
<tr>
<th></th>
<th>Dean</th>
<th>Director</th>
<th>HoD/Section</th>
<th>Registrar/Administrator</th>
<th>Missin g</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frequency</strong></td>
<td>69</td>
<td>56</td>
<td>218</td>
<td>87</td>
<td>1</td>
<td>431</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Percentage</strong></td>
<td>16.01</td>
<td>12.99</td>
<td>50.58</td>
<td>20.19</td>
<td>0.23</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016
4.5 Descriptive Statistics

Descriptive statistics were analyzed in terms of means, standard errors and standard deviations were obtained from the variables independent (strategy implementation) dependent, (university performance) and moderating (planning typologies).

4.5.1 University Performance

The study collected data from the deans, directors, heads of departments/sections, registrars and administrators to determine the mean for performance of universities. The variable for university performance had 24 items in total measuring employee effectiveness (9), financial sustainability (4), research (5) and society expectations (6). The results in Table 4.2 indicate that the means for employee effectiveness ranged from 3.53 to 4.26 while their standard deviation ranged from 0.76 to 1.19. The mean for financial sustainability ranged from 3.50 to 3.75. Table 4.2 indicates that the means for research ranged from 3.54 to 4.15 while the mean for society expectations ranged from 3.89 to 4.06. Since the minimum score was 1 and the maximum score was 5, the mean was 3. The average respondents’ score were all above the mean.
<table>
<thead>
<tr>
<th>Performance Items</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness Statistic (S.E = .118)</th>
<th>Kurtosis Statistic (S.E. = .235)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Effectiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognition for High Achievement</td>
<td>4.269</td>
<td>0.037</td>
<td>0.761</td>
<td>-1.167</td>
</tr>
<tr>
<td>Utilization of National Resource</td>
<td>3.942</td>
<td>0.05</td>
<td>1.034</td>
<td>-1</td>
</tr>
<tr>
<td>Support for Employee Training &amp; Development</td>
<td>3.981</td>
<td>0.045</td>
<td>0.93</td>
<td>-1.114</td>
</tr>
<tr>
<td>Efficient Service Delivery</td>
<td>4.033</td>
<td>0.041</td>
<td>0.859</td>
<td>-1.079</td>
</tr>
<tr>
<td>Performance Appraisal</td>
<td>3.826</td>
<td>0.05</td>
<td>1.045</td>
<td>-0.874</td>
</tr>
<tr>
<td>Increased Number of Staff</td>
<td>3.916</td>
<td>0.049</td>
<td>1.012</td>
<td>-1.107</td>
</tr>
<tr>
<td>Use of Technology</td>
<td>4.07</td>
<td>0.04</td>
<td>0.831</td>
<td>-1.309</td>
</tr>
<tr>
<td>Graduates Easily Fit the Job Market</td>
<td>4.227</td>
<td>0.037</td>
<td>0.774</td>
<td>-1.203</td>
</tr>
<tr>
<td>No Intention to Leave</td>
<td>3.538</td>
<td>0.058</td>
<td>1.196</td>
<td>-0.509</td>
</tr>
<tr>
<td>Financial sustainability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase of Internal Revenue</td>
<td>3.501</td>
<td>0.049</td>
<td>1.011</td>
<td>-0.64</td>
</tr>
<tr>
<td>Financial Discipline</td>
<td>3.661</td>
<td>0.054</td>
<td>1.113</td>
<td>-0.746</td>
</tr>
<tr>
<td>Reliance on Internally Generated Funds</td>
<td>3.543</td>
<td>0.053</td>
<td>1.105</td>
<td>-0.624</td>
</tr>
<tr>
<td>Operation Within Approved Annual Budget</td>
<td>3.757</td>
<td>0.053</td>
<td>1.104</td>
<td>-0.85</td>
</tr>
<tr>
<td>Research</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation of Research Policy</td>
<td>3.872</td>
<td>0.045</td>
<td>0.933</td>
<td>-0.884</td>
</tr>
<tr>
<td>Expansion of Opportunities for International Exposure</td>
<td>3.547</td>
<td>0.054</td>
<td>1.110</td>
<td>-0.657</td>
</tr>
<tr>
<td>Establishment of Linkages</td>
<td>4.063</td>
<td>0.044</td>
<td>0.919</td>
<td>-1.226</td>
</tr>
<tr>
<td>Participation in International Conferences</td>
<td>4.153</td>
<td>0.042</td>
<td>0.879</td>
<td>-1.337</td>
</tr>
<tr>
<td>Involvement in Technological Innovations</td>
<td>4.061</td>
<td>0.045</td>
<td>0.933</td>
<td>-1.145</td>
</tr>
<tr>
<td>Society Expectations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact on Society</td>
<td>4.012</td>
<td>0.043</td>
<td>0.898</td>
<td>-1.222</td>
</tr>
<tr>
<td>Provision of Extension Services</td>
<td>3.965</td>
<td>0.046</td>
<td>0.965</td>
<td>-1.038</td>
</tr>
<tr>
<td>Good Relations with Community</td>
<td>3.893</td>
<td>0.043</td>
<td>0.891</td>
<td>-1.198</td>
</tr>
<tr>
<td>Compliance with Health and Safety Regulations</td>
<td>3.993</td>
<td>0.043</td>
<td>0.888</td>
<td>-0.888</td>
</tr>
<tr>
<td>Promotion of Respect for Rule of Law</td>
<td>4.070</td>
<td>0.042</td>
<td>0.881</td>
<td>-1.283</td>
</tr>
<tr>
<td>Improvement in Performance</td>
<td>4.037</td>
<td>0.047</td>
<td>0.978</td>
<td>-1.108</td>
</tr>
</tbody>
</table>

**Source:** Survey Data, 2016
4.5.2 Organizational Leadership
The variable for university leadership had 5 items in total. The results in Table 4.3 indicate that the means for university leadership ranged from 3.34 to 4.04 while their standard deviation ranged from 0.883 to 1.169. Since the minimum score was 1 and the maximum score was 5, the mean was 3. The average respondents’ score were all above the mean.

<table>
<thead>
<tr>
<th>Table 4.3: Descriptive Statistics for Organizational Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td>Statistic</td>
</tr>
<tr>
<td>Organizational Leadership</td>
</tr>
<tr>
<td>Address of Employee Complaints</td>
</tr>
<tr>
<td>Leaders encourage employees to achieve results</td>
</tr>
<tr>
<td>Focus on Improved Performance</td>
</tr>
<tr>
<td>Equitable rewards for Employees</td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016

4.5.3 Organizational Culture
The variable for university culture had 10 items in total measuring level of communication (5) and rewards (5). The results in Table 4.4 indicate that the means for level of communication ranged from 3.26 to 3.71 while their standard deviation ranged from 0.46 to 0.57. The mean for rewards ranged from 2.51 to 2.87 and their standard deviations ranged from 1.246 to 1.297. Since the minimum score was 1 and the maximum score was 5, the mean was 3. The average respondents’ score for level of communication were all above the mean while the respondents’ score for rewards were all below the mean.

<table>
<thead>
<tr>
<th>Table 4.4: Descriptive Statistics for Organizational Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td>Statistic</td>
</tr>
<tr>
<td>Communication</td>
</tr>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Effective communication</td>
</tr>
<tr>
<td>Quick communication on strategic decisions</td>
</tr>
<tr>
<td>Provision of information for new developments</td>
</tr>
<tr>
<td>Easy communication between hierarchies</td>
</tr>
<tr>
<td>Feedback on performance</td>
</tr>
<tr>
<td><strong>Rewards</strong></td>
</tr>
<tr>
<td>Rewards for job competencies</td>
</tr>
<tr>
<td>Fair Employee Rewards Identification Systems</td>
</tr>
<tr>
<td>Impact of Rewards on Job performance</td>
</tr>
<tr>
<td>Annual rewards for employee retention</td>
</tr>
<tr>
<td>Rewards upon meeting targets</td>
</tr>
</tbody>
</table>

*Source: Survey Data, 2016*

### 4.5.4 Planning Typologies in Universities

The variable for planning typologies had 10 items in total measuring reactive planning typology (5) and proactive planning typology (5). The results in Table 4.5 indicate that the means reactive typology ranged from 3.64 to 3.92 while their standard deviation ranged from .8538 to 1.750. The mean for proactive planning ranged from 3.82 to 4.07 and their standard deviations ranged from .848 to 1.27. Since the minimum score was 1 and the maximum score was 5, the mean was 3. The average respondents’ score for planning typologies were all above the mean.
Table 4.5: Descriptive Statistics for Planning Typologies

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness (SE = 0.118)</th>
<th>Kurtosis (SE=0.235)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reactive Typology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees Whose Jobs are Related to Planning are Given Opportunities to Participate in Strategic Planning</td>
<td>3.579</td>
<td>0.049</td>
<td>1.021</td>
<td>-0.909</td>
</tr>
<tr>
<td>University has Collaboration Among Different Employees in Schools and Department</td>
<td>3.933</td>
<td>0.046</td>
<td>0.952</td>
<td>-0.988</td>
</tr>
<tr>
<td>University Schedules Activities to Achieve Goals Set</td>
<td>3.874</td>
<td>0.041</td>
<td>0.843</td>
<td>-1.140</td>
</tr>
<tr>
<td>University Ensures Efficiency in Allocation of Resources</td>
<td>3.726</td>
<td>0.050</td>
<td>1.046</td>
<td>-0.794</td>
</tr>
<tr>
<td>University has Developed Automated Processes to Cut on Operating Costs</td>
<td>3.661</td>
<td>0.051</td>
<td>1.054</td>
<td>-0.800</td>
</tr>
<tr>
<td><strong>Proactive Typology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University has Monitoring and Control Mechanisms in its Operations</td>
<td>3.714</td>
<td>0.051</td>
<td>1.055</td>
<td>-0.890</td>
</tr>
<tr>
<td>University gives Constant Feedback on Progress of Activities</td>
<td>3.512</td>
<td>0.051</td>
<td>1.066</td>
<td>-0.611</td>
</tr>
<tr>
<td>University Always Assesses the Operating Environment to Spot Changes for Adaptation</td>
<td>3.577</td>
<td>0.052</td>
<td>1.085</td>
<td>-0.628</td>
</tr>
<tr>
<td>University has Continued to Ensure Quality of Academic programmes</td>
<td>4.079</td>
<td>0.040</td>
<td>0.836</td>
<td>-1.162</td>
</tr>
<tr>
<td>University Rarely Makes Major Adjustments in its Technology and Methods of Operations</td>
<td>2.830</td>
<td>0.061</td>
<td>1.269</td>
<td>-0.022</td>
</tr>
</tbody>
</table>

**Source:** Survey Data, 2016

Descriptive analysis was conducted to describe the study variables and check for any violation of assumptions underlying regression analysis. The means and standard deviations for each variable were computed and are presented in Table 4.6.
Table 4.6: Summary of Descriptive Statistics for Study Variables

<table>
<thead>
<tr>
<th>#</th>
<th>Variable</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Performance</td>
<td>3.9213</td>
<td>.61391</td>
<td>0.9360</td>
</tr>
<tr>
<td>2</td>
<td>Leadership</td>
<td>3.9192</td>
<td>.78093</td>
<td>0.8710</td>
</tr>
<tr>
<td>3</td>
<td>Culture</td>
<td>3.2870</td>
<td>.76844</td>
<td>0.9030</td>
</tr>
<tr>
<td>4</td>
<td>Reactive</td>
<td>3.7544</td>
<td>.78765</td>
<td>0.8580</td>
</tr>
<tr>
<td>5</td>
<td>Proactive</td>
<td>3.7197</td>
<td>.83859</td>
<td>0.6310</td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016

N=430; Alpha = 0.96 (49 Items)

From the findings, the dependent variable, performance, had a mean of 3.92 with a standard deviation of .61391. The independent variables, leadership and culture, had means of 3.91 and 3.28 respectively and standard deviations of .78093 and .76844 respectively. The moderating variables, reactive and proactive planning typologies had means of 3.75 and 3.71 respectively and standard deviations of .78765 and .83859 respectively.

4.6 Reliability and Validity Test

Cronbach’s Coefficient Alpha was used to calculate the internal consistency reliabilities for all continuous variables. All the questions were subjected to Factor Analysis to test their validity.

4.6.1 Reliability

The reliability coefficients (α) of each of the variables are as follows. Performance = 0.936, Leadership = 0.871, Culture = 0.903, Reactive = 0.858, Proactive = 0.631. Internal consistency reliabilities for the variables (IV, DV and MV) were above the cutoff alpha value of 0.6, hence the instruments were reliable. Table 4.7 presents this information.

Table 4.7: Cronbach’s Alpha Reliability Tests

<table>
<thead>
<tr>
<th>#</th>
<th>Variable</th>
<th>Cronbach’s Alpha Coefficient</th>
<th>No. of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Performance</td>
<td>0.936</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>Leadership</td>
<td>0.871</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Culture</td>
<td>0.903</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Reactive</td>
<td>0.858</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Proactive</td>
<td>0.631</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016

4.6.2 Test for Scale Factorability Adequacy of Data

Bartlett’s test of sphericity was used to assess the factorability of data while the Kaiser-Meyer-Olkin (KMO) test was used to assess the measure of sampling adequacy. Bartlett’s test of
sphericity was performed on the independent and dependent variables’ constructs to establish if sufficient correlations existed among the constructs. According to Hair et al. (2006) and Tabachnick and Fidell (2001), a KMO of 0.50 is considered suitable for factor analysis. However, Netemeyer et al. (2003) also opines that a KMO correlation above 0.60 - 0.70 is considered adequate for analyzing the factor analysis output. This study adopted Netemeyer et al’s (2003) threshold of 0.6.

Bartlett’s test of Sphericity as per (Bartlett, 1950) should provide a chi-square output that must be significant with indication that the matrix was not an identity matrix and accordingly it should be significant (p < 0.01) for factor analysis to be suitable (Hair et al., 2006; Tabachnick & Fidell, 2001).

Kaiser-Meyer-Olkin and Bartlett’s tests of sampling adequacy and sphericity were performed on both strategy implementation as the IV and organizational performance as the DV to establish if the sample size was adequate for factor analysis. The results of the Bartlett’s test of sphericity and Kaiser-Meyer-Olkin measure of sampling adequacy for strategy implementation is shown in Table 4.8.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Test</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
<td>.946</td>
</tr>
<tr>
<td></td>
<td>Bartlett's Test of Sphericity</td>
<td>Approx. Chi-Square 5297.365</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sig. 0.000</td>
</tr>
<tr>
<td>Strategy Implementation</td>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
<td>.921</td>
</tr>
<tr>
<td></td>
<td>Bartlett's Test of Sphericity</td>
<td>Approx. Chi-Square 4592.974</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sig. 0.000</td>
</tr>
<tr>
<td>Planning Typologies</td>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</td>
<td>.931</td>
</tr>
<tr>
<td></td>
<td>Bartlett's Test of Sphericity</td>
<td>Approx. Chi-Square 2381.830</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sig. 0.000</td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016 (N = 430)

The results of the Bartlett’s test of sphericity (significant at 0.01), done to ensure sufficient correlations existed among the variables, were significant (KMO = .946, X²=5297.365, df=276, p=0.000 for performance; KMO = .921, X²=4592.974, df=105, p=0.000 for strategy
implementation and KMO= .931, $X^2=2381.830$, df=45, p=0.000 for strategic planning
typologies). This meant that there existed sufficient correlations among the constructs for each
variable. All the results for the KMO measure of sampling adequacy were above 0.5 as suggested
by Hair et al (2006). This showed that the sample size was adequate for the variables to be factor
analyzed.

4.6.3 Factor Analysis
Factor analysis with Varimax Rotation was performed on all the variables of the study in order to
eX

extract the dimensions underlying each construct.

4.6.3.1 Factor Analysis for Dependent Variable (University Performance)
The dependent variable (university performance) was subjected to factor analysis. There were 24
questionnaire items measuring performance. From the factor analysis, 19 items had factor
loadings of 0.5 and above while 5 items failed to meet the 0.5 criteria and were dropped from the
study. Four components with Eigen values greater than 1 were extracted which cumulatively
explained 62.579% of variance on university performance as shown in Table 4.9. Based on the
stated results, the construct validity for performance was established. The four factors that
emerged were used in the subsequent analysis.

Table 4.9: Total Variance Explained for University Performance

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigen values</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>7.977</td>
<td>41.985</td>
</tr>
<tr>
<td>2</td>
<td>1.553</td>
<td>8.173</td>
</tr>
<tr>
<td>3</td>
<td>1.308</td>
<td>6.885</td>
</tr>
<tr>
<td>4</td>
<td>1.052</td>
<td>5.536</td>
</tr>
<tr>
<td>5</td>
<td>.768</td>
<td>4.043</td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016 (Extraction Method: Principal Component Analysis)

A component rotation using Varimax with Kaiser Normalization reveals that six items of the
scale (University Implements Approved Research Policy, University has Expanded Opportunities
for International Exposure for Employees, University Establishes Linkages with Players in Other
Sectors, University Participates in International Conferences, University in Involved in
Technological Innovations, University Provides Relevant Extension Services to Community, )
were loaded on the first factor renamed Research and they explained 18.01% of the total
variance for this component.
Further, a rotation using Varimax with Kaiser Normalization revealed 4 items on factors two. These were University Increases Internal Revenue, University Instills Financial Discipline in Operations, University Relies on Internally Generated Funds and, University Operates within Approved Annual Budget, which were renamed as University *Financial sustainability*. Cumulatively, they explained the factor by 16.02%.

The third factor extracted was explained by 5 items of the scale (University is Recognized for Achievement of High Academic Standards, University Uses Technology, University Graduates Easily Fit in the Job Market, University has Good Relations with Community and University Promotes Respect for Rule of Law) and was renamed *Society Expectations*. These items represented the factor by 14.65%.

The fourth factor was explained by 4 items on the questionnaires (University Supports Employee Training and Development, University has Efficient Service Delivery, University Does Performance Appraisal and University has Increased Number of Senior Academic Staff) and was renamed as *Employee Effectiveness*. This represented the factor by 13.90%.

Cumulatively, these 19 questionnaire items represented the dependent variable by a cumulative variance of 62.58%. The highest Eigenvalue was 7.977, which represented university research while the least Eigenvalue was 1.052, which represented employee effectiveness. Table 4.10 presents this summary.
### Table 4.10: Rotated Factor Loadings for University Performance

<table>
<thead>
<tr>
<th>Factors/Items</th>
<th>Loadings</th>
<th>Eigenvalue</th>
<th>% of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>University Research</strong></td>
<td></td>
<td>7.977</td>
<td>18.010</td>
</tr>
<tr>
<td>University Participates in International Conferences</td>
<td>.783</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Establishes Linkages with Players in Other Sectors</td>
<td>.777</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University in Involved in Technological Innovations</td>
<td>.667</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Provides Relevant Extension Services to Community</td>
<td>.615</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University has Expanded Opportunities for International Exposure for Employees</td>
<td>.594</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Implements Approved Research Policy</td>
<td>.532</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Financial sustainability</strong></td>
<td></td>
<td>1.553</td>
<td>16.020</td>
</tr>
<tr>
<td>University Operates Within Approved Annual Budget</td>
<td>.755</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Relies on Internally Generated Funds</td>
<td>.733</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Instills Financial Discipline in Operations</td>
<td>.712</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Increases Internal Revenue</td>
<td>.628</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Society Expectations</strong></td>
<td></td>
<td>1.308</td>
<td>14.648</td>
</tr>
<tr>
<td>University is Recognized for Achievement of High Academic Standards</td>
<td>.737</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Graduates Easily Fit in the Job Market</td>
<td>.692</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University has Good Relations with Community</td>
<td>.691</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Uses Technology</td>
<td>.594</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Promotes Respect for Rule of Law</td>
<td>.584</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Employee Effectiveness</strong></td>
<td></td>
<td>1.052</td>
<td>13.902</td>
</tr>
<tr>
<td>University has Efficient Service Delivery</td>
<td>.663</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Supports Employee Training and Development</td>
<td>.637</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University has Increased Number of Senior Academic Staff</td>
<td>.632</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Does Performance Appraisal</td>
<td>.611</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 7 iterations.
Source: Survey Data, 2016
4.6.3.2 **Factor Analysis for Independent Variable, Strategy Implementation**

The independent variable (strategy implementation) was subjected to factor analysis. There were 15 questionnaire items measuring the independent variable. From the factor analysis output, all the 15 items had factor loadings of 0.5 and above. Two components with Eigen values greater than 1 were extracted which cumulatively explained 65.883% of variance on strategy implementation as shown in Table 4.11. Based on the above results, the construct validity for strategy implementation as the independent variable was established.

**Table 4.11: Total Variance Explained for Strategy Implementation**

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>7.156</td>
<td>47.704</td>
</tr>
<tr>
<td>2</td>
<td>2.727</td>
<td>18.178</td>
</tr>
<tr>
<td>3</td>
<td>.858</td>
<td>5.717</td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016

Extraction Method: Principal Component Analysis

A rotation using Varimax with Kaiser Normalization reveals that 9 items of the scale (Top Management in University Provides Adequate Information on New Development, University Quickly Passes Communication on Strategic Decisions, Top Management in University Focuses on Improved Performance, University Leadership Encourages Employees to Achieve Results, University Communicates Effectively with Employees, Communication Between Different Levels of Hierarchy in University is Easy, University Leadership Addresses Complaints Raised by Employees, University Leadership is Committed to Achieve Set objectives, University Ensures Employees are Rewarded Equitably) were loaded on the first factor renamed *University Leadership* and they explained 35.97% of the total variance for this component.

Further, the rotation using Varimax with Kaiser Normalization revealed that the remaining 6 items (Rewards Given Help Staff to Improve on Service Delivery, University Rewards Staff Upon Meeting Targets, University Rewards Staff for Competencies, University has a Fair System of Identifying Performing Employees, University Annually Gives Rewards to Attract and Retain Performing Employees, University Gives Feedback on Individual Performance) explained the second component, renamed as *University Culture*, by 29.91%.
Cumulatively, these 15 questionnaire items represented the dependent variable by a cumulative variance of 65.88%. The Eigenvalue for University Leadership was 7.16, while University Culture had an Eigenvalue of 2.727. Table 4.12 presents this summary. Based on these results, the construct was deemed valid.

*Table 4.12: Rotated Factor Loadings for Strategy Implementation*

<table>
<thead>
<tr>
<th>Factor/Items</th>
<th>Loadings</th>
<th>Eigenvalue</th>
<th>% of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>University Leadership</strong></td>
<td></td>
<td>7.156</td>
<td>35.972</td>
</tr>
<tr>
<td>Top Management in University Provides Adequate Information on New Development</td>
<td>.795</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Quickly Passes Communication on Strategic Decisions</td>
<td>.792</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top Management in University Focuses on Improved Performance</td>
<td>.782</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Leadership Encourages Employees to Achieve Results</td>
<td>.775</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Communicates Effectively with Employees</td>
<td>.771</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Between Different Levels of Hierarchy in University is Easy</td>
<td>.766</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Leadership Addresses Complaints Raised by Employees</td>
<td>.765</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Leadership is Committed to Achieve Set objectives</td>
<td>.705</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Ensures Employees are Rewarded Equitably</td>
<td>.562</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>University Culture</strong></td>
<td>2.727</td>
<td>29.911</td>
<td></td>
</tr>
<tr>
<td>Rewards Given Help Staff to Improve on Service Delivery</td>
<td>.885</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Rewards Staff Upon Meeting Targets</td>
<td>.878</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Rewards Staff for Competencies</td>
<td>.874</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University has a Fair System of Identifying Performing Employees</td>
<td>.863</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Annually Gives Rewards to Attract and Retain Performing Employees</td>
<td>.862</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Gives Feedback on Individual Performance</td>
<td>.532</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016

4.6.3.3 Factor Analysis for Moderating Variable, Planning Typologies

The moderating variable (planning typologies) was subjected to factor analysis. There were 10 questionnaire items measuring the moderating variable. From the factor analysis output, all the 10 items had factor loadings of 0.5 and above. Two components with Eigen values greater than 1 were extracted which cumulatively explained 65.457% of variance on planning typologies as shown in Table 4.13. Based on the above results, the construct validity for strategy implementation as the independent variable was established.

Table 4.13: Total Variance Explained for Moderating Variable, Planning Typology

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Rotation Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>5.522</td>
<td>55.219</td>
</tr>
<tr>
<td>2</td>
<td>1.024</td>
<td>10.238</td>
</tr>
<tr>
<td>3</td>
<td>.710</td>
<td>7.098</td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016 Extraction Method: Principal Component Analysis.

A rotation using Varimax with Kaiser Normalization reveals that 9 items of the scale (University Always Assesses the Operating Environment to Spot Changes for Adaptation, University gives Constant Feedback on Progress of Activities, University Ensures Efficiency in Allocation of Resources, University has Monitoring and Control Mechanisms in its Operations, University Schedules Activities to Achieve Goals Set, Employees Whose Jobs are Related to Planning are Given Opportunities to Participate in Strategic Planning, University has Collaboration Among Different Employees in Schools and Department, University has Developed Automated Processes to Cut on Operating Costs, University has Continued to Ensure Quality of Academic Programmes) were loaded on the first factor renamed Reactive Typology and they explained 54.12% of the total variance for this component. Further, the rotation using Varimax with Kaiser Normalization revealed that the remaining 1 item (University Rarely Makes Major Adjustments in its Technology and Methods of Operations) explained the second component, renamed as Proactive Typology, by 11.34%.
Cumulatively, these 10 questionnaire items represented the moderating variable by a cumulative variance of 65.46%. The Eigenvalue for Reactive Typology was 5.522, while Proactive Typology had an Eigenvalue of 1.024. Table 4.14 presents this summary. Based on these results, the construct was deemed valid.

**Table 4.14: Rotated Factor Loadings for Moderating Variables, Planning Typology**

<table>
<thead>
<tr>
<th>Factor/Items</th>
<th>Loadings</th>
<th>Eigenvalue</th>
<th>% of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reactive Typology</strong></td>
<td></td>
<td>5.522</td>
<td>54.121</td>
</tr>
<tr>
<td>University Always Assesses the Operating Environment to Spot Changes for Adaptation</td>
<td>.846</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University gives Constant Feedback on Progress of Activities</td>
<td>.833</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Ensures Efficiency in Allocation of Resources</td>
<td>.821</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University has Monitoring and Control Mechanisms in its Operations</td>
<td>.793</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Schedules Activities to Achieve Goals Set</td>
<td>.782</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees Whose Jobs are Related to Planning are Given Opportunities to Participate in Strategic Planning</td>
<td>.766</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University has Collaboration Among Different Employees in Schools and Department</td>
<td>.761</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University has Developed Automated Processes to Cut on Operating Costs</td>
<td>.716</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University has Continued to Ensure Quality of Academic Programmes</td>
<td>.639</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Proactive Typology</strong></td>
<td>1.024</td>
<td>11.336</td>
<td></td>
</tr>
<tr>
<td>University Rarely Makes Major Adjustments in its Technology and Methods of Operations</td>
<td>.970</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


*Source: Survey Data, 2016*
4.7 Tests for Regression Assumptions

4.7.1 Testing for Normality

Normality of the distribution was assessed using statistical and graphical methods. Skewness and Kurtosis were used to assess the normality of data. Skewness is the measure of the degree of symmetry of distribution while Kurtosis is the measure of the peakedness of flatness of a distribution (Tabachuk and Fidell, 2001). They state that skewness and Kurtosis values should be within the range of -2 to +2 when the variables are normally distributed. According to Leech et al. (2011), skewness can make significant difference in analysis and kurtosis can result in underestimated variance. Skewness and Kurtosis values ranging from ±3 are usually considered to have high levels of normality (Garson, 2012). Kline (1999) suggest that variables within values of skewness greater than 3.00 are considered as extremely skewed and variable with values of Kurtosis greater than 8.00 are considered as having extreme kurtosis. Similarly, Kolmogorov-Smirnov and Shapiro Wilk statistical tests were also used to test normality of the data. According to Ghozali (2005), normality can be detected by looking at the p-value of Kolmogorov-Smirnov test. If p-value is greater than the 5% significance level, the residuals are considered as normally distributed. Many of the statistical techniques used in research assume that the distribution of scores of the variables is ‘normal’. Gravetter and Wallnau (2004) argue that the term normal is used to describe a symmetrical bell-shaped curve, which has the greatest frequency of the scores in the middle with smaller frequencies towards the extremes.

The skewness for university performance was -1.179 with a standard error of 0.118 while the kurtosis was 1.639 with a standard error of 0.236. The skewness for the standardized independent variable, organizational leadership was -1.105 with a standard error of 0.118 and the kurtosis was 1.087 with a standard error of 0.235. The skewness for the standardized independent variable organizational culture was 0.022 with a standard error of 0.118 and the kurtosis was -0.992 with a standard error of 0.235. The skewness for the standardized reactive typology was -1.029 with a standard error of 0.118 while the kurtosis was 1.154 with a standard error of 0.235. The skewness for proactive typology variable was -.537 with a standard error of 0.118 while the kurtosis for proactive typology was .082 with a standard error of 0.235. Table 4.15 presents this information.

<table>
<thead>
<tr>
<th>Table 4.15: Summary of Normality Tests for Study Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>University performance</td>
</tr>
<tr>
<td>Organizational leadership</td>
</tr>
<tr>
<td>Organizational culture</td>
</tr>
<tr>
<td>Reactive typology</td>
</tr>
<tr>
<td>Proactive typology</td>
</tr>
</tbody>
</table>
In addition, data was assessed for normality by running Kolmogorov-Smirnov test and Shapiro-Wilk test. The tests were not significant (p<.05) for all the variables as shown in Table 4.16. This implies that the distribution of the sample was significantly different from a normal distribution. However, according to Hair et al (2010), a sample size greater than 200 tends to present significant departures from normality though the departure may not have a substantial impact on the results. Similarly, analyses using reasonably large samples of greater than 200 are unlikely to be affected by the skewness of the data (Tabachnick & Fidel, 2007).

Also, normality of data with larger sample sizes (>200) is better checked using graphical (visual) techniques such as normal probability (Q-Q) plots (Hair et al, 2010 and Field, 2009). Appendices v-xi presents the normality distribution for the standardized variable items using the Q-Q Plots.

### 4.7.2 Test for Linearity
Linearity means that the mean values of the outcome variable for each increment of the predictor(s) lie along a straight line. It can be tested using both statistical and graphical techniques. The most common statistical method is correlation analysis which can be used since it is a measure of the degree of association, to assess association between independent (predictor) and dependent (criterion) variables. Graphical methods include scatter plots generated from...
regressions among variables. Test for linearity for the two independent variables (Organizational leadership and Organizational Culture) was conducted to check whether they had a linear relationship with the independent variable (University Performance) using P-P Plots and Scatter plot. This was achieved by plotting the standardized residuals against predicted values, the points spread along the line of the best fit.

The figure in Appendix x shows a P-P Plot of Regression Standardized Residuals which depicts a linear relationship between the Dependent Variable (University Performance) and the Independent Variable (Strategy Implementation). This indicated linearity between the dependent variable and the independent variable.

In addition, the scatter plot figure was oval shaped and evenly dispersed, noting a positive linear relationship between the study variables as the scatter plot was skewed upwards from left to right. This also indicated linearity between the dependent variable and the independent variable. The figure in Appendix xi this illustration.

The graphical method indicates a linear relationship between Performance and Leadership. Mathematically, the $R^2$ was 0.58, further indicating a linear relationship. ($y=6.47e-3 + 0.77x$, where - e is the variance while .77 is the beta-coefficient).

The graphical method indicates a linear relationship between Performance and culture. Mathematically, the $R^2$ was 0.09, further indicating a linear relationship. ($y=1.99e-3 + 0.3x$, where - e is the variance while .3 is the beta-coefficient). From the above, culture was weak in its association with the dependent variable, performance. However, there is linearity between the two items. The figure in Appendix xii presents this output.

Further, linearity between the dependent variable and the moderator was tested using P-P Plot of Regression Standardized Residuals as shown in the figure in Appendix xiii. This depicted a linear relationship between the dependent variable and the moderator. The $R^2$ generated was 0.989, further indicating linearity between the two variables.

4.7.3 Test for Independence of the Error Terms
Independence of errors requires that residuals terms of any two observations are independent. Durbin Watson Test was used to determine the independence of errors if prediction of
independence errors were correlated. This was meant to test the presence of serial correlation among the residuals. This assumption of independence of errors requires that residuals or errors in prediction do not follow a particular pattern from case to case.

Durbin Watson Test value statistics ranges from 0 to 4 (Hair et al., 2010) and the residuals are not correlated if the Durbin Watson statistic is approximately 2 and the acceptable range is 1.5 to 2.5 intervals suggested by Tabachnic and Fidell (2001) as acceptable for non-correction of errors. The Durbin Watson statistic from the estimated composite model was 1.802. Table 4.17 presents this information.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>S.E. of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.807(^a)</td>
<td>.652</td>
<td>.648</td>
<td>.37319</td>
<td>1.802</td>
</tr>
</tbody>
</table>

\(^a\) Predictors: (Constant), proactive, culture, leadership, reactive
b. Dependent Variable: performance

Source: Survey Data, 2016

This implies that the models could not suffer from the problems associated with correlated errors.

### 4.7.4 Test for Homoscedasticity and Heteroscedasticity

This assumption was checked by visual examination of a plot of the standardized residuals (the errors) by the regression standardized predicted value. The figure in Appendices xiv-xx shows the plots that resulted from homoscedasticity and heteroscedastic data. The residuals are randomly scattered around 0 (the horizontal line), providing a relatively even distribution. Further, the standardized residuals lied between ±3.3. Scatter plots testing for homoscedasticity indicated the items clouded along the mean (0), suggesting homoscedasticity. But there are some plots showing that higher predicted values have lower residuals (lack of homoscedasticity). Appendix xv presents the scatter plot.

### 4.7.5 Test for Outliers

Cook’s Distance and Centered Leverage Value tests were used to identify outliers in the study. Outliers are observations that appears to deviate markedly from other observations in the sample. According to Garson (2012), multivariate outliers are cases which have a Cook’s distance greater than a cut-off value of 1. Garson (2012) also observes that multivariate outliers tend to have a
Centered Leverage Value greater than a cutoff value of 0.5. The Cook’s Distance value in this study was 0.003 while the Centered Leverage Value was 0.009. From this output, there were no outliers to be deleted in the data collected. Table 4.18 presents the output for outlier tests.

**Table 4.18: Residuals Statistics for Multivariate Outliers**

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>S. D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predicted Value</td>
<td>2.1663</td>
<td>4.7585</td>
<td>3.9202</td>
<td>.49096</td>
</tr>
<tr>
<td>Std. Predicted Value</td>
<td>-3.572</td>
<td>1.707</td>
<td>.000</td>
<td>1.000</td>
</tr>
<tr>
<td>S.E. of Predicted Value</td>
<td>.018</td>
<td>.114</td>
<td>.038</td>
<td>.013</td>
</tr>
<tr>
<td>Adjusted Predicted Value</td>
<td>2.1651</td>
<td>4.7578</td>
<td>3.9200</td>
<td>.49092</td>
</tr>
<tr>
<td>Residual</td>
<td>-1.35715</td>
<td>1.20002</td>
<td>.00000</td>
<td>.36904</td>
</tr>
<tr>
<td>Std. Residual</td>
<td>-3.660</td>
<td>3.236</td>
<td>.000</td>
<td>.995</td>
</tr>
<tr>
<td>Stud. Residual</td>
<td>-3.680</td>
<td>3.323</td>
<td>.000</td>
<td>1.003</td>
</tr>
<tr>
<td>Deleted Residual</td>
<td>-1.37158</td>
<td>1.26495</td>
<td>.00023</td>
<td>.37498</td>
</tr>
<tr>
<td>Stud. Deleted Residual</td>
<td>-3.735</td>
<td>3.363</td>
<td>.000</td>
<td>1.007</td>
</tr>
<tr>
<td>Mahal. Distance</td>
<td>.028</td>
<td>39.144</td>
<td>3.991</td>
<td>4.048</td>
</tr>
<tr>
<td>Cook's Distance</td>
<td>.000</td>
<td>.119</td>
<td>.003</td>
<td>.009</td>
</tr>
<tr>
<td>Centered Leverage Value</td>
<td>.000</td>
<td>.091</td>
<td>.009</td>
<td>.009</td>
</tr>
</tbody>
</table>

*Source: Survey Data, 2016*  
Dependent Variable: performance (N = 429)

### 4.7.6 Testing for Multicollinearity

In order to test for multicollinearity among the predictor variables, variance-inflation factor (VIF) and tolerance were applied. The multicollinearity statistics in Table 4.19 showed that the tolerance indicator for leadership, culture, reactive typology and proactive typology are all greater than 0.1, and their VIF values are less than 10. Further, correlation tests indicate that the performance, leadership and culture had a score of less than 0.8 apart from the relationship between the moderating variables (reactive and proactive) which was 0.849. This is because the two variables are measured in a continuum. Hence, the result indicates that no multicollinearity problem had occurred (Neter et al., 1996; Ott and Longnecker, 2001).

**Table 4.19: Test for Multi-Collinearity**

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
</tr>
<tr>
<td></td>
<td>leadership</td>
</tr>
<tr>
<td></td>
<td>culture</td>
</tr>
<tr>
<td></td>
<td>reactive</td>
</tr>
</tbody>
</table>
Source: Survey Data, 2016

a. Dependent Variable: performance

4.8 Correlation Analysis

The dependent variable, performance, in the questionnaire was measured by multiple items (organizational leadership, organizational culture, reactive panning typology and proactive planning typology) hence their average score was computed and used in further analysis such as correlation analysis and multiple regression analysis (Wang and Benbasat, 2007). Pearson Product Moment Correlation analysis was conducted to examine the relationship between the variables as it was ideal given that the data was parametric and was measured at the interval scale (Wong and Hiew, 2005; Jahangir and Begum, 2008). Besides, the data was normally distributed and was obtained from a large sample of 430 respondents (Field, 2009). Wong and Hiew (2005) assert that the correlation coefficient value ($r$) ranging from 0.10 to 0.29 is considered weak, from 0.30 to 0.49 is considered medium and from 0.50 to 1.0 is considered strong.

Correlation tests between the main variables showed that the variables were strongly correlated. Leadership and performance yielded an $r$-value of .759. Leadership and culture yielded an $r$-value of .521. Reactive planning typology correlated with performance yielded an $r$-value of .708 while proactive planning correlated with performance with an $r$-value of .674. Table 4.20 presents a summary of the inter-variable correlations.

Table 4.20: Inter-Variable Correlations

<table>
<thead>
<tr>
<th></th>
<th>Performance</th>
<th>Leadership</th>
<th>Culture</th>
<th>Reactive</th>
<th>Proactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>1</td>
<td>.759**</td>
<td>.521**</td>
<td>.708**</td>
<td>.674**</td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td>1</td>
<td>.520**</td>
<td>.738**</td>
<td>.687**</td>
</tr>
<tr>
<td>Culture</td>
<td></td>
<td></td>
<td>1</td>
<td>.517**</td>
<td>.527**</td>
</tr>
<tr>
<td>Reactive</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>.849**</td>
</tr>
<tr>
<td>Proactive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

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

Source: Survey Data, 2016
4.9 Multiple Regression Analysis and Hypotheses Testing

Multiple regressions were conducted to test hypotheses of the study. Four (4) hierarchical regression steps were carried out to evaluate the relationship of independent variables, dependent variable, moderating variable and the interactions between the independent variable and the dependent variable (Baron and Kenny, 1986). In addition, the two independent variables were interacted with moderator while controlling the impact of the category of the university.

Aiken and West (1991) suggested that the predictor variables should be standardized to reduce multicollinearity problem that arises when a moderator variable is computed as a product of two predictor variables. To avoid multicollinearity risk created by generating a new variable through multiplying two existing variable, interacted variables were converted to Z scores with mean of zero and standard deviation of one. Therefore, the interaction variables were created by multiplying the standardized variables together.

In this study, performance was measured using four dimensions, which were research, financial sustainability, society expectations and employee effectiveness. The control variables, size and age of the university, were entered first in the regression model. The individual dimensions were regressed against the independent variables (leadership and culture).

4.10.1 Effect of Strategy Implementation on University Research

Multiple Regression Analysis was used to test the direct effect hypotheses H01 and H02 because it was appropriate in analyzing the relationship between a single dependent variable and several dependent variables (Hair, et al, 2006). Since the control variable was significant in predicting performance, it was entered in the subsequent regression models.

The $R^2$ was .471 while the adjusted $R^2$ was .466. The Change in the F-value was 93.74. Table 4.21 presents this model summary.

<table>
<thead>
<tr>
<th>Table 4.21: Model Summary for Leadership and Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model</strong></td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), Culture, Size, Age of University, Leadership*
b. Dependent Variable: Research (DV1)

Source: Survey Data, 2016

The independent variables (leadership and culture) were regressed against the individual factors of performance (Research, Financial sustainability, Society Expectations and Employee Effectiveness). Leadership had a beta coefficient of .772 while culture a beta coefficient of -0.104 when regressed against university research. Table 4.22 presents this information.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.203</td>
<td>.160</td>
<td>7.513</td>
<td>.000</td>
</tr>
<tr>
<td>Size</td>
<td>.025</td>
<td>.017</td>
<td>.054</td>
<td>1.445</td>
</tr>
<tr>
<td>Age of University</td>
<td>.047</td>
<td>.019</td>
<td>.094</td>
<td>2.526</td>
</tr>
<tr>
<td>Leadership</td>
<td>.772</td>
<td>.091</td>
<td>.806</td>
<td>8.473</td>
</tr>
<tr>
<td>Culture</td>
<td>-.104</td>
<td>.081</td>
<td>-.122</td>
<td>-1.289</td>
</tr>
</tbody>
</table>

4.10.2 Effect of Strategy Implementation on University’s Financial sustainability

The independent variables (leadership and culture) were regressed against university’s financial sustainability. The $R^2$ was .436 while the adjusted $R^2$ was .430. The Change in the F-value was 81.269. Table 4.23 presents this model summary.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>S.E. of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.660</td>
<td>.430</td>
<td>.430</td>
<td>.655</td>
<td>.000</td>
</tr>
</tbody>
</table>

- a. Predictors: (Constant), Culture, Size, Age of University, Leadership
- b. Dependent Variable: Financial sustainability (DV2)

Source: Survey Data, 2016
Leadership had a beta coefficient of .829 while culture a beta coefficient of -0.151 when regressed against university financial sustainability. The t-value for leadership was 7.407 while that of culture was -1.522. Table 4.24 presents this information.

Therefore, leadership was significant in predicting the financial sustainability of universities in Kenya.

**Table 4.24: Leadership, Culture and Financial sustainability**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B SE Beta</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.520 .197 -.143 7.734 .000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Size</td>
<td>-.077 .021 -.143 -3.678 .000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age of University</td>
<td>-.065 .023 -.109 -2.827 .005</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leadership</td>
<td>.829 .112 .728 7.407 .000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Culture</td>
<td>-.151 .099 -.149 -1.522 .129</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Financial sustainability (DV2)

Source: Survey Data, 2016

4.10.3 Direct Effect of Strategy Implementation on Society Expectations

The independent variables (leadership and culture) were regressed against society expectations. The R² was .453 while the adjusted R² was .448. The Change in the F-value was 87.481. Table 4.25 presents this model summary.

**Table 4.25: Model Summary for Leadership, Culture and Society Expectations**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>S.E. of the Estimate</th>
<th>Change Statistics</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>df1</th>
<th>df2</th>
<th>Sig. ΔF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.673</td>
<td>.453</td>
<td>.448</td>
<td>.445</td>
<td>87.481 4 422</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Culture, Size, Age of University, Leadership

b. Dependent Variable: Society Expectations (DV3)

Source: Survey Data, 2016

Leadership had a beta coefficient of .833 with a p-value of .000 while culture a beta coefficient of -.324 with a p-value of .000 when regressed against society expectations. Table 4.26 presents this information.
This implies that both leadership and culture were significant in predicting the society expectations of universities in Kenya.

**Table 4.26: Leadership, Culture and Society Expectations**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>S.E.</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td></td>
<td>2.040</td>
<td>.135</td>
<td>15.091</td>
</tr>
<tr>
<td>Size</td>
<td>-0.047</td>
<td>0.014</td>
<td>-0.125</td>
<td>-3.284</td>
</tr>
<tr>
<td>Age of University</td>
<td>0.079</td>
<td>0.016</td>
<td>0.192</td>
<td>5.065</td>
</tr>
<tr>
<td>Leadership</td>
<td>0.833</td>
<td>0.076</td>
<td>1.045</td>
<td>10.939</td>
</tr>
<tr>
<td>Culture</td>
<td>-0.324</td>
<td>0.067</td>
<td>-0.458</td>
<td>-4.815</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: Society Expectations (DV3)*

**Source:** Survey Data, 2016

### 4.10.4 Effects of Strategy Implementation on Employee Effectiveness

The independent variables (leadership and culture) were regressed against society expectations. The \( R^2 \) was .436 while the adjusted \( R^2 \) was .431. The change in the F-value was 81.646. Table 4.27 presents this model summary.

**Table 4.27: Model Summary for Leadership, Culture and Employee Effectiveness**

<table>
<thead>
<tr>
<th>R</th>
<th>( R^2 )</th>
<th>Adjusted ( R^2 )</th>
<th>S.E. of the Estimate</th>
<th>( \Delta R^2 )</th>
<th>( \Delta F )</th>
<th>df1</th>
<th>df2</th>
<th>Sig. ( \Delta F )</th>
</tr>
</thead>
<tbody>
<tr>
<td>.661*</td>
<td>.436</td>
<td>.431</td>
<td>.55215</td>
<td>.436</td>
<td>81.646</td>
<td>4</td>
<td>422</td>
<td>.000</td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), Culture, Size, Age of University, Leadership*

*b. Dependent Variable: Employee Effectiveness (DV4)*

**Source:** Survey Data, 2016

The direct effect of leadership and culture was regressed against employee effectiveness. Leadership had a beta coefficient of .928 and p-value of 0.000 while culture a beta coefficient of -0.305 with a p-value of .000 when regressed against employee effectiveness. Table 4.28 presents this information.

In this case, both leadership and culture were significant predictors of employee effectiveness in universities in Kenya while culture was insignificant.
**Table 4.28: Leadership, Culture and Employee Effectiveness**

<table>
<thead>
<tr>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.547</td>
<td>.166</td>
<td>9.329</td>
<td>.000</td>
</tr>
<tr>
<td>Size</td>
<td>-.037</td>
<td>-2.106</td>
<td>.036</td>
</tr>
<tr>
<td>Age of University</td>
<td>.044</td>
<td>2.267</td>
<td>.024</td>
</tr>
<tr>
<td>Leadership</td>
<td>.928</td>
<td>9.824</td>
<td>.000</td>
</tr>
<tr>
<td>Culture</td>
<td>-.305</td>
<td>-3.645</td>
<td>.000</td>
</tr>
</tbody>
</table>

*a. Dependent Variable: Employee Effectiveness (DV4)*

*Source: Survey Data, 2016*

### 4.10.5 Summary of Effects of Strategy Implementation on University Performance

The independent variables (leadership and culture) were regressed against the composite dependent variable of performance. The $R^2$ was .601 while the adjusted $R^2$ was .597. The Change in the F-value was 157.761. Table 4.29 presents this model summary.

**Table 4.29: Model Summary for Leadership, Culture and Performance**

<table>
<thead>
<tr>
<th>R</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>S.E. of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>.775*</td>
<td>.601</td>
<td>.597</td>
<td>.38817</td>
<td>$R^2$ Change 601 157.76</td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), Culture, Size, Age of University, Leadership*
b. *Dependent Variable: Performance (DV)*

*Source: Survey Data, 2016*

The findings show that leadership had a beta coefficient of .840, $t = 12.621$ with a p-value of 0.000 while culture a beta coefficient of -.220, $t = -3.738$ with a p-value of .000 when regressed against the composite dependent variable of performance. Table 4.30 presents this information.

All the predictor variables were found to significantly affect overall performance of universities in Kenya.

**Table 4.30: Leadership, Culture and Performance**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td></td>
<td>13.330</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>1.575</td>
<td>.118</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The relationship between the independent variables and the factors of performance was moderated with the planning typologies. The hypotheses were tested using a series of hierarchical linear regression analysis. The independent variables were mean-centered before calculating the interaction terms to minimize the effects of multi-collinearity.

The study regressed research as the dependent variable against the leadership and culture as independent variables. The planning typologies were the moderating variables. In the first model, the control variables (Size and Age of university) were entered. In Model 2, leadership and culture were entered as independent variables, in Model 3, the planning typologies were entered as variables in the model. In model 4, the interaction terms of the strategy implementation and planning typologies were entered.

The change of coefficient of determination (R-square) was compared across Models 1, 2, 3 and 4. The R-square change from model 1 to model 2 was .470 and was significant (p=.000). From model 2 to 3, the R-square change was .016 and was significant (.001) and from model 3 to 4, the R-square change was .012 which was also significant (p=.039). Table 4.31 presents the model summary.

### Table 4.31: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.069a</td>
<td>.005</td>
<td>.000</td>
<td>1.00145264</td>
<td>.005</td>
<td>1.019</td>
<td>2</td>
<td>421</td>
<td>.362</td>
</tr>
<tr>
<td>2</td>
<td>.689b</td>
<td>.475</td>
<td>.470</td>
<td>.72920608</td>
<td>.470</td>
<td>187.520</td>
<td>2</td>
<td>419</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>.701c</td>
<td>.491</td>
<td>.484</td>
<td>.71943483</td>
<td>.016</td>
<td>6.729</td>
<td>2</td>
<td>417</td>
<td>.001</td>
</tr>
</tbody>
</table>
The interaction between leadership and reactive typology had a beta coefficient of .163 with a t-value of 1.492 and a p-value of .136. The interaction between leadership and proactive typology had a beta coefficient of -.385 with a t-value of -2.725 and a p-value of .007. The interaction between culture and reactive typology had a beta coefficient of -.189 with a t-value of 1.665 and a p-value of .097. The interaction between culture and proactive typology had a beta coefficient of .425 with a t-value of 3.019 and a p-value of .003.

Reactive planning typology did not moderate the relationship between strategy implementation and research in universities because all the associated p-values were greater than .05. However, Proactive planning typology moderated the relationship between strategy implementation and research in universities since the associated p-values were <0.05. Table 4.32 shows this information.
Table 4.32: Moderating Effect of Planning Typologies on the Relationship between Strategy Implementation and Research

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-.001</td>
<td>.049</td>
<td>-.012</td>
</tr>
<tr>
<td></td>
<td>Zscore: Size</td>
<td>-.060</td>
<td>.051</td>
<td>-.060</td>
</tr>
<tr>
<td></td>
<td>Zscore: Age of University</td>
<td>.056</td>
<td>.051</td>
<td>.056</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>-.002</td>
<td>.035</td>
<td>-.051</td>
</tr>
<tr>
<td></td>
<td>Zscore: Size</td>
<td>.055</td>
<td>.038</td>
<td>.055</td>
</tr>
<tr>
<td></td>
<td>Zscore: Age of University</td>
<td>.098</td>
<td>.038</td>
<td>.098</td>
</tr>
<tr>
<td></td>
<td>Zscore(Leadership)</td>
<td>.730</td>
<td>.041</td>
<td>.732</td>
</tr>
<tr>
<td></td>
<td>Zscore(Culture)</td>
<td>-.077</td>
<td>.041</td>
<td>-.077</td>
</tr>
<tr>
<td>3</td>
<td>(Constant)</td>
<td>-.002</td>
<td>.035</td>
<td>-.069</td>
</tr>
<tr>
<td></td>
<td>Zscore: Size</td>
<td>.076</td>
<td>.038</td>
<td>.076</td>
</tr>
<tr>
<td></td>
<td>Zscore: Age of University</td>
<td>.097</td>
<td>.037</td>
<td>.097</td>
</tr>
<tr>
<td></td>
<td>Zscore(Leadership)</td>
<td>.580</td>
<td>.058</td>
<td>.581</td>
</tr>
<tr>
<td></td>
<td>Zscore(Culture)</td>
<td>-.083</td>
<td>.041</td>
<td>-.083</td>
</tr>
<tr>
<td></td>
<td>Zscore(Reactive)</td>
<td>.199</td>
<td>.065</td>
<td>.200</td>
</tr>
<tr>
<td></td>
<td>Zscore(Proactive)</td>
<td>.006</td>
<td>.058</td>
<td>.006</td>
</tr>
<tr>
<td>4</td>
<td>(Constant)</td>
<td>-.008</td>
<td>.041</td>
<td>-.202</td>
</tr>
<tr>
<td></td>
<td>Zscore: Size</td>
<td>.064</td>
<td>.038</td>
<td>.064</td>
</tr>
<tr>
<td></td>
<td>Zscore: Age of University</td>
<td>.102</td>
<td>.037</td>
<td>.102</td>
</tr>
<tr>
<td></td>
<td>Zscore(Leadership)</td>
<td>.575</td>
<td>.060</td>
<td>.577</td>
</tr>
<tr>
<td></td>
<td>Zscore(Culture)</td>
<td>-.078</td>
<td>.041</td>
<td>-.078</td>
</tr>
<tr>
<td></td>
<td>Zscore(Reactive)</td>
<td>.196</td>
<td>.068</td>
<td>.196</td>
</tr>
<tr>
<td></td>
<td>Zscore(Proactive)</td>
<td>-.012</td>
<td>.059</td>
<td>-.012</td>
</tr>
<tr>
<td></td>
<td>Leadership*Reactive</td>
<td>.163</td>
<td>.110</td>
<td>.261</td>
</tr>
<tr>
<td></td>
<td>Leadership*Proactive</td>
<td>-.385</td>
<td>.141</td>
<td>-.527</td>
</tr>
<tr>
<td></td>
<td>Culture*Reactive</td>
<td>-.189</td>
<td>.114</td>
<td>-.267</td>
</tr>
<tr>
<td></td>
<td>Culture*Proactive</td>
<td>.425</td>
<td>.141</td>
<td>.534</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Zscore (Research - DV1)

Source: Survey Data, 2016

The study regressed financial sustainability as the dependent variable against the leadership and culture as independent variables. The change of coefficient of determination (R-square) was
compared across Models 1, 2, 3 and 4. The R-square change from model 1 to model 2 was .345 and was significant (p=.000). From model 2 to 3, the R-square change was .048 and was significant (p=.000) and from model 3 to 4, the R-square change was .026 which was also significant (p=.000). Table 4.33 presents the model summary.

**Table 4.33: Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>Change Statistics</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.313(^a)</td>
<td>.098</td>
<td>.094</td>
<td>.95461044</td>
<td>.098</td>
<td>22.838</td>
<td>2</td>
<td>421</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>.665(^b)</td>
<td>.443</td>
<td>.437</td>
<td>.75217557</td>
<td>.345</td>
<td>129.552</td>
<td>2</td>
<td>419</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>.701(^c)</td>
<td>.491</td>
<td>.484</td>
<td>.72045526</td>
<td>.048</td>
<td>19.854</td>
<td>2</td>
<td>417</td>
<td>.000</td>
</tr>
<tr>
<td>4</td>
<td>.719(^d)</td>
<td>.517</td>
<td>.506</td>
<td>.70503094</td>
<td>.026</td>
<td>5.611</td>
<td>4</td>
<td>413</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Zscore: Age of University, Zscore: Size  
b. Predictors: (Constant), Zscore: Age of University, Zscore: Size, Zscore(Culture), Zscore(Leadership)  
c. Predictors: (Constant), Zscore: Age of University, Zscore: Size, Zscore(Culture), Zscore(Leadership), Zscore(Proactive), Zscore(Reactive)  
d. Predictors: (Constant), Zscore: Age of University, Zscore: Size, Zscore(Culture), Zscore(Leadership), Zscore(Proactive), Zscore(Reactive), Culture*Proactive, Leadership*Reactive, Culture*Reactive, Leadership*Proactive  

*Source: Survey Data, 2016*

In the moderation for the relationship between strategy implementation and financial sustainability, the interaction between leadership and reactive typology had a beta coefficient of .143 with a t-value of 1.325 and a p-value of 0.186. The interaction between leadership and proactive typology had a beta coefficient of -.418 with a t-value of -2.997 and a p-value of .003. The interaction between culture and reactive typology had a beta coefficient of -.028 with a t-value of -.250 and a p-value of .802. The interaction between culture and proactive typology had a beta coefficient of .402 with a t-value of 2.905 and a p-value of .004. Table 4.34 presents this information.

The findings established that the reactive planning typology did not moderate the relationship between strategy implementation and financial sustainability in universities since all the p-values were greater than .05. However, proactive planning typology moderated the relationship between
strategy implementation and financial sustainability of universities in Kenya since all the associated p-values were <0.05.

**Table 4.34: Moderating Effect of Planning Typologies on the Relationship between Strategy Implementation and Financial Sustainability**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
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<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
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<tr>
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<td>.982</td>
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<tr>
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<td>Zscore: Age of University</td>
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</tr>
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<tr>
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<td>.037</td>
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<td>Zscore: Size</td>
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<td>.039</td>
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<td>-.099</td>
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<tr>
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<td>Zscore(Culture)</td>
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<td>.042</td>
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<td>Zscore: Age of University</td>
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<td>Zscore(Leadership)</td>
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<td>.058</td>
<td>.378</td>
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<td>Zscore(Culture)</td>
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<td>-.128</td>
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<tr>
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<td>Zscore(Reactive)</td>
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<td>-1.651</td>
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<td>Zscore: Size</td>
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<td>.037</td>
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<td>Zscore: Age of University</td>
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<td>.037</td>
<td>-.087</td>
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<td>Zscore(Leadership)</td>
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<td>Zscore(Culture)</td>
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<td>.041</td>
<td>-.110</td>
</tr>
<tr>
<td></td>
<td>Zscore(Reactive)</td>
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<td></td>
<td>Zscore(Proactive)</td>
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<td>.052</td>
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<td>Leadership*Reactive</td>
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<td>.228</td>
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<td></td>
<td>Leadership*Proactive</td>
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<td>.139</td>
<td>-.571</td>
</tr>
<tr>
<td></td>
<td>Culture*Reactive</td>
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<td>.112</td>
<td>-.040</td>
</tr>
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<td></td>
<td>Culture*Proactive</td>
<td>.402</td>
<td>.138</td>
<td>.506</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Zscore(Financial sustainability - DV2)

**Source:** Survey Data, 2016
The study regressed society expectations as the dependent variable against the leadership and culture as independent variables. The change of coefficient of determination (R-square) was compared across Models 1, 2, 3 and 4. The R-square change from model 1 to model 2 was .374 and was significant (p=.000). From model 2 to 3, the R-square change was .023 and was significant (p=.000) and from model 3 to 4, the R-square change was .052 which was also significant (p=.000). Table 4.35 presents the model summary.

**Table 4.35: Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
</tr>
</thead>
<tbody>
<tr>
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<td>.051</td>
<td>.047</td>
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<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>.652	extsuperscript{b}</td>
<td>.425</td>
<td>.420</td>
<td>.76386974</td>
<td>.374</td>
<td>136.713</td>
<td>2</td>
<td>420</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>.669	extsuperscript{c}</td>
<td>.448</td>
<td>.440</td>
<td>.75041508</td>
<td>.023</td>
<td>8.598</td>
<td>2</td>
<td>418</td>
<td>.000</td>
</tr>
<tr>
<td>4</td>
<td>.707	extsuperscript{d}</td>
<td>.500</td>
<td>.488</td>
<td>.71794094</td>
<td>.052</td>
<td>10.667</td>
<td>4</td>
<td>414</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Zscore: Age of University, Zscore: Size
b. Predictors: (Constant), Zscore: Age of University, Zscore: Size, Zscore(Culture), Zscore(Leadership)
c. Predictors: (Constant), Zscore: Age of University, Zscore: Size, Zscore(Culture), Zscore(Leadership), Zscore(Proactive), Zscore(Reactive)
d. Predictors: (Constant), Zscore: Age of University, Zscore: Size, Zscore(Culture), Zscore(Leadership), Zscore(Proactive), Zscore(Reactive), Culture*Proactive, Leadership*Reactive, Culture*Reactive, Leadership*Proactive

Source: Survey Data, 2016

The interaction between leadership and reactive typology had a beta coefficient of -.326 with a t-value of -2.962 and a p-value of .003. The interaction between leadership and proactive typology had a beta coefficient of -.196 with a t-value of -1.379 and a p-value of .169. The interaction between culture and reactive typology had a beta coefficient of .358 with a t-value of 3.141 and a p-value of .002. The interaction between culture and proactive typology had a beta coefficient of .123 with a t-value of .872 and a p-value of .384. Table 4.36 presents this information.

Therefore, proactive typology was not significant in moderating the relationship between leadership and society expectations and culture and society expectations. However, reactive
typology was significant in moderating the relationship between leadership and societal expectations and culture and society expectations.

**Table 4.36: Moderating Effect of Planning Typologies on the Relationship between Strategy Implementation and Society Expectations**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B (Std. Error)</td>
<td>Beta (t)</td>
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<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant) - .004 (.048)</td>
<td>- .078 (.938)</td>
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<td></td>
<td>Zscore: Size - .224 (.050)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zscore: Age of University .142 (.050)</td>
<td>.141 (2.846)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>(Constant) - .008 (.037)</td>
<td>-.220 (.826)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zscore: Size - .123 (.039)</td>
<td>-.123 (-3.145)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zscore: Age of University .179 (.039)</td>
<td>.179 (4.564)</td>
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<tr>
<td></td>
<td>Zscore(Leadership) .648 (.044)</td>
<td>.640 (14.895)</td>
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</tr>
<tr>
<td></td>
<td>Zscore(Culture) -.039 (.043)</td>
<td>-.039 (-.908)</td>
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<td></td>
</tr>
<tr>
<td>3</td>
<td>(Constant) - .010 (.036)</td>
<td>-.265 (.791)</td>
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<tr>
<td></td>
<td>Zscore: Size - .102 (.039)</td>
<td>-.102 (-2.597)</td>
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</tr>
<tr>
<td></td>
<td>Zscore: Age of University .182 (.039)</td>
<td>.181 (4.688)</td>
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</tr>
<tr>
<td></td>
<td>Zscore(Leadership) .478 (.061)</td>
<td>.472 (7.869)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Zscore(Culture) -.043 (.043)</td>
<td>-.042 (-.996)</td>
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</tr>
<tr>
<td></td>
<td>Zscore(Reactive) .254 (.068)</td>
<td>.252 (3.757)</td>
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</tr>
<tr>
<td></td>
<td>Zscore(Proactive) -.028 (.060)</td>
<td>-.028 (-.471)</td>
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</tr>
<tr>
<td>4</td>
<td>(Constant) .049 (.042)</td>
<td>1.184 (.237)</td>
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<td></td>
<td>Zscore: Size -.093 (.038)</td>
<td>-.093 (-2.459)</td>
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<td></td>
<td>Zscore: Age of University .178 (.037)</td>
<td>.178 (4.760)</td>
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<tr>
<td></td>
<td>Zscore(Leadership) .429 (.060)</td>
<td>.423 (7.106)</td>
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</tr>
<tr>
<td></td>
<td>Zscore(Culture) -.024 (.041)</td>
<td>-.024 (-.574)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zscore(Reactive) .181 (.068)</td>
<td>.180 (2.677)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zscore(Proactive) -.025 (.059)</td>
<td>-.024 (-.419)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leadership*Reactive -.326 (.110)</td>
<td>-.502 (-2.962)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Leadership*Proactive -.196 (.142)</td>
<td>-.251 (-1.379)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Culture*Reactive .358 (.114)</td>
<td>.486 (3.141)</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Culture*Proactive .123 (.141)</td>
<td>.145 (.872)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Zscore(Society Expectations - DV3)

*Source: Survey Data, 2016*
The study regressed society expectations as the dependent variable against the leadership and culture as independent variables. The change of coefficient of determination (R-square) was compared across Models 1, 2, 3 and 4. The R-square change from model 1 to model 2 was .389 and was significant (p=.000). From model 2 to 3, the R-square change was .052 and was significant (p=.000) and from model 3 to 4, the R-square change was .022 which was also significant (p=.001). Table 4.37 presents the model summary.

Table 4.37: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>R Square Change</th>
<th>F Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. F Change</th>
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<td>.482</td>
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<td>.022</td>
<td>4.510</td>
<td>4</td>
<td>414</td>
<td>.001</td>
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</table>

a. Predictors: (Constant), Zscore: Age of University, Zscore: Size
b. Predictors: (Constant), Zscore: Age of University, Zscore: Size, Zscore(Culture), Zscore(Leadership)
c. Predictors: (Constant), Zscore: Age of University, Zscore: Size, Zscore(Culture), Zscore(Leadership), Zscore(Proactive), Zscore(Reactive)
d. Predictors: (Constant), Zscore: Age of University, Zscore: Size, Zscore(Culture), Zscore(Leadership), Zscore(Proactive), Zscore(Reactive), Culture*Proactive, Leadership*Reactive, Culture*Reactive, Leadership*Proactive

Source: Survey Data, 2016

The interaction between leadership and reactive typology had a beta coefficient of -.300 with a t-value of -2.719 and a p-value of .007. The interaction between leadership and proactive typology had a beta coefficient of .007 with a t-value of .050 and a p-value of .960. The interaction between culture and reactive typology had a beta coefficient of .308 with a t-value of 2.685 and a p-value of .008. The interaction between culture and proactive typology had a beta coefficient of -.039 with a t-value of -.277 and a p-value of .782. Table 4.38 presents this information.

The findings established that the proactive planning typologies did not moderate the relationship between strategy implementation and employee effectiveness in
universities in Kenya. However, reactive planning typology moderated the relationship between strategy implementation and employee effectiveness.

**Table 4.38: Moderating Effect of Planning Typologies on the Relationship between Strategic Implementation and Employee Effectiveness**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.007</td>
<td>.048</td>
<td>.143</td>
</tr>
<tr>
<td></td>
<td>Zscore: Size</td>
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<td>.050</td>
<td>-.182</td>
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<tr>
<td></td>
<td>Zscore: Age of University</td>
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<td>.050</td>
<td>.047</td>
</tr>
<tr>
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<td>(Constant)</td>
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<td>.037</td>
<td>.174</td>
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<td>.039</td>
<td>-.076</td>
</tr>
<tr>
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<td>.039</td>
<td>.080</td>
</tr>
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<td>.043</td>
<td>.651</td>
</tr>
<tr>
<td></td>
<td>Zscore(Culture)</td>
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<td>.043</td>
<td>-.036</td>
</tr>
<tr>
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<td>.145</td>
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<td>Zscore: Size</td>
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<td>.038</td>
<td>-.036</td>
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<td>Zscore: Age of University</td>
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<td>.038</td>
<td>.076</td>
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<tr>
<td></td>
<td>Zscore(Leadership)</td>
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<td>.059</td>
<td>.378</td>
</tr>
<tr>
<td></td>
<td>Zscore(Culture)</td>
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<td>.042</td>
<td>-.053</td>
</tr>
<tr>
<td></td>
<td>Zscore(Reactive)</td>
<td>.329</td>
<td>.066</td>
<td>.330</td>
</tr>
<tr>
<td></td>
<td>Zscore(Proactive)</td>
<td>.051</td>
<td>.059</td>
<td>.051</td>
</tr>
<tr>
<td>4</td>
<td>(Constant)</td>
<td>.045</td>
<td>.042</td>
<td>1.090</td>
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<td>-.025</td>
</tr>
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<td>Zscore: Age of University</td>
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<td>.038</td>
<td>.070</td>
</tr>
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<td></td>
<td>Zscore(Leadership)</td>
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<td>.061</td>
<td>.347</td>
</tr>
<tr>
<td></td>
<td>Zscore(Culture)</td>
<td>-.042</td>
<td>.041</td>
<td>-.042</td>
</tr>
<tr>
<td></td>
<td>Zscore(Reactive)</td>
<td>.273</td>
<td>.068</td>
<td>.274</td>
</tr>
<tr>
<td></td>
<td>Zscore(Proactive)</td>
<td>.063</td>
<td>.059</td>
<td>.064</td>
</tr>
<tr>
<td></td>
<td>Leadership*Reactive</td>
<td>-.300</td>
<td>.110</td>
<td>-.479</td>
</tr>
<tr>
<td></td>
<td>Leadership*Proactive</td>
<td>.007</td>
<td>.142</td>
<td>.010</td>
</tr>
<tr>
<td></td>
<td>Culture*Reactive</td>
<td>.308</td>
<td>.115</td>
<td>.435</td>
</tr>
<tr>
<td></td>
<td>Culture*Proactive</td>
<td>-.039</td>
<td>.142</td>
<td>-.049</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Zscore (Employee Effectiveness - DV4)

**Source:** Survey Data, 2016
4.10 Summary of Hypotheses and Major Results

The direct effect hypotheses were tested and the summary of the findings and the decisions are presented in Table 4.39 below.

Table 4.39: Summary of Hypotheses Findings and Major Results

<table>
<thead>
<tr>
<th>Hypothesis Statements</th>
<th>Results</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H0(_{1a}): There is no significant effect of organizational leadership on the research of universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Rejected</td>
</tr>
<tr>
<td>H0(_{1b}): There is no significant effect of organizational leadership on the financial sustainability of universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Rejected</td>
</tr>
<tr>
<td>H0(_{1c}): There is no significant effect of organizational leadership on the society expectations of universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Rejected</td>
</tr>
<tr>
<td>H0(_{1d}): There is no significant effect of organizational leadership on the employee effectiveness in universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Rejected</td>
</tr>
<tr>
<td>H0(_{2a}): There is no significant effect of organizational culture on the research of universities in Kenya</td>
<td>No significant effect p&gt;0.05</td>
<td>Failed to Reject</td>
</tr>
<tr>
<td>H0(_{2b}): There is no significant effect of organizational culture on the financial sustainability of universities in Kenya</td>
<td>No significant effect p&gt;0.05</td>
<td>Failed to Reject</td>
</tr>
<tr>
<td>H0(_{2c}): There is no significant effect of organizational culture on the society expectations of universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Rejected</td>
</tr>
<tr>
<td>H0(_{2d}): There is no significant effect of organizational culture on the employee effectiveness in universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Source: Survey Data, 2016

The overall hypothesis that tested the effect of the predictor variables on performance established that strategy implementation was significant in predicting the performance of universities in Kenya.
The moderating effect hypotheses were tested and the summary of the findings and the associated decisions are presented in Table 4.40 below.

**Table 4.40: Summary of Moderated Effect Hypotheses**

<table>
<thead>
<tr>
<th>Hypothesis Statements</th>
<th>Results</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H0a: There is no significant moderating effect of reactive planning typology on the relationship between leadership and research of universities in Kenya</td>
<td>No significant effect p&gt;0.05</td>
<td>Failed to Reject</td>
</tr>
<tr>
<td>H0b: There is no significant moderating effect of reactive planning typology on the relationship between culture and research of universities in Kenya</td>
<td>No significant effect p&gt;0.05</td>
<td>Failed to Reject</td>
</tr>
<tr>
<td>H0c: There is no significant moderating effect of proactive planning typology on the relationship between leadership and research of universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Reject</td>
</tr>
<tr>
<td>H0d: There is no significant moderating effect of proactive planning typology on the relationship between culture and research of universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Reject</td>
</tr>
<tr>
<td>H0a: There is no significant moderating effect of reactive planning typology on the relationship between leadership and financial sustainability of universities in Kenya</td>
<td>No significant effect p&gt;0.05</td>
<td>Failed to Reject</td>
</tr>
<tr>
<td>H0b: There is no significant moderating effect of reactive planning typology on the relationship between culture and financial sustainability of universities in Kenya</td>
<td>No significant effect p&gt;0.05</td>
<td>Failed to Reject</td>
</tr>
<tr>
<td>H0c: There is no significant moderating effect of proactive planning typology on the relationship between leadership and financial sustainability of universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Reject</td>
</tr>
<tr>
<td>H0d: There is no significant moderating effect of proactive planning typology on the relationship between culture and financial sustainability of universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Reject</td>
</tr>
<tr>
<td>H0a: There is no significant moderating effect of reactive planning typology on the relationship between leadership and society expectations of universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Reject</td>
</tr>
<tr>
<td>H0b: There is no significant moderating effect of reactive planning typology on the relationship between culture and society expectations of universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Reject</td>
</tr>
<tr>
<td>H0a: There is no significant moderating effect of proactive planning typology on the relationship between leadership and research of universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Reject</td>
</tr>
<tr>
<td>H0b: There is no significant moderating effect of proactive planning typology on the relationship between culture and research of universities in Kenya</td>
<td>Significant effect p&lt;0.05</td>
<td>Reject</td>
</tr>
</tbody>
</table>
universities in Kenya

H0a: There is no significant moderating effect of proactive planning typology on the relationship between leadership and society expectations of universities in Kenya

No significant effect p>0.05
Failed to Reject

H0b: There is no significant moderating effect of proactive planning typology on the relationship between culture and society expectations of universities in Kenya

No significant effect p>0.05
Failed to Reject

H0c: There is no significant moderating effect of reactive planning typology on the relationship between leadership and employee effectiveness of universities in Kenya

Significant effect p<0.05
Rejected d

H0d: There is no significant moderating effect of reactive planning typology on the relationship between culture and employee effectiveness of universities in Kenya

Significant effect p<0.05
Rejected d

H0e: There is no significant moderating effect of proactive planning typology on the relationship between leadership and employee effectiveness of universities in Kenya

No significant effect p>0.05
Failed to Reject

H0f: There is no significant moderating effect of proactive planning typology on the relationship between culture and employee effectiveness of universities in Kenya

No significant effect p>0.05
Failed to Reject

Source: Survey Data, 2016

4.11 Validation of the Conceptual Model

The model developed was tested and found significant (p<0.05) and the all the independent variables significantly explain the variance in university performance. The moderating variables partially explained the variance in university performance. However, further analysis revealed that a modified model that better explains the moderating effect of planning typologies on the relationship between strategy implementation and university performance. Factor analysis on university performance extracted four distinct dimensions of performance: research, financial sustainability, society expectations and employee effectiveness. The study also established that age and size of university influenced performance of universities. Thus, they were used as control variables in the study.

The final new model was constructed using variable resulting from multiple regression analysis which was significant. The model was estimated using a robust maximum likelihood estimator in
MPlus 7.0 (Structural Equation Modelling) software developed by Muthen and Muthen, (2012). Model fit was evaluated using the chi-square goodness-of-fit test, Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA). For CFI and TLI, the study used the conventional cut off .90 or greater for acceptable fit and .95 or greater for good fit. RMSEA values between .05 and .08 represent acceptable fit, and values less than .05 indicate good fit (McDonald and Ho, 2002). In this study, the overall model has a satisfactory goodness-of-fit effect because $X^2/df < 5$ and the values of RMR and RMSEA are <0.05 while the CFI and TLI were >0.95. Table 4.41 presents a summary.

**Table 4.41: Assessment of the Fit of the Overall and Final Model**

<table>
<thead>
<tr>
<th>Determination Index</th>
<th>$X^2$</th>
<th>dF</th>
<th>CFI</th>
<th>TLI</th>
<th>RMR</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fit Value</td>
<td>1492.93</td>
<td>4</td>
<td>0.983</td>
<td>0.952</td>
<td>0.021</td>
<td>0.044</td>
</tr>
</tbody>
</table>

*Source: Survey Data, 2016*

Considering the output in Table 4.50 above, the parameter estimates, the standard errors (SE), and the Critical Ratio ($t$-values) among the latent variables were computed. Path 1 (Leadership and Performance) had parameter estimates of .340 and an SE of .064; Path 2 (Culture and Performance) had parameter estimates of -.111 and an SE of .053; Path 3 (Reactive Typology and Performance) had parameter estimates of .182 and an SE of .039; Path 4 (Interaction between Leadership and Reactive Typology) had parameter estimates of -.196 and an SE of .045; Path 5 (Interaction between Culture and Reactive Typology) had parameter estimates of .193 and an SE of .05. The corresponding regression models are presented as follows:

- $I = \beta_0 + \beta_1 L + \beta_2 P + \beta_3 L \ast P + \epsilon$
- $F = \beta_0 + \beta_1 L + \beta_2 P + \beta_3 L \ast P + \epsilon$
- $S = \beta_0 + \beta_1 L + \beta_1 C + \beta_2 R + \beta_3 L \ast R + \beta_3 C \ast R + \epsilon$
- $E = \beta_0 + \beta_1 L + \beta_1 C + \beta_2 R + \beta_3 L \ast R + \beta_3 C \ast R + \epsilon$

*Where: L = Leadership; C = Culture; R = Reactive Typology; P = Proactive Typology; I = University Research; F = Financial Sustainability; S = Societal Expectations; E = Employee Effectiveness*
Figure 4.1 shows the final model with parameters for each path. Also, see Appendix xxi for the detailed MPlus 7.0 output.
Figure 4.1: Analytical Model for University Performance
Source: Researcher, 2016

Key: $L =$ Leadership; $C =$ Culture; $R =$ Reactive Typology; $P =$ Proactive Typology; $I =$ University Research; $F =$ Financial Sustainability; $S =$ Societal Expectations; $E =$ Employee Effectiveness
Table 4.42 presents the path coefficients for the final analytical model in Figure 4.1. The final analytical model was constructed using only the paths that were significant. The independent variables were organizational leadership and culture; the moderating variables were reactive and proactive planning typologies. The dependent variable, performance, was measured using four dimensions (research, financial sustainability, society expectations and employee effectiveness.

**Table 4.42: Path Coefficients**

*Source: Survey Data, 2016*

<table>
<thead>
<tr>
<th>Path Coefficients for Each Pair of Latent Variables</th>
<th>Estimate</th>
<th>S.E</th>
<th>C. R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership Research</td>
<td>.388</td>
<td>.097</td>
<td>4.001</td>
<td>.000</td>
</tr>
<tr>
<td>Leadership Financial Sustainability</td>
<td>.460</td>
<td>.098</td>
<td>4.681</td>
<td>.000</td>
</tr>
<tr>
<td>Leadership Society Expectations</td>
<td>.459</td>
<td>.066</td>
<td>6.957</td>
<td>.000</td>
</tr>
<tr>
<td>Leadership Employee Effectiveness</td>
<td>.565</td>
<td>.070</td>
<td>8.038</td>
<td>.000</td>
</tr>
<tr>
<td>Culture Society Expectations</td>
<td>-.153</td>
<td>.048</td>
<td>-3.223</td>
<td>0.001</td>
</tr>
<tr>
<td>Culture Employee Effectiveness</td>
<td>-.130</td>
<td>.047</td>
<td>-2.753</td>
<td>0.006</td>
</tr>
<tr>
<td>Leadership*Reactive Society Expectations</td>
<td>-.270</td>
<td>.066</td>
<td>-4.077</td>
<td>0.000</td>
</tr>
<tr>
<td>Leadership*Reactive Employee Effectiveness</td>
<td>-.178</td>
<td>.057</td>
<td>-3.120</td>
<td>0.002</td>
</tr>
<tr>
<td>Leadership*Proactive Research</td>
<td>.637</td>
<td>.095</td>
<td>6.699</td>
<td>.000</td>
</tr>
<tr>
<td>Leadership*Proactive Financial Sustainability</td>
<td>.473</td>
<td>.113</td>
<td>4.170</td>
<td>0.000</td>
</tr>
<tr>
<td>Culture*Reactive Society Expectations</td>
<td>.286</td>
<td>.062</td>
<td>4.649</td>
<td>0.000</td>
</tr>
<tr>
<td>Culture*Reactive Employee Effectiveness</td>
<td>.195</td>
<td>.061</td>
<td>3.199</td>
<td>0.001</td>
</tr>
</tbody>
</table>
Figure 4.2: Final New Model of the Study

Source: Researcher, 2016
The final model in Figure 4.2 was developed to depict the relationship between strategy implementation and the dimensions of performance. It also shows that planning typologies do not moderate all the relationships between strategy implementation and the dimensions of performance. Reactive planning typology moderated the relationship between leadership and society expectations, leadership and employee effectiveness, culture and society expectations and culture and employee effectiveness. Proactive typology moderated the relationship between leadership and research and leadership and financial sustainability.

4.12 Discussion of Findings

This study sought to establish the moderating effects of planning typologies in the relationship between strategy implementation and university performance of universities in Kenya. The specific objectives of this study were to: establish the effect of organizational leadership on institutional performance; determine the effect of organizational culture on institutional performance and; assess the moderating effect of planning typologies on the relationship between strategy implementation and institutional performance of universities in Kenya.

4.13.1 Effect of Organizational Leadership on Performance of Universities

Findings from this study indicated that organizational leadership significantly influenced university performance in terms of research, financial sustainability, society expectations and employee effectiveness.

The findings of this study established that university leadership influenced research activities in universities (p<0.05). These findings are consistent with those other studies that have examined the influence of university leadership on research activities (Hurduzeu, 2015; Bryman, 2011). Leaders in universities must have the ability to promote creativity and innovation through research, stimulate the employees to challenge their own value systems and improve overall organizational performance (Hurduzeu, 2015). Similarly, Bryman (2011) indicated that university leadership should develop an environment that endeavors to achieve set goals and objectives for improved research performance.

Results from this study indicated that leadership contributed towards the financial sustainability of universities (p<0.05). These findings relate with the results from previous studies which showed that there exists a causal relationship between financial sustainability and leadership
Further, empirical findings from a study conducted by Kerine (2014) on Non-Governmental Organizations (NGOs) in Kenya established that organizational leadership contributed towards financial sustainability of selected NGOs by 45.3%.

The findings of this study indicated that leadership in universities was found to influence societal expectations (p<0.05). Findings from this study imply that leadership influences societal expectations in universities in terms of provision of extension services to the local communities and good relationship with the local leaders.

Findings from the study also indicated that leadership affects employee effectiveness in universities (p<0.05). This implies that the universities should support the training and development of employees. For example Tahir, Yousafzai, Jan and Hashim (2014) examined the influence of employee training and development on their performance and found that training and development of employees in organizations enhanced their effectiveness in terms of performance. Similarly, other studies on diverse leadership support the findings of the current study (Mostashari, 2009 and Linjuan, 2010).

4.13.2 Effect of Organizational Culture on Performance of Universities

Findings from this study indicated that organizational culture significantly influenced 2 dimensions of university performance that is research and financial sustainability. However, university culture did not influence performance of the university in terms of societal expectations and employee effectiveness.

The findings of this study established that university culture did not influence research activities in universities (p>0.05). These findings are not consistent with another study by Bland (2005) that examined the influence of university culture on research. Specifically, universities should effectively communicate strategic decisions to employees with regards to research performance.

Results from this study indicated that culture did not contribute towards the financial sustainability of universities (p>0.05). These findings do not relate with the results from previous studies (Lok and Crawford, 2003; Aluko, 2003; Rose et al., 2008) which showed that there exists a relationship between organizational culture and financial sustainability.
However, organizational culture influenced societal expectations and employee effectiveness (p<0.05). These findings are consistent with the findings of Ogbonna and Harris (2002) who established that there is a link between organizational culture and societal expectations and employee effectiveness.

4.13.3 Moderating Effect of Reactive Typology on Leadership and Performance

Hypothesis H03a stated that there is no significant moderating effect of reactive planning typology on the relationship between leadership and research in universities. Findings from the study have provided evidence that reactive typology does not moderate the relationship between leadership and research in universities (p>0.05), possibly because the research in universities is focused more on individual scholar efforts and not determined by the universities planning.

Hypothesis H04a stated that there is no significant moderating effect of reactive planning typology on the relationship between leadership and financial sustainability of universities. The results of this study indicated that reactive typology did not moderate the relationship between leadership and financial sustainability of universities in Kenya (p>0.05). Thus, reactive typology does not provide a flexible and collaborative platform that helps organizational leadership to enhance financial sustainability of universities in Kenya.

Hypothesis H05a stated that there is no significant moderating effect of reactive planning typology on the relationship between leadership and society expectations of universities. Findings of the study showed that reactive typology moderated the relationship between leadership and societal expectations in universities in Kenya (p<0.05). Thus, universities in Kenya are strong in reactive planning in relation to leadership and society expectations.

Hypothesis H06a stated that there is no significant moderating effect of reactive planning typology on the relationship between leadership and employee effectiveness of universities in Kenya. Results indicated that reactive typology significantly moderated the relationship between leadership and employee effectiveness (p<0.05). Thus, reactive typology can help out universities to achieve more on employee effectiveness from organizational leadership. This is mainly because universities are supposed to support training and development of the employees and perform performance appraisal to identify employees who are to undergo further training to enhance their skills and capacities.
4.13.4 Moderating Effect of Proactive Typology on Leadership and Performance

Hypothesis H0₃c stated that there is no significant moderating effect of proactive planning typology on the relationship between leadership and research of universities in Kenya. Findings showed that proactive typology moderated the relationship between leadership and research in universities in Kenya (p<0.05). This is because research in universities is an important aspect that focuses more on individual scholars’ efforts and is fostered by the leadership in universities.

Hypothesis H0₄c stated that there is no significant moderating effect of proactive planning typology on the relationship between leadership and financial sustainability of universities in Kenya. The findings indicated that proactive typology moderated the relationship between leadership and financial sustainability in universities in Kenya (p<0.05). This is because proactive typology is expected to provide a flexible and collaborative platform for responsive leadership. Therefore, proactive typology may have an impact on the relationship between leadership and financial sustainability.

Hypothesis H0₅c stated that there is no significant moderating effect of proactive planning typology on the relationship between leadership and societal expectations of universities in Kenya. The findings established that proactive typology did not moderate the relationship between leadership and societal expectations (p>0.05). While Snow and Miles (1978) argue that proactive organizations continually search for market opportunities and they regularly experiment with potential responses to emerging environmental trends, universities have a specific mandate within their areas of operation which may be significantly different from the societal expectations.

Hypothesis H0₆c stated that there is no significant moderating effect of proactive planning typology on the relationship between leadership and employee effectiveness of universities in Kenya. Results established that proactive typology did not moderate the relationship between leadership and employee effectiveness in universities in Kenya (p>0.05). This could be occasioned by the fact that most universities are concerned with the development and quality of academic programmes and thus completely ignore the well being of the employees. This also is supported by Miles and Snow (1978) who state that proactive organizations are usually not completely efficient due to their strong concern for product and market innovation.
4.13.5 Moderating Effect of Reactive Typology on Culture and Performance

Hypothesis H0₃b stated that there is no significant moderating effect of reactive planning typology on the relationship between culture and research of universities in Kenya. Results indicated that reactive typology did not moderate the relationship between culture and research in universities in Kenya (p>0.05). This could be explained by the fact that universities frequently perceive changes and uncertainty occurring in their environments but are unable to respond effectively through technological innovations.

Hypothesis H0₄b stated that there is no significant moderating effect of reactive planning typology on the relationship between culture and financial sustainability of universities in Kenya. The findings of the study established that reactive typology did not moderate the relationship between culture and financial sustainability in universities in Kenya (p>0.05). This could be occasioned by the fact that activities are not scheduled to achieve the goals set by the universities.

Hypothesis H0₅b stated that there is no significant moderating effect of reactive planning typology on the relationship between culture and society expectations of universities in Kenya. The study findings established that reactive typology moderated the relationship between culture and societal expectations in universities in Kenya (p<0.05). The reason for this could be that universities ensure efficiency in the allocation of resources in their plans in order to meet their societal expectations through extension services and employment creation.

Hypothesis H0₆b stated that there is no significant moderating effect of reactive planning typology on the relationship between culture and employee effectiveness of universities in Kenya. The results indicated that reactive typology significantly moderated the relationship between culture and employee effectiveness in Kenya (p<0.05). This could be due the provision of training and development opportunities to employees whose jobs are directly related to strategic planning process.

4.13.6 Moderating Effect of Proactive Typology on Culture and Performance

Hypothesis H0₃d stated that there is no significant moderating effect of proactive planning typology on the relationship between culture and research of universities in Kenya. The findings of the study showed that proactive typology significantly moderated the relationship between
culture and research in universities in Kenya (p<0.05). This is because universities closely monitor and provide constant feedback on the progress of research activities.

Hypothesis H04d stated that there is no significant moderating effect of proactive planning typology on the relationship between culture and financial sustainability of universities in Kenya. The results established that proactive typology significantly moderated the relationship between culture and financial sustainability of universities in Kenya (p<0.05). This is because universities always put in place adequate and effective monitoring and control mechanisms in all their financial operations.

Hypothesis H05d stated that there is no significant moderating effect of proactive planning typology on the relationship between culture and societal expectations of universities in Kenya. The study found out that proactive typology did not moderate the relationship between culture and societal expectations (p>0.05). This is because universities have not ensured quality of academic programmes for competitiveness.

Hypothesis H06d stated that there is no significant moderating effect of proactive planning typology on the relationship between culture and employee effectiveness of universities in Kenya. The findings established that proactive typology did not moderate the relationship between culture and employee effectiveness in universities in Kenya (p>0.05). This is because most universities rarely make adjustments in their technologies and methods of operations.
CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents and the summary of the major findings obtained from the study sequentially in relation to the study objectives. Appropriate conclusions are drawn and practical implications for this study are stated, based on the results of the hypotheses tested. Section 5.2 presents the summary of the findings; section 5.3 presents the conclusions of the study; section 5.4 presents the theoretical implications of the research, section 5.5 presents the practical implications of the study; section 5.6 presents the suggestions for further studies.

5.2 Summary of Findings

The study sought to find out the extent to which strategy implementation affected performance of universities in Kenya. The study was guided by the Balanced Score Card model which has four dimensions of performance: financial, customer, internal business process and learning and growth. In this study, financial sustainability was represented by financial sustainability; customer was represented by societal expectations; internal business process was represented by employee effectiveness while learning and growth was represented by research. While the Balanced Score Card was designed to measure performance for profit-making organizations, it was adopted for this study to enable the researcher to assess the performance of universities in Kenya, which are non-profit making entities.

The study formulated six objectives to be pursued and a total of six hypotheses were tested related to the objectives. The hypotheses were to test the relationship between strategy implementation and university performance. They also tested the moderating effect of planning typologies in the relationship between strategy implementation and performance of universities in Kenya. Each hypothesis addressed specific strategy implementation and planning typologies factors and how they affected specific dimensions of university performance.
5.2.1 Effects of Organizational Leadership on University Performance in Kenya

Hypothesis one ($H_{01}$) postulated that university leadership had no significant effect on the performance of universities in Kenya. Four sub-hypotheses were developed and tested based on the four dimensions of performance that were adopted for this study. The dimensions were research, financial sustainability, society expectations and employee effectiveness.

Hypothesis $H_{01a}$ stated that there was no significant relationship between leadership and research in universities. The findings indicated that the relationship between leadership and research in universities was positive and highly significant. This implied that leadership in universities positively affected the research activities in the universities. Thus, the null hypothesis was rejected and the alternative hypothesis, that leadership has a significant effect on research in universities was adopted.

Hypothesis $H_{01b}$ stated that there was no significant relationship between leadership and financial sustainability of universities in Kenya. The findings indicated that leadership in universities positively affected the financial sustainability of universities. Thus, the null hypothesis was rejected and the alternative hypothesis was adopted.

The third hypothesis $H_{01c}$ stated that organizational leadership did not significantly affect society expectations of universities in Kenya. This null hypothesis was rejected since the relationship between organizational leadership and society expectations was positive and significant.

The fourth hypothesis ($H_{01d}$) stated that there is no significant effect of organizational leadership on the employee effectiveness in universities in Kenya. This null hypothesis was also rejected as the relationship was positive and significant.

The findings in this study concurred with the findings of Furnham (2002), Kargar and Parnell (1996) and Kotter (1996) in that organizational leadership directly influenced performance of universities. Thus, the findings of this study further support the Balanced Score Card model where organizational leadership was found to influence organizational performance.

5.2.2 Effects of Organizational Culture on University Performance in Kenya

The findings of this study points out that universities had a culture that influenced their performance. The study findings indicated that organizational culture positively influenced
society expectations and employee effectiveness. However, the study findings indicated that organizational culture did not affect research and financial sustainability in the universities. Hypothesis H0_2 stated that there is no significant effect of organizational culture on the performance of universities in Kenya. Four sub-hypotheses (H0_2a-d) were developed and tested.

H0_2a stated that there is no significant effect of organizational culture on the research of universities in Kenya. H0_2b stated that there is no significant effect of organizational culture on the financial sustainability of universities in Kenya. The findings in this study established that organizational culture did not influence research and financial sustainability in universities. Thus, the study failed to reject hypotheses H0_2a and H0_2b.

H0_2c stated that there is no significant effect of organizational culture on the society expectations of universities in Kenya. H0_2d stated that there is no significant effect of organizational culture on the employee effectiveness in universities in Kenya. The findings of the study established that organizational culture influenced society expectations and employee effectiveness. Thus, both of these null hypotheses were rejected as organizational culture was found to positively and significantly affect society expectations and employee effectiveness of universities in Kenya.

The findings of this study slightly differ with earlier findings by Waton (2006), Schein (2004), Mannion, (2000), Moorhead and Griffin, (2002), Bartell (2003) and Deal and Kennedy (1999) who affirm that there is a positive relationship between organizational culture and organizational performance. Senge, (1990) also observed that stimulants and incentives, promotes employee effectiveness through motivation towards achieving common goals, having a relevant role in the processes of forming, transmitting and changing organizational culture. The study by Fleenor and Byrant (2002) also established that strong organizational culture influences organizational success regardless of the sector, size, industry or age of the organization. While organizational culture is depicted to have direct and positive effect on organizational performance on the Balanced Score Card model, the findings of the study depict a different picture. This study established that organizational culture influenced only societal expectations and employee effectiveness as dimensions of performance. However, organizational culture did not influence research and financial sustainability in universities.
5.2.3 Moderating Effects of Planning Typologies on the Relationship between Strategy Implementation and University Performance

The study findings established that reactive typology moderated the relationship between leadership and financial sustainability and societal expectations. However, reactive typology did not moderate the relationship between leadership and research and financial sustainability. Findings also indicated that reactive typology moderated the relationship between organizational culture and societal expectations and employee effectiveness. Nevertheless, reactive typology did not moderate the relationship between organizational culture and research and financial sustainability.

The findings indicated that proactive typology moderated the relationship between leadership and research and financial sustainability. However, proactive typology did not moderate the relationship between leadership and society expectations and employee effectiveness. The findings also showed that proactive typology did not moderate the relationship between culture and the all dimensions of performance (research, financial sustainability, societal expectations and employee effectiveness).

5.3 Conclusions of the Study

The study concludes that reactive typology significantly moderates the relationship between leadership and financial sustainability of universities in Kenya. Further, the study also concludes that reactive typology significantly moderates the relationship between leadership and societal expectations as a performance indicator in universities in Kenya. However, reactive typology does not moderate the relationship between leadership and research and employee effectiveness in universities.

Therefore, based on the empirical findings of the study, it was concluded that strategy implementation affected performance of universities in Kenya. Specifically, organizational leadership positively and significantly influenced research, financial sustainability, societal expectations and employee effectiveness as dimensions of performance in universities. Similarly, organizational culture influenced research and financial sustainability as dimensions of performance in universities. However, organizational culture does not affect societal expectation and employee effectiveness in universities.
The study also concludes that reactive typology significantly moderates the relationship between organizational culture and societal expectations as a performance indicator in universities in Kenya. However, reactive typology does not moderate the relationship between organizational culture and research, financial sustainability and employee effectiveness as indicators of performance of universities.

The study indeed concluded that proactive typology significantly moderated the relationship between leadership and societal expectations. Nevertheless, proactive typology does not moderate the relationship between leadership and research, financial sustainability and employee effectiveness in universities.

Lastly, proactive typology does not moderate the relationship between culture and research, financial sustainability, societal expectations and employee effectiveness as dimensions of performance of universities in Kenya.

5.4 Theoretical Implications of the Research

The study provides several implications for scholars. The findings of this study suggest that strategy implementation influences university performance. Specifically, organizational leadership and culture exert some impact on university performance. The study also suggests that planning typologies moderate the relationship between strategy implementation and university performance.

This study developed and tested a model that included three variables (strategy implementation, planning typologies and organizational performance). Reactive typology of planning moderates the relationship between culture and societal expectations and employee effectiveness as dimensions of performance in universities. Proactive planning typology moderated the relationship between leadership and research and financial sustainability as dimensions of performance in universities.

This study contributes to the Balanced Score Card Model which has four dimensions of performance: financial, customer, internal business process and learning and growth. Financial sustainability was represented by Financial sustainability; Customer was represented by Societal
Expectations; Internal Business Process was represented by Employee Effectiveness while Learning and Growth was represented by Research.

In this study, the four dimensions of performance were regressed against Strategy Implementation (leadership and culture) and the interaction of the two planning typologies and Strategy Implementation. Reactive typology was significant in moderating the relationship between culture and societal expectations and employee effectiveness. Proactive typology was significant in moderating the relationship between leadership and research and financial sustainability of universities.

Thus, the final analytical model of the study was developed using the two planning typologies, strategy implementation variables and the four performance variables.

5.5 Practical Implications of the Research

Several practical implications are associated with this study. A significant implication of this study is that by understanding of the strategy implementation, policy makers and implementers would enhance performance in universities through effective and timely communication, formulation of policies on effective reward systems and recognition of performing employees.

There is need for university leadership to create conducive environment to addressing complaints raised by employees as soon as they are reported and the university leadership should focus on improved performance and commitment to achieve the set objectives. Likewise, strategic decisions and any new development should be quickly communicated to the concerned employees. Also, universities leadership should provide timely feedback to employees on how they perform their duties.

Universities should develop fair systems for identifying employees who perform their work exemplarily well and reward them so as to improve their service delivery and attract and retain a performing and competent workforce.

Since planning typologies were found to moderate the relationship between leadership, culture and performance, opportunities in universities should be provided for employees whose jobs are significantly related to planning to participate in the strategic planning process. The universities
should schedule activities so as to achieve set goals. Likewise, universities should ensure that adequate resources are allocated and efficiently utilized and mechanisms put in place to monitor and control the resources. Universities should also frequently make adjustments in their technologies and methods of operations so as to optimize performance.

5.6 Suggestions for Further Studies

Although this study makes significant contributions to academic research and practices, it has some limitations that open up avenues for future studies. First, this study was conducted using samples from universities in Kenya and thus the findings are more meaningful in the Kenyan Universities context. Future studies can investigate this issue in other sectors.

Second, this study used a cross-sectional design and cannot reflect the lag time or long-term effects of strategy implementation on performance. Therefore, future studies could conduct longitudinal studies to examine the relationship between strategy implementation and performance.

Third, this study only examined the moderating effect of planning typologies on the relationship between strategy implementation and performance. It is therefore recommends that future studies could investigate the mediating effects of planning typologies on the relationship between strategy implementation and performance of organizations.
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*Trusteeship Magazine, Association of Governing Boards of Universities and Colleges, Washington DC*


APPENDICES

Appendix i: Introduction Letter

Micah Onyiego
School of Business and Economics
P.O. BOX 3900 -30100
ELDORET

Dear Respondent,

I am a post-graduate student of Moi University in the School of Business and Economics, Department of Business Management pursuing a Doctorate degree in Business Management, Strategic Management option. I am carrying out a research study titled, “STRATEGY IMPLEMENTATION, PLANNING TYPOLOGIES AND PERFORMANCE OF UNIVERSITIES IN KENYA”

I wish to request you to participate in this study as a respondent. The purpose of this study is to find out how strategy implementation context affects the performance of universities in Kenya. The results of this study will help universities to improve the way they formulate and implement their strategic plans to enable them to improve their service delivery to customers and citizens

The study is purely academic and I promise you that the information you will provide will be handled confidentially. I am therefore requesting your cooperation to provide honest and accurate response in filling the questionnaires. You are free to seek any clarification where necessary during the study

Thank you in advance,

Yours faithfully,

Micah Onyiego
Appendix ii: Questionnaire for Middle Level Management of Universities

Name of your University: ……………………………………………………………………

Your university is one of the institutions that has been chosen for the study on “Strategy Implementation, Planning Typologies and Performance of Universities in Kenya” Please respond to the following as indicated .Your participation is highly appreciated.

I wish to request for honesty in responding to the questionnaire. The information gathered will be used for academic purposes only and will be given confidentiality required

Part A: Organization information
1) What is your Job Title?
   a. Dean (   )
   b. Director (   )
   c. Head of Section/Department ( )
   d. Registrar/Administrator (   )

2) How long has your university existed?
   Below 5 years (   )  6-10 years (   ) 11-15 years ( )  16 -20 years ( )  21 -24 ( )
   Above 25 years (   )

3) What is the category of your university? Public (   ) Private ( )

4) What is the size of your university in relation to student enrolment?
   a. 0-5000 (   )
   b. 5001 – 10000 (   )
   c. 10001 – 15000 (   )
   d. 15001 – 20000 (   )
   e. Above 20000 (   )

Part B: Organizational Performance

Please tick the provided boxes the level of agreement which you agree or disagree tothe following statements that describe the organizational performance in your university on a scale of 1-5 where 1. SD – Strongly Disagree 2.D – Disagree 3.N – Neutral 4.A – Agree 5. SA – Strongly Agree

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employee Effectiveness</td>
<td>S</td>
<td>D</td>
<td>N</td>
<td>A</td>
<td>SA</td>
</tr>
<tr>
<td>EE1</td>
<td>Our university is recognized for achievement of high academic standards</td>
<td></td>
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<tr>
<td>EE2</td>
<td>My university use proper utilization of national resources to minimize wastage</td>
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</tr>
<tr>
<td>EE3</td>
<td>Our university supports training and development of employees</td>
<td></td>
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</tr>
<tr>
<td>EE4</td>
<td>Our university has efficient service delivery to meet the customer’s quality requirements that is met</td>
<td></td>
<td></td>
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<tr>
<td>EE5</td>
<td>Performance appraisal are done to identify employees who are to undergo further training in my university</td>
<td></td>
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<tr>
<td>EE6</td>
<td>My university has increased the number of senior academic staff</td>
<td></td>
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<tr>
<td>EE7</td>
<td>My university uses technology in service delivery</td>
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<tr>
<td>EE8</td>
<td>Graduates from my university easily fit in the job market</td>
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<tr>
<td>EE9</td>
<td>I have no intention to leave my university if I were to get another job</td>
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</tbody>
</table>

**Financial sustainability**

<table>
<thead>
<tr>
<th>FS1</th>
<th>My university increases internal revenue annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS2</td>
<td>My university instills financial discipline in all its operations</td>
</tr>
<tr>
<td>FS3</td>
<td>My university relies on internally generated sources of funding rather than external for its core activities</td>
</tr>
<tr>
<td>FS4</td>
<td>My university operates within the approved annual budget</td>
</tr>
</tbody>
</table>

**Research in Universities**

<table>
<thead>
<tr>
<th>R1</th>
<th>My university implements an approved research policy support</th>
</tr>
</thead>
<tbody>
<tr>
<td>R2</td>
<td>My university has expanded opportunities for international exposure for its employees</td>
</tr>
<tr>
<td>R3</td>
<td>Our university establishes linkage with players in other sectors for research purposes</td>
</tr>
<tr>
<td>R4</td>
<td>My university participates in international conferences</td>
</tr>
</tbody>
</table>

**Society Expectations**

<table>
<thead>
<tr>
<th>SE1</th>
<th>My university is involved in technological innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE2</td>
<td>My university impacts the society in employment creation</td>
</tr>
<tr>
<td>SE3</td>
<td>Our university provides extension services relevant to the needs of the local communities</td>
</tr>
<tr>
<td>SE4</td>
<td>My university has good relations with the leaders of the local community</td>
</tr>
<tr>
<td>SE5</td>
<td>Our university complies with health and safety regulations in all its activities</td>
</tr>
<tr>
<td>SE6</td>
<td>My university promotes respect for the rule of law in all its activities</td>
</tr>
<tr>
<td>SE7</td>
<td>Overall my university has greatly improved in performance over the last one year</td>
</tr>
</tbody>
</table>
**Part C: Strategy Implementation**

The following statements indicate how organizational leadership and organizational culture affect implementation of strategic planning in universities.

Please tick (✓) in the boxes to what extent you agree or disagree with the statements on a scale of 1-5 as follows:

1. **SD** – Strongly Disagree  2. **D** – Disagree  3. **N** – Neutral  4. **A** – Agree  5. **SA** – Strongly Agree

<table>
<thead>
<tr>
<th>University Leadership</th>
<th></th>
<th></th>
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<tbody>
<tr>
<td><strong>No.</strong></td>
<td><strong>Statement</strong></td>
<td><strong>SD</strong></td>
<td><strong>D</strong></td>
<td><strong>N</strong></td>
<td><strong>A</strong></td>
</tr>
<tr>
<td>L1</td>
<td>The leadership in my university has a commitment to achieve the set objectives</td>
<td></td>
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<tr>
<td>L2</td>
<td>The leadership of my university addresses complaints raised by employees as soon they are reported</td>
<td></td>
<td></td>
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<tr>
<td>L3</td>
<td>My university leadership encourages employees to achieve results</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>L4</td>
<td>Top management team in my university focuses on improved performance</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>L5</td>
<td>My university ensures that employees are rewarded equitably for their work</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>University Culture</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>C1</strong></td>
<td>My university communicates effectively with employees</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>C2</strong></td>
<td>Our university communication on strategic decisions is quickly passed to the employees</td>
<td></td>
<td></td>
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<tr>
<td><strong>C3</strong></td>
<td>The top management of my university provides adequate information on any new development</td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>C4</strong></td>
<td>Communication between different levels of hierarchy in my university is easy</td>
<td></td>
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<tr>
<td><strong>C5</strong></td>
<td>I receive feedback from my university on how I perform my duties</td>
<td></td>
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<tr>
<td><strong>C6</strong></td>
<td>My university rewards me for the competencies I have on the job</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>C7</strong></td>
<td>My university has a fair system of identifying employees who perform their work exemplarily well</td>
<td></td>
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</tbody>
</table>
Part D: Strategic Planning Typologies

Indicate how strategic planning typologies statements are carried out to achieve organizational goals.

Please tick (√) your level of agreement to the following statements on a scale of 1-5 where:


<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>S</th>
<th>D</th>
<th>N</th>
<th>A</th>
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</table>

**Reactive Planning Typology**

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>S</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
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<tbody>
<tr>
<td>RP1</td>
<td>Opportunities are provided for employees whose job are significantly related to planning to participate in the strategic planning process</td>
<td></td>
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<td>RP2</td>
<td>My university has collaboration among different employees in schools and departments</td>
<td></td>
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<td>RP3</td>
<td>Activities are scheduled to achieve the goals set in my university</td>
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<tr>
<td>RP4</td>
<td>My university ensures efficiency in allocation of resources in its plans</td>
<td></td>
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<td>RP5</td>
<td>My university has developed automated processes to maintain low costs on its activities.</td>
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</table>

**Proactive Planning Typology**

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
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<th>D</th>
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<th>A</th>
<th>SA</th>
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</thead>
<tbody>
<tr>
<td>PP1</td>
<td>My university has put in place monitoring and control mechanism in all its activities</td>
<td></td>
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<td>PP2</td>
<td>There is constant feedback on the progress of activities in my university</td>
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<td>PP3</td>
<td>My university continuously assess the operating environment to spot any changes for adaptation</td>
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<tr>
<td>PP4</td>
<td>My university has continued to ensure quality of</td>
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<tr>
<td>academic programmes for competitiveness</td>
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<tr>
<td>PP5</td>
<td>My university rarely makes major adjustments in its technology and methods of operation</td>
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</table>

Thank you for your time in completing this questionnaire
Appendix iii: NACOSTI Research Permit

THIS IS TO CERTIFY THAT:

MR. MICAH ONYIEGO NYAKEGO

of MOI, 3900-39100 eldoret, has been

permitted to carry out research in All

Counties

on the topic: STRATEGY

IMPLEMENTATION CONTEXT, PLANNING

TYPOLOGIES AND PERFORMANCE OF

UNIVERSITIES IN KENYA

for the period ending:

29th June, 2017

Applicant's
Signature

PERMIT NO: NACOSTI/P/16/79088/12302
Date Of Issue: 29th June, 2016
Fee Received: Ksh 2000

Director General
National Commission for Science, Technology & Innovation

CONDITIONS:

1. You must report to the County Commissioner and
the County Education Officer of the area before
embarking on your research. Failure to do that
will lead to the cancellation of your permit.

2. Government Officers will not be interviewed
without prior appointment.

3. No questionnaire will be used unless it has been
approved.

4. Excavation, filming and collection of biological
specimens are subject to further permission from
the relevant Government Ministries.

5. You are required to submit at least two(2) hard
copies and one(1) soft copy of your final report.

6. The Government of Kenya reserves the right to
modify the conditions of this permit including
its cancellation without notice.

RESEARCH CLEARANCE
PERMIT

REPUBLIC OF KENYA

NACOSTI

National Commission for Science, Technology & Innovation

CONDITIONS: see back page.
Appendix iv: Introduction Letter for Data Collection from Moi University

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: MICAHONYIEGO
REG/NO:SBE/D/009/14

This is to confirm that the above named is a bonafide student of Moi University registered for Doctor of Philosophy in Business Management.

In partial fulfillment for the award of the PhD degree, students are expected to learn to apply theories using the latest tools and techniques and practice making real-world business decisions to help solve a wide range of problems. In this regard they are expected to carry out a Thesis on current issues affecting business and society.

His Thesis topic is on “Strategy Implementation, Context, Planning, Typologies & Performance of Universities in Kenya.”

This is to request you to assist him with information from your organization. All the information provided will only be used for academic purposes.

Any assistance given to him will be highly appreciated.

Yours faithfully,

[Signature]

PROF. LOICE MARU,
FOR: DEAN, SCHOOL OF BUSINESS AND ECONOMICS.
Appendix v: Q-Q Plot for Dependent Variable (Performance)

Normal Q-Q Plot of Zscore(Performance)
Appendix vi: Q-Q Plot for Leadership

Normal Q-Q Plot of Zscore(Leadership)
Appendix vii: Q-Q Plot of Organizational Culture
Appendix viii: Normal P-P Plot of Regression Standardized Residual (DV –Performance)
Appendix ix: Scatter Plot for Performance and Leadership
Appendix x: Combined Linear Relationship between Performance and Culture
Appendix xi: Linearity Between Dependent Variable (Performance) and Moderator (Planning Typologies)
Appendix xii: Test for Homoscedasticity between IV, MV and Performance
Appendix xiii: Combined Test for Homoscedasticity between Leadership, Culture and Performance
Appendix xiv: Test for Homoscedasticity between Leadership and Performance
Appendix xv: Test for Homoscedasticity between Culture and Performance
Appendix xvi: Test for Homoscedasticity between Reactive typology and Performance

![Scatter plot showing reactive residuals vs. studentized residual with a horizontal line indicating homoscedasticity.](image-url)
Appendix xvii: Test for Homoscedasticity between Proactive typology and Performance
Appendix xviii: Scatter Plots for Planning Typologies
Appendix xix: Location of Selected Participant Universities

Key

University of Nairobi
Technical University of Kenya
Multimedia University of Kenya
Catholic University of Eastern Africa
KCA University
Kabarak University
Masinde Muliro University of Science and Technology
Kisii University
Kabarak University

Counties of Kenya

GeoCurrents Map
## Appendix xx: List of Accredited Universities in Kenya

<table>
<thead>
<tr>
<th>ACCREDITED UNIVERSITIES</th>
<th>YEAR OF ESTABLISHMENT</th>
<th>YEAR OF AWARD OF CHARTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Jomo Kenyatta University of Agriculture and Technology</td>
<td>1994</td>
<td>2013</td>
</tr>
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<td></td>
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<tr>
<td>13. Masinde Muliro University of Science and Technology</td>
<td>2007</td>
<td>2013</td>
</tr>
<tr>
<td>15.</td>
<td></td>
<td></td>
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<tr>
<td>18. Jaramogi Oginga Od inga University of Science and Technology</td>
<td>2009</td>
<td>2013</td>
</tr>
<tr>
<td>19. Laikipia University</td>
<td>2009</td>
<td>2013</td>
</tr>
<tr>
<td>20. University of Kabrang</td>
<td>2009</td>
<td>2013</td>
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<td>21.</td>
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</tr>
<tr>
<td>68.</td>
<td>Zetech University</td>
<td>2014</td>
</tr>
<tr>
<td>69.</td>
<td>Lukenya University</td>
<td>2015</td>
</tr>
</tbody>
</table>

Source: Commission for University Education, 2015
Appendix xxi: MPlus Output For Final Model Fitness