ROLE OF STRATEGIC LEADERSHIP FOR SUSTAINABLE COMPETITIVE ADVANTAGE IN KENYAN PUBLIC AND PRIVATE UNIVERSITIES

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Role of Strategic Leadership for Sustainable Competitive Advantage in Kenyan Public and Private Universities

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

Signature …….. Date……

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This thesis has been submitted for examination with our approval as University Supervisors.

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DEDICATION

This thesis is dedicated to my parents Mrs. Priscillah Muthoki Kising'u and the late Simon Kising'u Kathyaka who had longed to see the end of this study. Both parents were, in their own special ways, very inspirational to my accomplishment of the study. It is also dedicated to my brothers and sisters. The thesis is also dedicated to my loving wife Elizabeth Muthami and daughter Esther Muthoki Muthami. You made me who I am and made my dream come true.

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LIST OF ABBREVIATIONS AND ACRONYMS

AC	Adhocracy Culture
AI	Administrative Innovation
CC	Clan Culture
CUE	Commission for University Education
GLL	Group Level Learning
HC	Hierarchy Culture
ILL	Individual Level Learning
JKUAT	Jomo Kenyatta University of Agriculture and Technology
KA	Knowledge Acquisition
KI	Knowledge Implementation
KM	Knowledge Management
KT	Knowledge Transfer
MC	Market Culture
OC	Organizational Culture
OE	Organizational Excellence
OEF	Organizational Effectiveness

OI	Organizational Innovation
OL	Organizational Learning
OLL	Organizational Level Learning
OR	Organizational Responsiveness
PCI	Process Innovation
PI	Product Innovation
SCA	Sustainable Competitive Advantage

DEFINITION OF TERMS

Adhocracy Culture: the organizational culture that stresses external focus with a high degree of individuality and flexibility (Ashraf, Kadir, Pihie, & Rashid, 2014).

Administrative Innovation: the development and implementation of the administrative processes, rules, procedures, management systems, staff development programmes and changes in the social system (Damanpour & Aravind, 2012).

Clan Culture: the organizational culture whose focus of attention is the inside maintenance with flexibility, attention and sensitivity to customers and people (Ashraf *et al.*, 2014).

Competitive Advantage: the ability of a firm to create more superior value than rival organizations (Costa, Cool, & Dierickx, 2013).

Group Level Learning: the process that involves individuals transferring their individual knowledge within a group so that all members develop a shared understanding (Barba-Aragón, Jiménez-Jiménez, & Sanz-Valle, 2014).

Hierarchy Culture: the organizational culture that emphasizes the internal maintenance requiring control and stability (Ashraf *et al.*, 2014).

Individual Level Learning: the process by which individuals generate new insights and knowledge from existing tacit or explicit information and knowledge (Barba-Aragón *et al.*, 2014).

Knowledge Acquisition: the practice that encompasses the process of acquiring and learning appropriate knowledge from various internal and external resources, such as experiences, experts, relevant documents, plans and so forth (Gholami, Asli, Nazari-Shirkouhi, & Noruzy, 2013).

Knowledge Implementation: the practice that encompasses the application of knowledge and the use of the existing knowledge for decision-making, improving performance and achieving goals (Gholami *et al.*, 2013).

Knowledge Management: a framework for designing an organization's strategy, structures, and processes so that the organization can use what it knows to learn and to create economic and social value for its customers and community (Omotayo, 2015).

Market Culture: the organizational culture whose focus of attention on outside positioning requiring control and stability (Ashraf *et al.*, 2014).

Organizational Culture: a set of shared beliefs, values and assumptions that shape the perceptions and reactions of a group of people within an organization regarding events in their own environment (Chang & Lin, 2015).

Organizational Effectiveness: the faculty member's perception of the student educational satisfaction, student academic development, student career development, student personal development, faculty satisfaction with employment, faculty quality and occupational progress, system community interaction and openness, capability in obtaining resources, and organizational health to describe the current situation of their university (Ashraf *et al.*, 2014).

Organizational Excellence: an every day event that can be achieved when organizations are able to exceed expectations (Qawasmeh, Darqal & Qawasmeh, 2013).

Organizational Innovation: an organizational method in working practices, organizing work environment and external relations which are new for organization, and tends to improve organizational performance (Steiber, 2012).

Organizational Learning: an area of knowledge within organizational theory that studies models and theories about

	the way an organization learns and adapts (Vasenska, 2013).
Organizational Level Learning:	the process that occurs when individual and group knowledge is institutionalized (Barba-Aragón *et al.*, 2014).
Organizational Responsiveness:	the ability of an organization to respond in an appropriate manner to mitigate negative threats or capitalize on positive opportunities generated by an organization's environment (Vinayan, Jayashree, & Marthandan, 2012).
Process Innovation:	the development of new tools and equipment (Bilgihan, Okumus, & Kwun, 2011).
Product Innovation:	the introduction of new products or service (Bilgihan *et al.*, 2011).
Strategic Leadership:	the ability to anticipate, envision the future, maintain flexibility and empower others to create strategic change as necessary (Hitt, Ireland, & Hoskisson, 2015).
Sustainable Competitive Advantage:	the organization's efforts in establishing and maintaining competitive advantages for a long-term period over rival organizations (Hakkak & Ghodsi, 2015).

ABSTRACT

The general objective of this study was to assess the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities. Specifically, the study sought to assess the roles of shaping organizational culture, fostering organizational learning, implementing knowledge management and fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities. Strategic leadership is about promoting the sustainable competitive advantage. The strategic leadership practices focus on shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation. As universities in Kenya today are operating in a highly turbulent and dynamic environment as a result of liberalization of the higher education industry, resulting in an influx of many players, to deal with the changes and high levels of competition, it requires Kenyan public and private universities to have effective strategic leaders to build sustainable competitive advantage for their universities, especially when Kenya integrates into the regional and global markets. This research adopted quantitative research design and cross-sectional survey research design to address the formulated hypotheses. Stratified random sampling technique was used to select a sample of 57 universities in Kenya out of the target population of 67 universities accredited to undertake university education in Kenya. Primary data was collected by use of self-administered questionnaires which were distributed through drop and pick method to a total sample size of 285 academic leaders. A total of 215 complete responses were used for analyses. Data analysis was by descriptive statistics and inferential statistics using the Statistical Packages for Social Sciences (SPSS) version 24. The Pearson's product moment correlation analysis and standard multiple regression analysis were used for hypotheses testing. The data was presented by the use of tables, and figures for the purpose of giving a pictorial view of the results. The findings indicated that there was a significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities. There was a significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities. The results indicated that there was a significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities. Overall, the study found that there was a significant role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities. The study recommended that the practicing university leaders should understand and develop a holistic approach of sustaining effective organizational culture in order to build sustainable competitive advantage. The implications of the study on policy, theory and practice is that to deal with the changes and high levels of competition, it requires Kenyan public and private universities to have effective strategic leaders to build sustainable competitive advantage for their universities, especially when Kenya integrates into the regional and global markets.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Strategic leadership is acknowledged as one of the main research directions in mainstream strategic management (Malewska & Sajdak, 2014). In the rapidly changing environment, every organization has to exploit sustainable competitive advantage. Strategic leadership is about promoting the sustainable competitive advantage and influencing or turning a strategy of organization into actions (Du Plessis, Marriott, & Manichith, 2016; Marriott, Du Plessis, Sukumaran, & Manichith, 2014). However, in the complex global competitive environment, the abilities of an organization to gain competitive advantage and achieve above-average returns is compromised whenever strategic leaders unsuccessfully respond to changes. As the global competition becomes increasingly fierce, how to sustain competitive advantage or achieve sustainable competitive advantage in the higher education sector starts obtaining more attention in the academic environment (Hitt, Ireland, & Hoskisson, 2013). Globalization and increasing market competitiveness have driven firms towards innovativeness in their operations to gain sustainable competitive advantage (Verma & Jayasimha, 2014). Competition in the ages of global economy is more complex, changing more quickly, more unpredictable, brings more and greater new challenges to organization management, which means more threats and simultaneously more opportunities. Today's dynamic business world has been transformed into a knowledge-based economy. It has been identified that one factor that can help an organization deal with the global economy is strategic leadership (Zoogah, 2011). Accordingly, strategic leaders need to foster strategic leadership in other people instead of only themselves.

Strategic leadership today has been a leadership approach because of global competition and rapid technological progress that is much more important than indeterminate because of the environmental media. In today's world of turbulent conditions and intense competition, the ability of organizations to consistently track environmental changes and undertake timely and appropriate responses is considered as an important source of sustainable competitive advantages (Akhavan, Sanjaghi, Rezaeenoor, & Ojaghi, 2014). With the increasing pace of globalization, competitive rivalry, customer demand shift, and rapid technological advancements creates an environment in which sustainable competitive advantage is difficult, if not impossible, to achieve for organizations. In the current competitive environment, companies attempt to thrive and adapt by creating sustainable competitive advantage through increased organizational performance (Mehralian, Nazari, Akhavan, & Rasekh, 2014). The economic basis of today's world is undergoing a dynamic transformation into a knowledge-based economy (Shabaninejad, Misalehian, & Mehralian, 2014). Under these conditions, having high sensitivity and the ability to timely and quickly respond to market changes are vital necessities (Jafari, Rezaeenour, Mazdeh, & Hooshmandi, 2011).

There is need for further research on how strategic leaders in the public sector respond to dynamic environments and the requisite strengths essential for survival in turbulent environments (McCarthy, 2014). For organizations, effective strategic leadership can help them adapt better to new environment (Schoemaker, Krupp, & Howland, 2013), so that they may improve performance and enhance competitive power in turbulent environments (Li, Liu, & Xi, 2014). Knowledge of strategic leadership is essential because the demands from shareholders and stakeholders on the top management teams have increased in both intensity and complexity (Carter & Greer, 2013). However, some top leaders of universities embark on the work of strategic leadership without sufficient training and experience in the work of strategic leadership. Drew (2010) found that the most significant challenges facing higher education institutions include the need for strategic leadership, flexibility, creativity and change capability, maintaining academic

quality, the ability to respond to competing tensions and remain relevant. In the 21st century, universities compete for status, ranking, innovation, collaborations, research, new technologies, learning and funding from governmental or private sources. Universities have to compete for funding, innovation, collaborations, new technologies, research, and recruitment of students (Aydin, 2014).

Universities in Kenya today are operating in a highly turbulent and dynamic environment as a result of liberalization of the higher education industry, resulting in an influx of many players (Mathooko & Ogutu, 2014). Mathooko and Ogutu (2015) observed that higher education institutions in Kenya are operating in a high velocity environment which reflects rapid, frequent environmental change that continually disrupts the competitive structure of the industry (Mathooko & Ogutu, 2015). As today's universities operate in a climate of great change, along with increased responsibilities and accountability from internal and external customers, this has resulted in calls for a new kind of leadership working to help the university to improve educational services and face more challenges, called strategic leadership, at the university level (Alalfy & Elfattah, 2014). Therefore, the universities need a new management approach, strategic leadership.

Strategic leadership is a demand of the day, and needed for organizations to survive. In this scenario the most effective and beneficial maneuver for any organization is to create innovative ways in conducting business. Therefore, strategic leaders must navigate through these complexities and develop strategies that will allow their organizations to be successful, whether they are for profit or nonprofit (Slawinski, 2011). It has been argued that a lack of orientation to the work of strategic leadership may jeopardize organizational competitiveness, performance, and sustainability (Bansal & Desjardine, 2014). Despite the significance of competitiveness in the organizational performance, most top management teams lack adequate skills how to develop and implement a workable competitiveness strategy (Hino & Aoki, 2012). It has been suggested that the essence of strategic leadership is creation and maintenance

of strategic thinking, absorptive capacity, adaptive capacity and managerial wisdom (Li *et al.*, 2014). Strategic thinking refers to thinking in a long run and not content with the existing conditions (Gavetti, 2011), while adaptive capacity refers to the ability to change, and absorptive capacity refers to the ability to learn, mainly involving the capacity to recognize new information, assimilate it and apply it to new circumstance (Li *et al.*, 2014). Recently, Schoemaker *et al.* (2013) argued that strategic leaders are the focal point for organizational learning, they promote a culture of inquiry, and they search for the lessons in both successful and unsuccessful outcomes.

Strategic leadership is one critical factor in the successful implementation of knowledge management initiatives. Recently, Jain and Jeppessen (2013) emphasized that strategic leadership is another important knowledge management enabler and plays a critical role in implementing knowledge management for three reasons: establishment of vision for the organization as well as developing an action plan for the implementation of that vision; identification of opportunities that generate knowledge; and championing and influencing cultural and organizational transformation since knowledge management involves modifying processes, practices, and organizational structures. Similarly, Rowe and Nejad (2009) highlighted the concept of strategic leadership in knowledge management by suggesting that senior management support is vital in changing the behaviour of people and for introducing perspectives in knowledge management. Makambe and Pellissier (2015) explained that knowledge management involves changing practices, policy and often organizational structure, the senior leader must set the framework for the transformation, other factors such as culture and information technology infrastructure come second, but they are also the strategic leader's initiative.

Nowadays in global marketplace, sustaining a competitive position is an ever concern. Today's business environment is characterized by continuous change as a result of fast changing technologies, ever increasing changes in customer demand and the growing levels of intense global competition. In the rapidly changing environment of today, organizations face the challenge to improve their performance in order to

capitalize on rapid change, and to establish or regain sustainable competitive advantage. Nowadays in current economic difficulties organizations performance depends on their competitive advantage merely (De Oliveira & Werther, 2013). Many businesses in their quest for sustained competitive advantage have reacted to these new set of challenges by downsizing, unbundling, focusing on core business, reengineering, decentralization, outsourcing, restructuring, and relying on self-directed work teams. Unfortunately, sustained competitive advantage can no longer be found by simply lowering costs, higher quality and better service as these factors have now become the minimal criterion for remaining in the competitive game. With regard to recent financial crisis, changing environment and other international issues organizations found that gaining and sustaining competitive advantage is increasingly difficult (D'Aveni, Dagnino, & Smith, 2010). The businesses now should be cognizant of the fact that past economic success is no longer a guarantee of future success. The globalization has converted the world into a small global village; a village in which there is an ever high stream of contentions and competitions between organizations (Abdow, 2015).

1.1.1 Global Perspective of Higher Education Sector

As the higher education world over is undergoing rapid transformation in the face of changing environmental dynamics, all higher education institutions are required to build sustainable competitive advantage (Kising'u, Namusonge, & Mwirigi, 2016). The recent scenario in the higher education landscape has witnessed the increasing pressure exerted on organizations to compete towards organizational sustainability. In the globalizing world, having a competitive power at an international level is very important both for developing and developed countries. Global competition in the higher education sector has emerged during an era of increased globalization - a multidimensional phenomenon involving a conglomeration of social, economic, political, and cultural processes that result in a heightened interconnectedness and awareness between and among countries and their citizens (Steger, 2013). Higher education institutions are increasingly expected to become centers of knowledge creation and utilization, and to promote lifelong

learning. Effective higher education institutions are generally seen as an important building block in the development of a country (Ramaprasad, 2011). They play a crucial role in a nation as it creates tax revenue, increases savings and investment, and leads to a more entrepreneurial and civic society, not only enables a state to maintain a competitive advantage, but it also stimulates scientific research that results in modernization and social transformation. Higher education of a good quality is a source of great potential for the cultural development of a country (Kumar *et al.*, 2013).

Higher education is one of the most effective instruments for economic, political, human resources and social development. Higher education institutions have to form a coherent, coordinated, albeit complex network to generate knowledge, store it, propagate it and apply it to the development of society (Ramaprasad, 2011). They have a strategic role in the dissemination, creation and application of knowledge and contribute entrepreneurial graduates who will drive economic growth forward through their projects in the knowledge economy. They can play a critical role in knowledge transfer through working with other organizations to support innovation and solve their problems (Fullwood, Fullwoodwley, & Delbridge, 2013). They can maximize their impact on the community and the wider society. They have the ability to change the world through training, researching answers to challenges and informing public policy (Galang, 2010). They appear to be known as center of knowledge as they create stock of knowledge and expertise and they are equipped with relevant knowledge-generating capabilities and they also have research facilities which allow them to engage in science-based entrepreneurial activities.

Colleges, technical institutions and universities function as suppliers of training, expertise, and personnel to industries (Fullwood *et al.*, 2013). Universities and research centers constitute social academic communities that play a vital role in creating and transmitting scientific knowledge, which is the main source and driver of societal progress and development (Tian, Nakamori, & Wierzbicki, 2009). Universities have helped to transform societies by educating decision-makers, leaders, and academics

(Lozano, Lozano, Mulder, Huisingh, & Waas, 2013). That is why, in these recent years, universities are considered to be central to a knowledge-driven economy. Consequently, the world has seen a rapid increase in the number of private universities and private wings (self-sponsored students) of public universities.

The higher education has undergone significant changes in the recent past. Higher education world over is undergoing rapid transformation in the face of changing environmental dynamics (Mathooko & Ogutu, 2014). On the same account, Davidovitch and Iram (2015) emphasized that the higher education has undergone intensive change in recent decades, both in Israel and worldwide. The higher education sectors today are facing global challenges from the rapid technological change and increased demands of today's world. Higher education institutions around the world are facing the decline of funding from government (Fernández, Morales, Rodríguez, & Salmerón, 2011). Similarly, Hutaibat (2011) maintained that in recent years, the higher education sector has experienced various changes and developments, such as increased competition, globalization and limited funding resources. Recent changes to university funding in the United Kingdom, occurring against a background of intensifying competition and financial austerity, have resulted in a dual challenge for higher education institutions of improving quality and reducing costs (Thirkell & Ashman, 2014).

Today the higher education environment is inundated with a plethora of challenges that can spur only those businesses sound strategies have chances of surviving the competition. An examination of the service value chain models in higher education in India by Rathee and Rajain (2013) concluded that the higher education is facing lots of challenges due to the dynamic environment which is making the survival of these institutions difficult in the competitive world. Similarly, Ahmad and Farley (2014) concluded that the higher education landscape in Malaysia has gone through substantial changes. At the same time, the globalization of education has led to an increasingly competitive market among higher education institutions. It has been argued that these changes, enhanced by the emergence of the knowledge society (Bridges, Juceviciene,

Jucevicius, Mclaughlin, & Stankeviciute, 2014), demographic developments, slow economic growth, globalization and the growth of global competition (Dobbins & Knill, 2014; Dobbins, Knill, & Vögtle, 2011; Solanke, 2011).

It has been argued that global competition in higher education is a relatively new phenomenon, associated with the development of the worldwide knowledge economy and the impact of globalization (Marginson, 2012; Naidoo, 2011; Bagley & Portnoi, 2014). The notion of global competition is closely associated with neoliberal ideology and values that have informed thinking in a number of policy arenas, including higher education (Naidoo, 2011). Altbach and Salmi (2011) explained that the global competition is fueled by the idea of the world-class university. As the global competition is now manifested in global rankings of universities that first appeared in the early part of this century (Hazelkorn, 2014), more and more universities define themselves in global competitive terms. With increasing global competition among universities, satisfaction, loyalty and commitment to the students is regarded as a competitive advantage and has been emphasized more and more in the universities (Akbary-Boorang, Jafari-Sani, Ahanchian, & Kareshki, 2013). To gain competitive advantage, higher education institutions need to become more brand oriented by creating strong brand equity through interactions with internal and external stakeholders to increase their visibility, differentiation and market share (Gromark & Melin, 2011).

Păcuraru (2012) asserted that higher education institutions have to deal with the concurrent challenges of managing expansion of the student body, with the accompanying required increases in facilities, staff, lectures, and courses; maintaining and improving the quality of teaching, facilities, and curriculum; obtaining sustainable funding; improving labor market attractiveness of students; increasing managerial and staff capacities, and innovation in both teaching and managing the organization. As university leaders attempt to develop successful university education programs while addressing expanded competition, they need to understand the factors that provide a competitive advantage to their programs (Essary, 2011). Unfortunately, there is limited

empirical information available to help guide administrators in the planning and development of successful university education programs. By understanding the practices of their competitors, academic administrators can adjust their educational programs based on market requirements and can enhance the quality of their products and services in order to obtain a competitive advantage (Hanganu & Balan, 2011).

Universities all over the world are exposed to many of the social, economic, political and educational changes and must find ways to manage these large changes for long-term to university future. Today's universities operate in a climate of great change, along with increased responsibilities and accountability from internal and external customers (Alalfy & Elfattah, 2014a). This has resulted in calls for a new kind of leadership working to help the university to improve educational services and face more challenges, called strategic leadership, at the university level (Alalfy & Elfattah, 2014b). The universities as knowledge based institutions are expected to manage knowledge for sustainable competitive advantage, growth and innovation (Ohiorenoya & Eboreime, 2014). The current universities need to develop the skills and abilities of members required the exercise of strategic leadership. However, scant research in the plain of strategic leadership has considered the sector in which leadership occurs and as an effect of this, most of the speculative development in strategic leadership has assumed that it occurs in the for profit sector (Dimitrios, Sakas, & Vlachos, 2013).

1.1.2 Kenyan Perspective of Higher Education Sector

Nowadays, higher education in Kenya is characterized by massive expansion, more diverse profiles of higher education institutions, programs, and their students, greater internationalization and globalization, wider participation in lifelong learning, private education institutions, all thanks to the effects of the emergence new players, growing pressures on costs, and new forms of financing and management, collaborations, and more integrated use of communications and educational technologies. The higher education industry in Kenya has witnessed growth in the past decade, leading to intense

competition due to the increase in the number of degree choices; as prospective students have a wider variety of universities from which to choose (Soko, 2014). In the recent past, some of the polytechnics have been elevated into universities, increasing the number of players in the industry further. Ngome (2010) stated that universities are not only competing for customers (students) but also for staff. Higher education institutions in Kenya are operating in a high velocity environment which reflects rapid, frequent environmental change that continually disrupts the competitive structure of the industry (Mathooko & Ogutu, 2015). Some universities franchise their degree offerings to middle level colleges who get name recognition but pay for it. As public and private universities operate in the same environment, there is need for cross-sector study to ascertain whether private universities adopt same coping strategies as public universities and there is need to investigate and provide empirical evidence on how the environment influences the kind of leaders in these universities especially in relation to its volatility, the most current pressing challenge may be the least challenging in the future (Mathooko & Ogutu, 2014).

Due to the evening and weekend programmes, most public universities in Kenya have a population of self-sponsored students higher than that of regular or government-subsidized students (Wangenge-Ouma, 2012), thereby creating private public universities (Mathooko & Ogutu, 2014). Unfortunately, the main domain offence and domain creation strategies employed by Kenyan public universities include franchising to commercial colleges, establishment of satellite campuses and introducing new programmes, usually in fields beyond the universities' core areas of strength, such as health sciences, law, information and communication technology, management and business studies (Wangenge-Ouma & Nafukho, 2011; Wangenge-Ouma, 2012). As universities in Kenya today are operating in a highly turbulent and dynamic environment as a result of liberalization of the higher education industry, resulting in an influx of many players, strategic management plays a key role in positioning them in their quest to achieve sustainable competitive advantage (Mathooko & Ogutu, 2014).

Ng'ethe (2013) observed that universities in Kenya are operating in a highly competitive environment and one of the challenges they face is employee retention, which has been occasioned by globalization which has intensified competition and increased the mobility of highly skilled employees yet the universities depend on these staff for success and sustainability. Obwogi (2011) stated that mobility of teaching staff in Kenyan universities has grown over the last few years and observed that it was becoming a challenge. Kenyan universities have experienced rapid expansion in terms of enrolment of regular and self- sponsored students over the last decade without corresponding increase in staff numbers and replacement of those who leave due to various reasons including turnover and brain drain. Kipkebut (2010) argued that the biggest challenge occasioned by expansion of student numbers in universities was staff shortage which has forced universities to recruit from each other, while other challenges includes poor institutional governance, poor remuneration, heavy workload, lack of promotional opportunities as causes of staff attrition in the universities. Mathooko and Ogutu (2014) have stated that in developing countries, Kenya included, universities are still stuck with traditional strategic planning and are slowly moving towards broad strategic management with a view to attaining sustainable competitive advantage. As a result of this, competition in the higher education industry has resulted to numerous institutions and some business schools to experience declines in enrolment (Tagwireyi, 2013). However, the decline in enrolment is not as a result of decreasing number of students per se but rather because of the variety of degree programs offered as the number of students increase year on year and so too are the numbers of education providers increasing year on year (Soko, 2014). Therefore, the need for universities to build sustainable competitive advantage is self-evident, resulting in search for strategies that can make universities to thrive and prosper.

1.1.3 Strategic Leadership

Many scholars are increasingly developing an interest in strategic leadership rather than management in spite of the lack of a standard definition of the term strategic leadership. Despite the importance of strategic leadership, leadership scholars and practitioners have not approved a standard definition of strategic leadership (Allio, 2013). Strategic leadership means the ability to anticipate and envision the future, maintain flexibility, think strategically and initiate changes that will create a competitive advantage for the organization in the future (Daft, 2011). Similarly, Carter & Greer (2013) has defined strategic leadership as the ability of the top management team to create a vision and mission, think and act strategically, and create organizational competitiveness sustainably. Strategic leadership encompasses the capacity to communicate the vision of the organization and to motivate followers toward the implementation of the strategic goals. Strategic leadership has been defined as the ability to anticipate, envision the future, maintain flexibility and empower others to create strategic change as necessary (Hitt, Ireland, & Hoskisson, 2015). In the Kenyan context, Abudho-Riwo, Njanja, and Ochieng (2012) have defined strategic leadership as the ability to envision the future of the organization.

1.1.4 Strategic Leadership Practices

Strategic leadership practices in not-for-profit organizations is a concept that scholars need to investigate urgently due to the importance it has on organizational performance especially in not-for-profits in developing countries (Kitonga, Bichanga, & Muema, 2016a). The strategic leadership practices focus on shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation. Shaping the organizational culture is a central task of effective strategic leadership (Tîrtan, 2011). Strategic leaders are the focal point for organizational culture as they promote a culture of inquiry, and they search for the lessons in both successful and unsuccessful outcomes. Strategic leaders learn how to

shape a firm's shared values and symbols in ways that allow the firm to be more competitive, because they sustain an effective organizational culture (Slawinski, 2011). As competition increases and customers become more demanding, organizational leaders are faced with the dilemma of creating a sustainable competitive advantage and one method of developing such an advantage is to actively build a compelling organizational culture (Testa & Sipe, 2013). Latham (2013) sought to understand the experiences of top management teams who have successfully transformed their organizations to performance excellence and found that change of culture, values-driven, teamwork excellence, valuing employees, being customer focused, and trust has a significant effect on creating performance excellence. Therefore, the role of strategic leadership in the creation of enabling organizational values and culture is essential to the success of the organization (Mauri & Romero, 2013).

Strategic leadership practices focus on fostering organizational learning. The development of strategic leadership skills may significantly improve organizational learning, strategic decision-making, and performance (Carmeli, Tishler, & Edmondson, 2011). Boal and Schultz (2007) believe strategic leaders play a central role in fostering organizational learning and adaptation through the use of dialogue and storytelling, while, Boal (2007) suggested that strategic leaders play a central role in fostering organizational learning and adaptation through the use of dialogue and storytelling (Phipps & Burbach, 2010). Organizational learning is an essential element of the strategic leadership development that ought to be part of an organizational culture. Jansen, Vera, and Crossan (2009) found strategic leaders' engage in transformational and transactional leadership behaviors to affect organizational learning. It has been argued that effective strategic leaders create a nonthreatening work environment that fosters creativity and innovation and where employees learn through practice, without fear of punishment for mistakes (Tawadros, 2015). Strategic leaders are the focal point for organizational learning (Schoemaker *et al.*, 2013). However, failure to institutionalize organizational learning can have devastating effects on the performance

of the organization (Schweitzer, 2013). Tawadros (2015) contended that strategic leaders can use mentoring, job rotation, coaching, and the creation of a learning environment to develop strategic leadership skills. Different approaches exist for the development of strategic leadership skills, including formal learning and self-initiated courses (Gentry, Eckert, Munusamy, Stawiski, & Martin, 2013).

It has been suggested that strategic leadership focuses on implementing knowledge management (Jain & Jeppessen, 2013; Makambe & Pellissier, 2015; Rowe & Nejad, 2009). Jain and Jeppessen (2013) emphasized that strategic leadership is another important knowledge management enabler and plays a critical role in implementing knowledge management for three reasons: establishment of vision for the organization as well as developing an action plan for the implementation of that vision; identification of opportunities that generate knowledge; and championing and influencing cultural and organizational transformation since KM involves modifying processes, practices, and organizational structures. Makambe and Pellissier (2015) explained that KM involves changing practices, policy and often organizational structure, the senior leader must set the framework for the transformation, other factors such as culture and information technology infrastructure come second, but they are also the strategic leader's initiative.

Phipps and Burbach (2010) have proposed that strategic leadership focuses on fostering organizational innovation. In advancing a vision, strategic leaders promote organizational learning and innovation as they instill meaning in followers for the roles they play in fulfilling that vision and encourage a motivated response to new situations and challenges (Boal & Schultz, 2007). Therefore, understanding strategic leadership involves spotlighting what effective top leaders actually do to produce a strategy-focused organization (Rumsey, 2013). Consequently, this thesis is based on the perspective of strategic leadership that focuses on the specific activities and behaviors of strategic leaders that can improve the success of the firm. This perspective argues that in an ever-changing complex business environment, strategic leaders may be a source of competitive advantage (Slawinski, 2011). Strategic leaders need to understand which

combinations of resources and capabilities are valuable, rare, costly to imitate, and difficult to substitute for, as these will allow the firm to gain a sustainable competitive advantage.

1.1.5 Strategic Leadership and Sustainable Competitive Advantage in Universities

Saleem, Qayyum, Tahir, and Khan (2015) asserted that strategic leadership always plays very vital and dynamic role to formulate the strategies which is heart of a university or any learning institution towards that ultimately leads toward sustainable competitive advantages. More recently, Tairas, Kadir, Muis, and Mardiana (2016) affirmed that strategic leadership in the university plays important role as it has the capacity to set the direction, identify, select and implement activities that create sustainable competitive advantage. Tairas *et al.* (2016) analyzed the influence of strategic leadership and dynamic capabilities on the competitive advantage of Private Universities in Jakarta using entrepreneurship strategy and operational strategy as the intervening variables. The study adopted a quantitative research design with a sample size of 200 chairmen or leaders of 22 private universities in Jakarta using questionnaire and interview method. The study found that strategic leadership had positive and significant influence on the competitive advantage of private universities in Jakarta in Indonesia.

The case study on strategic leadership and their effect on managing organizational change in Zarqa University in Jordan by Dudin and Al-rbabah (2015) suggested that to achieve a competitive advantage in the light of the transformations, rapid and complex changes, which take place in the surrounding environment, requires organizations to depend on strategic leadership. Mahdi and Almsafir (2014) adopted a cross-sectional survey research design using a quantitative research method to examine the role of strategic leadership in building sustainable competitive advantage in the academic environment focusing on a sample size of 540 academic leaders in 44 private universities in Iraq and the findings revealed that a significantly positive effect was

present in the relationship, indicating that sustainable competitive advantage was improved when strategic leadership is applied.

1.2 Statement of the Problem

Despite the assertion that strategic leadership always plays very vital and dynamic role to formulate the strategies which is heart of an organization or a university that ultimately leads toward sustainable competitive advantages (Dudin & Al-rbabah, 2015; Saleem *et al.*, 2015; Tairas *et al.*, 2016) and the deliberate move by the Government of Kenya to expand university education through the creation of more universities and expansion of programmes offered to get industrialized by the year 2030 in line with the Kenya Vision 2030, Kenyan universities continue to be ranked low internationally as only University of Nairobi and Strathmore University were ranked among top 50 out of 12000 institutions in Africa in survey conducted by the Webometrics in 2011 and no Kenyan university was ranked among the top 1000 in a survey conducted by the Academic Ranking of World Universities in 2012 suggesting that the universities' attainment of sustainable competitive advantage has become a point of concern to stakeholders following these low positions in ranking (Kaluyu, M'chebere, & Gichunge, 2014). However, it appears that some universities seem to consistently perform better than others and this creates scholarly curiosity to find out what is it that they do better than others (Kaluyu, *et al.*, 2014).

Given the phenomenal expansion of Kenyan public and private universities, the Government of Kenya mandates the CUE to regulate university education in the country (Kande, Namusonge, & Mugambi, 2017). Universities in Kenya today are operating in a highly turbulent and dynamic environment as a result of liberalization of the higher education industry, resulting in an influx of many players (Mathooko & Ogutu, 2014) making some business schools to experience declines in enrolment (Tagwireyi, 2013). However, the decline in enrolment is not as a result of decreasing number of students per se but rather because of the variety of degree programs offered as the number of students

increase year on year and so too are the numbers of education providers increasing year on year (Soko, 2014). Nevertheless, the scanty and to some extent inconclusive literature on the subject of strategic leadership and sustainable competitive advantage is not sufficient to interpret what takes place in the Kenyan public and private universities. Sila and Gichinga (2016) sought to examine the role of strategic leadership on strategy implementation in public universities in Kenya. The study was a case study of JKUAT Main campus and found out that strategic leadership plays a critical role in strategy implementation. Kuchio (2012) conducted a study on the role of strategic leadership in strategy implementation in Kenyan private universities - A case study of Kabarak University. The study by Kuchio (2012) was a case study in the Kenyan private universities and it only used a sample from one University and suggests methodological gaps.

There have been little, if any, studies focusing on strategic leadership for sustainable competitive advantage in Kenyan public and private universities. Unfortunately, most recent studies on the subject of strategic leadership in the Kenyan context have focused on strategic leadership and organizational performance (Kitonga, 2017; Kitonga *et al.*, 2016a; Kitonga, Bichanga, and Muema, 2016b; Nganga, 2013; Obunga, Marangu, & Masungo, 2015) leaving a knowledge gap on the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities. Kitonga (2017) recently sought to determine the effect of strategic leadership practices on the organizational performance of not-for-profit organizations in Nairobi County in Kenya adopting a convergent mixed method design utilizing a simple random sampling technique to determine the actual sample size of the study and the findings established positive correlations between determining strategic direction, developing human capital, ethical practices, strategic control and organizational performance and concluded that that there was significant positive correlation between strategic leadership practices in general and organizational performance in not-for-profit organizations in Nairobi County in Kenya.

To deal with the changes and high levels of competition, it requires universities in Kenya to have effective strategic leaders to promote and build sustainable competitive advantage for their universities, especially when Kenya integrates into the regional and global markets. Therefore, the general business problem is that some top leaders in universities embark on the work of strategic leadership without strategic leadership training and orientation to the work of strategic leadership. The specific business problem is that some executives in universities lack the strategic leadership skills to build sustainable competitive advantage for their universities. There are contextual, conceptual, and methodological gaps that have not been filled by the existing studies that justify the current research raises the question: what is the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities?

1.3 Research Objectives

This study was guided by the following one general objective and four specific objectives.

1.3.1 General Objective

The general objective of this study was to assess the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities.

1.3.2 Specific Objectives

This study was guided by the following four specific objectives:

1) To examine the role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities.
2) To establish the role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities.

3) To determine the role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities.
4) To assess the role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities.

1.4 Research Hypotheses

The following four research hypotheses were proposed for this study:

1) Hypotheses 1

   $H_0$1: There is no significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities.

   $H_1$1: There is a significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities.

2) Hypotheses 2

   $H_0$2: There is no significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities.

   $H_1$2: There is a significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities.

3) Hypotheses 3

   $H_0$3: There is no significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities.

   $H_1$3: There is a significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities.

4) Hypotheses 4

$H_0$4: There is no significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities.

$H_1$4: There is a significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities.

1.5 Significance of the Study

The essence of this study was to broaden the notion of strategic leadership that has been primarily applied to profit oriented organizations, to nonprofits, particularly Kenyan public and private universities. The study is important, because it sought to assess the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities. To deal with the changes and high levels of competition, it requires Kenyan public and private universities to have effective strategic leaders to build sustainable competitive advantage for their universities, especially when Kenya integrates into the regional and global markets.

The study provides empirical information to the universities especially the university management teams who may better understand strategic leadership practices for sustainable competitive advantage in Kenyan public and private universities. Current and future strategic leaders may understand how limited strategic leadership can thwart universities' sustainable competitive advantage and how effective strategic leadership can propel universities' sustainable competitive advantage. The study provides information to the stakeholders and the government on sustainable competitive advantage that will facilitate development of the higher education sector in Kenya.

The study adds to the existing body of academic knowledge in the area of strategic management in general. The study pointed out other research areas for possible consideration by other researchers that could contribute to the existing body of

knowledge the strategic management doctrine. The study is of great value to the academicians and researchers, because it has suggested areas for further research for possible consideration by future researchers that could contribute to the existing body of knowledge on strategic leadership and sustainable competitive advantage.

The study provides the policy makers with viable opportunities to revise policies related to strategic leadership and sustainable competitive advantage. The findings provide the policy makers with viable opportunities to revise policies related to shaping of organizational culture, implementing knowledge management, fostering organizational learning, and fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities.

The assessment of the significance of this study is based on the context of the efficacy of the findings in supporting positive social change implications and the extent of the literature gap. The outcome of this study may help develop strategic leadership for sustainable competitive advantage in Kenyan public and private universities. The implications for positive social change include the potential for university leaders to identify strategic leadership practices for sustainable competitive advantage to create more jobs opportunities, and ease unemployment problems in the community. The results of the research may contribute to positive social change, because the society as a whole may benefit from an improved higher education system that might support the employment creation and improvement in the livelihood of the communities as the community gears towards the realization of Kenya Vision 2030.

1.6 Scope of the Study

Simon (2011) stated that delimitations are boundaries that researchers impose on the research project to minimize the scope of a study. The scope of this study was the 67 universities accredited to undertake university education in Kenya, distributed as follows: 22 public chartered universities, 9 public university constituent colleges, 17

private chartered universities, 5 private university constituent colleges, 13 institutions with letter of interim authority, and 1 registered private institution according to the Commission for University Education website (CUE, 2014). The study focused to assess the role of strategic leadership in sustainable competitive advantage of universities in Kenya. The scope of this study was to assess the roles of four strategic leadership practices namely sustaining an effective organizational culture, fostering organizational learning, implementing knowledge management and fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities. Specifically, this study sought to assess the roles of shaping organizational culture, fostering organizational learning, implementing knowledge management and fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities.

1.7 Limitations of the Study

Limitations are the possible weaknesses of the study that the researcher cannot control. Staller (2014) defined limitations as the factors that are outside the control of a researcher that may impede the validity of a study (Staller, 2014). As with other studies, this study had several limitations which should need to be taken into consideration. Firstly, this research was cross-sectional in nature as opposed to being longitudinal. A cross-sectional study examines a particular phenomenon at a particular time (Saunders, Lewis, & Thornhill, 2009). The researcher gathered data just once in order to meet the research objectives, meaning that the research was snapshot, one-shot or cross-sectional in nature, while adopting the cross-sectional research design for data was collected at one point in time), the study was not able to assess the long term impact of the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities. A longitudinal study collects data over a longer time period. However, the duration allocated for completing the doctoral studies was insufficient to conduct a longitudinal study. A longitudinal study would have revealed whether there were any changes in the role of strategic leadership for sustainable competitive advantage in

Kenyan public and private universities over a period of time.

Secondly, most of the measures used were adapted from previous studies which were carried out in the different environments of developed countries. The surveyed employees were from one sector, public and private universities in the higher education sector in Kenya. A study involving more sectors would have added depth to the study but it would have made the scope of the study too broad. Moreover, due to time and financial limitations, the researcher did not study public and private universities in any other country. Therefore, the findings of this study cannot necessarily be generalized to other sectors of the economy such as the manufacturing, banking, health services or the civil service.

Thirdly, the research used a self-report instrument to collect information about the dependent and independent variables. However, these types of survey instruments are most susceptible to common method variance bias (Malhotra, Kim, & Patil, 2006; Rindfleisch, Malter, Ganesan & Moorman, 2008). There is a possibility of consistency effect (motif) as respondents try to show evenness in their responses. Consistency motif may have arisen whereby respondents try to maintain consistency in their responses to similar question, thus producing relationships that would otherwise not exist at the same level in real life settings. On the basis of Field (2013) guidelines, this study covered a minimum of 5 academic leaders per university in order to reduce common method variance bias.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the literature review on the role of strategic leadership practices in sustainable competitive advantage of universities in Kenya. It presents the theoretical framework, conceptual framework, review of literature of variables, empirical review, and critique of the existing literature relevant to the study, research gaps, and summary of the literature review.

2.2 Theoretical Framework

In the development of the structural relationships among the variables of the study, the resource based theory, the flexible leadership theory, and the knowledge based theory are integrated. Consequently, this study is guided by the resource based theory, flexible leadership theory, and knowledge-based theory. These theories explain the role of strategic leadership (shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation) for sustainable competitive advantage in Kenyan public and private universities. The following sections briefly describe these theories to provide deeper understanding on how they might explain the hypothesized relationships.

2.2.1 Resource Based View Theory

In the strategic management literature, the resource-based view of the firm has been considered as one of the most and fast growing research area in the last few decades. The resource based view theory of the firm is a theory in strategic management literature that has been applied in management research to analyze and explain resources of a firm that have the potential to create and sustain competitive advantage and, in turn, superior

performance among firms (David, 2009; Ling & Jaw, 2011; Sheehan & Foss, 2007). The resource based theory of the firm aspires to explain the internal sources of a firm's sustained competitive advantage (Kraaijenbrink, Spender, & Groen, 2010). In relation to the implication of the resource-based view of the firm on the sustainable competitive advantage of the organization, the resource-based view of the firm focuses on the importance of resources in sustainable competitive advantage of the organization, and therefore, it should improve the mechanism of choosing the resources with great potential value (Agha, Alrubaiee, & Jamhour, 2012). More recent studies that focus on the resource-based theory of the firm contend that competitive advantage is a consequence of firm-specific resources and capabilities with characteristics of value, rareness, inimitability and non-substitutability (Barney, 2007). The resource-based view of the firm suggests that variation in competitive markets stems from differences in the characteristics of competitors' resources and capabilities (Scheepers, Hough, & Bloom, 2008). Specifically, resources or capabilities that are valuable and difficult to imitate offer the potential for competitive advantage. The resource-based view of the firm provides an avenue for organizations to plan and execute their organizational strategy by examining the position of their internal resources and capabilities towards achieving competitive advantage (Kristandl & Bontis, 2007; Sheehan & Foss, 2007).

The resource-based view of the firm stipulates that in strategic management the fundamental sources and drivers to firms' sustainable competitive advantage and superior performance are mainly associated with the attributes of their resources which are valuable and costly-to-copy (Ling & Jaw, 2011). However, to possess these resources alone is insufficient to gain a competitive advantage and create value; firms must effectively manage their resources and build unique capabilities to gain an advantage and realize value creation (David, 2009; Sirmon, Hitt,& Ireland, 2007). According to the resource based theory of the firm, sustainable competitive advantage results from resources that are inimitable, not substitutable, tactic in nature and synergistic. Value creation occurs as firms exceed their competitors' ability to provide

solutions to customers' problems, while simultaneously maintaining or improving their long-term financial performance, thereby creating wealth for owners (Morrow, Sirmon, Hitt, & Holcomb, 2007). Therefore, managers need to be able to identify key resources of competitive advantage, performance and value in their organizations, which includes intangible assets such as organizational innovation, knowledge management and organizational learning which have potential to build intellectual capital. In fact, the origin of resource-based view of the firm is the work of Penrose (David, 2009; Ling & Jaw, 2011) who described a firm as a bundle of resources the disposal of which between different uses and over time is determined by management decision making.

As a result, the resource-based view of the firm developed as an explanation of performance differences between firms in the strategic management literature (Barney & Hesterly, 2008; Thompson, Peteraf, Gamble, & Strickland, 2012). The intellectual capital is the main source of sustainable competitive advantage to improve enterprise growth (Clolow, Barry, & Ketchen, 2007; Newbert, 2007). Armstrong and Shimizu (2007) posit that most research using the resource-based view as the theoretical framework have centered mostly on intangible resources. As a major resource of the firm, organizational learning is considered by scholars to foster competitive advantage (Saru, 2007) and is basically conceptualized as the ability to make sense of the environment, and develop new understandings which ultimately manifest itself through internal and external organizational actions (Moore, 2007). Therefore, the resource based theory is a suitable theory to explain the role of strategic leadership (shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation) for sustainable competitive advantage in Kenyan public and private universities through innovatively delivering superior value to customers and use of resources such as organizational culture, organizational learning, organizational innovation and knowledge management for developing a sustainable competitive advantage.

2.2.2 Flexible Leadership Theory

Yukl (2008) proposed a new flexible leadership theory to explain how top executives can influence the financial performance of a business organization. It was formulated in response to the need for a more comprehensive theory of strategic leadership that integrates relevant ideas from several distinct literatures such as leadership, strategy, and human resource management (Yukl, 2009). The flexible leadership theory uses ideas from several different literatures including leadership, human resource management, strategic management, organizational theory and organizational change (Yukl, 2008). The flexible leadership theory is a theory of strategic leadership that emphasizes the need to influence key determinants of organizational sustainable competitive advantage such as shaping organizational culture, fostering organizational learning, implementing knowledge management and fostering organizational innovation. One form of influence with the theory is with management decisions about strategy, programmes, systems and organizational structure while another is the use of task, relations and change-oriented leadership behavior (Yukl, 2009).

Zhou and Li (2012) focused on how knowledge affects radical innovation in knowledge base, market knowledge acquisition, and internal knowledge sharing. The study delved into how knowledge base in its depth and breadth interacts with knowledge integration mechanisms (external market knowledge acquisition and internal knowledge sharing) to affect radical innovation (Zhou & Li, 2012). The sustainable competitive advantage of firms is seen as resting on distinctive processes (ways of coordinating and combining), shaped by the firm's (specific) asset position such as the firm's portfolio of difficult-to-trade knowledge assets, complementary assets and the environmental paths it has adopted or inherited. Within the flexible leadership theory propositions, innovative adaptation includes the ability of a company to adapt to changes in the external environment (Yukl, 2009) which has led to a shift in strategic emphasis beyond the sole efficient management of tangible assets to an additional emphasis on innovation resulting from effective usage of intangible assets like human and social capital

(Mahsud *et al*., 2011). The two determinants can have simultaneous, joint effects on firm performance and lead to competitive advantage (Yukl, 2009). As such, the flexible leadership theory is a suitable theory to explain the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities through innovatively delivering superior value to customers.

2.2.3 Knowledge Based View Theory

The relevant theory that helps significantly towards realizing the important role of implementing knowledge management and fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities is the knowledge-based view theory. The knowledge-based theory of the firm can be a beneficial framework to develop a firm innovation in an effective way (Diaz-Daiz, Aguir-Diaz, & DeSaa-Perez, 2008) as the innovative capability of the firm depends closely on the intellectual assets and knowledge that it has. The main tenet of the approach is that a firm is an institution for generating and applying various types of knowledge. Some scholars have developed conceptual models based on knowledge-based theory which contain critical KM practices. Although the emphasis on knowledge and capabilities has strengthened during the last decade it seems that empirical research has still not reached maturity, and there are no universally accepted guidelines for studying capabilities. This theory supposes that KM practices such as knowledge acquisition, knowledge storage, knowledge creation, knowledge sharing and knowledge implementation play a critical role in achieving high level productivity, financial and human resource performance and finally improving sustainable competitive advantage. The main goal of KM is the rapid, effective and innovative utilization of the resources and knowledge assets, infrastructures, processes and technologies in order to promote organizational performance (Diaz-Daiz *et al.*, 2008).

As KM involves valuable processes which can influence the productivity, financial performance, staff performance, innovation, work relationships and customer satisfaction and finally organizational performance, studying the influence of KM practices on organizational performance in firms is important (Chang, & Lee, 2008). According to the knowledge-based theory, knowledge acts as a basis for creating firm-level capabilities, and is viewed as the strategically most important resource. KM has become increasingly important as organizations realize that effective use of their vast and varied knowledge assets and resources provides them with the ability to innovate and respond to fast changing customer expectations (Sandhawalia & Dalcher, 2011). As such, universities use the knowledge based theory to gain sustainable competitive advantage through generating and applying various types of knowledge.

2.3 Conceptual Framework

The conceptual framework is visual or written output that elucidates essential features of a topic (Berman, 2013; Yin, 2014). The conceptual framework for this study attempts to explain an integrative view of the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities to provide strategic guidelines for universities in Kenya. In this study, the resource based view theory which is a strategic management approach to organizational competitiveness informed the conceptual framework to focus and tie the study together. It is hypothesized that strategic leadership has significant role in sustainable competitive advantage. Therefore, the four strategic leadership practices: shaping organizational culture; fostering organizational learning; implementing knowledge management; and fostering organizational innovation are classified as the independent variables, while sustainable competitive advantage is classified as the dependent variable and the conceptual framework is demonstrated as shown in Figure 2.1.

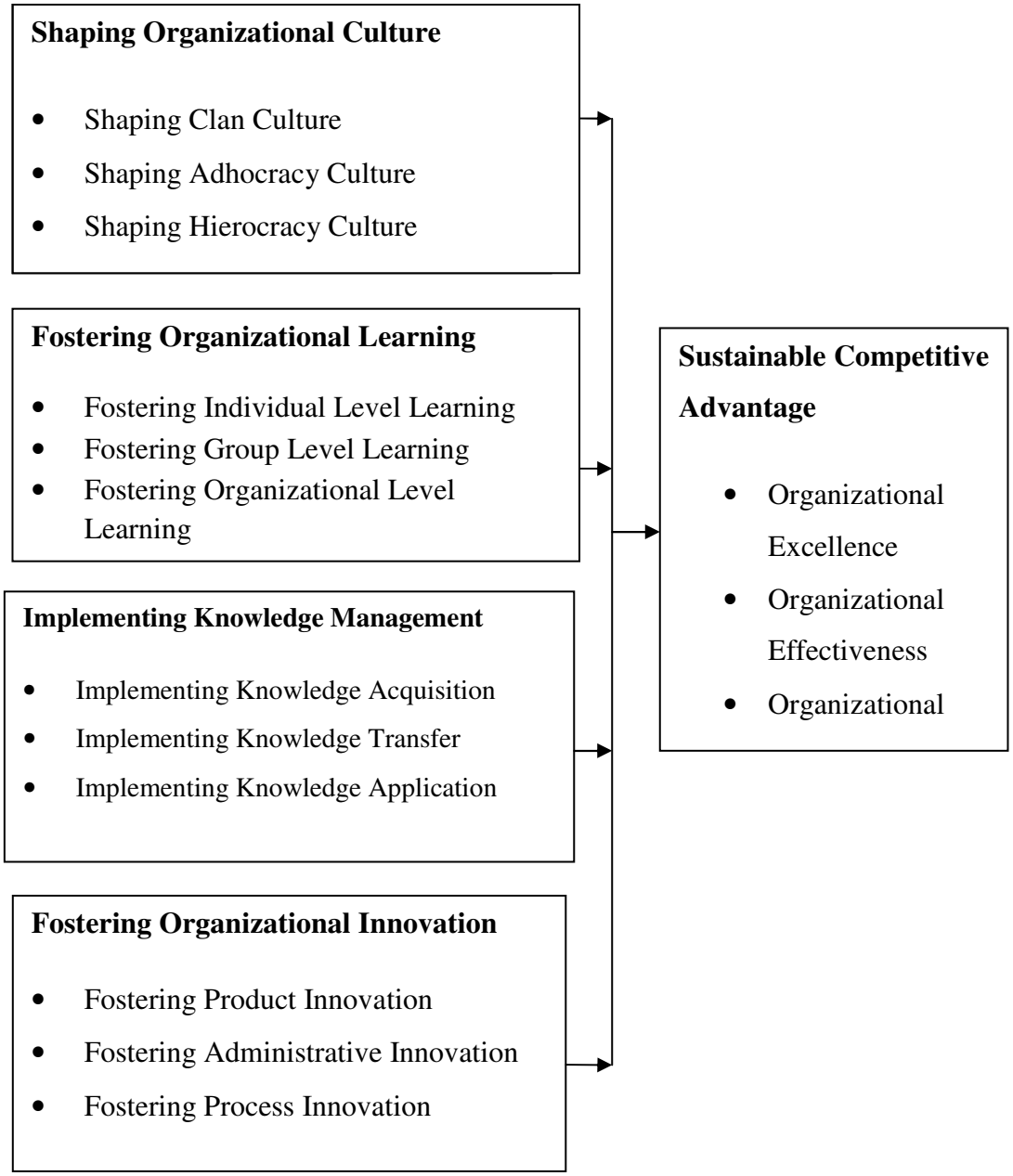

Figure 2.1: Conceptual Framework

2.4 Review of Literature on Variables

This section discusses the theoretical review of variables of the study. Sustainable competitive advantage is classified as dependent variable, while the four strategic leadership practices: shaping organizational culture; fostering organizational learning; implementing knowledge management; and fostering organizational innovation are classified as the independent variables.

2.4.1 Shaping Organizational Culture

Shaping the organizational culture is a central task of effective strategic leadership (Tîrtan, 2011). Strategic leaders are the focal point for organizational culture as they promote a culture of inquiry, and they search for the lessons in both successful and unsuccessful outcomes. Strategic leaders learn how to shape a firm's shared values and symbols in ways that allow the firm to be more competitive, because they sustain an effective organizational culture (Slawinski, 2011). Strategic leaders need to cultivate organizational culture (OC) that can allow talented employees to thrive. As competition increases and customers become more demanding, organizational leaders are faced with the dilemma of creating a sustainable competitive advantage and one method of developing such an advantage is to actively build a compelling OC (Testa & Sipe, 2013). Latham (2013) sought to understand the experiences of top management teams who have successfully transformed their organizations to performance excellence and found that change of culture, values-driven, teamwork excellence, valuing employees, being customer focused, and trust has a significant effect on creating performance excellence. Therefore, the role of strategic leadership in the creation of enabling organizational values and culture is essential to the success of the organization (Mauri & Romero, 2013).

The ability of top management to strike a balance between sustainability and profitability, supportive OC, management, and employees' innovativeness could affect performance and competitiveness (Heracleous & Wirtz, 2014). OC has been described as one of the most popular concepts in the field of management and organizational theory (Uddin, Luva, & Hossian, 2013). However, there seems to be no agreed upon definition of OC in the literature (Abu-Jarad, Yusof, & Nikbin, 2010). Robbins and Judge (2008) stated that OC is a system of shared meaning, created by members of what would be the difference with other organizations. OC is a pattern of norms, values, beliefs and attitudes that influences behaviour within an organization (Chin-Loy & Mujtaba, 2007). Therefore, OC may be described as the values, beliefs and hidden assumptions that organizational members have in common. Furthermore, OC refers to a system of shared meaning held by members, in the end distinguishing one organization from another (Robbins & Judge, 2007). Therefore, OC consist of norms, values, beliefs, procedures and rules that are shared and in effect bind members together (Hill, 2009).

OC is defined as a set of shared beliefs, values and assumptions that shape the perceptions and reactions of a group of people within an organization regarding events in their own environment (Chang & Lin, 2015). OC refers to the set of shared values, beliefs, attitudes, customs, norms, hidden assumptions and personalities developed over time and held in common by members of an organization (Schein, 2010). OC is the most critical component in moving a company from being good to great and that the only asset which firms cannot buy is their organization's culture. Consequently, Di Stifano (2007) also argues that a prerequisite for achieving competitive advantage is having the right corporate culture in place. The study of OC originated from anthropology and sociology and these perspectives have led researchers to define, measure, and characterize culture differently (Cameron & Quinn, 2011). From an academic perspective, literature with regards to OC can broadly be categorized in to two main schools of thought: a phenomenological approach and a functionalist approach. The phenomenological approach focuses on understanding the concept and defining the

meaning of culture, while the functionalist approach focuses on the consequences of culture (Tsui *et al*., 2006). Research has shown that OC performs a functional role by directing managers on how best to manage groups (Sisaye, 2005). Consistent with Abdi and Senin (2014) as well as Cameron and Quinn (2011) this current study applies a quantitative approach in the sociological-functionalist tradition by assuming that organizations have cultures. In addition, this current study views OC from an integration perspective and treats OC as an independent variable composed of four dimensions: clan culture, adhocracy culture hierocracy and market culture (Abdi & Senin, 2014; Cameron & Quinn, 2011).

The clan culture emphasizes and group cohesion, adhocracy culture emphasizes transformation and growth, hierarchy culture emphasizes stability and execution, while market culture emphasizes efficiency and productivity (Cameron & Quinn, 2011). The clan culture is characterized with loyalty, morale, commitment, tradition, collaboration, teamwork, participation, consensus, and individual development (Cameron & Quinn, 2006; Tseng, 2010). Tseng (2010) argued that clan culture emphasizes the long-term benefit of human resources development with high cohesion and morale, but it is also prudent and conservative. This implies that the clan culture can be viewed as a friendly place with an extended family working together. Therefore, the clan culture is typical for an organization that concentrates on internal upholding with agility, apprehension for people, understating for customers, places importance on human relations, adopts flexible operation, generally very hospitable place where leaders are thought as mentors and workplace is regarded as the home from home. Fekete and Boeskei (2011) reported that clan culture is positively related to financial performance of the firms. Tseng (2010) argued that firm performance comes from interdependent behavior like cooperation, knowledge sharing, and mutual assistance. Nevertheless, Fekete and Boeskei (2011) claim that devotedness to the organization; loyalty and tradition are the underlying factors behind this positive relationship.

The adhocracy culture is characterized as a dynamic, entrepreneurial, innovative and creative workplace (Cameron & Quinn, 2011; Tseng, 2010). In fact, the adhocracy culture emphasizes new product and service development, adaptability, growth, change, productivity, efficiency and experimentation (Cameron & Quinn, 2011; Tseng, 2010). Furthermore, these characteristics reflect external orientation and have better developed knowledge conversion and corporate performance (Tseng, 2010). Therefore, the adhocracy culture is typical for an organization that concentrates on an external focus with a high degree of flexibility and individuality supported by an open system that promotes willingness to act, experimentation, risk, independence and responsiveness (Cameroon, Quinn, Degraff, & Thakor, 2006; Igo & Skitmore, 2006). Fekete and Boeskei (2011) reported that the adhocracy culture is positively related to financial performance of the firms. Therefore, OC that is characterized with adaptability to its external environment has the potential to positively affect performance outcomes.

The hierarchy culture is where an organization focuses on internal maintenance, strives for consistency and control through enforcement of strict rules (Igo & Skitmore, 2006). The main characteristics of hierarchy culture are formalized and structured places along with procedures, well-defined processes and a smooth-running organization (Cameron & Quinn, 2011; Tseng, 2010). Therefore, the long-term concern of hierarchy culture is the stability, predictability, and efficiency (Cameron & Quinn, 2006; Tseng, 2010). Ogbonna and Haris (2000) found no relationship between organizational performance and bureaucratic cultures. Furthermore, Fekete and Boeskei (2011) reported that hierarchy culture is negatively related to financial performance of the firms. Although these studies show hierarchy culture is not the best performer compared to other cultural dimensions, Tseng (2010) argued that more formalized companies usually possess formalized controls and processes thus they have better developed corporate performance because of its effective management.

The market culture is regarded as a results-oriented workplace with emphasis on winning, outpacing the competition, escalating share price, and market leadership (Cameron & Quinn, 2011). The market culture tends to be results oriented, where members value competitiveness, thoroughness, perfectionism, assertiveness and personal initiative (Igo & Skitmore, 2006). Fekete and Boeskei (2011) reported that hierarchy culture is positively related to financial performance of the firms. Clan culture is in competition with market culture, while adhocracy culture is in competition with hierarchy culture (Cummings & Worley, 2005). Furthermore, highly collective organizations emphasize group harmony, cooperation and reward for enhancing employee performance (Javidan & Dastmalchian, 2009).Research has shown that some organizations are effective if the organization tends towards clan culture while others are effective towards adhocracy culture or hierarchy culture or market culture (Cameroon *et al*., 2006). Theoretical arguments support the idea that OC is related to organizational performance and long term effectiveness (Cameron & Quinn, 2011; Zheng, Yang, & McLean, 2010). For instance, Zheng *et al*. (2010) argued that OC is one of the key organizational assets that have been studied extensively in their association with organizational effectiveness based on the resource based view. Accordingly, OC can enhance performance in a large scale if it can be understood that what sustains a culture as the culture of an organization allows the employees to be acquainted with both the firm's history as well as current methods of operation and this specific detection endows the employees with guidance about expected and acceptable future organizational behaviors and norms. Thus, creating and influencing an adaptive culture is one of a manager's most important jobs (Daft, 2010). As such, understanding of the shared values, based on the competing values framework will enhance managerial decision making in relation to establishing or ensuring a sustainable competitive advantage (Cameroon *et al*., 2006). Therefore, this current study is based on the functionalist approach to OC with a focus on its role in sustainable competitive advantage of universities in Kenya.

A strong OC supports adaptation and develops organization's employee performance by motivating employees toward a shared goal and objective; and finally shaping and channeling employees' behavior to that specific direction should be at the top of operational and functional strategies (Daft, 2011). OC can have a significant impact on the competitive advantage (Testa & Sipe, 2011). OC is assumed to be a significant factor to effective organizational innovation (OI) and organizational learning (OL) because OC forms values, beliefs, and work systems that could boost or impede both learning and knowledge sharing (Hislop, 2013; Rai, 2011). In fact, OC will affect OL and organization's capabilities and can provide suitable environment for OI (Cameron & Quinn, 2011; Škerlavaj *et al*., 2010). However, there are limited studies that have comprehensively and simultaneously examined different processes of OL on relationship between OC and OI (Cameron & Quinn, 2011). An effective OC can provide support and incentives as well as encourage knowledge-related activities by creating suitable environments for knowledge exchange and accessibility. Therefore, an organization must have a strong culture that values trust, openness, and sociability to stimulate people's interactions and knowledge sharing (Ngoc, 2005). A team-based, non-hierarchical, self-organizing organizational structure is the most effective for knowledge sharing. A research carried out by Mosoti and Masheka (2010) on KM in Kenya revealed that most of the challenges faced by organizations in Nairobi are how to create and implement KM practices as part of OC, organizational strategy and organizational leadership.

2.4.2 Fostering Organizational Learning

Strategic leadership focuses on fostering organizational learning (OL). The development of strategic leadership skills may significantly improve OL, strategic decision-making, and performance (Carmeli *et al.*, 2011). Boal and Schultz (2007) believe strategic leaders play a central role in fostering organizational learning (OL) and adaptation through the use of dialogue and storytelling, while, Boal (2007) suggested that strategic leaders play a central role in fostering OL and adaptation through the use of dialogue

and storytelling (Phipps & Burbach, 2010). Therefore, OL is an essential element of the strategic leadership development that ought to be part of an organizational culture. Jansen *et al.* (2009) found strategic leaders' engage in transformational and transactional leadership behaviors to affect OL. It has been argued that effective strategic leaders create a nonthreatening work environment that fosters creativity and innovation and where employees learn through practice, without fear of punishment for mistakes (Tawadros, 2015).

Strategic leaders are the focal point for OL (Schoemaker *et al.*, 2013). Tawadros (2015) contended that strategic leaders can use mentoring, job rotation, coaching, and the creation of a learning environment to develop strategic leadership skills. Different approaches exist for the development of strategic leadership skills, including formal learning and self-initiated courses (Gentry, Eckert, Munusamy, Stawiski, & Martin, 2013). It has been emphasized that over the last decade there has been a growing interest in examining OL as a source of competitive advantage for the firm (Graham & Nafukho, 2007; Saru, 2007). OL has a significant impact on the strategic initiative and performance (Cheng, Chua, Moris, & Lee, 2012). However, failure to institutionalize OL can have devastating effects on the performance of the organization (Schweitzer, 2013).

OL is a continuous process that may take the time to embed in the day-to-day organizational processes (Lengnick-Hall & Inocencio-Gray, 2013). Therefore, OL encompasses changes in behavior, cognition, and alignment of learning efforts with the aim of achieving strategic initiatives (Walter, Lechner, & Kellermanns, 2013). OL is an area of knowledge within organizational theory that studies models and theories about the way an organization learns and adapts (Vasenska, 2013). With increased competition in this era of globalization and knowledge economy, the role of OL in promoting competitive advantage has become important for the survival and sustainable growth of firms in both developed and developing countries. Clearly, OL has emerged as one of the most promising concepts in strategic management literature in late 1980s in

relation to the concept of competitive advantage (Škerlavaj & Dimovski, 2007). OL has been conceptualized as the ability to make sense of the environment, and develop new understandings which ultimately manifest itself through internal and external organizational actions (Moore, 2007; Dimitriades, 2005). OL is a field of study that was developed in several disciplines by many researchers using a variety of different perspectives. Nevertheless, the concept of OL stretches much farther and is embedded also in different schools of thought, including contingency theory, organizational development, industrial economy, information theory and system dynamics, systems theory, management science, production and operation management, social anthropology, sociology, psychology, and organizational theory (Škerlavaj & Dimovski, 2007). Given the turbulent environments that organizations work within, continuous learning is a key driver of their ability to remain adaptive and flexible – that is to survive and effectively compete (Burke *et al.*, 2006). Consequently, OL is one of the most important sources of a sustainable competitive advantage that companies have (Škerlavaj & Dimovski, 2007) as well as an important driver of corporate performance (Dimovski & Škerlavaj, 2005).

There is a general agreement that OL is a multidimensional concept (Barba-Aragón *et al.*, 2014; Chiva, Alegre, & Lapiedra, 2007; Tohidi, Seyedaliakbar, & Mandegari, 2012). Consistent with Chiva *et al.* (2007), this current study defines OL as the organizational orientation to learn or as an organizational capability that facilitates the OL process (Barba-Aragón *et al.*, 2014; Camps & Luna-Aroca, 2012). The OL capability can be defined as the organizational and managerial characteristics that facilitate the OL process or allow an organization to learn (Chiva *et al.*, 2007; Tohidi *et al.*, 2012). OL consists of three dimensions: individual level learning, group level learning and organizational learning level (Chiva *et al*., 2007). The individual level learning refers to the individuals' competencies and motivation to learn and is reflected in some individual behaviors such as experimentation, generation of new insights, be aware of critical issues that affect ones work, have a sense of pride and ownership in one's work (Barba-

Aragón *et al.*, 2014). This implies that the individual level learning refers to the process by which individuals generate new insights and knowledge from existing tacit or explicit information and knowledge. Group Level Learning: the process that involves individuals transferring their individual knowledge within a group so that all members develop a shared understanding (Barba-Aragón *et al.*, 2014). The group level learning involves individuals transferring their individual knowledge within a group so that all members develop a shared understanding (Kiessling, Richey, Meng, & Dabic, 2009) hence dialog and joint action, which are elements that describe the effective work of groups, are crucial in knowledge transfer within a group. The organizational level learning refers to the processes of embedding individual and group learning into the non-human aspects of the organization including systems, structures, strategy, culture and procedures (Chiva *et al.*, 2007). Organizational level learning is the process that occurs when individual and group knowledge is institutionalized (Barba-Aragón *et al.*, 2014). The relationship between each of the three OL levels and performance has received little attention in the literature (Jyothibabu, Farooq, & Pradhan, 2010). Consequently, OL occurs when individual and group knowledge is institutionalized in the organization. Barba-Aragón *et al.* (2014) and Popadiuk and Choo (2006) maintained that although the three levels of learning: individual, group and organizational are distinct, they are interrelated.

Literature considers OL as a basis for gaining a sustainable competitive advantage and a key variable in the enhancing of organizational performance (Barba-Aragón *et al.*, 2014; Bontis *et al.*, 2002; Brockmand & Morgan, 2003; Dimovski & Škerlavaj, 2005; Jashapara, 2003). Studies have shown that OL affects competitive advantage (Jashapara, 2003), financial and nonfinancial performance (Bontis *et al.*, 2002; Dimovski &Škerlavaj, 2005), and innovation (Llorens-Montes, Ruiz-Moreno, & Garcia-Morales, 2005). There are also empirical evidence supporting a positive relation between OL capability and firm performance (Keskin, 2006; Rhodes, Lok, & Hung, 2008; Camps & Luna-Aroca, 2012). In this line, Tippins and Sohi (2003) suggest that firms that are able to learn stand a better chance of sensing events and trends in the marketplace. Sanchez

(2001) extends the understanding of OL to multiple levels, while Schwandt & Marquardt (2000) explicitly render the need to understand OL as relational phenomena. OL is said to foster innovation and knowledge management and in turn have a complementary or synergistic effect on competitive advantage (Jimenez-Jimenez *et al*., 2008; Dimitriades, 2005).

2.4.3 Implementing Knowledge Management

Strategic leadership focuses on implementing knowledge management (Jain & Jeppessen, 2013; Makambe & Pellissier, 2015; Rowe & Nejad, 2009). Jain and Jeppessen (2013) emphasized that strategic leadership is another important knowledge management enabler and plays a critical role in implementing knowledge management for three reasons: establishment of vision for the organization as well as developing an action plan for the implementation of that vision; identification of opportunities that generate knowledge; and championing and influencing cultural and organizational transformation since knowledge management involves modifying processes, practices, and organizational structures. Makambe and Pellissier (2015) explained that knowledge management involves changing practices, policy and often organizational structure, the senior leader must set the framework for the transformation, other factors such as culture and information technology infrastructure come second, but they are also the strategic leader's initiative.

Successful knowledge management (KM) could be the chief determinant for the survival of an enterprise in a knowledge-based economy (Saini, 2013). KM is defined as a firm‘s ability to steer and control knowledge assets, with the aim of using existing knowledge inside and outside of organizations to enable the creation of new knowledge, and generate value and innovation (Jaime, Gardoni, Mosca, & Vinck, 2006). Claiborne (2010) presented KM as the process of synthesizing the information flowing into an organization resulting in an improvement in the effectiveness of organization performance. KM can be described as a systematic process of managing knowledge

mainly from searching, creating, organizing, sharing, facilitating and evaluating aspects by utilizing technologies to help in decision making of sustaining competitive advantage (Mahdi *et al*, 2011). KM can be mentioned as systematic processes that help organizations creating, sharing and applying knowledge to improve organizational performance at least. Similarly, Dahiya, Gupta, and Jain (2012) acknowledged that KM is a systematic and integrated management strategy that develops, and transfers, transmits, stores, and implements knowledge so that it can improve efficiency and effectiveness of the organization's manpower. Therefore, KM is a process that facilitates knowledge sharing and establishes learning as continuous process within an organization.

KM has become increasingly important as organizations realize that effective use of their vast and varied knowledge assets and resources provides them with the ability to innovate and respond to fast changing customer expectations (Sandhawalia & Dalcher, 2011). The KM processes is defined as the degree to which the firm creates, shares, and utilizes knowledge resources across functional boundaries (Al-Shourah *et al.*, 2014). KM processes include several stages to develop the organization's ability to obtain and share knowledge and benefit from it in order to survive and succeed, and this means that the organization owning the systems, structures and organizational values and processes that support knowledge management. KM activities, including knowledge acquisition, knowledge storage, knowledge creation, knowledge sharing and knowledge implementation can help the firms achieve necessary capabilities, such as problem solving, dynamic learning, strategic planning, decision-making, and improving their organizational performance as a whole (Zack, Mc Keen, & Singh, 2009). Bhatti and Qureshi (2007) stated that KM means efforts to explore the tacit and explicit knowledge of individuals, groups, and organizations and to convert this treasure into organizational assets so that individuals and managers can use it in various levels of decision making. KM practices could be defined in various forms and utilized in different configuration. Bhatti and Qureshi (2007) adapted five main practices of KM: knowledge creation,

acquisition, sharing, storage, and implementation, which have been frequently applied in evaluation of KM practices.

KM practices means the process of acquiring, storing, understanding, sharing, implementing knowledge, and these actions are taken in the organizational learning process with regard to the culture and strategies of the organizations (Kiessling, Richey, Meng, & Dabic, 2009). KM capabilities focus on the importance of setup of knowledge repositories and building a knowledge-sharing environment for increased awareness and diffusion of e-business (Matopoulos, Vlachopoulon, & Manthou, 2009). In fact, KM capabilities are organizational mechanisms for generating knowledge continuously; they can encourage acquiring knowledge, storing knowledge, protecting knowledge, and facilitating knowledge sharing in an organization. Sandhawalia and Dalcher (2011) mentioned knowledge sharing between individuals in their KM capabilities definition and stated that knowledge use is associated with people and behavior and organizations benefit when knowledge is shared in context and according to need.

According to Moodysson (2008), knowledge creation involves the utilization of internal and external resources of an organization to generate new knowledge for achieving the organizational goals, while knowledge acquisition is practice encompass the process of acquiring and learning appropriate knowledge from various internal and external resources, such as experiences, experts, relevant documents, plans and so forth. Therefore, knowledge creation involves brainstorming methods and conducting research to make the best use of the knowledge assets of customers, suppliers and staffs are strategies applied in many prosperous firms for creating knowledge, whereas knowledge acquisition involves interviewing, laddering, process mapping, concept mapping, observing, educating and training. Knowledge sharing is a process through which personal and organizational knowledge is exchanged, while Knowledge storage involves both the soft or hard style recording and retention of both individual and organizational knowledge in a way so as to be easily retrieved (Frappaolo, 2006; Karadsheh, Mansour, Alhawari, Azar, & El-Bathy, 2009). Knowledge implementation means the application

of knowledge and the use of the existing knowledge for decision-making, improving performance and achieving goals (Karadsheh *et al*., 2009). Knowledge sharing is considered to be a building block of efficient performance within higher education environments and to play a key role in enhancing the innovation of universities (Mathew, 2010).

There are three different knowledge processes involved in strategic alliances: knowledge creation, knowledge transfer, and knowledge application (Meier, 2011). Knowledge acquisition, also called knowledge creation or knowledge generation refers to the process in which knowledge is acquired by an organization from outside sources and those created from within. This implies that KM involves knowledge creation, knowledge transfer, and knowledge application. According to Meier (2011), knowledge creation is the development of new or novel knowledge between two partner firms, knowledge transfer is the process whereby existing knowledge is transferred within or across firm boundaries, whereas knowledge application is the process of assimilating created or transferred knowledge and using this knowledge to create value. Knowledge sharing, also called knowledge transfer or knowledge diffusion, refers to the process by which knowledge is transferred from one person to another, from individuals to groups, or from one group to another group (Al-Shourah *et al.*, 2014). However, the transfer of knowledge is more common than the jointly creation of knowledge (Meier, 2011), because the process of knowledge creation in newly developed products, technologies and production routines is generally more time consuming than the transfer of already existing knowledge (Meier, 2011). Knowledge utilization, also called knowledge application or knowledge implementation, refers to the process that is oriented toward the actual use of knowledge (Al-Shourah *et al.*, 2014). Based on what is mentioned here, this current study conceptualizes KM practices as composed of three processes: knowledge creation, knowledge transfer, and knowledge application.

2.4.4 Fostering Organizational Innovation

Strategic leadership also focuses on fostering organizational innovation. Phipps and Burbach (2010) have proposed that strategic leadership focuses on fostering organizational innovation. In advancing a vision, strategic leaders promote organizational learning and innovation as they instill meaning in followers for the roles they play in fulfilling that vision and encourage a motivated response to new situations and challenges (Boal & Schultz, 2007). Organizational innovation (OI) which is based on the changing environment and the highly competitive market leads to sustainable competitive advantage (Ganter & Hacker, 2013). Therefore, OI may be defined as the application of ideas that are new to the firm, whether the newness is embodied in products, processes, and management or marketing systems. OI is an organizational method in working practices, organizing work environment and external relations which are new for organization, and tends to improve organizational performance (Steiber, 2012).

OI can be defined as the application of ideas that are new to the company, to create added value either directly for the company or indirectly for its customers, whether the newness and added value are embodied in products, processes, services, or in work organization, management or marketing systems (Hernández-Mogollon, Cepeda-Carrión, Cegarra-Navarro, & Leal-Millán, 2010). Therefore, OI is the development or adoption of an idea or behavior into business operations that is new to the whole organization. OI is the implementation of a new organizational method in the firm's business practices, workplace organization or external relations (Gunday *et al*, 2011). Similarly, Camisón and Villar-López (2012) defined OI as the implementation of a new organizational method in a firm's business practices, workplace organization, or external relationships. As such, innovation can take the form of a new service or product, a new structure, a new production process, or a new administrative system (Bilgihan *et al.*, 2011; Gebauer, Gustafsson, & Witell, 2011). Thus, OI is a social process leads to major changes in the organization.

There is a general agreement among scholars that innovation is power for all organizations nowadays (Kamasak & Bulutlar, 2010). For instance, it is argued that innovative behaviour is essential if organizations are to adapt and respond to rapid and unstable environmental and technological changes and survive in the present environment (Kellermanns, Eddleston, Barnett, & Pearson, 2008; Cooper & Edgett, 2009; Trott, 2008). Innovative organizations have the capacity to improve individual and organizational performance and solve problems by effecting change and creating opportunities for them (Walker, 2007; Varis & Littunen, 2010). Consequently, today's organizations are increasingly focusing on innovation as a key factor in success and competitive advantage (Schilling, 2010; Tidd & Bessant, 2011). Therefore, innovation is the most important element underlying an organization's long-term competitive advantage (de Jong & Hartog, 2007) as innovation can provide entry to new markets and enhance the effectiveness of organizations (Lagrosen, 2005) hence it is important to identify different types of innovation in order to understand organizations (Damanpour, Walker,& Avellanede, 2009). Some researchers such as Damanpour *et al*. (2009), Bilgihan *et al*. (2011) and Gebauer *et al*. (2011) among many others have defined OI as a type of innovation that includes product, process and administrative innovation.

Consistent with Bilgihan *et al*. (2011) and Gebauer *et al*. (2011), this current study defines OI as a type of innovation that includes product, process and administrative innovation. Product innovation refers to the introduction of new products or service, while process innovation includes the development of new tools and equipment (Bilgihan *et al*., 2011). On the other hand, administrative innovation includes rules, procedures, management systems and staff development programmes (Trott, 2008; Jaskyte, 2011; Damanpour & Aravind, 2012). Administrative innovation also includes the development and implementation of the organization's activities, such as organizational structure, administrative processes, and changes in the social system that consists of organizational members and relationships among them (Walker, 2007, Schilling, 2010). In higher education environments, innovation is important and

universities should rely on product innovation and process innovation. Product innovation is the process by which firms produce and develop new products that can lead to organizational success (Valencia, Valle, & Jimenez, 2010). Prior literature has reported that product innovation and process innovation is essential for organizations as it gives them the capability to solve problems, add value and improve performance (Ahmed & Shepherd, 2010). The same view is held by Trott (2008) who argued that at product innovation and process innovation at the heart of all types of innovation as well as Liao, Fei, and Liu (2008) who suggested that product innovation and process innovation could determine an organization's success or failure.

Product innovation is associated with the success of organizations and allows them to establish a dominant position in the competitive marketplace (Schilling, 2010). Furthermore, product innovation and process innovation enable organizations to realize competitive advantage (Bilgihan *et al*., 2011). Organizations with greater product innovation and process innovation capabilities can achieve a better response from the environment and more easily build the capabilities needed to enhance organizational performance (Jimenez & Vall, 2011). Product innovation can respond to unstable environment and create new opportunities for developing effectiveness (Matzler, Schwarz, Deutinger, & Harms, 2008). A recent survey by Ussahawanitchakit (2012) of 121 managers of electronics companies in Thailand showed that product innovation and process innovation have the ability to improve competitive advantage, profitability, and performance. Similarly, Jimenez and Vall (2011) found both product and process innovation to affect firm performance. A recent study on the role of innovation on performance of firms on Nigerian stock exchange by Namusonge, Muturi, and Olaniran (2016) found that innovation had negative relationships with both returns on assets, and returns on equity, suggesting that, in Nigeria, like in Kenya, innovation has been widely adopted and practiced, but it was yet to have positive relationship with returns on assets and returns on equity in Nigeria, indicating the implication that, innovation was still at

infancy level, as asserted by earlier studies or the firms were operating in a seller's market or both.

There is a general consensus that education has a positive impact on the well-being of communities, families and individuals (OECD, 2009). For instance, Chen and Chen (2008) noted that innovation in higher education institutions could be achieved through the of academic results, while Hsiao, Chen, Chang, Chou, and Shen (2009) as well as Chen, Hsiao, Shiu, Chang, and Shen (2010) suggested that innovation appears in seven different areas within public universities and technical institutions in Taiwan: leadership, administrative operations, student affairs, curricula and instruction, teachers' professional development, resource applications and the campus. Al-Yasseri (2006) showed that strategic leadership and OI namely: the ability to solve problems and make decisions, the ability to change, a spirit of risk taking, and the encouragement of innovation, is essential for performance within Iraqi companies. Additionally, the OECD (2009) saw innovation in educational environments as including the introduction of new products/services such as curricula, new processes for the delivery of services, the use of information communication technologies (ICT) in e-learning services, new ways of organizing activities such as using ICT to communicate with students and colleagues, and new marketing techniques (such as the pricing of postgraduate courses).

Based on these arguments, in this study there is the need to conceptualize the OI of universities in terms of product innovation, administrative innovation and process innovation in an attempt to understand the role of OI in sustainable competitive advantage of universities in Kenya.

2.4.5 Sustainable Competitive Advantage

As the global competition becomes increasingly fierce, how to sustain competitive advantage or achieve sustainable competitive advantage in Kenyan public and private universities starts obtaining more attention. The concept of SCA was introduced in 1984

when Day was explaining the competitive advantage maintenance strategies and the term SCA was seriously developed in 1985 by Porter and in terms of a variety of competitive strategies (cost leadership, differentiation, and focus) to achieve long -term competitive advantage (Hakkak & Ghodsi, 2015; Vinayan *et al.*, 2012). The pursuit for SCA has been the primary objective in the study of a firm's competitive strategy and generation of superior profitability (Hill & Jones, 2009). Literatures on competition and competitive advantage during the earlier times have sparked off many interests on SCA in recent times (Vinayan *et al.*, 2012).

In recent times, although there were many researches that were undertaken focusing in the area of SCA, there is still, however, a lack of an operational definition for SCA. SCA is related to the firm's efforts in establishing and maintaining advantages for a long-term period (Hakkak & Ghodsi, 2015). Therefore, SCA may be defined as enduring benefits that flow to an organization over a prolonged time period. SCA may also be considered as encompassing the protection of resources for longer period of time into the future (Haberberg & Rieple, 2008; Grant, 2010; Thompson *et al.*, 2012). While other sources of SCA exist, core competencies are the direct source of SCA on which most scholars widely agree (Grant, 2010; Hill & Jones, 2009).

Lynch (2009) explains that core competencies are special skills and technologies that enable a firm to provide a specific value added to the customers, as they provide the foundation of core products and services which are at the centre of a firm's activities. However, Montgomery and Porter (2009) maintained that the only way to sustain a competitive advantage is to upgrade it.

To gain SCA a business strategy of a firm manipulates the various resources over which it has direct control and these resources have the ability to generate competitive advantage. However, Gupta, Woodside, Dubelaar, and Bradmore (2009) point out that, resources alone are frequently not enough to generate competitiveness over other firms. A firm is said to have a SCA when it is implementing a value creating strategy not

simultaneously being implemented by any current or potential player. Barney and Hesterly (2010) maintain that in general a firm has a competitive advantage when it is able to create more economic value than rival firms. To achieve any competitive advantage a firm has to look deeply into what it has, what it can achieve and how to use what it has for realization of success. Barney and Hesterly (2008) distinguished two types of competitive advantage: temporary and sustainable competitive advantage.

Competitive advantage typically results in high profits, but these profits attract competition, and competition limits the duration of competitive advantage in most cases, therefore, most competitive advantage is temporary (Barney & Hesterly, 2010; Barney & Hesterly, 2008). Barney and Hesterly (2008) define competitive advantage as being sustainable if competitors are unable to imitate the source of advantage or if no one conceives of a better offering. As such, competitive advantage is sustainable when rival firms give up plans to imitate the resources of the competitors (Haberberg & Rieple, 2008; Grant, 2010) or when barriers to imitation are high (Hill & Jones, 2009). This implies that when the imitative actions have come to an end without disrupting the firm's competitive advantage or when it is not easy or cheap to imitate, the firm's competitive strategy can be called "sustainable". However with this constant change from the environment the firm finds it challenging to align the environment with organization characteristics as they tend to focus more on the implementation of strategy in question hence in times of change, managers and strategic leaders find it challenging to manage the many different systems of the firm so as to align them and make them consistent with the environment. Therefore, if a firm possesses resources and capabilities which are superior to those of competitors, then as long as the firm adopts a strategy that utilizes these resources and capabilities effectively, it should be possible for it to establish a SCA.

The concept of SCA can also be understood along the dimensions of durability and imitability (Grant, 2010; Haberberg & Rieple, 2008; Wheelen & Hunger, 2010). The sustainability of competitive advantage depends on three major characteristics of

resources and capabilities: durability; which is the period over which a competitive advantage is sustained, transferability; which is the harder a resource is to transfer the higher sustainable the competitive advantage, and finally, replicability; which means that the competitive advantage cannot be replicated or purchased from a market. Durability determines how long the competitive advantage is sustainable and is considered in terms of the ability of competitors to duplicate or imitate through gaining access to the competitive resources and competitive capabilities on which the competitive advantage is built. Durability represents the pace at which a firm's underlying competitive resources, competitive capabilities or core competencies depreciate or become obsolete or irrelevant, owing to causes including new technology and innovations (Wheelen & Hunger, 2010). The longer it takes for the competitors to achieve an imitation, the greater is the chance for the successful firm to improve on the core competencies or build new core competencies, to stay a number of steps ahead of the competition (Grant, 2010; Hill & Jones, 2009; Thompson *et al*., 2012). Consequently, the firm's ability to delay imitations or duplication of its competitive resource base is essential to derive maximum benefit from any competitive advantage. The strategies put in place focus on utilizing the resources and capabilities existing in the firm to build sustainable competitive advantage while in highly dynamic environments. These organization characteristics include routine and business process, structure, politics, culture and leadership (Laudon & Laudon, 2007; Senior & Fleming, 2006). Without effective strategic leadership, the capability of a company to achieve or sustain a competitive advantage is greatly constrained (Elenkov, 2008).

In spite of the vast conceptual and empirical studies conducted on the notion of SCA, there is no one agreed upon method for evaluating SCA for business organizations and measurement criteria for SCA have not been established despite the extensive focus in the area (Vinayan *et al.*, 2012). SCA is a resource-based strategy, which evidently is a very powerful business strategy today. Organizational excellence has been identified by previous research as one of the dimensions of sustainable competitive advantage in

organizations. For instance, Peters (2010) argued that organizational excellence in execution was, is, wherever, and forever will be sustainable competitive advantage number one. Organizational excellence refers to the potentiality of organization that can be planned to catch in a container all of situation, to analyze the situation that can affect on business performance, can achieve mission and accomplish effectiveness goals, delivery service quality to customer on time and excellence of performance (Ooncharoen, & Ussahawanitchakit, 2008). Organizational excellence can be seen and calculated based on the relationships between various variables of performance (Antony & Bahattacharyya, 2010).

Organizational excellence is defined as the state, quality, or condition of excelling; superiority (Arussy, 2008). Organizational excellence is an everyday event, and can be achieved when organizations are able to exceed expectations (Qawasmeh *et al.*, 2013). Similarly, Kalsom and Ching (2011) maintained that for public institutions of higher education to strive for academic excellence, it is vital for the institutions to become learning organizations). Consequently, as public and private institutions of higher education is to achieve academic excellence among its students, it appears that universities may need to transform into learning organizations and subsequently improve overall organizational performance, innovativeness, and sustainable competitive advantage. The need for institutions of higher education to become learning organizations is substantiated because learning creates opportunities for educators to access the right knowledge at the right time and in the right location to stay competitive (Kumar, 2005). Considering that organizational excellence is regarded as the highest level of performance (Antony & Bahattacharyya, 2010) and that many organizations are looking for organizational excellence, but unfortunately most of them failed to have it because of the misunderstanding what is the meaning of excellence (Dahlgaard-Park, 2009), universities should care more in their sustainable competitive advantage and superior performance. Therefore, in this study there is the need to conceptualize the SCA of universities in terms of organizational excellence.

SCA of higher education institutions such as universities may be conceptualized in terms of organizational effectiveness. Organizational effectiveness is the degree to which an organization realizes its goals (Al-Shourah, Irtaimeh, & Al-Shawabakeh, 2014). Organizational effectiveness is the degree or extent to which organization get close to desired objectives (Wzhen, 2010). From a strategic management standpoint, organizational effectiveness is the degree to which the composite outputs an organization produces align with the demands of its environment in order to achieve a competitive advantage, and strategic leadership is a primary determinant of this set of outputs (Awang *et al.*, 2015). How well universities perform their mission and accomplishes their vision and goals of effective service delivery is of paramount concern (Chitere & Gachunga, 2013). In essence, organizational effectiveness represents the outcome of organizational activities. In the 1980s, organizational effectiveness became more prominent and switched to being a concept from the status of a construct (Henry, 2011). Organizational effectiveness is related to issues such as the ability of an organization to access and absorb resources and consequently achieve its aims. By considering organizational effectiveness as a second-order construct, Kwan and Walker (2003) sought to investigate the relative significance of different dimensions of organizational effectiveness in higher education and the results indicated that the second-order structure of organizational effectiveness is duly supported in Hong Kong universities. Organizational effectiveness is the main concern of all higher education institutes (Ashraf & Kadir, 2012). Organizational effectiveness has been one of the most extensively researched issues since the early development of organizational theory. Organizations are more effective when they are equipped with thoughtful strategy, strong leadership, sound operations, and compelling communication. Organizational effectiveness may be defined as the criterion of the organization's successful fulfillment of their purposes through core strategies. Furthermore, the organizations, laboratories and universities that are involved in scientific researches suffer most, because they have to present effective management, behave more responsibly, and do jobs with limited resources in order to improve their effectiveness.

The issue of organizational effectiveness revolves round four main approaches: the system resource approach, the goal approach, the strategic constituency approach and the internal process approach (Balduck & Buelens, 2008). The system resource approach of organizational effectiveness which pays attention to the input of the figure explains the effectiveness from the point of view of the ability to obtain necessary resources from the environments outside the organization, the process approach of organizational effectiveness pays attention to the transformation process and is dedicated to seeing to what extent the resources are officially used to give services or produce goods, while the strategic constituency approach of organizational effectiveness deals with the effect of the organization on the main stakeholders and their interests. In their survey, Lejeune and Vas (2009) assessed the perceived effect of an accreditation process on organizational culture and organizational effectiveness and found that there was a positive effect on some aspects of effectiveness. Although willing to improve their effectiveness, the managers in these organizations first see themselves as scientists and then managers. However, they have to deal with the problems of the organization and system effectiveness (Ashraf & Kadir, 2012). Therefore, universities are obliged to be innovative in their research, conduct, sponsorship as well as design and management of their organizations. Consequently, in this study there is the need to conceptualize the SCA of universities in terms of organizational effectiveness.

Research conducted by Vinayan *et al.* (2012) established that organizational responsiveness as a dimension of SCA. It gives the organization the advantage in the speed and effectiveness of its response to opportunities and threats (Mei, 2012). Furthermore, it enables companies to quickly detect market changes and reconfigure their processes to provide products and services to satisfy the demand of customers, eventually expanding market share and enhancing profit (Hoyt, Huq, & Kreiser, 2007). Therefore, in times of increasing competition and continuously evolving customer needs, responsiveness to environmental change has become a vital success factor for firms (Homburg, Grozdanovic, & Klarmann, 2007). Generally, organizational

responsiveness refers to the inter-individual knowledge exchanges which, in turn influence the ability of the organization to respond to a changing environment in a particular style. It refers to the extent to which a firm rapidly reacts to the changes of business environment in order to seize potential opportunities (Bernardes & Hanna, 2009; Wei, Samiee, & Lee, 2013).

Organizational responsiveness reflects the ability of an organization to respond to its external environment in an appropriate manner. Organizational responsiveness reflects the extent to which a firm responds rapidly to market changes (Wei & Wang, 2011) and also reflects the efficiency and effectiveness with which firms sense, interpret, and act on market stimuli (Garrett, Covin, & Slevin, 2009). Considered as a firm-level strategic action, organizational responsiveness highlights the firm's ability to meet the customers' needs or react to the competitors' decisions by utilizing various resources (Wei *et al.*, 2013; Wei & Wang, 2011). Furthermore, organizational responsiveness is based on the knowledge firms possess (Bernardes & Hanna, 2009). As organizational responsiveness is dependent on the ability of an organization to learn about changes in its market environment (Ketchen & Hult, 2007), it is important for firms to learn quickly about the changes which are fast-paced and difficult to foresee (Bernardes & Hanna, 2009). Therefore, organizational learning would play a critical role in developing organizational responsiveness. For instance, the most successful public universities will be the ones which can attract, develop and retain individuals who have the ability to manage a global organization that is responsive to customers and the opportunities being presented by technology (Chitere & Gachunga, 2013).

Organizational culture forms a basis for creating a framework for understanding and, more importantly for investing in a firm's SCA (Ramadhan, 2010). Literature considers organizational learning as a basis for gaining a SCA and a key variable in the enhancing of organizational performance (Bontis *et al*., 2002; Brockmand & Morgan, 2003; Dimovski & Škerlavaj, 2005; Jashapara, 2003). Organizational innovation which is based on the changing environment and the highly competitive market leads to

sustainable competitive advantage (Ganter & Hacker, 2013). Past studies such as those conducted by Atkočiūnienė (2013), Chowtupalli and Rafi (2013), Marjanovic and Freeze (2012), Mahdi *et al.* (2011), as well as Bhatti, Khan, Ahmad, Hussain, and Rehman (2010) have established significant effects of KM and KM capabilities on sustainable competitive advantage.

Due to the fiercely competitive education market which is driven by global competition, strategic management plays a key role in positioning higher education institutions in their quest to achieve SCA (Mathooko & Ogutu, 2014). Higher education institutions have always had the gene of being competitive in trying to reach high academic standards, to achieve academic excellence, and to obtain international reputation and status, while the student numbers and career success do increasingly make up a great part of growth strategy at many public higher education institutions, and this also implies some new instruments such as internationalization, marketing and promotion for enhancing competitiveness (Chan & Dimmock, 2008). As the higher education world over is undergoing rapid transformation in the face of changing environmental dynamics, all higher education institutions are required to build SCA. For instance, public higher education institutions are required increasingly to gain competitive advantage in both national and international markets (Chan & Dimmock, 2008). Within this context of increasing competition, public higher education institutions have to face competition in respect to obtaining governmental and/or research funds, which implies the possession of specific qualities of teaching and research in the institution in attracting students, which implies specific marketing capability in gaining recognition of their quality (Marginson, 2007), and in building a reputation which depends on a volatile combination of factors involving everything from Nobel prizes to athletics (Edwards, 2007). As long as higher education institutions rely on modes of economic rationality from the business sector, such as economies of scale to maintain competitive advantage, the relatively low level of theoretical development on the business concepts remains a weakness in the education sector (Huisman, 2007). Therefore, competitive advantage

theories are claimed to be applicable in the public sector Barney & Hesterly, 2010), because these theories are based on the supposition that public higher education institutions and firms face the same kind of competition and have the same need of surviving and prospering by achieving/realizing a better fit with their environment (Bryson, Ackermann, & Eden, 2007). Public higher education institutions overall in the world are increasingly characterized by the new dimension of commodification and marketisation (Eckel, 2007; Jiang, 2008), and confronted with a big challenge in finding a balance between traditional academic operation and the new but increasingly dominating market-driven dimension of global competition (Marginson & van der Wende, 2007; Kim, 2009).

Within this context of increasing competition, the term sustainable competitive advantage has become popularized in the higher education sector, as the classification of education has been determined as a marketable service in a competitive environment because it is based on the assumption that education market is the same as a normal market (Mazzarol & Souta, 2008; Eckel, 2007). The notion of competitive advantage is made more precise by equating it with added value because the added value ensures the chances of survival. Indeed, so far the competitive advantage of public higher education institutions is mostly related to terms like excellence, reputation, status, and prestige (Marginson & van der Wende, 2007; Kehm, Huisman, & Stensaker, 2008). Considering that the competition in the public higher education institutions' context is not a pure market competition, but a mixture of traditional academic competition and the newly introduced market competition, the complexity of education market competition needs to be recognized and the potential effects and costs of intensified competition on the development of higher education need to be reconsidered (Marginson & van der Wende, 2007; Eckel, 2007; Marginson, 2007; Lovegrove & Clarke, 2008; Larsen, Maassen, & Stensaker, 2009).

Considering the universities as formal organizations leads to a conception of strategies as change instruments in the hands of management, the application of strategic

management to the context of higher education institutions is feasible based on two premises: an institution of higher learning is an entity with its own goals and coherent goal-directed actions, and an institution of higher learning is a network of participants who use their association to pursue their individual goals (Huang & Lee, 2013). For instance, the success of private higher education institutions in Malaysia has been shown to use Porter's generic competitive strategy model to beat competition in the higher education industry and their response to the challenges in the environment are guided by Porter's five competitive forces framework (Hua, 2011). Similarly, universities in Kenyan have embraced the marketing concept and this is evidenced by the establishment of fully-fledged marketing departments as a response strategy focused on capitalizing on the newfound opportunities (Svensson & Wood, 2010). In large part, public universities introduced 'parallel programmes alongside 'regular' programmes attended by government-subsidized students to augment anorexic allocations from the government (Wangenge-Ouma, 2012). Due to the evening and weekend programmes, most public universities in Kenya have a population of self-sponsored students higher than that of regular or government-subsidized students (Wangenge-Ouma, 2012), thereby creating private public universities, faced with many environmental and managerial challenges including intense industry competition, government control and regulation, commoditizing of education, rising costs, highly dynamic environment, and more demanding customers (students, parents and industry), the survival of public universities in Kenya has been shown to depend greatly upon the development of sustainable response strategies to remain viable and competitive, if not to achieve market leadership (Mathooko & Ogutu, 2014).

From a university perspective, one of the response strategies that have been used in public universities in Kenya to cope with financial challenges is the introduction of the parallel degree programmes, a strategy of admitting full fee-paying students over and above the students who are admitted with government subsidy mainly introduced for the purpose of generating funds (Odhiambo, 2013). In Kenya, where a university degree is

moving from being desirable, in many cases, to being a necessity, the universities have capitalized on this change in the economy and have coined the terms 'mature student' or 'evening students' which is basically 'life-long learning' as a marketing tool to ensure repeat business for their product offerings, mounting of evening classes for mature and working people was a strategy adopted by public universities to increase student numbers and also generate more funds (Mathooko & Ogutu, 2014; Svensson & Wood, 2010). In addition some universities franchise their degree offerings to commercial middle level colleges who get name recognition but pay for it as well as the establishment of satellite campuses and introducing new programmes, usually in fields beyond the universities' core areas of strength, such as health sciences, law, information and communication technology, management and business studies (Wangenge-Ouma & Nafukho, 2011; Wangenge-Ouma, 2012). Consequently, both public and private universities in Kenya use generic and grand strategies to survive in the competitive market. Universities in Kenya have experienced various changes in their external environment, prompting responses from players in the higher education sub-sector with the objective of mitigating risks and taking advantage of opportunities strategic management plays a key role in positioning them in their quest to achieve sustainable competitive advantage (Mathooko & Ogutu, 2014).

The universities as knowledge based institutions are expected to manage knowledge for sustainable competitive advantage, growth and innovation (Ohiorenoya & Eboreime, 2014). Moreover, sustainable competitive advantage and innovation hinges on effective management of organizations' vast and varied knowledge assets. However, the extent to which the universities have realized this expectation is yet to be established (Ohiorenoya & Eboreime, 2014). Strategic leadership practices in not-for-profit organizations is a concept that scholars need to investigate urgently due to the importance it has on organizational performance especially in not-for-profits in developing countries (Kitonga *et al.*, 2016). Therefore, the study seeks to assess the role of strategic leadership for sustainable competitive advantage in Kenyan public and private

universities. Specifically, this study seeks to assess the role of shaping organizational culture, fostering organizational learning, implementing knowledge management and fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities.

2.5 Empirical Review

This section discusses the empirical review of variables of the study. Kitonga (2017) recently sought to determine the effect of strategic leadership practices on the organizational performance of not-for-profit organizations in Nairobi County in Kenya adopting a convergent mixed method design utilizing a simple random sampling technique to determine the actual sample size of the study and the findings established positive correlations between determining strategic direction, developing human capital, ethical practices, strategic control and organizational performance and concluded that that there was significant positive correlation between strategic leadership practices in general and organizational performance in not-for-profit organizations in Nairobi County in Kenya.

Kitonga *et al.* (2016a) sought to examine the link between strategic leadership practices and organizational performance in not-for-profit organizations in Nairobi County in Kenya. The study found that there was a significant positive relationship between strategic leadership practices (determining strategic direction, developing human capital, developing ethical practices, and developing organizational control) and organizational performance in not-for-profit organizations in Nairobi County in Kenya. The study adopted mixed methods research design with both quantitative and qualitative data collection methods being applied concurrently and recommended that there was need for future research to be conducted on other strategic leadership practices in other sectors. Kitonga *et al.* (2016b) sought to examine the link between strategic leadership practice of determining strategic direction and organizational performance in not-for-profit

organizations in Nairobi County in Kenya and established a significant positive relationship between determining strategic direction and organizational performance.

Mutia (2015) undertook a study on strategic leadership and church growth in Kenya using a descriptive correlation study with a sample size comprised of 95 bishops and 387 clergy and found a significant relationship between strategic leadership practices and the church's growth which was measured by different items. Koskei, Katwalo, and Asienga (2015) analyzed the influence of strategic leadership capability on performance of research institutions in Kenya and found that there was a positive relationship between strategic leadership capability and performance of research institutions in Kenya. The study adopted quantitative research design and distributed questionnaires using stratified random sampling to the target population. The study concluded that strategic leadership need to prioritize activities and maintained competency level in respective organizations in Kenya and recommended that there was need for future researchers to consider undertaking the same study by looking at strategic leadership capability in other areas of the organizations including the private firms, non-government organizations (NGOs) and determined the type of leadership styles that best suit the enterprises in a competitive environment (Koskei *et al.*, 2015).

Namusonge, Kabare, and Mutua (2012) observed that Kenya has been experiencing turbulent times with regard to its organizational practices in the last two decades, while Iravo, Ongori, and Munene (2013) raised concern as to why some organizations succeed while others fail, and this has resulted in generally low profits across the economy (Ng'ang'a, Namusonge, & Sakwa, 2016). Sasaka, Namusonge, and Sakwa (2014) assessed the influence of effects of strategic management practices on corporate social responsibility performance of parastatals in Kenya, while but did not assess the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities.

Masungo, Marangu, Obunga, and Lilungu (2015) sought to examine the effect of strategic leadership on the performance of devolved government system in Kakamega County in Kenya. Strategic leadership was the independent variable of the study characterized by strategic intent/vision articulation, integrity/ethical issues, influence and style of execution. The study adopted a descriptive correlation survey research design and utilized a simple regression model for hypotheses testing. The results indicated that strategic leadership had significant and positive effect on performance of devolved government system in Kakamega County in Kenya (Masungo *et al.*, 2015). Obunga *et al.* (2015) adopted a descriptive survey design and applied a purposive sampling in seeking to establish the effect of strategic leadership and performance of savings and credit co-operative societies in Kakamega County in Kenya and found that strategic leadership (strategic direction, styles of execution, organizational culture and organizational controls) had significant and positive effect on performance of savings and credit co-operative societies in Kakamega County in Kenya. A case study of Kenya Commercial Bank by Abashe (2016) revealed a significant influence of strategic leadership in strategy implementation in commercial banks.

Kachchhap and Ong'uti (2015) sought to investigate the empirical link between strategic leadership and organizational identification, and personality dimensions and organizational identification and the results of the study suggested that the stronger the respondents perceived their leaders to practice strategic leadership the stronger their organizational identification. Abuzaid (2016) tested the impact of strategic leadership on achieving organizational ambidexterity of the Jordanian chemical manufacturing companies. The study revealed that strategic leadership (visioning, focusing, and implementing) had a significant positive impact on organizational ambidexterity of the Jordanian chemical manufacturing companies. Kachchhap and Ong'uti (2015) recommended that there was a need to take another dimensions of strategic leadership.

Dudin and Al-rbabah (2015) sought to identify the effects of strategic leadership on managing of the organizational change in Zarqa University. The study revealed that

there was significant effect of creative leadership on managing of the organizational change. However, there was insignificant effect of transformational leadership on managing of the organizational change. The results indicated that there was significant effect of transactional leadership on managing the organizational change. The study revealed that there was a significant effect of strategic leadership (creative leadership, transformational leadership, and transactional leadership) on managing the organizational change in Zarqa University in Jordan (Dudin & Al-rbabah, 2015).

Mahdi and Almsafir (2014) sought to examine the role of strategic leadership in building sustainable competitive advantage in the academic environment. The adopted a used a quantitative research design. The study conceptualized strategic leadership in terms of developing human capital and developing social capital. The study found that there was significant and positive role of strategic leadership on sustainable competitive advantage. The study concluded that strategic leadership capabilities (developing human capital and developing social capital) had significant and positive impact of on sustainable competitive advantage in private universities in Iraq (Mahdi & Almsafir, 2014).

Tairas *et al.* (2016) aimed to analyze the influence of strategic leadership and dynamic capabilities on the competitive advantage of Private Universities in Jakarta using entrepreneurship strategy and operational strategy as the intervening variables utilizing a quantitative research design with a sample size of 200 chairmen or leaders of 22 of private universities in Jakarta using questionnaire and interview method and found that strategic leadership had positive and significant influence on the competitive advantage of private universities in Jakarta. However, there was an inverse relationship of strategic leadership on competitive advantage if the intervening variables of the entrepreneurship strategy were used and concluded that it was clear that entrepreneurship strategy cannot be used as mediating variable in influencing the strategic leadership on the competitive advantage of the Private Universities in Jakarta (Tairas *et al.*, 2016).

Palladan, Abdulkadir, and Chong (2016) argued that most previous studies on strategic leadership have only concentrated in profit oriented organization, especially in Europe, America and Asia. Palladan *et al.* (2016) examined the effect of strategic leadership, organization innovativeness, and information technology capability on effective strategy implementation in tertiary institutions in Nigeria and revealed significant positive relationship between strategic leadership behaviours and effective strategy implementation. Tairas *et al.* (2016) analyzed the influence of strategic leadership and dynamic capabilities on the competitive advantage of Private Universities in Jakarta using entrepreneurship strategy and operational strategy as the intervening variables. The study adopted a quantitative research design with a sample size of 200 chairmen or leaders of 22 private universities in Jakarta using questionnaire and interview method. The study found that strategic leadership had positive and significant influence on the competitive advantage of private universities in Jakarta in Indonesia. Mahdi and Almsafir (2014) adopted a cross-sectional survey research design using a quantitative research method to examine the role of strategic leadership in building sustainable competitive advantage in the academic environment focusing on a sample size of 540 academic leaders in 44 private universities in Iraq and the findings revealed that a significantly positive effect was present in the relationship, indicating that sustainable competitive advantage was improved when strategic leadership is applied. However, there exist both contextual and conceptual gaps as this study examined the role of strategic leadership (developing human capital and developing social capital) in sustainable competitive advantage, but did not address the role of strategic leadership (shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation) for sustainable competitive advantage in Kenyan public and private universities.

A lack of orientation to the work of strategic leadership may jeopardize organizational competitiveness, performance, and sustainability (Bansal & Desjardine, 2014). Scholars have emphasized that strategic leadership is about promoting the sustainable competitive

advantage, but competitive advantage of an organization can end whenever leaders have poor strategic leadership and its rivals have skills to duplicate the benefits of the company's value creating strategy (Du Plessis *et al.*, 2016; Marriott *et al.*, 2014). Drew (2010) found that one of the most significant challenges facing higher education institutions include the need for strategic leadership. Knowledge of strategic leadership is essential because the demands from shareholders and stakeholders on the top management teams have increased in both intensity and complexity (Carter & Greer, 2013). As today's universities operate in a climate of great change, along with increased responsibilities and accountability from internal and external customers which has resulted in calls for strategic leadership, at the university level to help the university to improve educational services and face more challenges (Alalfy & Elfattah, 2014). However, whenever strategic leaders unsuccessfully respond to changes in the global competitive environment, the abilities of an organization to gain competitive advantage and above average returns is compromised (Hitt, Ireland, & Hoskisson, 2013).

2.5.1 Shaping Organizational Culture and Sustainable Competitive Advantage

Empirical studies provide the evidence of link between organizational culture and enterprise sustainable competitive advantage. Ramadhan (2010) sought to explore the influence of OC on sustainable competitive advantage of small and medium enterprises in North America and the study provided strong and statistically significant association between OC and sustainable competitive advantage. Chepngeno, Wagoki and Okello (2014) sought to determine the effects of OC on sustainable competitive advantage in state owned corporations in Kenya with the case of Postal Corporation of Kenya and established a weak and positive correlation between OC and sustainable competitive advantage yet the relationship was not statistically significant. On the contrast, Weihong, Caitao, and Dan (2008) found that the openness of the OC and the OL capability has a significant impact on the enterprise sustainable competitive advantage.

Empirical studies also provide the evidence of link between OC and organization related performance outcomes. Recently, Uddin *et al*. (2013) examined impact of OC on employee performance and productivity with a specific focus of a case study of telecommunication sector in Bangladesh in South Asia and the results demonstrated that OC significantly influences employee performance and productivity in the dynamic emerging context. The results of Duke II and Edet (2012), there is positive association between OC and performance. Oparanma (2010) found that OC is an important variable to be considered when organizational performance in consideration. Ehtesham, Muhammad, and Muhammad (2011) explored relationship between OC and performance management practices with specific focus on a case of University in Pakistan and the results indicated that OC had a positive significant relationship with the performance management practices.Research evidence also suggests that OC in addition to affecting the implementation of business strategies also affects the performance of the organization (Cummings & Worley, 2005). Furthermore, past research has found OC to be related to both performance at organizational level and commitment at the individual level (Tsui *et al*., 2006). Qawasmeh, Darqal, and Qawasmeh (2013) sought to determine the role of OC in achieving organizational excellence with a specific focus of Jadara University as a case study and the results confirmed strong positive correlations between overall university culture and organizational excellence. The study conducted by Aftab, Rana and Sarwar (2012) aimed to study the impact of OC on role based performance the banking sector in Pakistan and study results confirmed that the impact of culture is positively related to work performance. Ooncharoen and Ussahawanitchakit (2008) investigated the relationship between five dimensions of service culture (high-quality service, communicate openly and honestly, service responsiveness, service failure prevention, and service recovery) and organizational excellence of selected the hotel business in Thailand and the results indicated that all service culture dimensions had a positive effect on organizational excellence. Furthermore, Cameron and Quinn (2006) found that the most effective managers, that is, those rated as most successful by their subordinates, peers, and superiors and those who tend to rise quickly in the organization

demonstrate a leadership style that matches that of their organization's dominant culture. Gregory, Harris, Armenakis, and Shook (2009) found a positive relationship between clan cultures and patient satisfaction in healthcare facilities. However, one culture is not necessarily better than the others, but the proper culture for each organization depends on the organization's industry and strategy.

2.5.2 Fostering Organizational Learning and Sustainable Competitive Advantage

Carmeli *et al.* (2011) found that strategic leadership may significantly improve strategic decision-making, organizational learning, and performance in Israel. Ussahawanitchakit (2012) studied the impacts of organizational learning (OL) and strategic leadership on competitive advantage of electronics businesses in Thailand via competitive environment as the moderator and found that organizational learning had a significant positive relationship with strategic leadership, and strategic leadership had an important positive association with competitive advantage. An organization with a strong OL is not simply a collector or storehouse of knowledge but a processor of it. Various researches have long acknowledged the importance of OL to overall performance. Studies have shown that OL affects competitive advantage (Jashapara, 2003), financial and nonfinancial performance (Bontis, Crossan, & Hulland, 2002; Dimovski & Škerlavaj, 2005), and innovation (Llorens-Montes, Ruiz-Moreno, & Garcia-Morales, 2005). Sanchez (2001) extends the understanding of OL to multiple levels, while Schwandt & Marquardt (2000) explicitly render the need to understand OL as relational phenomena. There are also empirical evidence supporting a positive relation between OL capability and firm performance (Keskin, 2006; Rhodes, Lok, & Hung, 2008; Camps & Luna-Aroca, 2012). OL is found to foster innovation and knowledge management and in turn have a complementary or synergistic effect on competitive advantage (Jimenez-Jimenez *et al*., 2008; Dimitriades, 2005). Phromket and Ussahawanitchakit (2009) also found that OL has positive effect on innovation outcome and export performance. Cheng *et al.* (2012) found that OL had a significant impact on the strategic initiative and performance. The study by Enz (2008) indicated that intangible assets such as OL,

market orientation and KM allow an organization to develop those abilities that enhance competitive advantage leading to superior market performance as these intangibles enabled an organization to continuously develop existing resources and new resources were needed to be created leading to superior performance as the main outcome.

2.5.3 Implementing Knowledge Management and Sustainable Competitive Advantage

The study by Claiborne (2010) found out that KM improves organizational performance, facilitates innovation, and creates sustainable competitive advantage. Past studies such as those conducted by Atkočiūnienė (2013), Chowtupalli and Rafi (2013), Marjanovic and Freeze (2012), Mahdi, Almsafir, and Yao (2011), as well as Bhatti, Khan, Ahmad, Hussain, and Rehman (2010) have established significant effects of KM and KM capabilities on sustainable competitive advantage. Wei, Choy, and Yew (2009) assessed the perceived importance and actual level of implementation of five preliminary success factors, four KM strategies and three KM processes towards the industry performance and their results showed a positive relationship between KM processes namely construction, embodiment and deployment and organizational performance. Govind and Ravindran (2009) used experimental design and showed that KM was increasingly becoming an integral and important element in corporate strategy and the knowledge sharing among employees exhibited improved organizational performance. The study conducted by Zack, McKeen, and Singh (2009) revealed that KM practices have a positive and indirect influence on financial performance. The study by Kiessling, Richey, Meng and Dabic (2009) established that KM positively affects organizational outcomes, such as the firm's innovation, product improvement and employee improvement. Brătianu and Orzea (2010) found that knowledge creation is a dynamic capability that enables firms to achieve a sustainable competitive advantage on the market. Mitchell (2010) found that the ability to create knowledge as a critical foundation for an organization's capability to be dynamic on an ongoing basis.

The study conducted by Viju (2010) showed by studying the way in which explicit and tacit knowledge become assets for an organization which seeks to create an advantage. Claiborne (2010) presented KM as the process of synthesizing the information flowing into an organization resulting in an improvement in the effectiveness of organization performance. Wastyn and Czarnitzki (2010) concluded in their study that KM techniques have a positive effect on the innovative performance of a firm. Zheng, Yang, and McLean (2010) examined the mediating role of knowledge management in the relationship between organizational culture, structure, strategy, and organizational effectiveness through a survey of 301 organizations and the results suggested that successful KM has the potential of enhancing an organization's competitive advantage, customer focus, employee relations and development, innovation, and lower costs. Bontis and Serenko (2009) tested a comprehensive causal model that illustrated the inputs and outputs of effective knowledge management practices and the results suggested that organizations need to be concerned about knowledge retention. Liao and Wu (2009) laid down that organizational performance measured in terms of financial, market and partnership depends on effective implementation of KM processes and their results indicated that KM processes have a positive effect on organizational performance.

2.5.4 Fostering Organizational Innovation and Sustainable Competitive Advantage

Jansen *et al.* (2009) found strategic leaders' transformational leadership behaviors associated with exploratory innovation and strategic leaders' transactional leadership behaviors associated with exploitative innovation. Several studies by Mavondo, Chimhanzi, and Stewart (2005), Matthews and Becker (2009), García-Morales *et al.* (2008) have established OI as main factor for sustainable competitive advantage achieving. The study by Ganter and Hacker (2013) found that OI has a significant effect on sustainable competitive advantage. Zhou *et al.* (2010) in their study around the process of KM and continuous innovation, stated that organizational innovation reinforces KM for sustainable competitive advantage achieving. Different studies have

shown that innovation is a way which enables organizations to adapt to dynamic environments and gain competitive advantage (Hult, Hurley, & Knight, 2004; Zheng, Yim, & Tse, 2005; Keskin, 2006; & Garido & Gamarero, 2010). Hult *et al.* (2004) in their study have found that firms, who show a greater ability to innovate, will respond more successfully to environmental changes and have a higher ability to develop skills that enable them to gain competitive advantage. Also the studies of Zheng *et al*., (2005), Keskin (2006), and Garido and Camarero (2010) found positive effects of innovation on performance.

2.6 Critique of the Existing Literature Relevant to the Study

Despite the long history of research on leadership, only recently have the organization behaviour scholars started to single out strategic leadership as a focus of attention (Narayanan & Zane, 2009). Nevertheless, there is little empirical evidence of the effects of leadership at strategic level on organizational processes that have distinctive strategic significance that can help companies achieve sustainable competitive superiority (Elenkov, 2008). Porter and McLaughlin (2006) argue that if a relative void still exists in the literature on the impact of the organizational context on strategic leadership, the situation would seem to be like the weather: many talking about it, but very few doing much about it insofar as empirical research is concerned. A lot of research in organizational theory has focused on developed countries; 95 percent and whereas only 5 percent of the studies testing organizational theories are found to be done in developing countries (Farashahi *et al*., 2005) in spite of the highly dynamic environment (Ehtesham *et al*., 2011). A number of scholars have questioned the applicability of western management practices in developing countries and since long time it has also been recognized that culture is a main source of difference in performance management practices (Piercy, Low, & Cravens, 2004; Yilmaz & Ergun, 2008). Many researchers have called to investigate the phenomenon of organizational culture in different cultural context particularly in non-western nations (Ehtesham *et al*., 2011; Piercy *et al*., 2004; Yilmaz & Ergun, 2008).

Mahdi and Almsafir (2014) sought to examine the role of strategic leadership in building sustainable competitive advantage in the academic environment and found that there is significant positive impact of strategic leadership capabilities (developing human capital and developing social capital) on sustainable competitive advantage in Private Universities in Iraq. However, there exist both contextual and objective gaps as this study did not address the role of other strategic leadership practices such as shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation in sustainable competitive advantage of universities in Kenya.

2.7 Research Gaps

Mahdi and Almsafir (2014) sought to examine the role of strategic leadership in building sustainable competitive advantage in the academic environment and found that there is significant positive impact of strategic leadership capabilities (developing human capital and developing social capital) on sustainable competitive advantage in Private Universities in Iraq. However, there exist both contextual and objective gaps as this study did not address the role of other strategic leadership practices such as shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation in sustainable competitive advantage of universities in Kenya.

Kitonga *et al.* (2016b) examined the link between strategic leadership practices (determining strategic direction, developing human capital, developing ethical practices, and developing organizational control) and organizational performance in not-for-profit organizations in Nairobi County in Kenya, there exists an contextual gap as this study did not address the role of other strategic leadership practices such as shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation in sustainable competitive advantage of universities in Kenya. Koech, Namusonge, and Mugambi (2016) assessed

the effectiveness of board characteristics on corporate governance at state corporations in Kenya and concluded that board characteristics were critical in determining effectiveness of corporate governance in state corporations in Kenya, but did not assess the role of other strategic leadership practices in sustainable competitive advantage of universities in Kenya.

Ng'ethe, Iravo, and Namusonge (2012) examined the determinants of academic employee retention in public universities in Kenya, where as Ng'ethe, Namusonge, and Iravo (2012) assessed the Influence of leadership style on academic staff retention in public universities in Kenya and concluded that leadership style influences academic staff retention in Kenyan public universities, but there exists objective gap because they did not assess the role of other strategic leadership practices in sustainable competitive advantage of universities in Kenya. Even though Koskei *et al.* (2015) analyzed the influence of strategic leadership capability on performance of research institutions in Kenya and found that there was a positive relationship between strategic leadership capability and performance of research institutions in Kenya, there exists an objective gap because this study did not address the role strategic leadership practices in sustainable competitive advantage of universities in Kenya.

Obunga *et al.* (2015) sought to establish the effect of strategic leadership and performance of savings and credit co-operative societies in Kakamega County in Kenya and found that strategic leadership (strategic direction, styles of execution, organizational culture and organizational controls) had significantly and positively effect on performance of savings and credit co-operative societies in Kakamega County in Kenya, but there exists an objective gap as this study did not address the role of other strategic leadership practices such as shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation in sustainable competitive advantage of universities in Kenya. This current thesis, therefore, intended to fill these pertinent gaps in literature by assessing role of strategic leadership practices (shaping organizational culture, fostering

organizational learning, implementing knowledge management, and fostering organizational innovation) in sustainable competitive advantage of universities in Kenya.

2.8 Summary

This chapter reviewed the various theories that explain the independent and dependent variables. Nowadays in global marketplace, sustaining a competitive position is an ever concern. As the global competition becomes increasingly fierce, how to sustain competitive advantage or achieve sustainable competitive advantage starts obtaining more attention in the universities in Kenya. The study was guided by the resource based theory, flexible leadership theory, and knowledge-based theory. These theories explain the role of strategic leadership practices (shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation) in sustainable competitive advantage of universities in Kenya. The conceptual framework for this study attempts to explain an integrative view of the role of strategic leadership practices in sustainable competitive advantage of universities in Kenya to provide strategic guidelines for universities in Kenya. In this study, the resource based view theory which is a strategic management approach to organizational competitiveness informed the conceptual framework to focus and tie the study together. It is hypothesized that strategic leadership practices have significant role in sustainable competitive advantage. Therefore, the four strategic leadership practices: shaping organizational culture; fostering organizational learning; implementing knowledge management; and fostering organizational innovation were classified as the independent variables, while sustainable competitive advantage was classified as the dependent variable. The theoretical review of literature on the independent variables and the dependent variable was presented. The empirical review was conducted. Critique of the existing literature relevant to the study was discussed. Research gaps were indentified.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology used in undertaking the study. This study is sought to assess the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities. The chapter starts by explaining the research design, then covers target population, sampling frame, sample and sampling techniques, data collection methods, data collection procedures, pilot study, validity and reliability, data processing and analysis.

3.2 Research Design

This study adopted a quantitative research design, because it sought to assess the role of strategic leadership (shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation) for sustainable competitive advantage in Kenyan public and private universities. The study adopted a quantitative research design to quantify the hypothesized relationship between dependent and independent variables because it requires the data to be transposed into numbers in a formal, objective, systematic process and obtain information, describe variables and their relationship (Mark, Philip, & Adrian, 2009; Nicholas, 2011; William, 2010). A survey design was employed in the data collection, because it enabled the researcher to have a much larger sample size to generate data to test the research hypotheses. A cross-sectional survey design was the specific design that was used in the research, because data was collected at one point in time to test the research hypotheses. The cross-sectional survey design has the advantages of being cost effective per respondent as compared to other methods; it employs an easier method of data collection; it enables the researcher to have a much larger sample size that could even range into thousands hence enhancing the accuracy of the conclusions arrived at and

finally, due to anonymity, respondents become more candid hence improving the accuracy of the data obtained (Brusco, 2012). Sekaran and Bougie (2011) suggested that a researcher should use more than one design to enhance the study. Saunders, Lewis and Thornhill (2009) recommended that a researcher should use more than one design to achieve the optimal results. Research designs are plans and procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis (Creswell, 2014).

3.3 Target Population

A target population is a group of events, people or items of interest with a common observable attributes (Kothari, 2012). The target population for this study was the 67 universities accredited to undertake university education in Kenya, distributed as follows: 22 public chartered universities, 9 public university constituent colleges, 17 private chartered universities, 5 private university constituent colleges, 13 institutions with letter of interim authority, and 1 registered private institution according to the Commission for University Education website (CUE, 2014). The survey unit of analysis composed of universities accredited to undertake university education in Kenya whose academic leaders were the units of inquiry. The senior and middle managers are considered the most appropriate group to answer questions ranging from aspects of structure, strategy, and sustainable competitive advantage (Hung, 2006). Similar justification was also provided by Lok *et al*. (2005) in their study. In addition, Kaluyu *et al*. (2014) maintained that the key managers run day to day managerial activities and thus have a better understanding of the status of the institutions.

Table 3.1 illustrates the target population.

Table 3.1: Target Population

Accredited Universities	Target Population
Public Chartered Universities	22
Public University Constituent Colleges	09
Private Chartered Universities	17
Private University Constituent Colleges	05
Institutions with Letter of Interim Authority	13
Registered Private Institutions	01
Total	**67**

3.4 Sampling Frame

The sampling frame describes the list of all population units from which the sample was selected (Cooper & Schindler, 2013). The sampling frame for this study is the list of 67 universities accredited to undertake university education in Kenya according to the Commission for University Education website (CUE, 2014) as shown in Appendix 3.

3.5 Sample Size and Sampling Technique

Sampling is the selection of the smallest number of units of the population (Vos, Strydom, Fouche, & Delport, 2014). Therefore, sampling may be defined as the choice of a subset of a population used to derive conclusions about the characteristics of the whole population. The issues regarding sampling are important in determining the extent to which research findings could be generalized. Collecting data from a sample that represents the entire population rather than from the entire population is necessary when budget and time constraints prevent the researcher from surveying the entire population

(Saunders *et al*., 2012). It is explained that using sampling can provide higher overall accuracy than surveying the entire population (Sekaran & Bougie, 2011).

There are two types of sampling mentioned in the literature: probability, sometimes called representative sampling, each case selected is known and all cases are equal, which means that the researcher can achieve the objectives of the research and test the results statistically and non-probability, sometimes called judgmental sampling, each case is not known. Probability sampling is based on randomization, while non-probability sampling has to do with where the researcher does not have knowledge of the population prior to embarking on the study (Vos *et al.*, 2014). The literature has reported that the main advantage of probability sampling is to keep the sampling error to a minimum (Cooper & Schindler, 2013) and this type of sampling is more effective than other methods when the population of the study covers a large geographical area and when the researcher can easily access the entire population (Saunders *et al*., 2009). It is argued that probability sampling techniques include simple random, systematic, stratified, cluster and multi-stage (Bryman, 2012; Bryman & Bell, 2015; Hair, Black, Baln & Anderson, 2010), while non-probability sampling techniques include purposive, quota, snowball, and convenience, but the most commonly used are purposive and convenience (Saunders *et al*., 2012; Berg, 2012).

In this study, it was necessary to determine an appropriate sample size, before collecting and estimating the characteristics of a large population. Saunders *et al*. (2009) explained that when statistics are applied to a sample, the researcher is estimating the value for the whole population and argued that the larger is the sample size, the lower is the error. The sample size determination formula by Miller and Brewer (2006) was utilized to determine a sample of 57 universities out of the target population of 67 accredited to undertake university education in Kenya. With a required precision level of 5% and a 95% confidence level, the sample size determination formula by Miller and Brewer (2006) gave a required sample of 57 universities, distributed as follows: 19 public chartered universities, 8 public university constituent colleges, 14 private chartered

universities, 4 private university constituent colleges, 11 institutions with letter of interim authority, and 1 registered private institution out of the target population of 67 accredited to undertake university education in Kenya, distributed as follows: 22 public chartered universities, 9 public university constituent colleges, 17 private chartered universities, 5 private university constituent colleges, 13 institutions with letter of interim authority, and 1 registered private institution. According to Sekaran and Bougie (2010), sample size larger than 30 and less than 500 are appropriate for most research.

The sample size determination formula was:

$$n = N \div (1 + Ne^2)$$

$$n = 67 \div (1 + 67 \times 0.05^2)$$

$$n = 57.388$$

$$n = 57$$

Where: n = the required size of the sample.

N = the size of the total target population, and,

e = the level of precision or sampling error = 0.05.

Stratified random sampling was used in this study to select the sampled universities, because the target population from which the sample was drawn does not constitute a homogeneous group. The stratified random sampling was applicable as the population from which a sample was to be drawn does not constitute a homogeneous group, because the target population for this study was the 67 universities accredited to undertake university education in Kenya, distributed as follows: 22 public chartered universities, 9 public university constituent colleges, 17 private chartered universities, 5 private university constituent colleges, 13 institutions with letter of interim authority,

and 1 registered private institution according to the Commission for University Education website (CUE, 2014). Kothari (2012) emphasized that the stratified sampling is used when a population from which a sample is to be drawn does not constitute a homogeneous group. The selection procedure involved picking of pieces of paper in box without replacement until 57 universities were selected. The main advantages of this type of sampling are that it is accurate, easy, accessible, divisible into relevant strata, low-cost, and is more likely to lead to a representative sample (Cooper & Schindler, 2013; Hair *et al.*, 2010; Saunders, Lewis, & Thornhill, 2009).

As the survey unit of analysis composed of universities accredited to undertake university education in Kenya whose academic leaders were the units of inquiry, the purposeful sampling was used in this study, whereby particular persons were deliberately selected due to the important information they could provide that could not be obtained from other sources. A selection criterion was used to choose the participants so as to reduce bias and again wider in-depth, information about the research questions (Silverman, 2010). On the basis of Field (2013) guidelines, this study covered a minimum of 5 academic leaders per university who comprised of the Registrar in charge of Academics or Registrar in charge of Administration, Dean of a School, Head of a Department, Finance Officer, University Librarian or there deputies as the key informants. The 5 key academic leaders in each of these sampled universities were purposefully selected to respond to a questionnaire making the total sample size equal to 285 academic leaders as the units of inquiry (key informants). The purposeful sampling is appropriate when the researcher wants to select cases that will be informative (Bryman, 2012; Saunders *et al*., 2009).

Table 3.2 illustrates the calculated sample size.

Table 3.2: Sample Size

Strata of Accredited Universities	**Target Population**	**Calculation**	**Sample Size**	**Units of Inquiry**	**Total Sample Size**
Public Chartered Universities	22	$57 \div 67 \times 22$	19	05	95
Public University Constituent Colleges	09	$57 \div 67 \times 9$	08	05	40
Private Chartered Universities	17	$57 \div 67 \times 17$	14	05	70
Private University Constituent Colleges	05	$57 \div 67 \times 05$	04	05	20
Institutions with Letter of Interim Authority	13	$57 \div 67 \times 13$	11	05	55
Registered Private Institutions	01	$57 \div 67 \times 01$	01	05	05
Total	**67**	**$67 \div (1 + 67 \times 0.05^2)$**	**57**	**05**	**285**

3.6 Data Collection Methods

The data collection methods involved the collection of primary data using questionnaires. A questionnaire is defined as a document that consists of a number a number of questions printed in a definite order on a form or a set of forms (Kothari, 2014). This study employed a quantitative data collection method whereby data was gathered by the use closed ended questionnaires. Questionnaires works best with standardized questions that are interpreted the same way by all respondents (Cooper & Schindler, 2013). The advantage of quantitative method is that it provides data that can be used after analysis to draw generalized conclusions and also analyzing quantitative data is easier and one can determine statistical relations which can then be tested in order to prove the research hypotheses (Caniato, Kalchschmidt, & Ronchi, 2011). On the basis of Field (2013) guidelines, 5 questionnaires were administered to each of the 57 sampled universities making a total of 285 questionnaires.

The questionnaire was comprised of two sections. The first section captured data on the background organizational profile. The second section of the questionnaire captured the survey questions on the four strategic leadership practices: shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation, which were classified as the independent variables, and the sustainable competitive advantage, which was classified as the dependent variable. Shaping organizational culture is operationalized with four indicators: shaping clan culture, shaping adhocracy culture, shaping hierarchy culture and shaping market culture. Fostering organizational learning was operationalized with three indicators: fostering individual level learning, fostering group level learning and fostering organizational level learning. Implementing knowledge management was operationalized with three indicators: implementing knowledge acquisition, implementing knowledge transfer and implementing knowledge application. Fostering organizational innovation was operationalized with three indicators: fostering product innovation, fostering administrative innovation and fostering process innovation.

Sustainable competitive advantage is operationalized with three indicators: organizational excellence, organizational effectiveness and organizational responsiveness. Cooper and Schindler (2013) suggest that due to the identification issue each construct should be measured by at least three indicators. All item scales were anchored on a five point scale with 5 = strongly agree, 4 = agree, 3 = neither agree nor disagree, 2 = disagree and 1 = strongly disagree. This five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree is designed to be easy and quick for potential respondents to complete and approximates an interval scale that is commonly used to assess psychometric attributes in social research (Kothari, 2014; Saunders *et al*., 2009).

3.7 Data Collection Procedures

Data of the main study was collected through self-administered questionnaires which were delivered using the drop and pick to respondents by the researcher or by three research assistants to the 5 potential respondents especially the Registrar in charge of Academics or Registrar in charge of Administration, Dean of a School, Head of a Department, Finance Officer, University Librarian or there deputies as the key informants or units of inquiry. Therefore, at least 5 questionnaires were delivered to the potential respondents at both top and middle management of each of the sampled 57universities in order to reduce on the common methods bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) and because they are seen as having a wide breadth of knowledge of all the organization's functions, activities and operating environment (Frost, Birkinshaw, & Ensign, 2002; Hillman & Keim, 2001) as this is consistent with Westphal and Frederickson (2001), and Spanos and Lioukas (2001) who also agree that both top management and middle management has a significant impact on strategic direction and change. Although Hoe and Hoare (2012) state that the percentage of completed and usable questionnaires improves when they are administered by the researcher, this in considering the time taken, is mostly applicable in the case where the population sampled are either in close proximity or exist within the same locality (Arch

& Elizabeth, 2003). It has been emphasized by Kirsty (2004) that compared to other ways such as posting the questionnaires with an extra envelop and paid stamp for return, drop and pick questionnaires are returned faster.

3.8 Pilot Study

After being developed, the draft questionnaire was pilot-tested to check that respondents do not experience problems in understanding or completing it. Saunders *et al*. (2007) stated that prior to using a survey questionnaire to collect data it should be piloted, while Hair *et al*. (2010) emphasized that pilot-testing is particularly important when measures are taken from various sources and applied in specific contexts. The pilot-test was used to enable the researcher check the validity and reliability of the research instruments of data collection as well as to enable the researcher estimate with some accuracy the average completion time, feedback would be used to improve the data collection instrument by eliminating any ambiguities and inadequate terms. Sekaran and Bougie (2011) noted that pilot testing questionnaire before the administer of it will help the researcher to find out if participants will understand the questions, if the questions mean the same thing to all participants, and how long it takes to complete. Cooper and Schindler (2013) indicated that a pilot test is usually conducted to detect weaknesses in design and instrumentation and to provide proxy data for selection of a probability sample. During the pilot test in this study, the draft questionnaire was administered to 35 randomly-selected academic leaders in 7 randomly-selected universities in Kenya which were not included in the sample for the main survey in order to test the scale reliability of the data collection instruments before the main survey. The rule of thumb is that 1% of the sample should constitute the pilot test (Cooper & Schindler, 2013). The pilot survey also provided the opportunity to test the data-coding scheme, and to gain experience with SPSS version 24 in small-scale data analysis using real data. Based on the findings of this pilot survey, the questionnaire was finalized for the main study.

3.8.1 Validity

Validity is defined as the extent to which the research findings accurately reflect the phenomenon under study (Collis & Hussey, 2009). Saunders *et al*. (2009) noted that the questions used in the data collection instrument must be understood by the participants in the way intended by the researcher, and the answers given by the respondents should be understood by the researcher in the way intended by the respondents. Bryman and Bell (2011) emphasized that validity is the most important criterion for research. Therefore, it should be noted that in this study the following steps were taken to ensure questionnaire validity: the objectives of the study were defined very carefully, draft questionnaire was pre-tested, and many questions were used from previous studies that had been used in different cultures, different environments, and at different times, a measure that contributed to construct validity. Saunders *et al*. (2009) suggested three ways of validating a questionnaire, namely content, construct, and external validity. Content validity explains how well the dimensions and elements of the concept have been delineated (Sekaran & Bougie, 2011). In this study content validity was established by means of a comprehensive review of the literature, presented in Chapter Two, which identified and evaluated the main issues. Content validity can be established by the comprehensive review of the literature (Bryman, 2012; Bryman & Bell, 2015; Cooper & Schindler, 2013). It has been suggested that content validity can also be established by asking people with experience and expertise in a field to judge whether, on the face of it, the measure seems to reflect the concept concerned (Cooper & Schindler, 2013).

Construct validity refers to the extent to which a set of measured items actually reflects the theoretical latent constructs those items are designed to measure and explains how the instrument works and how its application can be interpreted (Bryman & Bell, 2015; Hair *et al*., 2010). The construct validity of the measurement model can be established through convergent and discriminant validity (Hair *et al*., 2010). As such, the construct validity of the measurement model was established through convergent and discriminant validity in this study. The construct validity refers to the extent to which a set of

measured items actually reflects the theoretical latent constructs those items are designed to measure and it explains how the instrument works and how its application can be interpreted (Loehlin, 2012; Blunch, 2012; Hair *et al*., 2010; Saunders *et al*., 2009). Convergent validity is the degree to which independent measures of the same phenomenon are correlated (Sekaran & Bougie, 2011), while discriminant validity refers to the extent to which a construct is truly different from other constructs (Loehlin, 2012; Blunch, 2012; Hair *et al*., 2010).

In this study, convergent validity was assessed through a conservative measure average of variance extracted (AVE) as recommended by Hair *et al*. (2010). AVE reflects the amount of variance that is captured by the construct in relation to the amount of variance that is due to measurement error, and in relation to the magnitudes of the accompanying t-values (Loehlin, 2012; Blunch, 2012). Hair *et al*. (2010) stated that an AVE of 0.5 or higher suggests adequate convergent validity. On the other hand, the main goal in establishing discriminant validity is to establish internal consistency (Byrne, 2010). The external validity refers to the ability of the data to be generalized across populations and research settings (Cooper & Schindler, 2013). Factor analysis will be used to assess the validity of the questionnaire. Factor analysis is an interdependence technique under the family of multivariate analysis with the purpose to identify from a large set of variables, the salient few that can be used for multivariate analysis (Malhotra & Birks, 2007). Exploratory Factor Analysis (EFA) is applied to analyze the scale items in order to prove their discriminant validity of measurement instruments developed within a study, where the EFA is measured based on Kaiser Meyer-Olkin (KMO) measure of sampling adequacy and test of significance at 95% and the instrument is regarded as adequate when the value of KMO is between 0.5 to 1.0 (Hair *et al.*, 2010).

The Confirmatory Factor Analysis (CFA) is a member of the factor analysis family with the objective of determining unidimensionality and constructs validity of variables. Consequently, Hair *et al*. (2010) recommends applying trial and error methods with reference to the modification indices until the modification indices reach a satisfactory

level greater than 4 of goodness-of-fit for the measurement model to be acceptable. A KMO statistic of greater than 0.7, an associated Bartlett's p-value of less than or equal to 0.05, and an Anti image correlation statistic of greater than 0.6 indicates that the adequate correlation exists to justify factor analysis (Hair *et al.*, 2010). As such, factor analysis with varimax rotation is conducted using SPSS package software version 24 to detect the factor structure in the observed variables. Byrne (2010) defined factor analysis as a statistical procedure for investigating the relation between a set of observed and latent variables. Factor analysis provides and specifies the unit of analysis, helps with data summation, and the reduction of the data (Hair *et al*., 2010).

Two types of factor analysis are reported in the literature: exploratory factor analysis, and confirmatory factor analysis (Field, 2013; Tabachnick & Fidell, 2014; Blunch, 2012). Exploratory factor analysis (EFA) is designed to determine whether the factors are correlated or not. EFA is conducted without knowing how many factors really exist. EFA involves determining the number of factors and the pattern of the factor loadings. Thus, EFA is used to define the relationships between factors and then uses multivariate techniques to estimate the relationships. Hence, EFA is considered to be more of a theory generator than a theory procedure (Blunch, 2012). On the other hand, confirmatory factor analysis (CFA) is used when the researcher has some knowledge of the underlying latent variable structure and wants to determine the internal reliability of a measure. Hair *et al*. (2010) explained that EFA is unlike CFA because the latter is related to the testing of the theory underlying latent processes and enables the researcher to either confirm or reject the theory.

3.8.2 Reliability

Reliability analysis was carried out for all the variables in this study. Reliability was measured by the value of Cronbach's Alpha (α) which is required to achieve a level of greater than 0.7 for the items of the variables to be accepted as reliable and otherwise, the items of the variables needs to be deleted as suggested by the analysis until finally

the value of α is accepted (Bryman & Bell, 2015; Hair *et al*., 2010). Normally, the Cronbach's alpha value ranges ranges between 0 and 1.0; while 1.0 indicates perfect reliability, the value 0.70 is deemed to be the lower level of acceptability. Basically, reliability coefficients of 0.7 or more are considered adequate for social studies (Hair *et al.*, 2012). According to Hair *et al*., (2010), the Cronbach's alpha is a general form of the Kunder - Richardson (K – R) 20 formula as follows:

$$KR_{20} = \frac{(K)\,(S^2) - \Sigma\, s^2)}{(S^2)\,(K - 1)}$$

Where:

KR_{20} – represents reliability coefficient of internal consistency.

K – represents number of items used to measure the concept.

S^2 – represents variance of all scores.

s^2 – represents variance of individual items.

3.9 Data Processing and Analysis

The questionnaires were edited for completeness and consistency to ensure that respondents have completed them as required. The collected data was also be coded and entered into the statistical package for social sciences (SPSS) version 24 to create a data sheet that was to be used for analysis.

3.9.1 Descriptive Analysis

The preliminary analysis of the data collected involved calculating the mean and standard deviation scores for all items in the questionnaire hence descriptive statistics such as means and standard deviations were used to describe the characteristics of collected data.

3.9.2 Testing for Normality, Homoscedasticity, Linearity and Multicollinearity

The collected data was tested for normality using skewness and kurtosis for variables for this study in order to determine the distribution curve. It is noted that when the values of skewness and kurtosis are equal to zero, the distribution is a perfect match to a normal distribution and it is accepted that the distribution approximates that of a normal distribution when the value of skewness is within ±2.00 of their respective standard errors for significance of 95% and the value of kurtosis is within ±3.00 of their respective standard errors of significance of 95% (Bryman & Bell, 2015; Hair *et al*., 2010). Next, homoscedasticity was determined through Bartlett's test. Homoscedasticity is determined through Bartlett's test and can also be determined through correlation analysis where the statistics for correlation is Pearson's correlation, and tested based on statistical significance (Sekaran & Bougie, 2011) to test the assumption that all variables have equal variances (Bryman & Bell, 2011; Hair *et al*., 2010). Testing for linearity was carried out on all the variables based on p-plot. The linearity among the variables is determined by the closeness the plots are to the linear line (Bryman, 2012; Hair *et al*., 2010). Finally, multicollinearity was determined by the level of variance inflating factor (VIF) and tolerance. Ideally, the level of VIF should be less than10 while the level of tolerance should be greater than 0.1, in order to exhibit low levels of multicollinearity (Bryman & Bell, 2015; Hair *et al*., 2010; Malhotra & Birks, 2007).

3.9.3 Inferential Analyses

Inferential analyses employed for the main study included the Pearson's product moment correlation, analysis of variance (ANOVA) and multiple regression analyses. Multiple regression analyses was used to establish the relationships among the study variables, while the Pearson's product moment correlation was used to reflect the degree of linear relationship between two variables and determine the strength of the linear relationship between the variables, and one-way ANOVA was employed to determine the significance of the relationship.

Multiple regression analysis was conducted using sustainable competitive advantage as the dependent variable, and the four strategic leadership practices: shaping organizational culture; fostering organizational learning; implementing knowledge management, and fostering organizational innovation as the predicting variables. The four hypotheses were tested at 95% confidence level. The data was presented by the use of tables, pie charts, and bar charts for the purpose of giving a pictorial view of the results.

The multiple regression model was:

$$Y= \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = Sustainable competitive advantage (Dependent variable),

X_1 = Shaping Organizational culture (Independent variable),

X_2 = Fostering Organizational learning (Independent variable),

X_3 = Implementing Knowledge management (Independent variable),

X_4 = Fostering Organizational innovation (Independent variable),

β_o = Constant (coefficient of Y intercept),

$\beta_1 - \beta_4$ = Regression coefficient for each Independent variable,

ε = Error Term (Random or Stochastic Term).

Before the multiple regression analyses, the bivariate correlations were conducted in order to test the relationships among the variables. The variables of the study were quantitative, having five values, and being measured on a level with at least approximate interval characteristic. Therefore, the statistical techniques of the Pearson's product moment, known as the Pearson's correlation, were used to determine the extent to which they were linearly related (Bryman, 2012; Hair *et al*., 2010). A Pearson's correlation coefficient (r) of -1.00 or +1.00 and -0.50 or +0.50 indicates perfect and moderate correlation respectively (Bryman & Bell, 2011; Pallant, 2013). The Pearson's product moment correlation was performed to identify aspects of the relationship among the variables, to test the hypotheses, and answer the research questions.

Multiple regression analysis provides a means of objectively assessing the magnitude and direction of each predictor's relationship to its outcome variable (Bryman & Bell, 2011; Tabachnick & Fidell, 2014). It has been argued that multiple regression analysis is a powerful analytical tool used to determine which specific independent variables predicts the variance of dependent variables selected by the research (Hair *et al*., 2010). It has also been emphasized that multiple regression analysis is by far the most widely used in the business and social sciences to explore all types of dependence relationships (Bryman & Bell, 2015; Tabachnick & Fidell, 2014). The stepwise multiple regression analysis was conducted to establish the best predictors for sustainable competitive advantage in Kenyan public and private universities.

3.9.4 Hypotheses Tests

The Pearson's product moment correlation analysis supported by standard multiple regression analysis were performed to test the hypotheses, and answer the research questions. Following the testing of the underlying assumptions for multiple regression analysis and the determination of the appropriateness of the data set, standard multiple regression analysis was employed to test the proposed hypotheses. The standard multiple regression analysis was conducted using sustainable competitive advantage as the dependent variable, and the four strategic leadership practices: shaping organizational culture; fostering organizational learning; implementing knowledge management, and fostering organizational innovation as the predicting variables. Standard multiple regression analysis is conducted for hypotheses testing (Cooper & Schindler, 2013). For this study, the four hypotheses were tested at 95% confidence level ($\alpha = 0.05$) and a two tailed test was carried out. Table 3.3 presents the procedure for the hypotheses tests.

Table 3.3: Hypotheses Tests

Hypothesis	Hypothesis Statement	Hypothesis Test	Decision Rule
Hypothesis 1 $H_0$1	There is no significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities.	Pearson's product moment correlation analysis supported by multiple regression analysis	Reject $H0_1$ if P- value ≤ 0.05 otherwise fail to reject $H0_1$ if P – value is > 0.05
$H_1$1	There is a significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities.		
Hypothesis 2 $H_0$2	There is no significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities.	Pearson's product moment correlation analysis supported by multiple regression analysis	Reject $H0_2$ if P- value ≤ 0.05 otherwise fail to reject $H0_2$ if P – value is > 0.05
$H_1$2	There is a significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities.		
Hypothesis 3 $H_0$3	There is no significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities.	Pearson's product moment correlation analysis supported by multiple regression analysis	Reject $H0_3$ if P- value ≤ 0.05 otherwise fail to reject $H0_3$ if P – value is > 0.05
$H_1$3	There is a significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities.		
Hypothesis 4 $H_0$4	There is no significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities.	Pearson's product moment correlation analysis supported by multiple regression analysis	Reject $H0_3$ if P- value ≤ 0.05 otherwise fail to reject $H0_3$ if P – value is > 0.05
$H_1$4	There is a significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities.		

3.9.5 Variable Definition and Measurement

Bryman and Bell (2015) and Saunders *et al*. (2009) emphasized the need for operationalization of variables as variables enable facts to be measured. The scales used in this study are either developed specifically for this study or adapted from existing

scales to suit the context of the present study. Hair *et al*. (2010) suggest that due to the identification issue each construct should be measured by at least three indicators. In this study each variable was operationalized with at least three indicators. For instance, sustainable competitive advantage which was classified as the dependent variable was operationalized by three indicators: organizational excellence, organizational effectiveness and organizational responsiveness. Sustainable competitive advantage measurement scales were based on Barney (2007) and Verma and Jayasimha (2014) consisting of 21 items. The independent variables are the four strategic leadership practices: shaping organizational culture, fostering organizational learning, implementing knowledge management and fostering organizational innovation.

Measurement scales for organizational culture were based on the works of Cameron and Quinn (2011) organizational culture survey instrument (consisting of four indicators: shaping clan culture, shaping adhocracy culture, shaping hierarchy culture and shaping market culture) used 24 items. Measurement scales for fostering organizational learning were based on the works of Barba-Aragón *et al.* (2014) was operationalized with three indicators: fostering individual level learning, fostering group level learning and fostering organizational level learning used 21 items. Implementing knowledge management item scales were derived from the works of Darroch (2003) and Lee and Tsai (2005) was operationalized with three indicators: implementing knowledge acquisition, implementing knowledge transfer and implementing knowledge implementation used 21 items. Measurement scales for fostering organizational innovation are based on the works of Mostafa (2005) and Sadler-Smith *et al.* (2000) was operationalized with three indicators: fostering product innovation, fostering administrative innovation and fostering process innovation used 21 items. In line with these previous measurements a five-point Likert scale was adopted for all item scales, hence on interval scale of measurement. All item scales were anchored on a five point scale with 5 = strongly agree, 4 = agree, 3 = neither agree nor disagree, 2 = disagree and 1 = strongly disagree. This five-point Likert scale ranging from 1 = strongly disagree to

5 = strongly agree was designed to be easy and quick for potential respondents to complete and approximates an interval scale that is commonly used to assess psychometric attributes in social research (Saunders *et al*., 2009). Table 3.4 presents the variable definition and measurement of variables of the study.

Table 3.4: Variable Definition and Measurement

Variables		**Indicators**	**No. of items**	**Item Code**	**Scale of Measurement**
Independent Variables	Shaping Organizational Culture	Shaping Clan Culture	6	CC1-CC6	Interval Scale
		Shaping Adhocracy Culture	6	AC1-AC6	Interval Scale
		Shaping Hierarchy Culture	6	HC1-HC6	Interval Scale
		Shaping Market Culture	6	MC1-MC6	Interval Scale
	Fostering Organizational Learning	Fostering Individual Level Learning	7	ILL1-ILL7	Interval Scale
		Fostering Group Level Learning	7	GLL1-GLL7	Interval Scale
		Fostering Organizational Level Learning	7	OLL1-OLL7	Interval Scale
	Implementing Knowledge management	Implementing Knowledge Acquisition	7	KA1-KA7	Interval Scale
		Implementing Knowledge Transfer	7	KA1-KA7	Interval Scale
		Implementing Knowledge Application	7	KA1-KA7	Interval Scale
Independent Variables	Fostering Organizational Innovation	Fostering Product Innovation	7	PI1-PI7	Interval Scale
		Fostering Administrative Innovation	7	AI1-AI7	Interval Scale
		Fostering Process Innovation	7	PCI1-PCI7	Interval Scale
Dependent Variable	Sustainable Competitive Advantage	Organizational Excellence	7	OE1-OE7	Interval Scale
		Organizational Effectiveness	7	OEF1-OEF7	Interval Scale
		Organizational Responsiveness	7	OR1-OR7	Interval Scale

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter presents the research findings and discussions of the study. The general objective of this study was to assess the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities. Specifically, the study sought to assess the roles of shaping organizational culture, fostering organizational learning, implementing knowledge management and fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities. The chapter presents the findings of the study and discussion of the research response rate, reliability and validity testing, data normality analysis, demographic characteristics of study variables, descriptive statistics of independent variables and dependent variable, correlation of variables, regression analysis, hypothesis testing and a summary of the chapter.

4.2 Response Rate

The survey was directed to 285 academic leaders in the 57 sampled universities in Kenya and five questionnaires were administered to each university, based on the guidelines by Field (2013). Therefore, a total of 285 questionnaires were distributed to the sampled 57 sampled universities, from which 215 usable questionnaires from 43 universities were obtained, giving an effective response rate of 75%. According to Bryman and Bell (2011), a response rate of 50% is acceptable to analyze and publish, 60% is good and 70% is very good. Sekaran and Bougie (2010) suggested that sample size larger than 30 and less than 500 are appropriate for most research. The major reasons that could explain this high response rate are: letter of introduction from the researcher's own attached to the survey questionnaire; the professional presentation of

the questionnaire; and covering letter explained the contribution of this study to the Kenyan public and private universities in Kenya. In addition, the high response rate may be indicative of the interest respondents have in the research topic.

Table 4.1 presents the response rate.

Table 4.1: Response Rate

Strata of Accredited Universities	**No. of Sampled Universities**	**Total No. of Questionnaires Administered**	**Total No. of Valid Questionnaires Received**	**No. of Universities with Valid Responses**	**Valid Response Rate**
Public Chartered Universities	19	95	85	17	29.82%
Public University Constituent Colleges	08	40	30	06	10.53%
Private Chartered Universities	14	70	55	11	19.30%
Private University Constituent Colleges	04	20	15	03	05.26%
Institutions with Letter of Interim Authority	11	55	30	06	10.53%
Registered Private Institutions	01	05	00	00	0.00%
Total	**57**	**285**	**215**	**43**	**75.44%**

4.3 Results of Validity

Validity is defined as the extent to which the research findings accurately reflect the phenomenon under study (Collis & Hussey, 2009). Bryman and Bell (2011) emphasized that validity is the most important criterion for research. In this study the following steps were taken to ensure questionnaire validity: the objectives of the study were defined very carefully, draft questionnaire was pre-tested for content validity, and many questions were used from previous studies that had been used in different cultures, different environments, and at different times, a measure that contributed to construct validity. Saunders *et al*. (2009) noted that the questions used in the data collection instrument must be understood by the participants in the way intended by the researcher, and the answers given by the respondents should be understood by the researcher in the way intended by the respondents.

4.3.1 Results of Face Validity

The study established face validity by garnering comments from people with experience and expertise in this field. First, the researcher distributed the draft questionnaire to 13 PhD postgraduate students studying strategic management at JKUAT, and asked them to provide any comments about the questionnaire and whether they understood the questions. Their feedback was related to the wording of some of the statements, the structure, and the layout of the questionnaire. All their comments were considered and various changes were made. Second, the draft questionnaire was sent to the 2 supervisors for the researcher. Their feedback helped with the refinement of the items in terms of using more objective methods for measuring items and better wording. After these changes were made, the final version of the draft questionnaire was ready, before being pre-tested as recommended by the experts.

4.3.2 Results of Content Validity

Content validity explains how well the dimensions and elements of the concept have been delineated (Sekaran & Bougie, 2011). As suggested in Chapter Three, content validity was established in two ways: by means of a comprehensive review; and a pretest where the initial draft questionnaire was subjected to an evaluation by a group of 4 university experts who provided their comments on the relevance of each item on the data collection instrument prior to the pilot test. In this study content validity was established by means of a comprehensive review of the literature, presented in Chapter Two, which identified and evaluated the main issues. It has been suggested that content validity can be established by the comprehensive review of the literature (Bryman, 2012; Cooper & Schindler, 2013). Further, content validity was also established by means of a pretest where the initial draft questionnaire was subjected to an evaluation by a group of 4 university experts who provided their comments on the relevance of each item on the data collection instrument prior to the pilot test. The researcher also asked them to provide any comments about the questionnaire and whether they understood the questions. Their feedback was also related to the wording of some of the statements, the structure, and the layout of the questionnaire. All comments were considered and various changes were made. Content validity can also be established by asking people with experience and expertise in a field to judge whether, on the face of it, the measure seems to reflect the concept concerned (Cooper & Schindler, 2013). The results of their responses were analyzed to establish the percentage representation using the content validity index. The content validity formula by Polit and Beck (2006) was used. This content validity formula was: $CVI = K \div N$

Where: CVI = Content Validity Index

K = Total No. of Items in the Questionnaire Declared Valid by the Raters

N = Total No. of Items in the Questionnaire

The results from the pre-test indicated that the average content validity index was 0.938 and the average congruency percentage was 93.8% implying that the content validity was acceptable. Waltz, Strickland, and Lenz (2005) advise that an average congruency percentage of 90 percent or higher would be considered acceptable (Polit & Beck, 2006). A similar approach for determining the content validity has been adopted by Kitonga *et al.* (2016a) and Waithaka (2013) in their researches.

Table 4.2 presents the results of the content validity from the pre-test.

Table 4.2: Results of Content Validity from the Pre-Test

Rater	Total No. of Items	Total No. of Items Declared Valid	Content Validity Index	Congruency Percentage	Comments
Rater 1	112	108	0.964	96.4%	Valid
Rater 2	112	104	0.929	92.9%	Valid
Rater 3	112	106	0.946	94.6%	Valid
Rater 4	112	102	0.911	91.1%	Valid
Average	**112**	**105**	**0.938**	**93.8%**	**Valid**

4.3.3 Results of Construct Validity

Construct validity refers to the extent to which a set of measured items actually reflects the theoretical latent constructs those items are designed to measure and explains how the instrument works and how its application can be interpreted (Hair *et al.*, 2010). A principal component factor analysis with varimax rotation was conducted to assess the construct validity of research instrument upon completion of the final data collection. In reference to Hair *et al.* (2010), since the number of shaping organizational culture types, fostering organizational learning types, implementing knowledge management types,

fostering organizational innovation types, and sustainable competitive advantage types in this study have been reported in a number of other studies in the domain of higher education (Cameron & Quinn, 2006; Dela Cruz, 2011), the number of factors is already known. Then a priori criterion can be useful in extracting the same number of factors that were found in previous studies. For each of the four shaping organizational culture subscales, three fostering organizational learning subscales, three implementing knowledge management subscales, three fostering organizational innovation subscales, and three sustainable competitive advantage subscales, one component was extracted.

In this regard, several assumptions were tested. The Kaiser-Meyer-Olkin (KMO) measure should be greater than 0.70, and is inadequate if less than 0.50. The KMO test tells one whether or not enough items are predicted by each factor. The Bartlett test should be significant (that is, a significant value of less than 0.50); this means that the variables are correlated highly enough to provide a reasonable basis for factor analysis (Leech, Barrett, & Morgan, 2008).

Table 4.3 shows the results of KMO and Bartlett's Test for shaping organizational culture.

Table 4.3: Results of KMO and Bartlett's Test for Shaping Organizational Culture

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.826**
	Approx. Chi-Square	517.248
	df	6
	Sig.	.000

The Bartlett's test of sphericity was significant since its value (Chi-square 517.248, p = 0.000) was less than alpha (α = 0.05). On the other hand, the Kaiser-Meyer-Oklin measure of sampling adequacy (0.826) is more than the threshold of (0.50). According to these two statistics, the data set is suitable for factor analysis.

Varimax rotation is frequently used in factor analysis since it reduces the number of complex variables and improves interpretation (Coakes & Steed, 2007). The result of rotated component matrix confirmed the presence of four subscales including: shaping clan culture, shaping adhocracy culture, shaping market culture, and shaping hierarchy culture types for shaping organizational culture scale. Their factor loadings were ranged between 0.894 and 0.772. In other words, each subscale was unidimensional. Table 4.4 shows the varimax rotation technique was used to determine the factor loading of each factor for shaping organizational culture.

Table 4.4: Rotated component matrix for Shaping Organizational Culture

Anti-image Correlation	**Component**			
	1	**2**	**3**	**4**
Shaping Clan Culture	**.772**[a]	-.264	-.469	-.424
Shaping Adhocracy Culture	-.264	**.894**[a]	-.242	-.051
Shaping Hierarchy Culture	-.469	-.242	**.819**[a]	-.223
Shaping Market Culture	-.424	-.051	-.223	**.849**[a]

a. Measures of Sampling Adequacy (MSA)

The Bartlett's test of sphericity was significant since its value (Chi-square 522.485, p = 0.000) is less than alpha (α = 0.05). On the other hand, the Kaiser-Meyer-Oklin measure of sampling adequacy (0.763) was equal with the threshold of (0.50). According to these two statistics, the data set is suitable for factor analysis. The results from KMO and Bartlett's test for fostering organizational learning are reported in Table 4.5.

Table 4.5: Results of KMO and Bartlett's Test for Fostering Organizational Learning

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.763**
	Approx. Chi-Square	522.485
	df	3
	Sig.	.000

The Bartlett's test of sphericity was significant since its value (Chi-square522.485, p = 0.000) was less than alpha (α = 0.05). On the other hand, the Kaiser-Meyer-Oklin measure of sampling adequacy (0.763) was greater than the threshold of (0.50). According to these two statistics, the data set is suitable for factor analysis. Varimax rotation is frequently used in factor analysis since it reduces the number of complex variables and improves interpretation (Coakes & Steed, 2007). The result of rotated component matrix confirmed the presence of three subscales including: fostering individual level learning, fostering group level learning, and fostering organizational level learning types for fostering organizational learning scale. Their factor loadings were ranged between 0.807 and 0.741. In other words, each subscale was unidimensional. The varimax rotation technique was used to determine the factor loading of each factor. Table 4.6 presents the rotated component matrix for fostering organizational learning.

Table 4.6: Rotated component matrix for Fostering Organizational Learning

Anti-image Correlation	**Component**		
	1	**2**	**3**
Fostering Individual Level Learning	**.748**[a]	-.382	-.559
Fostering Group Level Learning	-.382	**.807**[a]	-.405
Fostering Organizational Level Learning	-.559	-.405	**.741**[a]

a. Measures of Sampling Adequacy (MSA)

Regarding to implementing knowledge management, the Bartlett's test of sphericity was significant since its value (Chi-square 289.650, p = 0.000) is less than alpha (α = 0.05). On the other hand, the Kaiser-Meyer-Oklin measure of sampling adequacy (0.632) was more than the threshold of (0.50). Using these two statistics, the data set was suitable for factor analysis.

The results of KMO and Bartlett's test for implementing knowledge management are shown in Table 4.7.

Table 4.7: Results of KMO and Bartlett's Test for Implementing Knowledge Management

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.632**
	Approx. Chi-Square	289.650
	df	3
	Sig.	.000

In addition, as can be seen in the rotated component matrix, there were three subscales for implementing knowledge management scale in the present study. Their factor loadings were ranged between 0.796 and 0.585. In other words, each subscale was unidimensional.

Table 4.8 presents the rotated component matrix for implementing knowledge management.

Table 4.8: Rotated component matrix for Implementing Knowledge Management

	Component		
Anti-image Correlation	**1**	**2**	**3**
Implementing Knowledge Acquisition	**.796**[a]	-.363	-.023
Implementing Knowledge Transfer	-.363	**.585**[a]	-.731
Implementing Knowledge Application	-.023	-.731	**.610**[a]

a. Measures of Sampling Adequacy (MSA)

Regarding to fostering organizational innovation, the results of KMO and Bartlett's test for this variable (Table 4.9) indicates the Bartlett's test of sphericity was significant since its value (Chi-square 425.491, p = 0.000) was less than alpha (α = 0.05). On the other hand, the Kaiser-Meyer-Oklin measure of sampling adequacy (0.533) was more than the threshold of (0.50). Using these two statistics, the data set is suitable for factor analysis.

Table 4.9 presents the results of KMO and Bartlett's test for fostering organizational innovation.

Table 4.9: Results of KMO and Bartlett's Test for Fostering Organizational Innovation

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.533**
	Approx. Chi-Square	425.491
	df	3
	Sig.	.000

In addition, as can be seen in the rotated component matrix (Table 4.10), there were three subscales for fostering organizational innovation scale in the present study. Their factor loadings were ranged between 0.547 and 0.519. In other words, each subscale was unidimensional.

Table 4.10 presents the rotated component matrix for fostering organizational innovation.

Table 4.10: Rotated component matrix for Fostering Organizational Innovation

	Component		
Anti-image Correlation	**1**	**2**	**3**
Fostering Product Innovation	**.547**[a]	.357	-.725
Fostering Administrative Innovation	.357	**.541**[a]	-.773
Fostering Process Innovation	-.725	-.773	**.519**[a]

a. Measures of Sampling Adequacy (MSA)

Regarding to sustainable competitive advantage, the results of KMO and Bartlett's test for this variable indicates the Bartlett's test of sphericity was significant since its value (Chi-square 261.931, $p = 0.000$) is less than alpha ($\alpha = 0.05$). On the other hand, the Kaiser-Meyer-Oklin measure of sampling adequacy (0.721) is more than the threshold of (0.50). Using these two statistics, the data set is suitable for factor analysis. Table 4.11 presents the rotated component matrix for sustainable competitive advantage.

Table 4.11: KMO and Bartlett's Test for Sustainable Competitive Advantage

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		**.721**
	Approx. Chi-Square	261.931
	df	3
	Sig.	.000

In addition, as can be seen in the rotated component matrix (Table 4.12), there were three subscales for sustainable competitive advantage scale in the present study. Their factor loadings were ranged between 0.763 and 0.688. In other words, each subscale was unidimensional.

Table 4.12 presents the rotated component matrix for sustainable competitive advantage.

Table 4.12: Rotated component matrix for Sustainable Competitive Advantage

	Component		
Anti-image Correlation	**1**	**2**	**3**
Organizational Excellence	**.763**[a]	-.396	-.282
Organizational Effectiveness	-.396	**.688**[a]	-.490
Organizational Responsiveness	-.282	-.490	**.720**[a]

4.4 Results of Reliability

Reliability refers to the extent to which the data collection or analysis procedures used will lead to consistent findings (Saunders *et al*., 2009). Sekaran and Bougie (2011) asserted that a measure should not only be valid but also reliable. As mentioned in Chapter Three, a pilot test was conducted to eliminate possible weaknesses and flaws in

the draft questionnaire as well as to preliminarily examine the reliability of relevant construct measures in a specific context, leading to the final survey questionnaire used in the main study. In the pilot test in this study, the draft questionnaire with an invitation letter was administered to 35 randomly-selected academic leaders in 7 randomly-selected universities in Kenya. The researcher received 32 questionnaires out of the 35 that were distributed. However, the total number of incomplete questionnaires was 2 questionnaires that had 10% missing data and repeatable answers were ignored as recommended by (Field, 2009, 2013; Hair *et al*., 2010). Therefore, 30 questionnaires were found useful for the study and the valid response rate for the pilot test was 85.7%. According to Bryman and Bell (2011), a response rate of 50% is acceptable to analyze and publish, 60% is good and 70% is very good. Accordingly, the 30 valid responses from the pilot survey were compiled and underwent reliability analysis testing.

To examine reliability in this study, Cronbach's alpha values and item-total correlations were calculated. Cronbach's alpha values were calculated to establish the reliability (internal consistency) of the questions and to check whether the respondents understood all the questions (Bryman, 2012; Saunders *et al*., 2009), while the item-total correlations were calculated to remove or retain the item in the scale (Bryman & Bell, 2011; Field, 2013). Internal consistency has been defined as the degree to which responses are consistent across the variables within a single measurement scale, while the item-total correlations refer to the correlation of a variable with the composite score of all variables forming the measure of constructs (Bryman, 2012). Cronbach's Alpha remains the most widely used measure of scale reliability (Bryman, 2012; Bryman & Bell, 2011; Pallant, 2013). However, the Cronbach's alpha values are quite sensitive to the number of items in the scale (Pallant, 2013) and the Cronbach's alpha values are usually low when data have a multidimensional structure (Bryman, 2012; Bryman & Bell, 2011). Therefore, it was suggested that analyses of corrected item-total correlations for the items be considered (Bryman & Bell, 2011; Hair *et al*., 2010; Pallant, 2013).

In this study, the survey questionnaire used five scales to measure the constructs proposed in the research conceptual framework (Figure 2.1) namely organizational culture, organizational learning, knowledge management, organizational innovation, and sustainable competitive advantage. The Cronbach's alpha values in this study were 0.986 for organizational culture (OC), 0.982 for organizational learning (OL), and 0.998 for knowledge management (KM), 0.997 for organizational innovation (OI), 0.994 for sustainable competitive advantage (SCA), and 0.993 for all the variables in the survey questionnaire. Cronbach's alpha values of 0.70 indicate that the constructs have good reliability (Hair *et al*., 2010). Cronbach's alpha values above 0.70 is considered an acceptable indicator of internal consistency, and the values of 0.60 to 0.70 are at the lower limit of acceptability as suggested in the literature (Bryman, 2012; Bryman & Bell, 2011; Hair *et al*., 2010; Pallant, 2013). Therefore, the measurement scales appear to consist of a set of consistent variables for capturing the meaning of the model constructs. Furthermore, all items had values for corrected item-total correlations above 0.35. It was observed that all variables achieved the required level of Cronabach's alpha (α) value without having to delete any items. Consequently, all values of Cronabach's alpha were above 0.70 as suggested by Hair *et al*. (2010) and all corrected item total correlations were above 0.35 (Bryman, 2012; Bryman & Bell, 2011; Field, 2013), which indicates the internal reliability of the components. The reliability analysis indicated that the overall survey instrument was reliable and displays consistency in measuring the instrument. Therefore, no changes were made to the questionnaire (see Appendix 4). Table 4.13 summarizes the Cronbach's Alpha for five scales: OC (24 items), OL (21 items), KM (21 items), OI (21 items) and SCA (21 items).

Table 4.13: Results of Reliability of all Variables of the Study from the Pilot Study

Variables	Cronbach's Alpha (α)	No. of Items	No. of Items Deleted	No. of Cases	Comment
Shaping Organizational Culture	.986	24	0	30	Reliable
Fostering Organizational Learning	.982	21	0	30	Reliable
Implementing Knowledge Management	.998	21	0	30	Reliable
Fostering Organizational Innovation	.997	21	0	30	Reliable
Sustainable Competitive Advantage	.994	21	0	30	Reliable
All the Five Variables	.993	108	0	30	Reliable

4.5 Descriptive Results of the University Profiles

Descriptive statistical analysis was carried out to describe the basic statistics and distribution of the universities. Basic statistics includes percentages and frequencies. This forms the respondent's university profiles of the data collected for this study. The first section of the survey sought responses with regards to the background information of the respondents' university profiles, such as the university type, age of university, number of employees in the university, and market share of the university.

4.5.1 University Type

This section presents the preliminary analysis of the data collected with regard to the respondents' university profile in terms of university type. Table 4.14 presents the results respondents' university profile in terms of university type. From the overall 215 valid responses from the survey, majority (85 or 39.5%) were from the public chartered universities, followed by 55 (25.6%) from the private chartered universities, then 30 (14.0%) from public university constituent colleges and institutions with letter of interim authority, while the remaining 15 (7.0%) were from the private university constituent colleges. This implies that of the target sample of 57 universities, valid responses were from a total of 43 universities of which majority was from the public chartered universities.

Table 4.14: University Type

University Type	Frequency	Percent
Public Chartered University	85	39.5
Public University Constituent College	30	14.0
Private Chartered University	55	25.6
Private University Constituent College	15	7.0
Institution with Letter of Interim Authority	30	14.0
Total	**215**	**100.0**

4.5.2 Age of University

This section presents the preliminary analysis of the data collected with regard to the respondents' university profile in terms of age of universities. For age of universities in terms of years in operation, majority responses (105 or 48.8%) were from universities that were in operation for less than 6 years, followed by 50 (23.3%) from universities

that were in operation for between 11 and 15 years, then 30 (14.0%) from universities that were in operation for more than 20 years, then 25 (11.6%) from universities that were in operation for between 16 and 20 years, while the least (5 or 2.3%) were from universities that were in operation for between 6 and 10 years. This indicates that approximately 50% of the universities were in operation for less than 6 years, implying that there has been rapid increase in the number of Kenyan public and private universities. Table 4.15 presents the results respondents' university profile in terms of age of universities.

Table 4.15: Age of University

Age of University	Frequency	Percent
Less than 6 Years	105	48.8
6 - 10 Years	5	2.3
11 - 15 Years	50	23.3
16 - 20 Years	25	11.6
More than 20 Years	30	14.0
Total	**215**	**100.0**

4.5.3 Number of Employees in the University

This section presents the preliminary analysis of the data collected with regard to the respondents' university profile in terms of number of employees in the universities. In terms of number of employees in the universities in Kenya, majority responses (80 or 37.2%) were from universities that had 201 to 500 employees, followed by 45 (20.9%) were from universities that had 101 to 200 employees and 301 to 400 employees, then 30 (14.0%) were from universities that had less than 101 employees, while 15 (7.0%) were from universities that had more than 500 employees. This implies that the profile of universities responding in this survey was spread across the range of very small to relatively large universities.

Table 4.16 presents the results respondents' university profile in terms of number of employees in the universities.

Table 4.16: Number of Employees in the University

Number of Employees in the University	Frequency	Percent
Less than 101 Employees	30	14.0
101 – 200 Employees	45	20.9
201 – 300 Employees	80	37.2
301 – 400 Employees	45	20.9
More than 500 Employees	15	7.0
Total	**215**	**100.0**

4.5.4 Market Share of the University

This section presents the preliminary analysis of the data collected with regard to the respondents' university profile in terms of market share of the universities. In terms of market share of universities, majority responses (195 or 90.7%) were from universities that had less than 25% market share, while only 20 (9.3%) were from universities that had between 25% to 49% market share. This implies that the profile of universities responding in this survey was dominated by very small to relatively small universities. Table 4.17 presents the results respondents' university profile in terms of market share of the universities.

Table 4.17: Market Share of the University

Market Share of the University	Frequency	Percent
25% - 49% Market	20	9.3
Less than 25%	195	90.7
Total	**215**	**100.0**

4.6 Descriptive Results of All Variables of the Study

This section presents the descriptive results of the data collected on all variables of the study. The analysis covers calculating the mean and standard deviation scores for all variables and items in the questionnaire.

4.6.1 Descriptive Results for the Five Variables of the Study

This section presents the descriptive results of the data collected on the five variables of the study. The analysis covers calculating the mean and standard deviation scores for all the five variables of the study in the survey questionnaire. The fostering organizational learning had the lowest mean score of 3.87and the highest standard deviation of 0.454, followed by the sustainable competitive advantage with a mean score of 3.88 and standard deviation of 0.349, then the shaping organizational culture with a mean score of 3.89 and standard deviation of 0.377, then the fostering organizational innovation with a mean score of 3.91 and standard deviation of 0.382, and finally the implementing knowledge management had the highest mean score of 4.01 and the lowest standard deviation of 0.325. Overall, the mean scores ranged from 3.87 to 4.01 with the standard deviation scores ranged from 0.325 to 0.454. This indicates that there is a good variation with regards to the responses from the survey. All the means for the study variables revealed their presence.

Respondents were decided as to whether their universities had the strategic leadership practices: shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation for sustainable competitive advantage over other universities in Kenya.

Table 4.18 presents the descriptive results in terms of the mean and standard deviation scores for all for the five variables of the study.

Table 4.18: Descriptive Results for the Five Variables

Variable	n	Mean	Std. Deviation
Shaping Organizational Culture	215	3.89	.377
Fostering Organizational Learning	215	3.87	.454
Implementing Knowledge Management	215	4.01	.325
Fostering Organizational Innovation	215	3.91	.382
Sustainable Competitive Advantage	215	3.88	.349

4.6.2 Descriptive Results for the Shaping Organizational Culture

The results revealed that the mean scores ranged from 3.64 for item suggesting that the university was a very dynamic entrepreneurial workplace as people were willing to stick their necks out and take risks in the university to 4.05 for the item suggesting that the leadership in the university was generally considered to exemplify a no-nonsense, aggressive, results-oriented focus. The shaping adhocracy culture had the lowest mean score of 3.81 and a standard deviation of 0.311, followed by the shaping clan culture with a mean score of 3.88 and a standard deviation of 0.519, then the shaping hierarchy culture with a mean score of 3.89 and a standard deviation of 0.447, while shaping market culture had the highest mean score of 3.96 and a standard deviation of 0.445.

Overall, the shaping organizational culture had a mean score of 3.89 and standard deviation of 0.377 in Kenyan public and private universities.

Table 4.19 presents the results of the descriptive statistics in terms of the means and standard deviations for all items for the shaping organizational culture.

Table 4.19: Descriptive Results for the Shaping Organizational Culture

Item Code	Statement	n	Mean	Std. Deviation
CC1	The university is a very hospitable, personal workplace as it is like an extended family as people seem to share a lot of ideas among themselves in the university.	215	3.99	.843
CC2	The leadership in the university is generally considered to exemplify mentoring, facilitating, or nurturing.	215	3.87	.664
CC3	The university emphasizes human development as high trust, openness, and participation persist.	215	3.77	.611
CC4	The management style in the university is characterized by teamwork, consensus, and participation.	215	3.90	.739
CC5	The glue that holds the university together is loyalty and mutual trust as commitment to this university runs high.	215	3.80	.537
CC6	The university defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.	215	3.97	.788
CC	Shaping Clan Culture	215	3.88	.519
AC1	The university is a very dynamic entrepreneurial workplace as people are willing to stick their necks out and take risks in the university.	215	3.64	.601
AC2	The leadership in the university is generally considered to exemplify entrepreneurship, innovating, or risk taking.	215	3.72	.537

Item Code	Statement	n	Mean	Std. Deviation
AC3	The university emphasizes acquiring new resources and creating new challenges as trying new things and prospecting for opportunities are valued.	215	4.00	.256
AC4	The management style in the university is characterized by individual risk-taking, innovation, freedom, and uniqueness.	215	3.74	.440
AC5	The glue that holds the university together is commitment to innovation and development as there is an emphasis on being on the cutting edge.	215	3.83	.520
AC6	The university defines success on the basis of having the most unique or newest products as it is a product leader and innovator.	215	3.90	.584
AC	Shaping Adhocracy Culture	215	3.81	.311
HC1	The university is a very controlled and structured workplace as formal procedures generally govern what people do in the university.	215	3.77	.613
HC2	The leadership in the university is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.	215	4.04	.550
HC3	The university emphasizes permanence and stability as efficiency, control and smooth operations are important.	215	3.85	.690
HC4	The management style in the university is characterized by security of employment, conformity, predictability, and stability in relationships.	215	3.83	.683
HC5	The glue that holds the university together is formal rules and policies as maintaining a smooth-running university is important.	215	3.97	.599
HC6	The university defines success on the basis of efficiency as dependable delivery, smooth scheduling and low-cost operation are critical.	215	3.90	.304

Item Code	Statement	n	Mean	Std. Deviation
HC	Shaping Hierarchy Culture	215	3.89	.447
MC1	The university is very results oriented workplace, people are very competitive and achievement oriented as a major concern is with getting the job done in the university.	215	3.87	.557
MC2	The leadership in the university is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.	215	4.05	.610
MC3	The university emphasizes competitive actions and achievement as hitting stretch targets and winning in the marketplace are dominant.	215	3.90	.468
MC4	The university style in the university is characterized by hard-driving competitiveness, high demands, and achievement.	215	4.01	.687
MC5	The glue that holds the university together is the emphasis on achievement and goal accomplishment as aggressiveness and winning are common themes in the university.	215	3.87	.613
MC6	The university defines success on the basis of winning in the marketplace and outpacing the competition as competitive market leadership is common theme in the university.	215	4.04	.658
MC	Shaping Market Culture	215	3.96	.445
OC	Shaping Organizational Culture	215	3.89	.377

4.6.3 Descriptive Results for the Fostering Organizational Learning

The results revealed that the mean scores ranged from 3.67 for item suggesting that individuals were able to break out of traditional mind-sets to see things in new and different ways to 4.13 for the item suggesting that all of their university functions were integrated in serving the needs of our target markets. The fostering individual level learning had the lowest mean score of 3.83 and a standard deviation of 0.459, followed by the fostering group level learning with a mean score of 3.84 and a standard deviation of 0.552, while fostering organizational level learning had the highest mean score of 3.93 and a standard deviation of 0.443. Overall, the fostering organizational learning of universities in Kenya had a mean score of 3.87 and standard deviation of 0.454. Table 4.20 presents the results of the descriptive statistics in terms of the means and standard deviations for all items for the fostering organizational learning of universities in Kenya.

Table 4.20: Descriptive Results for the Fostering Organizational Learning

Item Code	Statement	n	Mean	Std. Deviation
ILL1	Individuals are able to break out of traditional mind-sets to see things in new and different ways.	215	3.67	.694
ILL2	Individuals feel a sense of pride in their work.	215	3.71	.685
ILL3	Individuals have a clear sense of direction in their work.	215	3.84	.517
1LL4	Individuals generate many new insights.	215	3.97	.178
1LL5	Individuals are aware of the critical issues that affect their work.	215	3.89	.512
1LL6	Individuals feel confident in their work.	215	3.93	.507
ILL7	Individuals feel a sense of accomplishment in what they do.	215	3.80	.825
ILL	Fostering Individual Level Learning	215	3.83	.459

Item Code	Statement	n	Mean	Std. Deviation
GLL1	We have effective conflict resolution when working in groups.	215	3.93	.568
GLL2	Different points of view are encouraged in group work.	215	3.71	.685
GLL3	Groups have the right people involved in addressing the issues.	215	3.93	.674
GLL4	We share our success within the group.	215	3.80	.595
GLL5	In meetings, we seek to understand everyone's point of view.	215	3.84	.631
GLL6	Groups in the university are adaptable.	215	3.80	.595
GLL7	Groups are prepared to rethink decisions when presented with new information.	215	3.87	.712
GLL	Fostering Group Level Learning	215	3.84	.552
OLL1	We have a strategy that positions us well for the future.	215	3.87	.664
OLL2	We have the necessary systems to implement our strategy.	215	3.87	.495
OLL3	Our university strategies are driven by our beliefs about how we can create greater value for learners.	215	3.87	.613
OLL4	The organizational structure allows us to work effectively.	215	3.80	.696
OLL5	We have a realistic yet challenging vision for the university.	215	4.03	.542
OLL6	All of our university functions are integrated in serving the needs of our target markets.	215	4.13	.423
OLL7	Our operational procedures allow us to work efficiently.	215	3.97	.599
OLL	Fostering Organizational Level Learning	215	3.93	.443
OL	Fostering Organizational Learning	215	3.87	.454

4.6.4 Descriptive Results for the Implementing Knowledge Management

The results revealed that the mean scores ranged from 3.83 for item suggesting that they made use of technology and other techniques to disseminate knowledge in their university to 4.42 for the item suggesting that employees were encouraged to undertake further studies on a full-time basis to acquire knowledge about their learners. The results revealed that implementing knowledge application had the lowest mean score of 3.96 and a standard deviation of 0.375, followed by implementing knowledge transfer with a mean score of 3.97 and a standard deviation of 0.287, while implementing knowledge acquisition had the highest mean score of 4.11 and a standard deviation of 0.486. Overall, the results revealed that implementing knowledge management of universities in Kenya had a mean score of 4.01 and standard deviation of 0.325. Table 4.21 presents the results of the descriptive results in terms of the means and standard deviations for all items for the implementing knowledge management of universities in Kenya.

Table 4.21: Descriptive Results for the Implementing Knowledge Management

Item Code	Statement	n	Mean	Std. Deviation
KA1	Employees are encouraged to undertake further studies on a full-time basis to acquire knowledge about our learners.	215	4.42	.799
KA2	Employees are encouraged to undertake short courses to acquire knowledge about our learners.	215	4.33	.694
KA3	We organize in-house training seminars to acquire knowledge to continuously improve on our performance.	215	3.93	.988
KA4	We encourage any knowledge acquisition that improves on our performance.	215	4.13	.664
KA5	We strive for any opportunity that improves on our capabilities for acquiring new knowledge from existing knowledge.	215	3.93	.507
KA6	Interaction between our university and learners plays an important role in acquiring new knowledge throughout the industry.	215	4.07	.356

Item Code	Statement	n	Mean	Std. Deviation
KA7	We have regular meetings with employees for acquiring knowledge about our learners and to discuss issues concerning our university.	215	3.93	.623
KA	Implementing Knowledge Acquisition	215	4.11	.486
KT1	There are regular meetings between departments to discuss business trends and developments.	215	4.03	.477
KT2	We make use of technology and other techniques to disseminate knowledge in our university.	215	3.83	.520
KT3	Information on learners is communicated across departments in the university.	215	4.03	.312
KT4	Our university periodically circulates documents such as reports, newsletters, which provide information on our business.	215	3.84	.681
KT5	We encourage people with similar interests to work together to solve a problem.	215	4.03	.477
KT6	Our employees normally exchange their knowledge and experiences while working.	215	4.03	.312
KT7	The university encourages team work as one of the methods to disseminate knowledge.	215	3.97	.403
KT	Implementing Knowledge Transfer	215	3.97	.287
KI1	Our university has processes for using knowledge to solve new problems.	215	3.93	.438
KI2	Our university has processes for using knowledge in development of new products/services.	215	3.97	.312
KI3	Our university matches sources of knowledge to problems and challenges.	215	3.93	.568

Item Code	Statement	n	Mean	Std. Deviation
KI4	Our university uses knowledge to improve efficiency.	215	3.99	.477
KI5	Our university uses knowledge to adjust strategic direction.	215	3.97	.542
KI6	Our university is able to locate and apply knowledge to changing competitive conditions.	215	3.95	.403
KI7	Our university takes advantage of new knowledge.	215	3.97	.403
KI	Implementing Knowledge Application	215	3.96	.375
KM	Implementing Knowledge Management	215	4.01	.325

4.6.5 Descriptive Results for the Fostering Organizational Innovation

The results revealed that the mean scores ranged from 3.71 for item suggesting that the university was implementing a reward system (i.e. promotions, thank----you) through 4.10 for the item suggesting that their university was delivering new courses for their students to encourage members of staff to come up with innovative ideas for educational purposes and administrative operations to 4.11 for the item suggesting that their university constantly emphasizes development and doing research projects. The results revealed that fostering administrative innovation had the lowest mean score of 3.88 and a standard deviation of 0.420, followed by fostering process innovation with a mean score of 3.91 and a standard deviation of 0.470, while fostering product innovation had the highest mean score of 3.95 and a standard deviation of 0.397. Overall, the results revealed that fostering organizational innovation of universities in Kenya had a mean score of 3.91 and standard deviation of 0.382.

Table 4.22 presents the results of the descriptive results in terms of the means and standard deviations for all items for the fostering organizational innovation of universities in Kenya.

Table 4.22a: Descriptive Results for the Fostering Organizational Innovation

Item Code	Statement	n	Mean	Std. Deviation
PI1	Our university is delivering new courses for members of staff.	215	3.74	.726
PI2	Our university constantly emphasizes development and doing research projects.	215	4.11	.544
PI3	Our university often develops new teaching materials and methodologies.	215	3.87	.668
PI4	Our university often develops new programmes/services for members of staff and students.	215	3.84	.636
PI5	Our university is extending its programmes/ services to new groups of employees not previously served by the university.	215	4.03	.700
PI6	Our university is delivering new courses for our students.	215	4.10	.392
PI7	Our university is extending its programmes/services to new groups of students in new colleges not previously served by the university.	215	3.93	.507
PI	Fostering Product Innovation	215	3.95	.397

The results suggested that the respondents revealed that their university was trying to bring in new equipment (that is, computers) to facilitate educational operations, work procedures and administrative operations and their university emphasizes the need for administrative innovation for educational purposes and administrative operations evident from the mean score of 4.00. Table 4.22 reveals that for fostering administrative innovation.

Table 4.22b: Descriptive Results for the Fostering Organizational Innovation

Item Code	Statement	n	Mean	Std. Deviation
AI1	New multimedia software is used by this university for educational purposes and administrative operations.	215	3.74	.722
AI2	This university is implementing a reward system (i.e. promotions, thank----you) to encourage members of staff to come up with innovative ideas for educational purposes and administrative operations.	215	3.71	.893
AI3	Our university is trying to bring in new equipment (i.e. computers) to facilitate educational operations, work procedures and administrative operations.	215	4.00	.362
AI4	Our university pays close attention to administrative innovation to facilitate educational operations, work procedures and administrative operations.	215	3.97	.477
AI5	Our university penalizes those persons who do not give ideas for new administrative innovations for educational purposes and administrative operations.	215	3.80	.787
AI6	Our university emphasizes the need for administrative innovation for educational purposes and administrative operations.	215	4.00	.512
AI7	Our university is always first to initiate administrative innovations for educational purposes and administrative operations to which competitors then respond.	215	3.97	.403
AI	Fostering Administrative Innovation	215	3.88	.420

For process innovation, the results indicated that the respondents perceived that their university often develops new technology (internet, databases, ---) to improve the educational process, their university encourages teamwork and good working

relationships between staff members, and their university emphasizes offering innovative approaches to deliver new services as evident from the high mean score of 3.97 as can be seen in Table 4.22.

Table 4.22c: Descriptive Results for the Fostering Organizational Innovation

Item Code	Statement	n	Mean	Std. Deviation
PCI1	Our university is developing new training programmes for staff members.	215	3.93	.765
PCI2	Our university encourages teamwork and good working relationships between staff members.	215	3.97	.542
PCI3	Our university emphasizes the need for radical innovation for development.	215	3.93	.356
PCI4	Our university is implementing an incentive system (i.e. higher salaries, bonuses, --) to encourage members of staff to come up with innovative ideas.	215	3.81	.701
PCI5	Our university often develops new technology (internet, databases, ---) to improve the educational process.	215	3.97	.599
PCI6	Our university emphasizes offering innovative approaches to deliver new services.	215	3.97	.542
PCI7	Our university often uses new technology to improve the educational process.	215	3.80	.648
PCI	Fostering Process Innovation	215	3.91	.470
OI	Fostering Organizational Innovation	215	3.91	.382

4.6.6 Descriptive Results for the Sustainable Competitive Advantage

For organizational excellence, the item rated highest was that which suggested that university management excellently selects new university hires subject to experience, competence, and qualification standards in order to build sustainable competitive advantage which had a mean score of 4.04 and a standard deviation of 0.482. The results revealed that organizational responsiveness had the lowest mean score of 3.84and a standard deviation of 0.401, followed by organizational effectiveness with a mean score of 3.88and a standard deviation of 0.455, while organizational excellence had the highest mean score of 3.92and a standard deviation of 0.356. Overall, the results revealed that sustainable competitive advantage of universities in Kenya had a mean score of 3.88and standard deviation of 0.349. Table 4.23 presents the results of the descriptive statistics in terms of the means and standard deviations for all items for the sustainable competitive advantage of universities in Kenya.

Table 4.23a: Descriptive Results for the Sustainable Competitive Advantage

Item Code	Statement	n	Mean	Std. Deviation
OE1	University management is excellently capable of achieving sustainable competitive advantage.	215	3.93	.507
OE2	University management excellently carries out work through participation and employees interaction in order to build sustainable competitive advantage.	215	3.80	.648
OE3	University management excellently selects new university hires subject to experience, competence, and qualification standards in order to build sustainable competitive advantage.	215	4.04	.482
OE4	University management excellently and highly values openness and accepts change in order to build sustainable competitive advantage.	215	3.77	.662
OE5	University management and employees excellently carry out their duties with high morale and enthusiasm in order to build sustainable competitive advantage.	215	3.87	.613
OE6	University management and employees are excellently aware of achieving a strong linkage among its vision, mission, and objectives in order to build sustainable competitive advantage.	215	4.00	.256
OE7	University management is excellently capable of providing development opportunities in order to build the university's sustainable competitive advantage.	215	4.00	.448
OE	Organizational Excellence	215	3.92	.356

Item Code	Statement	n	Mean	Std. Deviation
OEF1	We are more effective than our competitors to provide innovative learning to student in order to build the university's sustainable competitive advantage.	215	3.76	.803
OEF2	The university's staff turnover was lower than that of the competitors indicating sustainable competitive advantage.	215	3.78	.492
OEF3	The university's employee morale is higher than that of the competitors indicating sustainable competitive advantage.	215	3.80	.537
OEF4	The university's effective attraction to professionals was higher than that of the competitors indicating sustainable competitive advantage.	215	3.99	.599
OEF5	The university's image is better than that of the competitors indicating sustainable competitive advantage.	215	3.90	.694
OEF6	The university's growth rate was higher than that of the competitors last year indicating sustainable competitive advantage.	215	3.95	.546
OEF7	The university's employee productivity was higher than that of the competitors last year indicating sustainable competitive advantage.	215	3.97	.599
OEF	Organizational Effectiveness	215	3.88	.455

The results revealed that for organizational effectiveness, the item that rated highest was that which suggested that the university's effective attraction to professionals was higher than that of the competitors indicating sustainable competitive advantage which had a mean score of 3.99 and a standard deviation of 0599. However, the item rated highest for organizational responsiveness was that which suggested that if a major competitor launches an intensive campaign targeted at their students, they would implement a response immediately in order to build the university's sustainable competitive advantage which had a mean score of 4.00 and a standard deviation of 0592.

Table 4.23b: Descriptive Results for the Sustainable Competitive Advantage

Item Code	Statement	n	Mean	Std. Deviation
OR1	We are faster than our competitors to respond to student complaints in order to build the university's sustainable competitive advantage.	215	3.75	.611
OR2	We are faster than our competitors to respond to concerns raised by employees in order to build the university's sustainable competitive advantage.	215	3.79	.611
OR3	We are faster than our competitors to access future student needs and respond in time in order to build the university's sustainable competitive advantage.	215	3.87	.337
OR4	We are faster than our competitors to respond to changes in technology in order to build the university's sustainable competitive advantage.	215	3.80	.648
OR5	We are faster than our competitors to respond to concerns raised by suppliers in order to build the university's sustainable competitive advantage.	215	3.77	.555
OR6	We are faster than our competitors to respond to concerns raised by government in order to build the university's sustainable competitive advantage.	215	3.90	.468
OR7	If a major competitor launches an intensive campaign targeted at our students, we would implement a response immediately in order to build the university's sustainable competitive advantage.	215	4.00	.592
ORR	Organizational Responsiveness	215	3.84	.401
SCA	Sustainable Competitive Advantage	215	3.88	.349

4.7 Testing for the Underlying Assumptions for Multiple Regression Analysis

In drawing conclusions about a population based on a regression analysis conducted on sample data, testing the underlying assumptions for multiple regression analysis is critically important, because of the complication of the relationship between variables (Hair *et al*., 2010). The underlying assumptions for multiple regression analysis are normality of residuals, linearity and homoscedasticity, multicollinearity, and residual independence (autocorrelation). The first test for normality is done by examining the values of skewness and kurtosis. This is necessary to determine the next course of testing; using parametric or non-parametric techniques. The second test is homoscedasticity which is tested by examining the correlation among the variables. Next is to test linearity by observing the p-plot graphs for all variables. Last but not least, multicollinearity was tested by examining the VIF and tolerance values for all variables. When summarizing all the tests for underlying assumptions for multiple regression analysis, it can be concluded that the distribution of the data does not indicate any serious departure from normality, the presence of linearity and homoscedasticity, the absence of multicollinearity, the absence of autocorrelation. Therefore, further statistical analysis can be performed using parametric techniques. Each of the assessment procedures and associated results are presented in the subsequent sections.

4.7.1 Testing for Normality using Skewness and Kurtosis

As previously discussed in Chapter Three, the most fundamental assumption in multivariate analysis is normality, referring to the shape of the data distribution for a variable and its correspondence to the normal distribution (Hair *et al*., 2010). There are several ways to determine normality of the data. Normality is tested to determine whether the distribution of the data approximates that of a normal distribution. This is necessary to determine the next course of testing; using parametric or non-parametric techniques. The first test for normality is done by examining the values of skewness and kurtosis. Two important components of normality are skewness and kurtosis

(Tabachnick & Fidell, 2014). Skewness examines the deviation of the data from the mean while kurtosis examines the relative peakedness of the distribution.

Although theoretically, when a distribution is perfect distribution, the value of skewness and kurtosis are zero, which are rather uncommon occurrence in the social science, Garson suggested that, for a distribution to be considered normal, both the skewness and kurtosis of the distribution should fall between -2.00 to +2.00. However, Hair *et al*. (2010) suggested that for a distribution to be considered normal, the skewness value must be within ±2.00 standard error of skewness and within ±3.00 standard error of kurtosis. Statistics for skewness for shaping organizational culture was -0.123 while kurtosis was0.448. Fostering organizational learning had statistics for skewness of -0.245 and kurtosis was 0.896. Implementing Knowledge management had statistics for skewness of -0.748 and kurtosis of 0.699. Next, fostering organizational innovation had statistics for skewness of -0.642 and kurtosis of 0.610.

Sustainable competitive advantage had statistics for skewness of 0.743and kurtosis of 0.441. All of these values did not exceed the absolute values of 2 for skewness and 3 for kurtosis indices and, therefore, the data set was considered to have moderately normal distribution and the maximum likelihood estimation was used. The distributions of all the variables have no indication of severe departure from normality, because Hair *et al*. (2010) suggested that for a distribution to be considered normal, the skewness value must be within ± 2.00 standard error of skewness and within ± 3.00 standard error of kurtosis.

Table 4.24 summarizes the skewness and kurtosis for all variables.

Table 4.24: Testing for Normality using Skewness and Kurtosis

Variable	n	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Shaping Organizational Culture	215	-.123	.155	.448	.309
Fostering Organizational Learning	215	-.245	.157	.896	.313
Implementing Knowledge Management	215	-.748	.164	.699	.327
Fostering Organizational Innovation	215	-.642	.164	.610	.326
Sustainable Competitive Advantage	215	.743	.160	.441	.320

4.7.2 Testing for Linearity and Homoscedasticity

The assumption of linearity was tested by observing the p-plot graphs for all variables. The assumption of linearity is that there is a straight line relationship between dependent variables and independent variables (Hair *et al*., 2010). The assumption of linearity is important as Pearson's *r* only captures the linear relationships among variables (Tabachnick & Fidell, 2014). If there are sustainable nonlinear relationships among variables, they are ignored. The linearity between two variables may be assed roughly by inspection of bivariate scatter plot. If both variables are normally distributed and linearly related, the scatter plot is oval-shaped (Tabachnick & Fidell, 2014). Homoscedasticity is desirable, because the variance of the dependent variable being explained in the dependence relationship should not be concentrated in only a limited range of independent value (Hair *et al*., 2010). Homoscedasticity refers to the assumption that dependent variable(s) exhibit equal levels of variance across the range of independent variables. The assumption of homoscedasticity was tested by examining the correlation

among the variables. The results of Pearson product-moment correlations show significant positive correlations between the four strategic leadership practices (shaping organizational culture, fostering organizational learning, implementing knowledge management, fostering organizational innovation) and sustainable competitive advantage, implying that the presence of linearity and homoscedasticity was observed across all variables and which further attests that the distribution of all the variables have no indication of severe departure from normality. Shaping organizational culture was positively and significantly correlated with sustainable competitive advantage ($r = 0.471$; $p < 0.01$), fostering organizational learning was positively and significantly correlated with sustainable competitive advantage ($r = 0.591$; $p < 0.01$), implementing knowledge management was positively and significantly correlated with sustainable competitive advantage ($r = 0.832$; $p < 0.01$), and fostering organizational innovation was positively and significantly correlated with sustainable competitive advantage ($r = 0.917$; $p < 0.01$). These results were consistent with the resource based view that sustainable competitive advantage is an outcome of a collection of intangible resources (Barney, 2007). Table 4.25 presents the correlation analysis for the purpose of determining homoscedasticity among the variables, and the values of Pearson correlation coefficient are presented in matrix format across all variables.

Table 4.25: Testing for Linearity and Homoscedasticity in Terms of Correlation Analysis

		OC	OL	KM	OI	SCA
Shaping Organizational Culture (OC)	Pearson Correlation	1				
	Sig. (2-tailed)					
	n	215				
Fostering Organizational Learning (OL)	Pearson Correlation	.878**	1			
	Sig. (2-tailed)	.000				
	n	215	215			
Implementing Knowledge Management (KM)	Pearson Correlation	.586**	.645**	1		
	Sig. (2-tailed)	.000	.000			
	n	215	215	215		
Fostering Organizational Innovation (OI)	Pearson Correlation	.539**	.592**	.840**	1	
	Sig. (2-tailed)	.000	.000	.000		
	n	215	215	215	215	
Sustainable Competitive Advantage (SCA)	Pearson Correlation	.471**	.591**	.832**	.917**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	n	215	215	215	215	215

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

4.7.3 Testing for Multicollinearity

Multicollinearity was tested by examining the variable inflation factor (VIF) and tolerance values for all variables. Multicollinearity is defined as a strong correlation among the predictor variables (Hair *et al*., 2010). The presence of multicollinearity threatens the internal validity of multiple regression analysis and increases the likelihood of errors in hypothesis testing (Field, 2013). In order to conclude that multicollinearity is absent, the VIF values and the tolerance values are acceptable if they are below 10 and over 0.1 respectively (Hair *et al*., 2010; Tabachnick & Fidell, 2014). The findings revealed that shaping organizational culture had VIF of 4.376 and tolerance of 0.229, fostering organizational learning had VIF of 4.944 and tolerance of 0.202, implementing knowledge management had VIF of 3.840 and tolerance of 0.260, and fostering organizational innovation had VIF of 3.450 and tolerance of 0.290 respectively, suggesting multicollinearity was absent among the variables (Hair *et al*., 2010; Tabachnick & Fidell, 2014). The results for testing multicollinearity in terms of VIF and tolerance values with sustainable competitive advantage as the dependant variable are presented in Table 4.26.

Table 4.26: Testing for Multicollinearity in Terms of VIF and Tolerance

Variable	Tolerance	VIF
Shaping Organizational Culture	.229	4.376
Fostering Organizational Learning	.202	4.944
Implementing Knowledge Management	.260	3.840
Fostering Organizational Innovation	.290	3.450

4.7.3 Testing for Autocorrelation

Autocorrelation may be defined as the assumption that the errors of prediction are independent of one another (Hair *et al.*, 2010; Tabachnick & Fidell, 2014). The Durbin-Watson statistic was used to measure the autocorrelation of errors over the sequence of cases, and if significant, indicates dependence of errors. In order to conclude lack of autocorrelation, Johnson and Wichern (2006) stated that the optimum value of the Durbin-Watson should fall within the range of 1.5 to 2.5, while Field (2013) suggested that the Durbin-Watson statistic is better when closer to 2.0. The findings revealed that the Durbin-Watson values were 2.135, 2.029, 1.526, and 1.940 for shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation respectively, suggesting lack of autocorrelation among the variables (Johnson & Wichern, 2006; Field, 2013). Table 4.27 presents the results for testing autocorrelation in terms of the Durbin-Watson statistics.

Table 4.27: Testing for Autocorrelation

Variable					**Durbin-Watson statistics**
			Model Summary[b]		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.471[a]	.222	.218	.309	2.135
a. Predictors: (Constant), Shaping Organizational Culture					
b. Dependent Variable: Sustainable Competitive Advantage					
			Model Summary[b]		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.591[a]	.349	.346	.283	2.209
a. Predictors: (Constant), Fostering Organizational Learning					
b. Dependent Variable: Sustainable Competitive Advantage					
			Model Summary[b]		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.832[a]	.693	.691	.194	1.526
a. Predictors: (Constant), Implementing Knowledge Management					
b. Dependent Variable: Sustainable Competitive Advantage					
			Model Summary[b]		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.917[a]	.841	.840	.140	1.940
a. Predictors: (Constant), Fostering Organizational Innovation					
b. Dependent Variable: Sustainable Competitive Advantage					

4.8 Pearson's Correlation Analyses

Before the multiple regression analyses, bivariate correlations were conducted in order to test the relationships among the variables. The variables of the study were quantitative, having five values, and being measured on a level with at least approximate interval characteristic. Therefore, the statistical techniques of the Pearson's product moment correlation, known as the Pearson's correlation, were used to determine the extent to which they were linearly related (Hair *et al*., 2010). A Pearson's correlation coefficient (r) of -1.00 or +1.00 and -0.50 or +0.50 indicates perfect and moderate correlation respectively (Pallant, 2013). The Pearson's product moment correlation was performed to identify aspects of the relationship among the variables, to test the hypotheses, and answer the research questions.

4.8.1 Pearson's Correlation Analysis between Shaping Organizational Culture and Sustainable Competitive Advantage

Pearson's product moment correlations were computed between the shaping organizational culture (OC) and sustainable competitive advantage (SCA). The results indicated that shaping clan culture had a positive and statistically significant relationship with organizational excellence ($r = 0.555$, $p < 0.01$), organizational effectiveness ($r = 0.496$, $p < 0.01$), organizational responsiveness ($r = 0.358$, $p < 0.01$), and sustainable competitive advantage ($r = 0.539$, $p < 0.01$). Shaping adhocracy culture had positive and statistically significant relationship with organizational excellence ($r = 0.350$, $p < 0.01$), organizational effectiveness ($r = 0.659$, $p < 0.01$), organizational responsiveness ($r = 0.328$, $p < 0.01$), and sustainable competitive advantage ($r = 0.518$, $p < 0.01$). Shaping hierarchy culture had a positive and statistically significant relationship with organizational excellence ($r = 0.271$, $p < 0.01$), organizational effectiveness ($r = 0.334$, $p < 0.01$), but a weak and insignificant relationship with organizational responsiveness ($r = 0.047$, $p > 0.01$), and a positive and statistically significant relationship with sustainable competitive advantage ($r = 0.251$, $p < 0.01$). Shaping market culture had a positive and

statistically significant relationship with organizational excellence ($r = 0.413$, $p < 0.01$), organizational effectiveness ($r = 0.278$, $p < 0.01$), organizational responsiveness ($r = 0.242$, $p < 0.01$), and sustainable competitive advantage ($r = 0.355$, $p < 0.01$).

Overall, shaping organizational culture had a positive and statistically significant relationship with organizational excellence ($r = 0.465$, $p < 0.01$), organizational effectiveness ($r = 0.487$, $p < 0.01$), organizational responsiveness ($r = 0.276$, $p < 0.01$), and sustainable competitive advantage ($r = 0.471$, $p < 0.01$). According to this result, the null hypothesis ($H_0 1_)$ that postulated that there is no significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities was rejected. Therefore, it was concluded that there is a significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities. The positive and significant relationships between the shaping organizational culture and sustainable competitive advantage provide empirical support for the claim that Di Stifano (2007) that a prerequisite for achieving competitive advantage is having the right corporate culture in place. The findings are consistent with those of various recent studies such as Qawasmeh *et al.* (2013) and Ramadhan (2010) whose research provided empirical evidence on the links between organizational culture and sustainable competitive advantage.

The results of this thesis are also consistent with the results of the recent study by Kaluyu *et al.* (2014) entitled the moderating effect of quality assurance mechanisms on the relationship between strategic factors and sustainable competitive advantage: a case of universities in Kenya that found a fairly strong positive correlation between organizational culture and sustainable competitive advantage.

Table 4.28 displays detailed Pearson's product moment correlation matrix for the dimensions of shaping organizational culture and sustainable competitive advantage.

Table 4.28: Pearson Correlation Matrix between Shaping Organizational Culture and Sustainable Competitive Advantage

		SCA	OR	OEF	OE	CC	AC	HC	MC	OC
Sustainable Competitive Advantage (SCA)	Pearson Correlation	1								
	Sig. (2-tailed)									
	n	215								
Organizational Responsiveness (OR)	Pearson Correlation	.863**	1							
	Sig. (2-tailed)	.000								
	n	215	215							
Organizational Effectiveness (OEF)	Pearson Correlation	.897**	.683**	1						
	Sig. (2-tailed)	.000	.000							
	n	215	215	215						
Organizational Excellence (OE)	Pearson Correlation	.849**	.595**	.639**	1					
	Sig. (2-tailed)	.000	.000	.000						
	n	215	215	215	215					
Shaping Clan Culture (CC)	Pearson Correlation	.539**	.358**	.496**	.555**	1				
	Sig. (2-tailed)	.000	.000	.000	.000					
	n	215	215	215	215	215				
Shaping Adhocracy Culture (AC)	Pearson Correlation	.518**	.328**	.659**	.350**	.648**	1			
	Sig. (2-tailed)	.000	.000	.000	.000	.000				
	n	215	215	215	215	215	215			
Shaping Hierarchy Culture	Pearson Correlation	.251**	.047	.334**	.271**	.786**	.632**	1		
	Sig. (2-tailed)	.000	.495	.000	.000	.000	.000			
	n	215	215	215	215	215	215	215		
Shaping Market Culture (MC)	Pearson Correlation	.355**	.242**	.278**	.413**	.743**	.538**	.684**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		
	n	215	215	215	215	215	215	215	215	
Shaping Organizational Culture (OC)	Pearson Correlation	.471**	.276**	.487**	.465**	.929**	.775**	.898**	.864**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	
	n	215	215	215	215	215	215	215	215	215

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

4.8.2 Pearson's Correlation Analysis between Fostering Organizational Learning and Sustainable Competitive Advantage

Pearson's product moment correlations were computed between the fostering organizational learning (OL) and sustainable competitive advantage (SCA). The results indicate that fostering individual level learning (ILL) had positive and statistically significant relationship with organizational excellence ($r = 0.454$, $p < 0.01$), organizational effectiveness ($r = 0.434$, $p < 0.01$), organizational responsiveness ($r = 0.352$, $p < 0.01$), and sustainable competitive advantage ($r = 0.475$, $p < 0.01$). Fostering group level learning (ILL) had positive and statistically significant relationship with organizational excellence ($r = 0.520$, $p < 0.01$), organizational effectiveness ($r = 0.591$, $p < 0.01$), organizational responsiveness ($r = 0.417$, $p < 0.01$), and sustainable competitive advantage ($r = 0.587$, $p < 0.01$). Fostering organizational level learning (OLL) had positive and statistically significant relationship with organizational excellence ($r = 0.664$, $p < 0.01$), organizational effectiveness ($r = 0.494$, $p < 0.01$), organizational responsiveness ($r = 0.403$, $p < 0.01$), and sustainable competitive advantage ($r = 0.595$, $p < 0.01$). Overall, fostering organizational learning (OL) had positive and statistically significant relationship with organizational excellence ($r = 0.580$, $p < 0.01$), organizational effectiveness ($r = 0.546$, $p < 0.01$), organizational responsiveness ($r = 0.418$, $p < 0.01$), and sustainable competitive advantage ($r = 0.591$, $p < 0.01$). The null hypothesis (H_02) that postulated that there is no significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities was rejected, in favour of the alternative hypothesis (H_12) that postulated that there is a significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities, which was accepted. Therefore, it was concluded that there is a significant role of fostering organizational learning in sustainable competitive advantage of universities in Kenya. The findings are consistent with the results of the study by Akhtar, Khan, and Mujtaba

(2013) which showed that organizational learning contribute significantly towards the achievement of competitive advantage.

Table 4.29 displays the detailed Pearson's product moment correlation matrix between fostering organizational learning and sustainable competitive advantage dimensions.

Table 4.29: Pearson's Correlation Matrix between Fostering Organizational Learning and Sustainable Competitive Advantage

		SCA	OR	OEF	OE	ILL	GLL	OLL	OL
Sustainable Competitive Advantage (SCA)	Pearson Correlation	1							
	Sig. (2-tailed)								
	n	215							
Organizational Responsiveness (OR)	Pearson Correlation	.863**	1						
	Sig. (2-tailed)	.000							
	n	215	215						
Organizational Effectiveness (OEF)	Pearson Correlation	.897**	.683**	1					
	Sig. (2-tailed)	.000	.000						
	n	215	215	215					
Organizational Excellence (OE)	Pearson Correlation	.849**	.595**	.639**	1				
	Sig. (2-tailed)	.000	.000	.000					
	n	215	215	215	215				
Fostering Individual Level Learning (ILL)	Pearson Correlation	.475**	.352**	.434**	.454**	1			
	Sig. (2-tailed)	.000	.000	.000	.000				
	n	215	215	215	215	215			
Fostering Group Level Learning (GLL)	Pearson Correlation	.587**	.417**	.591**	.520**	.803**	1		
	Sig. (2-tailed)	.000	.000	.000	.000	.000			
	n	215	215	215	215	215	215		
Fostering Organizational Level Learning (OLL)	Pearson Correlation	.595**	.403**	.494**	.664**	.845**	.807**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		
	n	215	215	215	215	215	215	215	
Fostering Organizational Learning (OL)	Pearson Correlation	.591**	.418**	.546**	.580**	.937**	.938**	.937**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	n	215	215	215	215	215	215	215	215

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

4.8.3 Pearson's Correlation Analysis between Implementing Knowledge Management and Sustainable Competitive Advantage

Pearson's product moment correlations were computed between the implementing knowledge management (KM) and sustainable competitive advantage (SCA). The results indicate that implementing knowledge acquisition had positive and statistically significant relationship with organizational excellence ($r = 0.511$, $p < 0.01$), organizational effectiveness ($r = 0.623$, $p < 0.01$), organizational responsiveness ($r = 0.434$, $p < 0.01$), and sustainable competitive advantage ($r = 0.603$, $p < 0.01$). The implementing knowledge transfer had positive and statistically significant relationship with organizational excellence ($r = 0.757$, $p < 0.01$), organizational effectiveness ($r = 0.674$, $p < 0.01$), organizational responsiveness ($r = 0.410$, $p < 0.01$), and sustainable competitive advantage ($r = 0.704$, $p < 0.01$). The implementing knowledge application had positive and statistically significant relationship with organizational excellence ($r = 0.930$, $p < 0.01$), organizational effectiveness ($r = 0.636$, $p < 0.01$), organizational responsiveness ($r = 0.652$, $p < 0.01$), and sustainable competitive advantage ($r = 0.844$, $p < 0.01$).

Overall, implementing knowledge management had positive and statistically significant relationship with organizational excellence ($r = 0.835$, $p < 0.01$), organizational effectiveness ($r = 0.753$, $p < 0.01$), organizational responsiveness ($r = 0.588$, $p < 0.01$), and sustainable competitive advantage ($r = 0.832$, $p < 0.01$). The null hypothesis (H_03) that postulated that there is no significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities is rejected, in favour of the alternative hypothesis (H_13) that postulated that there is a significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities, which is accepted. Therefore, it was concluded that there is a significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities. In line with prior studies (Atkočiūnienė, 2013); Bhatti *et al.*, 2010; Chowtupalli & Rafi, 2013;

Kamya, Ntayi, & Ahiauzu, 2010; Kamya *et al.*, 2011; Mahdi *et al.*, 2011; Marjanovic & Freeze, 2012), this study found significant relationship between knowledge management and sustainable competitive advantage. This finding is consistent with the resource based view that sustainable competitive advantage is an outcome of a collection of intangible resources (Barney, 2007). Table 4.30 displays the correlation matrix between dimensions of implementing knowledge management and sustainable competitive advantage.

Table 4.30: Pearson's Correlation Matrix between Implementing Knowledge Management and Sustainable Competitive Advantage

		SCA	OR	OEF	OE	KA	KT	KI	KM
Sustainable Competitive Advantage (SCA)	Pearson Correlation	1							
	Sig. (2-tailed)								
	n	215							
Organizational Responsiveness (OR)	Pearson Correlation	.863**	1						
	Sig. (2-tailed)	.000							
	n	215	215						
Organizational Effectiveness (OEF)	Pearson Correlation	.897**	.683**	1					
	Sig. (2-tailed)	.000	.000						
	n	215	215	215					
Organizational Excellence (OE)	Pearson Correlation	.849**	.595**	.639**	1				
	Sig. (2-tailed)	.000	.000	.000					
	n	215	215	215	215				
Implementing Knowledge Acquisition (KA)	Pearson Correlation	.603**	.434**	.623**	.511**	1			
	Sig. (2-tailed)	.000	.000	.000	.000				
	n	215	215	215	215	215			
Implementing Knowledge Transfer (KT)	Pearson Correlation	.704**	.410**	.674**	.757**	.557**	1		
	Sig. (2-tailed)	.000	.000	.000	.000	.000			
	n	215	215	215	215	215	215		
Implementing Knowledge Application (KI)	Pearson Correlation	.844**	.652**	.636**	.930**	.454**	.794**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		
	n	215	215	215	215	215	215	215	
Implementing Knowledge Management (KM)	Pearson Correlation	.832**	.588**	.753**	.835**	.837**	.877**	.844**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	n	215	215	215	215	215	215	215	215

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

4.8.4 Pearson's Correlation Analysis between Fostering Organizational Innovation and Sustainable Competitive Advantage

Pearson's product moment correlations were computed between the fostering organizational innovation dimensions and sustainable competitive advantage dimensions. The results indicate that fostering product innovation had positive and statistically significant relationship with organizational excellence ($r = 0.528$, $p < 0.01$), organizational effectiveness ($r = 0.788$, $p < 0.01$), organizational responsiveness ($r = 0.590$, $p < 0.01$), and sustainable competitive advantage ($r = 0.735$, $p < 0.01$).

Fostering administrative innovation had positive and statistically significant relationship with organizational excellence ($r = 0.698$, $p < 0.01$), organizational effectiveness ($r = 0.788$, $p < 0.01$), organizational responsiveness ($r = 0.514$, $p < 0.01$), and sustainable competitive advantage ($r = 0.768$, $p < 0.01$). Fostering process innovation had positive and statistically significant relationship with organizational excellence ($r = 0.786$, $p < 0.01$), organizational effectiveness ($r = 0.889$, $p < 0.01$), organizational responsiveness ($r = 0.731$, $p < 0.01$), and sustainable competitive advantage ($r = 0.924$, $p < 0.01$). Overall, fostering organizational innovation had positive and statistically significant relationship with organizational excellence ($r = 0.763$, $p < 0.01$), organizational effectiveness ($r = 0.929$, $p < 0.01$), organizational responsiveness ($r = 0.694$, $p < 0.01$), and sustainable competitive advantage ($r = 0.917$, $p < 0.01$).The null hypothesis (H_04) that postulated that there is no significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities was rejected, in favour of the alternative hypothesis (H_14) that postulated that there is a significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities, which was accepted. Therefore, it was concluded that there is a significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities. Table 4.31 displays Pearson's correlation matrix between the dimensions of fostering organizational innovation and sustainable competitive advantage.

Table 4.31 displays the correlation matrix for dimensions of fostering organizational innovation and sustainable competitive advantage.

Table 4.31: Pearson's Correlation Matrix between Fostering Organizational Innovation and Sustainable Competitive Advantage

		SCA	OR	OEF	OE	PI	AI	PCI	OI
Sustainable Competitive Advantage (SCA)	Pearson Correlation	1							
	Sig. (2-tailed)								
	n	215							
Organizational Responsiveness (OR)	Pearson Correlation	.863**	1						
	Sig. (2-tailed)	.000							
	n	215	215						
Organizational Effectiveness (OEF)	Pearson Correlation	.897**	.683**	1					
	Sig. (2-tailed)	.000	.000						
	n	215	215	215					
Organizational Excellence (OE)	Pearson Correlation	.849**	.595**	.639**	1				
	Sig. (2-tailed)	.000	.000	.000					
	n	215	215	215	215				
Fostering Product Innovation (PI)	Pearson Correlation	.735**	.590**	.788**	.528**	1			
	Sig. (2-tailed)	.000	.000	.000	.000				
	n	215	215	215	215	215			
Fostering Administrative Innovation (AI)	Pearson Correlation	.768**	.514**	.788**	.698**	.465**	1		
	Sig. (2-tailed)	.000	.000	.000	.000	.000			
	n	215	215	215	215	215	215		
Fostering Process Innovation (PCI)	Pearson Correlation	.924**	.731**	.889**	.786**	.758**	.799**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		
	n	215	215	215	215	215	215	215	
Fostering Organizational Innovation (OI)	Pearson Correlation	.917**	.694**	.929**	.763**	.829**	.857**	.967**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	n	215	215	215	215	215	215	215	215

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

4.9 Standard Multiple Regression Analysis of the Role of Strategic Leadership for Sustainable Competitive Advantage in Kenyan Public and Private Universities

Following the testing of the underlying assumptions for multiple regression analysis and the determination of the appropriateness of the data set, standard multiple regression analysis was employed to test the proposed hypotheses. Standard multiple regression analysis is conducted for hypotheses testing (Cooper & Schindler, 2013; Sekaran, 2008). Multiple regression analysis provides a means of objectively assessing the magnitude and direction of each predictor's relationship to its outcome variable (Hair *et al.*, 2010; Tabachnick & Fidell, 2014). It has been argued that multiple regression analysis is a powerful analytical tool used to determine which specific independent variables predicts the variance of dependent variables selected by the research (Hair *et al*., 2010). It has also been emphasized that multiple regression analysis is by far the most widely used in the business and social sciences to explore all types of dependence relationships (Hair *et al.*, 2010; Tabachnick & Fidell, 2014).

In this study, the interpretation of the multiple regression analysis included understanding of the multiple correlation indices such as R, R^2, and adjusted R^2, unstandardized regression coefficients (B), and standardized regression coefficients (β).The R^2 value ranges from 0 to 1. Multiple Pearson's product moment correlation (R) value 0 means that there is no linear relationship between predicted scores and the criterion scores, while a value of 1 implies that the linear combination of the predictor variables perfectly predicts the criterion variable; values between 0 to 1 indicate a less than perfect linear relationship between predicted and criterion scores (Hair *et al*., 2010). However, R^2 is adjusted to correct the overestimation (inflated) value of the population of the sample (Hair *et al*., 2010; Tabachnick & Fidell, 2014). Therefore, adjusted R^2 values are reported, to indicate the degree (in percentage) to which particular constructs or factors were predicted and explained by others and to compare degree of prediction between the constructs or factors.

In this study, both unstandardized regression coefficients (B), and standardized regression coefficients (β) were also reported for the significant regression models. Following the recommendations by Pallant (2013), the unstandardized regression coefficients (B) were used to construct a regression equation, calculate the predicted values for each observation and to express the expected change in the criterion variable for each unit change in predictors, while the standardized regression coefficients (β) which are the beta coefficients from the standardized data, reflected the relative impact on the criterion of a change in one standard deviation in either variable. Therefore, the standardized regression coefficient (β) was one of the particular relevant to this research, because of its ability to determine the most influential independent variable was important in understanding the role of strategic leadership in sustainable competitive advantage of universities in Kenya. Based on the values of the standardized regression coefficients (β), the predicting power of predictors within a multiple regression model could be compared, where the larger the β coefficient was, then the larger effect the predictor had in predicting (Hair *et al*., 2010).

The statistical results of this investigation indicated that there was a statistically significant role of the strategic leadership (shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities. Each of the assessment procedures and associated regression results of the variables are presented in subsequent sections.

4.9.1 Variables Entered/Removed in the Standard Multiple Regression Equation

The hypotheses were designed to answer the research question of what is the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities. In order to test the hypotheses, a standard multiple regression analysis was conducted using sustainable competitive advantage as the dependent variable, and the four strategic leadership practices: shaping organizational culture; fostering

organizational learning; implementing knowledge management, and fostering organizational innovation as the predicting variables. The multiple regression model for the study was:

$$Y= \beta_o + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where:

Y = Sustainable competitive advantage (Dependent variable),

X_1 = Shaping Organizational culture (Independent variable),

X_2 = Fostering Organizational learning (Independent variable),

X_3 = Implementing Knowledge management (Independent variable),

X_4 = Fostering Organizational innovation (Independent variable),

β_o = Constant (coefficient of Y intercept),

$\beta_1 - \beta_4$ = Regression coefficient for each Independent variable,

ε = Error Term (Random or Stochastic Term).

Table 4.32 illustrates that the method used was enter and when the multiple regression analysis was conducted using sustainable competitive advantage as the dependent variable, and the four strategic leadership practices: shaping organizational culture; fostering organizational learning; implementing knowledge management, and fostering organizational innovation as the independent variables, it turns out that the all the independent variables entered into the regression equation and none was excluded.

Table 4.32: Variables Entered/Removeda in the Standard Multiple Regression Equation

Model	Variables Entered	Variables Removed	Method
1	Shaping Organizational Culture, Fostering Organizational Innovation, Implementing Knowledge Management, Fostering Organizational Learning[b]	.	Enter

a. Dependent Variable: Sustainable Competitive Advantage

b. All requested variables entered.

4.9.2 Model Summary of Standard Multiple Regression Results of the Role of Strategic Leadership for Sustainable Competitive Advantage

From the model summary, it is clear that the value of R was 0.935, while the value of R^2 was 0.873 that can be expressed as a percentage 87.3%, which means that the model including only the four strategic leadership practices (shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation) can able to explain 87.3 % of the variance in sustainable competitive advantage in Kenyan public and private universities. Considering the relatively small sample, it is claimed that R^2 value tends to overestimate the true value in the population (Tabachnick & Fidell, 2014). Therefore, the adjusted R^2 offers better estimation of the true population values. It is clear that the value of the adjusted R^2 was 0.871 indicating that a combination of four strategic leadership practices (shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation) predict and explain approximately 87.1% of the variation in the sustainable competitive advantage of universities in Kenya. This means 12.9% of the variation in sustainable competitive advantage in Kenyan public and private universities cannot be explained by the strategic leadership alone.

Therefore, there might be other variables that have an influence also. From the model summary, it is clear that the Durbin-Watson value for the model was 1.798, falling within the optimum range of 1.5 to 2.5 and closer to 2.0, suggesting lack of autocorrelation among the variables (Hair *et al.*, 2010; Johnson & Wichern, 2006; Field, 2013).

Table 4.33 presents the model summary of standard multiple regression results for the role of strategic leadership practices in sustainable competitive advantage of universities in Kenya.

Table 4.33: Model Summary[b] of Standard Multiple Regression Results of the Role of Strategic Leadership for Sustainable Competitive Advantage

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.935[a]	.873	.871	.126	1.798

a. Predictors: (Constant), Shaping Organizational Culture, Fostering Organizational Innovation, Implementing Knowledge Management, Fostering Organizational Learning

b. Dependent Variable: Sustainable Competitive Advantage

4.9.3 ANOVA of Standard Multiple Regression Results of the Role of Strategic Leadership for Sustainable Competitive Advantage

The ANOVA table tests whether the model is significantly better than the mean at predicting the outcome variable. From the ANOVA table, it is clear that the overall standard multiple regression model (the model involving constant, shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation) achieved a high degree of fit, as reflected by an R^2 of 0.873, $F(4, 210) = 362.201$, $p < 0.001$). The results show that all the four strategic leadership practices (shaping organizational culture, fostering

organizational learning, implementing knowledge management, and fostering organizational innovation) were significant in explaining sustainable competitive advantage of universities in Kenya. This finding suggests that strategic leadership practices have significant role in sustainable competitive advantage of universities in Kenya. The results are consistent to the recent research conducted by Mahdi and Almsafir (2013) which found that there is significant positive impact of strategic leadership capabilities on sustainable competitive advantage in the academic environment, especially Private Universities in Iraq. Therefore, strategic leadership practices become a key determinant of driving and explaining sustainable competitive advantage of universities in Kenya. Table 4.34 presents the ANOVA of standard multiple regression results for the role of strategic leadership practices in sustainable competitive advantage of universities in Kenya.

Table 4.34: ANOVA[a] of Standard Multiple Regression Results of the Role of Strategic Leadership for Sustainable Competitive Advantage

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	22.827	4	5.707	362.201	.000[b]
	Residual	3.309	210	.016		
	Total	26.135	214			

a. Dependent Variable: Sustainable Competitive Advantage

b. Predictors: (Constant), Shaping Organizational Culture, Fostering Organizational Innovation, Implementing Knowledge Management, Fostering Organizational Learning

4.9.4 Standard Multiple Regression Coefficients of the Role of Strategic Leadership for Sustainable Competitive Advantage

Following the recommendations by Bryman (2012), Hair *et al.* (2010) and Pallant (2013), the unstandardized regression coefficients (B) were used to construct a regression equation, calculate the predicted values for each observation and to express the expected change in the criterion variable for each unit change in predictors. Therefore, when the unstandardized regression coefficients (B) were substituted to the multiple regression model which was:

$$Y = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Therefore, the multiple regression equation becomes:

$$Y = 0.573 + -0.267 X_1 + 0.212 X_2 + 0.217 X_3 + 0.677 X_4$$

The multiple regression equation has established that taking all factors into account (shaping organizational culture, fostering organizational learning, implementing knowledge management and fostering organizational innovation) constant at zero, sustainable competitive advantage of universities in Kenya will be 0.573. These findings provide support to the argument that strategic leaders have the capability and the power to manage the organization's critical resources to achieve sustainable competitive advantage in the marketplace (Hirschi & Jones, 2009). The results further confirm the proposition that strategic leadership plays vital role for organizations dealing with variations and retaining competitive advantages (Memon *et al.*, 2009; Storey, 2005).

The established multiple regression equation suggests that taking all other independent variables at zero, a unit increase in shaping organizational culture could lead to 0.267 decrease in sustainable competitive advantage; a unit increase in fostering organizational learning could lead to 0.212 increase in sustainable competitive advantage; a unit increase in implementing knowledge management could lead to 0.217 increase in

sustainable competitive advantage and a unit increase fostering organizational innovation could lead to a 0.677 increase in sustainable competitive advantage in universities in Kenya. Therefore, it can be inferred that fostering organizational innovation contribute most to sustainable competitive advantage followed by implementing knowledge management then fostering organizational learning while shaping organizational culture contributed negatively to the sustainable competitive advantage of universities in Kenya. This notwithstanding, all the variables were significant as their P-values were less than 0.05.

Following the recommendations by Hair *et al.* (2010) and Pallant (2013), the standardized regression coefficients (β), which are the beta coefficients from the standardized data, reflected the relative impact on the criterion of a change in one standard deviation in either variable. The larger the standardized regression coefficient (β) value is, then the larger effect the predicator has in predicting (Hair *et al.*, 2010). The standardized regression coefficients (β) in the standard multiple regression model, model 1, showed that fostering organizational innovation contribute most to sustainable competitive advantage in universities in Kenya ($\beta = 0.739$; $t = 16.214$; $p < 0.001$) followed by fostering organizational learning ($\beta = 0.275$; $t = 5.045$; $p < 0.001$) then implementing knowledge management ($\beta = 0.202$; $t = 4.197$; $p < 0.001$) while shaping organizational culture contributed negatively to the sustainable competitive advantage of universities in Kenya ($\beta = -0.288$; $t = -5.605$; $p < 0.001$). This notwithstanding, all the variables were significant as their P-values were less than 0.05.

Therefore, the standardized regression coefficient (β) was one of the particular relevant to this research, because of its ability to determine the most influential independent variable was important in understanding the role of strategic leadership in sustainable competitive advantage of universities in Kenya. The findings also revealed that organizational culture had VIF of 4.376 and tolerance of 0.229, organizational learning had VIF of 4.944 and tolerance of 0.202, knowledge management had VIF of 3.840 and tolerance of 0.260, and organizational innovation had VIF of 3.450 and tolerance of

0.290 respectively, suggesting multicollinearity was absent among the variables (Hair *et al*., 2010; Tabachnick & Fidell, 2014).

Table 4.35 presents the standard multiple coefficients for the role of strategic leadership practices in sustainable competitive advantage of universities in Kenya.

Table 4.35: Standard Multiple Regression Coefficients[a] of the Role of Strategic Leadership for Sustainable Competitive Advantage

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.573	.116		4.925	.000		
	Fostering Organizational Learning	.212	.042	.275	5.045	.000	.202	4.944
	Implementing Knowledge Management	.217	.052	.202	4.197	.000	.260	3.840
	Fostering Organizational Innovation	.677	.042	.739	16.214	.000	.290	3.450
	Shaping Organizational Culture	-.267	.048	-.288	-5.605	.000	.229	4.376

a. Dependent Variable: Sustainable Competitive Advantage

4.10 Stepwise Multiple Regression Analysis for the Role of Strategic Leadership for Sustainable Competitive Advantage in Kenyan Public and Private Universities

To determine the optimal model for the study on the role of strategic leadership (shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation) for sustainable competitive advantage in Kenyan public and private universities, a stepwise multiple regression analysis was conducted. It has been emphasized that the stepwise multiple regression analysis is conducted in order to establish the best combination of independent (predictor) variables would be to predict the dependent (predicted) variable and to establish the best model of the study (Cooper & Schindler, 2013).

Kock (2014) suggested that the R^2 is a measure of the goodness of fit of the model and takes values between 0 and 1 for no explanation and perfect fit respectively. Kock (2013) explained that the higher the R^2 is, the more useful is the model. Therefore, a stepwise multiple regression analysis was conducted using sustainable competitive advantage as the dependent variable and the four strategic leadership practices: shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation as predictor (independent) variables.

4.10.1 Variables Entered/Removed in the Stepwise Multiple Regression Equation

When the stepwise multiple regression analysis was conducted using sustainable competitive advantage as the dependent variable and the four strategic leadership practices: shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation as predictor (independent) variables, which were all entered into the regression equation. It is clear that the stepwise multiple regression produced four models. These models were: model 1, model 2, model 3, and model 4.

Table 4.36 illustrates the variables entered/removed in the stepwise multiple regression when stepwise multiple regression analysis was conducted using sustainable competitive advantage as the dependent variable and the four strategic leadership practices: shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation as predictor (independent) variables, which were all entered into the regression equation.

Table 4.36: Variables Entered/Removeda in the Stepwise Multiple Regression Equation

Model	Variables Entered	Variables Removed	Method
1	Fostering Organizational Innovation	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
2	Implementing Knowledge Management	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
3	Fostering Organizational Culture	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
4	Fostering Organizational Learning	.	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a. Dependent Variable: Sustainable Competitive Advantage

4.10.2 Model Summary of Stepwise Multiple Regression Results for the Role of Strategic Leadership for Sustainable Competitive Advantage

The stepwise multiple regression produced four models. From the model summary, it is clear that the Durbin-Watson value for the model 4 was 1.798, falling within the optimum range of 1.5 to 2.5 and closer to 2.0, suggesting lack of autocorrelation among the variables (Hair *et al.*, 2010; Johnson & Wichern, 2006; Field, 2013). From the model summary, it is also clear that the four models were:

Model 1: $Y = \beta_o + \beta_4 X_4 + \varepsilon$

Model 2: $Y = \beta_o + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$

Model 3: $Y = \beta_o + \beta_1 X_1 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$

Model 4: $Y = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$

Where:

Y = Sustainable competitive advantage (Dependent variable),

X_1 = Shaping Organizational culture (Independent variable),

X_2 = Fostering Organizational learning (Independent variable),

X_3 = Implementing Knowledge management (Independent variable),

X_4 = Fostering Organizational innovation (Independent variable),

β_o = Constant (coefficient of Y intercept),

$\beta_1 - \beta_4$ = Regression coefficient for each Independent variable,

ε = Error Term (Random or Stochastic Term).

From the model summary, it is also clear that the value of R was 0.917, R Square was 0.841 and Adjusted R Square was 0.840 for model 1, while the value of R was 0.924, R Square was 0.854 and Adjusted R Square was 0.853 for model 2, while the value of R was 0.926, R Square was 0.858 and Adjusted R Square was 0.856 for model 3, and the value of R was 0.935, R Square was 0.873 and Adjusted R Square was 0.871 for model 4.It has been emphasized that the higher the R^2 is, the more useful is the model (Kock, 2013). Kock (2014) suggested that the R^2 is a measure of the goodness of fit of the model and takes values between 0 and 1 for no explanation and perfect fit respectively.

The results revealed that best model was the model 4, which predicted and explained approximately 87.1% of the variation of sustainable competitive advantage of universities in Kenya (Adjusted R Square = 0.871). This means that other variables not studied predicted and explained approximately 12.9% of the variation of sustainable competitive advantage of universities in Kenya (Std. Error of the Estimate = 0.126). Therefore, there is need for future research to be conducted to discover the other strategic leadership practices.

Table 4.37 presents the model summary of stepwise multiple regression results for the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities.

Table 4.37: Model Summary of Stepwise Multiple Regression Results for the Role of Strategic Leadership for Sustainable Competitive Advantage

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.917[a]	.841	.840	.140	
2	.924[b]	.854	.853	.134	
3	.926[c]	.858	.856	.133	
4	.935[d]	.873	.871	.126	1.798

a. Predictors: (Constant), Fostering Organizational Innovation

b. Predictors: (Constant), Fostering Organizational Innovation, Implementing Knowledge Management

c. Predictors: (Constant), Fostering Organizational Innovation, Implementing Knowledge Management, Shaping Organizational Culture

d. Predictors: (Constant), Fostering Organizational Innovation, Implementing Knowledge Management, Shaping Organizational Culture, Fostering Organizational Learning

e. Dependent Variable: Sustainable Competitive Advantage

4.10.3 ANOVA of Stepwise Multiple Regression Results for the Role of Strategic Leadership for Sustainable Competitive Advantage

The ANOVA table tests whether the model is significantly better than the mean at predicting the outcome variable. From the ANOVA table, it is clear that the overall model 1 achieve a high degree of fit, as reflected by an R^2 of 0.841, F (1, 213) = 1126.089, $p < 0.001$), while the overall model 2 achieve a high degree of fit, as reflected

by an R^2 of 0.854, F (2, 212) = 619.917, p < 0.001), while the overall model 3 achieve a high degree of fit, as reflected by an R^2 of 0.858, F (3, 211) = 425.174, p < 0.001), and the overall model 4 achieve a high degree of fit, as reflected by an R^2 of 0.841, F (4, 210) = 362.201, p < 0.001). Table 4.38 presents the ANOVA of stepwise multiple regression results for the role of strategic leadership (shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation) for sustainable competitive advantage in Kenyan public and private universities.

Table 4.38: ANOVA[a] of Stepwise Multiple Regression Results of the Role of Strategic Leadership for Sustainable Competitive Advantage

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.978	1	21.978	1126.089	.000[b]
	Residual	4.157	213	.020		
	Total	26.135	214			
2	Regression	22.319	2	11.160	619.917	.000[c]
	Residual	3.816	212	.018		
	Total	26.135	214			
3	Regression	22.426	3	7.475	425.174	.000[d]
	Residual	3.710	211	.018		
	Total	26.135	214			
4	Regression	22.827	4	5.707	362.201	.000[e]
	Residual	3.309	210	.016		
	Total	26.135	214			

a. Dependent Variable: Sustainable Competitive Advantage
b. Predictors: (Constant), Fostering Organizational Innovation
c. Predictors: (Constant), Fostering Organizational Innovation, Implementing Knowledge Management
d. Predictors: (Constant), Fostering Organizational Innovation, Implementing Knowledge Management, Shaping Organizational Culture
e. Predictors: (Constant), Fostering Organizational Innovation, Implementing Knowledge Management, Shaping Organizational Culture, Fostering Organizational Learning

4.10.4 Stepwise Multiple Regression Coefficients for the Role of Strategic Leadership for Sustainable Competitive Advantage

Following the recommendations by Bryman and Bell (2015), Hair *et al.* (2010) and Pallant (2013), the unstandardized regression coefficients (B) were used to construct a regression equation, calculate the predicted values for each observation and to express the expected change in the criterion variable for each unit change in predictors.

When the unstandardized regression coefficients (B) were substituted to the regression model 1 which was: $Y = \beta_o + \beta_4 X_4 + \varepsilon$

The regression equation becomes: $Y = 0.590 + 0.840X_4$

When the unstandardized regression coefficients (B) were substituted to the regression model 2 which was: $Y = \beta_o + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$

The multiple regression equation becomes:

$$Y = 0.316 + 0.226X_3 + 0.678X_4$$

When the unstandardized regression coefficients (B) were substituted to the regression model 3 which was: $Y = \beta_o + \beta_1 X_1 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$

The multiple regression equation becomes:

$$Y = 0.402 + -0.073X_1 + 0.265X_3 + 0.690X_4$$

Finally, when the unstandardized regression coefficients (B) were substituted to the regression model 4 which was:

$$Y = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

The multiple regression equation becomes:

$$Y = 0.573 + -0.267X_1 + 0.212X_2 + 0.217X_3 + 0.677X_4$$

The established multiple regression equation suggests that taking all other independent variables at zero, a unit increase in shaping organizational culture can lead to 0.267 decrease in sustainable competitive advantage; a unit increase in fostering organizational learning can lead to 0.212 increase in sustainable competitive advantage; a unit increase in implementing knowledge management will lead to 0.217 increase in sustainable competitive advantage and a unit increase fostering organizational innovation can lead to a 0.677 increase in sustainable competitive advantage. This suggests that fostering organizational innovation contribute most to sustainable competitive advantage followed by implementing knowledge management then fostering organizational learning. However, shaping organizational culture contributed negatively to the sustainable competitive advantage of universities in Kenya. This notwithstanding, all the variables were significant as their P-values were less than 0.05. Bryman and Bell (2015), Hair *et al.* (2010) and Pallant (2013) have suggested that the standardized regression coefficients (β), which are the beta coefficients from the standardized data, reflects the relative impact on the criterion of a change in one standard deviation in either variable. The larger the standardized regression coefficient (β) value is, then the larger effect the predicator has in predicting (Bryman, 2012; Hair *et al.*, 2010).

The standardized regression coefficients (β) in the optimal multiple regression model, suggests that fostering organizational innovation contributed most to sustainable competitive advantage of universities in Kenya ($\beta = 0.739$; $t = 16.214$; $p < 0.001$) followed by fostering organizational learning ($\beta = 0.275$; $t = 5.045$; $p < 0.001$) then implementing knowledge management ($\beta = 0.202$; $t = 4.197$; $p < 0.001$), while shaping organizational culture contributed negatively to the sustainable competitive advantage of universities in Kenya ($\beta = -0.288$; $t = -5.605$; $p < 0.001$). This notwithstanding, all the variables were significant as their P-values were less than 0.05.

Table 4.39 presents the stepwise multiple regressions coefficients for the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities

Table 4.39: Stepwise Multiple Regression Coefficients[a] for the Role of Strategic Leadership for Sustainable Competitive Advantage

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.590	.098		5.996	.000		
	Fostering Organizational Innovation	.840	.025	.917	33.557	.000	1.000	1.000
2	(Constant)	.316	.114		2.784	.006		
	Fostering Organizational Innovation	.678	.044	.740	15.297	.000	.294	3.399
	Implementing Knowledge Management	.226	.052	.211	4.351	.000	.294	3.399
3	(Constant)	.402	.118		3.420	.001		
	Fostering Organizational Innovation	.690	.044	.753	15.654	.000	.291	3.439
	Implementing Knowledge Management	.265	.054	.246	4.928	.000	.269	3.712
	Shaping Organizational Culture	-.073	.030	-.079	-2.463	.015	.649	1.540
4	(Constant)	.573	.116		4.925	.000		
	Fostering Organizational Innovation	.677	.042	.739	16.214	.000	.290	3.450
	Implementing Knowledge Management	.217	.052	.202	4.197	.000	.260	3.840
	Shaping Organizational Culture	-.267	.048	-.288	-5.605	.000	.229	4.376
	Fostering Organizational Learning	.212	.042	.275	5.045	.000	.202	4.944

a. Dependent Variable: Sustainable Competitive Advantage

4.10.5 Excluded Variables

The results of the stepwise multiple revealed that no variable was excluded from model 4 which was the most optimal model. Table 4.40 presents the results on the excluded variables when the stepwise multiple was conducted for the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities.

Table 4.40: Excluded Variables[a]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	Fostering Organizational Learning	.074[b]	2.192	.029	.149	.649	1.541	.649
	Implementing Knowledge Management	.211[b]	4.351	.000	.286	.294	3.399	.294
	Shaping Organizational Culture	-.033[b]	-1.024	.307	-.070	.709	1.410	.709
2	Fostering Organizational Learning	.029[c]	.840	.402	.058	.575	1.740	.261
	Shaping Organizational Culture	-.079[c]	-2.463	.015	-.167	.649	1.540	.269
3	Fostering Organizational Learning	.275[d]	5.045	.000	.329	.202	4.944	.202

a. Dependent Variable: Sustainable Competitive Advantage

b. Predictors in the Model: (Constant), Fostering Organizational Innovation

c. Predictors in the Model: (Constant), Fostering Organizational Innovation, Implementing Knowledge Management

d. Predictors in the Model: (Constant), Fostering Organizational Innovation, Implementing Knowledge Management, Shaping Organizational Culture

4.10.6 Optimal Model

The stepwise multiple regression analysis conducted enabled to identify the most significant independent variables which explained the best variance in the dependent variable. The stepwise multiple regression analysis was conducted in order to establish the best combination of independent (predictor) variables would be to predict the dependent (predicted) variable and to establish the best model of the study (Cooper & Schindler, 2013). Therefore, the stepwise multiple regression analysis conducted revealed that the most optimal model for the current study was:

$$Y = \beta_o + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

Y = Sustainable competitive advantage (Dependent variable),

X_1 = Shaping Organizational culture (Independent variable),

X_2 = Fostering Organizational learning (Independent variable),

X_3 = Implementing Knowledge management (Independent variable),

X_4 = Fostering Organizational innovation (Independent variable),

β_o = Constant (coefficient of Y intercept),

$\beta_1 - \beta_4$ = Regression coefficient for each Independent variable,

ε = Error Term (Random or Stochastic Term).

4.11 Results of Testing Hypotheses

The general objective of this study was to assess the role of strategic leadership for sustainable competitive in Kenyan public and private universities. Specifically, the study sought to assess the roles of shaping organizational culture, fostering organizational learning, implementing knowledge management and fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities. There were four research hypotheses involved in this study.

In order to test the four research hypotheses, a multiple regression analysis was we conducted using sustainable competitive advantage as the dependent variable, and the various components of strategic leadership: shaping organizational culture; fostering organizational learning; implementing knowledge management and fostering organizational innovation as the predicting variables. The decision rule was to reject Ho: $\beta i = 0$ (I = 1, 2, 3, 4) if the regression coefficient was significantly different from zero and subsequently accept the alternative hypothesis H1: $\beta i \neq 0$ (I = 1, 2, 3, 4). All the four research hypotheses were tested at 95 percent confidence level (level of significance, $\alpha = 0.05$). The outcomes of the hypotheses testing are briefly discussed. Based on data collection and analysis, all the four alternative hypotheses were supported and one hypothesis was not supported.

4.11.1 Results of Testing Hypothesis 1

The first null and alternate hypotheses were stated as follows:

$H_0$1: There is no significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities.

$H_1$1: There is a significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities.

The results indicated that shaping organizational culture had a negative and statistically significant role for sustainable competitive advantage in Kenyan public and private universities ($\beta = -0.288$; $t = -5.605$; $p < 0.001$). The Ho1 which predicted that there is no significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities was rejected, while the $H_1 1$ which proposed that there is a significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities was accepted. Therefore, conclusion was made that there was a significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities at level ($\alpha \leq 0.05$).

4.11.2 Results of Testing Hypothesis 2

The second null and alternate hypotheses were stated as follows:

$H_0 2$: There is no significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities.

$H_1 2$: There is a significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities.

The results indicated that fostering organizational learning had a positive and statistically significant role for sustainable competitive advantage in Kenyan public and private universities ($\beta = 0.275$; $t = 5.045$; $p < 0.001$). The Ho2 which predicted that there is no significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities was rejected, while the $H_1 2$ which proposed that there is a significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities was accepted. Therefore, conclusion was made that there was a significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities ($\alpha \leq 0.05$).

4.11.3 Results of Testing Hypothesis 3

The third null and alternate hypotheses were stated as follows:

$H_0$3: There is no significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities.

$H_1$3: There is a significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities.

The results indicated that implementing knowledge management had a positive and statistically significant role for sustainable competitive advantage in Kenyan public and private universities ($\beta = 0.202$; $t = 4.197$; $p < 0.001$). The Ho3, which predicted that there is no significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities, was rejected, while the $H_1$3 which proposed that there is a significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities was accepted. Therefore, conclusion was made that there was a significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities ($\alpha \leq 0.05$).

4.11.4 Results of Testing Hypothesis 4

The fourth null and alternate hypotheses were stated as follows:

$H_0$4: There is no significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities.

$H_1$4: There is a significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities.

The results indicated that fostering organizational innovation had a positive and statistically significant role for sustainable competitive advantage in Kenyan public and private universities ($\beta = 0.739$; $t = 16.214$; $p < 0.001$). The Ho4 which predicted that there is no significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities was rejected, while the $H_1 4$ which proposed that there is a significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities was accepted. Therefore, conclusion was made that there was a significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities ($\alpha \leq 0.05$).

Table 4.41 presents summary of hypotheses testing results for the role of strategic leadership (shaping organizational culture, fostering organizational learning, implementing knowledge management, and fostering organizational innovation) for sustainable competitive advantage in Kenyan public and private universities based on the standard multiple coefficients.

Table 4.41: Summary of Hypotheses Testing Results of the Role of Strategic Leadership for Sustainable Competitive Advantage

Research Hypotheses	β	t	Sig.	Comments
1. There is a significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities.	-.288	-5.605	.000	Supported
2. There is a significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities.	.275	5.045	.000	Supported
3. There is a significant role of implementing knowledge management for sustainable competitive advantage of universities in Kenya	.202	4.197	.000	Supported
4. There is a significant role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities.	.739	16.214	.000	Supported

a. Dependent Variable: Sustainable Competitive Advantage

4.12 Discussion of Key Findings

This section discusses the key findings of the study. The general objective of this study was to assess the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities. The findings revealed that there was statistically significant positive role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities. The results are consistent to the recent research conducted by Mahdi and Almsafir (2013) which found that there was significant positive role of strategic leadership capabilities in sustainable competitive advantage in the academic environment in Private Universities in Iraq. The findings provide empirical support for the argument that strategic leadership plays vital role for organizations dealing with variations and retaining competitive advantages (Storey, 2005; Memon *et al.*, 2009). These findings confirm prior literature suggesting that individuals and teams enact strategic leadership when they think, act, and influence in ways that promote the sustainable competitive advantage of the organization (Hughes & Beatty, 2005). The results also support the proposition that strategic leaders have the capability and the power to manage the organization's critical resources to achieve sustainable competitive advantage in the marketplace (Hirschi & Jones, 2009) and the argument that without effective strategic leadership, the capability of a company to achieve or sustain a competitive advantage is greatly constrained (Elenkov, 2008). Therefore, the universities as knowledge based institutions are expected to manage knowledge for sustainable competitive advantage, growth and innovation (Ohiorenoya & Eboreime, 2014). Ultimately, strategic leadership practices and strategies lead a university towards sustainable competitive advantage which enables the institution to conceive and implement strategies that improve its excellence, effectiveness and responsiveness.

4.12.1 The Role of Shaping Organizational Culture for Sustainable Competitive Advantage in Kenyan Public and Private Universities

The first specific objective of the study was to examine the role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities. This study found that there was a significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities. The results of this thesis confirms the findings of the study by Ramadhan (2010) who sought to explore the influence of organizational culture on sustainable competitive advantage of small and medium enterprises in North America, which provided strong and statistically significant association between organizational culture and sustainable competitive advantage.

The results of this thesis are also consistent with the results of the recent study by Kaluyu *et al.* (2014) found a fairly strong positive correlation between organizational culture and sustainable competitive advantage in Kenyan public and private universities. The results of the Pearson's product moment correlations between shaping organizational culture and sustainable competitive advantage dimensions revealed that shaping clan culture had a positive and statistically significant relationship with organizational excellence ($r = 0.555$, $p < 0.01$), organizational effectiveness ($r = 0.496$, $p < 0.01$), organizational responsiveness ($r = 0.358$, $p < 0.01$), and sustainable competitive advantage ($r = 0.539$, $p < 0.01$). Shaping organizational culture had a positive and statistically significant relationship with organizational excellence ($r = 0.465$, $p < 0.01$), organizational effectiveness ($r = 0.487$, $p < 0.01$) and with organizational responsiveness ($r = 0.276$, $p < 0.01$). These findings are in line with the results of Ashraf (2012) and Ashraf *et al.* (2014).

The results of the Pearson's product moment correlations between shaping organizational culture and sustainable competitive advantage indicated that shaping organizational culture had a positive and statistically significant relationship with

sustainable competitive advantage ($r = 0.471$, $p < 0.01$), which provides empirical support for argument by Di Stifano (2007) that a prerequisite for achieving competitive advantage is having the right corporate culture in place. The findings are consistent with those of various recent studies such as Qawasmeh *et al.* (2013) whose research sought to determine the role of organizational culture in achieving organizational excellence with a specific focus of Jadara University as a case study and the results confirmed strong positive correlations between overall university culture and organizational excellence. However, the findings contrast the current research conducted by Chepngeno *et al.* (2014) which sought to determine the effects of organizational culture on sustainable competitive advantage in state owned corporations in Kenya with the case of Postal Corporation of Kenya and found a weak and positive correlation between organizational culture and sustainable competitive advantage yet the relationship was not statistically significant. Surprisingly, the results of the multiple regression analysis indicated that shaping organizational culture had a negative and statistically significant role for sustainable competitive advantage in Kenyan public and private universities ($\beta = -0.288$; $t = -5.605$; $p < 0.001$).

The results of the multiple regression analysis suggest that shaping organizational culture contributed negatively to the sustainable competitive advantage in Kenyan public and private universities. The explanation for this may be that the universities in Kenya had hierarchy culture to a great extent that was inhibiting the building of sustainable competitive advantage, because universities with highly hierarchical systems may have greater transaction costs for each decision and function. From these findings, the recommendation is that changing organizational culture can create new opportunities at the same time it can destroy the existing ones. Furthermore, university leaders need to develop a listening culture for all levels of workers and allow criticism in the spirit of minimizing on any short-coming. Therefore, the university leaders and managers should be aware of the benefits from the implementation of a culture that supports innovation in order to assure the responsiveness, excellence, and effectiveness of universities.

4.12.2 The Role of Fostering Organizational Learning for Sustainable Competitive Advantage of in Kenyan Public and Private Universities

The second specific objective of the study was to establish the role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities. This study found that there was a significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities. The results of the multiple regression analysis indicated that fostering organizational learning had a positive and statistically significant role for sustainable competitive advantage in Kenyan public and private universities ($\beta = 0.275$; $t = 5.045$; $p < 0.001$). The findings are consistent with the results of the study by Akhtar, Khan, and Mujtaba (2013) which showed that organizational learning contribute significantly towards the achievement of competitive advantage.

The results of the Pearson's product moment correlations between fostering organizational learning and sustainable competitive advantage indicated that fostering organizational learning had a positive and statistically significant relationship with sustainable competitive advantage ($r = 0.591$, $p < 0.01$). These findings provide support to many researches that have shown that organizational learning affects competitive advantage (Jashapara, 2003), financial and nonfinancial performance (Bontis *et al.*, 2002; Dimovski & Škerlavaj, 2005), and innovation (Llorens-Montes *et al.*, 2005). There are also empirical evidence supporting a positive relation between organizational learning capability and firm performance (Keskin, 2006; Rhodes, Lok, & Hung, 2008; Camps & Luna-Aroca, 2012). The findings are consistent with the study conducted by Enz (2008) which indicated that intangible assets such as organizational learning, market orientation and knowledge management allow an organization to develop those abilities that enhance competitive advantage leading to superior market performance as these intangibles enabled an organization to continuously develop existing resources and new resources were needed to be created leading to superior performance as the main outcome. The results provide empirical support for the claim by Njuguna (2009).

Consequently, organizational learning has emerged as one of the most promising concepts in strategic management literature in late 1980s in relation to the concept of competitive advantage (Škerlavaj & Dimovski, 2007).

Therefore, the results of this current study suggests that for universities trying to gain sustainable competitive advantage have to continuously foster organizational learning activities, because the statistical analysis indicates that indicates fostering organizational learning plays an important role for sustainable competitive advantage in Kenyan public and private universities.

4.12.3 The Role of Implementing Knowledge Management for Sustainable Competitive Advantage in Kenyan Public and Private Universities

The third specific objective of the study was to determine the role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities. This study found that there was a significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities. The results of this thesis are also consistent with the results of the recent study by Kaluyu *et al.* (2014) that concluded that knowledge management predicted sustainable competitive advantage of universities in Kenya. The findings provide support for the study by Zheng *et al.* (2010) that examined the mediating role of knowledge management in the relationship between organizational culture, structure, strategy, and organizational effectiveness through a survey of 301 organizations and the results suggested that successful knowledge management had the potential of enhancing an organization's competitive advantage, customer focus, employee relations and development, innovation, and lower costs.

The results of the Pearson's product moment correlations between implementing knowledge management and sustainable competitive advantage indicated that implementing knowledge management had a strong positive and statistically significant

relationship with sustainable competitive advantage ($r = 0.832$, $p < 0.01$), while the results of the multiple regression analysis indicated that implementing knowledge management had a positive and statistically significant role for sustainable competitive advantage in Kenyan public and private universities ($\beta = 0.202$; $t = 4.197$; $p < 0.001$). The findings of this thesis clearly provides support for the study by Zhou *et al.* (2010) around the process of knowledge management and continuous innovation, stated that organizational innovation reinforces knowledge management for sustainable competitive advantage achieving. Therefore, the results of this current study suggests that for universities trying to gain sustainable competitive advantage have to continuously implement knowledge management activities, because the statistical analysis indicated that implementing knowledge management played an important role in sustainable competitive advantage in Kenyan public and private universities.

4.12.4 The Role of Fostering Organizational Innovation for Sustainable Competitive Advantage in Kenyan Public and Private Universities

The fourth specific objective of the study was to assess the role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities. This thesis found that there was a significant role of organizational innovation for sustainable competitive advantage in Kenyan public and private universities. The results of the Pearson's product moment correlations between fostering organizational innovation and sustainable competitive advantage indicated that fostering organizational innovation had a strong positive and statistically significant relationship with sustainable competitive advantage ($r = 0.917$, $p < 0.01$), and the results of the multiple regression analysis indicated that fostering organizational innovation had a positive and statistically significant role for sustainable competitive advantage in Kenyan public and private universities ($\beta = 0.739$; $t = 16.214$; $p < 0.001$). The findings are consistent with the study by Ganter and Hacker (2013) which found that organizational innovation has a significant effect on sustainable competitive advantage. The results of this thesis signify the importance of fostering organizational innovation in

achieving a sustainable competitive advantage which is in line with empirical findings (Abdelgawad, Zahra, Svejenova & Sapienza, 2013; Jimenez-Jimenez *et al.*, 2008).

The result corroborates several studies by Mavondo, Chimhanzi, and Stewart (2005), Matthews and Becker (2009), García-Morales *et al.*(2008) that have established organizational innovation as main factor for sustainable competitive advantage achieving. The current study support Hult *et al.* (2004) in their study have found that firms, who show a greater ability to innovate, will respond more successfully to environmental changes and have a higher ability to develop skills that enable them to gain competitive advantage. The findings also confirm the results of the studies of Zheng *et al*. (2005), Keskin (2006), and Garido and Camarero (2010) that found positive effects of organizational innovation on performance. This result is consistent with the findings conducted by Brătianu and Orzea (2010) which found that knowledge creation is a dynamic capability that enables firms to achieve a sustainable competitive advantage on the market. Therefore, this current study suggests that for universities trying to gain sustainable competitive advantage have to continuously be involved in organizational innovation activities, because the statistical analysis indicated that fostering organizational innovation plays the most important pivotal role for sustainable competitive advantage in Kenyan public and private universities.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The chapter presents a summary, conclusions and the recommendations made from the research findings and discussions of the study. The chapter also highlights the recommendations of the study and suggested areas for further research.

5.2 Summary of Major Findings

This section summarizes the findings of the study. The general objective of this study was to assess the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities. The findings revealed that there was a significant role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities. Ultimately, strategic leadership plays a significant role for sustainable competitive advantage in Kenyan public and private universities.

5.2.1 The role of shaping organizational culture for sustainable competitive advantage in Kenyan Public and Private Universities

The first specific objective of the study was to examine the role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities. The findings indicated that there was a significant role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities. The results of the multiple regression analysis suggested that shaping organizational culture contributed negatively to the sustainable competitive advantage of universities in Kenya.

5.2.2 The role of fostering organizational learning for sustainable competitive advantage in Kenyan Public and Private Universities

The second specific objective of the study was to establish the role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities. The findings indicated that there was a significant role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities.

5.2.3 The role of implementing knowledge management for sustainable competitive advantage in Kenyan Public and Private Universities

The third specific objective of the study was to determine the role of implementing knowledge management in sustainable competitive advantage of universities in Kenya. This study found that there was a significant role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities.

5.2.4 The role of fostering organizational innovation for sustainable competitive advantage in Kenyan Public and Private Universities

The fourth specific objective of the study was to assess the role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities. The findings indicated that there was a significant positive role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities.

5.3 Conclusions

This section presents the conclusions of the thesis on the role in sustainable competitive advantage of universities in Kenya. Overall, the thesis concluded that strategic leadership had significant positive role for sustainable competitive advantage in Kenyan public and private universities.

5.3.1 The role of shaping organizational culture for sustainable competitive advantage in Kenyan Public and Private Universities

The first specific objective of the study was to examine the role of shaping organizational culture for sustainable competitive advantage in Kenyan public and private universities. The first conclusion was that shaping organizational culture forms a basis for creating a framework for understanding and more importantly for investing in sustainable competitive advantage.

5.3.2 The role of fostering organizational learning for sustainable competitive advantage in Kenyan Public and Private Universities

The second specific objective of the study was to establish the role of fostering organizational learning for sustainable competitive advantage in Kenyan public and private universities. The second conclusion was that fostering organizational learning significantly contributes towards the achievement of sustainable competitive advantage in Kenyan public and private universities.

5.2.3 The role of implementing knowledge management for sustainable competitive advantage in Kenyan Public and Private Universities

The third specific objective of the study was to determine the role of implementing knowledge management for sustainable competitive advantage in Kenyan public and private universities. The third conclusion was that implementing knowledge

management significantly plays a significant role for sustainable competitive advantage in Kenyan public and private universities.

5.3.4 The role of fostering organizational innovation for sustainable competitive advantage in Kenyan Public and Private Universities

The fourth specific objective of the study was to assess the role of fostering organizational innovation for sustainable competitive advantage in Kenyan public and private universities. The fourth conclusion was that fostering organizational innovation significantly plays the most important pivotal role for sustainable competitive advantage in Kenyan public and private universities.

This thesis has attempted to develop a theoretical research framework for strategic leadership practices sustainable competitive advantage of universities in Kenya. The findings ultimately enhance the field of strategic management which focuses on improving the sustainable competitive advantage of universities in Kenya. The theoretical research framework developed in this study also contributes new knowledge to the field of strategic leadership and sustainable competitive advantage. This thesis has significantly attempted to expand extant literature in strategic management, strategic leadership, organizational culture, knowledge management, organizational innovation and sustainable competitive advantage by making several significant contributions.

5.4 Recommendations

This section presents the recommendations derived from the research findings and discussion of the results of the study.

5.4.1 Managerial Recommendations

To be successful, the university needs to be in tune with its external environment. Those universities that reinvent themselves by becoming more entrepreneurial in the attitudes,

behaviours, and characteristics of their strategic management, resulting from effective strategic leadership are more likely to survive and build sustainable competitive advantages in this rapidly changing environment. Firstly, the practicing university leaders and managers should understand and develop a holistic approach of shaping effective organizational culture in order to build sustainable competitive advantage. Therefore, changing organizational culture can create new opportunities at the same time it can destroy the existing ones. Secondly, this current study suggests that for universities trying to gain sustainable competitive advantage have to continuously foster organizational learning activities, because the statistical analysis indicates that indicates fostering organizational learning plays an important role in sustainable competitive advantage of universities in Kenya. Thirdly, the managers should understand and develop a holistic approach of implementing knowledge management for sustainable competitive advantage. Therefore, this current study suggests that for universities trying to gain sustainable competitive advantage have to continuously implement knowledge management activities, because the statistical analysis indicates that indicates implementing knowledge management plays an important role in sustainable competitive advantage of universities in Kenya. Fourthly, for universities trying to gain sustainable competitive advantage have to continuously be involved in fostering organizational innovation activities, because the statistical analysis indicated that indicates fostering organizational innovation plays the most important pivotal role in sustainable competitive advantage of universities in Kenya.

5.4.2 Policy Recommendations

Firstly, to be successful, the university needs to be in tune with its external environment. Secondly, changing organizational culture can create new opportunities at the same time it can destroy the existing ones. Thirdly, as pillars of higher education system, universities are supposed to be insulated from all extraneous influences, so that they can function effectively for sustainable competitive advantage. Fourthly, the university that recognizes competition or pressures from the external environment

should usually think innovatively and act entrepreneurially, because entrepreneurship thrives in a culture where the organization as a whole is pushing or struggling against something that is considered a norm in other organizations. Fifthly, those universities that reinvent themselves by becoming more entrepreneurial in the attitudes, behaviours, and characteristics of their strategic management, resulting from effective strategic leadership are more likely to survive and build sustainable competitive advantages in this rapidly changing environment.

5.4.3 Areas for Further Research

On the basis of study results and conclusions, the following future research recommendations are suggested. A longitudinal study should be conducted to reveal the role of strategic leadership practices in sustainable competitive advantage of universities over a period of time. The study recommends studying developing intellectual capital and competence along with shaping organizational culture, fostering organizational learning, implementing knowledge management and fostering organizational innovation as the strategic leadership practices. Future researchers should consider involving more sectors, especially other sectors of the economy such as the manufacturing, banking, health services or the civil service in for better generalization of research findings. Future research on the role of strategic leadership practices in sustainable competitive advantage could focus on strategic leadership styles such as transactional, transformational, charismatic, authentic, servant, and responsible leadership rather than strategic leadership practices as was the case of this thesis.

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APPENDICES

Appendix 1: Cover Letter

JKUAT Mombasa CBD Campus,

P.O. BOX 81310-80100,

MOMBASA.

Dear Participant,

RE: ROLE OF STRATEGIC LEADERSHIP FOR SUSTAINABLE COMPETITIVE ADVANTAGE IN KENYAN PUBLIC AND PRIVATE UNIVERSITIES.

I am a PhD student at JKUAT, Kenya. You are cordially invited to participate in this survey targeted at top management from established, reputed and accredited Universities in Kenya. The purpose of this survey is to solicit views on the role of strategic leadership practices in sustainable competitive advantage of Universities in Kenya. This survey consists of multiple choice questions and should take approximately 15 minutes of your time. Your feedback is important and will contribute towards enriching the knowledge and understanding of business practices and strategic management in Kenya. We ask your support in this regard. We are aware that this will entail a sacrifice on your part.

Your willingness to participate in this survey is highly appreciated. Your honest response in answering the questions would be greatly appreciated. All correspondence will be treated with the utmost confidentiality. Should you have any additional queries, please do not hesitate to contact me directly at ttkisingu@gmail.com

We truly appreciate your valuable contribution to the knowledge base on the role of strategic leadership practices in sustainable competitive advantage of universities in Kenya. We assure you that your identity will remain anonymous and your responses to the survey will be held in strict confidence and used for academic purposes only.

Sincerely,

Titus M. Kising'u,	Prof. Gregory S. Namusonge,	Dr. Fred. M. Mugambi,
PhD candidate,	Supervisor,	Supervisor.
JKUAT, Kenya	JKUAT, Kenya	JKUAT, Kenya

Appendix 2: Survey Questionnaire

Please respond to the following questions by ticking on the appropriate box (√) for only **one** choice to indicate the degree of agreement or disagreement that fits the situation in your University best for each of the following statements:

A: Background Information

Please take a few moments to give us some background information.

Description: This section aims at obtaining background information about the organization, in an effort to understand better on the nature of business of the organization.

Instructions: Please select the most appropriate response to the following statements about your University:

1. Type of business of your university:

□ Public Chartered University

□ Private Chartered University

□ Public University Constituent College

□ Private University Constituent College

□ Institution with Letter of Interim Authority

□ Registered Private Institution

2. Age of your university:

□ Less than 5 years

□ 5 to 10 years

□ 10 to 15years

□ 15 to 20 years

□ More than 20 years

3. Number of employees in your university:

□ Less than 101 employees

□ 101 to 200 employees

□ 201 to 300 employees

□ 301 to 400 employees

□ 401 to 500 employees

□ More than 500 employees

4. Market share of your university:

□ Less than 25% market share

□ 25% to 50% market share

□ 51% to 75% market share

□ Above 75% market share

B1: Shaping Organizational Culture (OC)

Description: This section aims at obtaining information about shaping organizational culture of your university in terms of clan culture, adhocracy culture, hierarchy culture and market culture.

Instructions: Please select the most appropriate response to indicate your level of agreement to the following statements:

No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Shaping Clan Culture (CC)						
1	The university is a very hospitable, personal workplace as it is like an extended family as people seem to share a lot of ideas among themselves in the university.					
2	The leadership in the university is generally considered to exemplify mentoring, facilitating, or nurturing.					
3	The university emphasizes human development as high trust, openness,					

	and participation persist.					
4	The management style in the university is characterized by teamwork, consensus, and participation.					
5	The glue that holds the university together is loyalty and mutual trust as commitment to this university runs high.					
6	The university defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.					
No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Shaping Adhocracy Culture (AC)						
1	The university is a very dynamic entrepreneurial workplace as people are willing to stick their necks out and take risks in the university.					
2	The leadership in the university is generally considered to exemplify entrepreneurship, innovating, or risk taking.					
3	The university emphasizes acquiring					

	new resources and creating new challenges as trying new things and prospecting for opportunities are valued.					
4	The management style in the university is characterized by individual risk-taking, innovation, freedom, and uniqueness.					
5	The glue that holds the university together is commitment to innovation and development as there is an emphasis on being on the cutting edge.					
6	The university defines success on the basis of having the most unique or newest products as it is a product leader and innovator.					
No.	Items	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Shaping Hierarchy Culture (HC)						
1	The university is a very controlled and structured workplace as formal procedures generally govern what people do in the university.					
2	The leadership in the university is generally considered to exemplify coordinating, organizing, or smooth-					

	running efficiency.					
3	The university emphasizes permanence and stability as efficiency, control and smooth operations are important.					
4	The management style in the university is characterized by security of employment, conformity, predictability, and stability in relationships.					
5	The glue that holds the university together is formal rules and policies as maintaining a smooth-running university is important.					
6	The university defines success on the basis of efficiency as dependable delivery, smooth scheduling and low-cost operation are critical.					
No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Shaping Market Culture (MC)						
1	The university is very results oriented workplace, people are very competitive and achievement oriented as a major concern is with getting the job done in the university.					

2	The leadership in the university is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.					
3	The university emphasizes competitive actions and achievement as hitting stretch targets and winning in the marketplace are dominant.					
4	The university style in the university is characterized by hard-driving competitiveness, high demands, and achievement.					
5	The glue that holds the university together is the emphasis on achievement and goal accomplishment as aggressiveness and winning are common themes in the university.					
6	The university defines success on the basis of winning in the marketplace and outpacing the competition as competitive market leadership is common theme in the university.					

B2: Fostering Organizational Learning (OL)

Description: This section aims at obtaining information about fostering organizational learning in terms of fostering individual level learning, fostering group level learning, and fostering organizational level learning.

Instructions: Please select the most appropriate response to indicate your level of agreement to the following statements:

No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Fostering Individual Level Learning (ILL)						
1	Individuals are able to break out of traditional mind-sets to see things in new and different ways.					
2	Individuals feel a sense of pride in their work.					
3	Individuals have a clear sense of direction in their work.					
4	Individuals generate many new insights.					
5	Individuals are aware of the critical issues that affect their work.					
6	Individuals feel confident in their work.					
7	Individuals feel a sense of accomplishment in what they do.					
No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Fostering Group Level Learning (GLL)						
1	We have effective conflict resolution when working in groups.					

2	Different points of view are encouraged in group work.					
3	Groups have the right people involved in addressing the issues.					
4	We share our success within the group.					
5	In meetings, we seek to understand everyone's point of view.					
6	Groups in the university are adaptable.					
7	Groups are prepared to rethink decisions when presented with new information.					
No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Fostering Organizational Level Learning (OLL)						
1	We have a strategy that positions us well for the future.					
2	We have the necessary systems to implement our strategy.					
3	Our university strategies are driven by our beliefs about how we can create greater value for learners.					
4	The organizational structure allows us to work effectively.					
5	We have a realistic yet challenging vision for the university.					
6	All of our university functions are integrated in serving the needs of our target markets.					
7	Our operational procedures allow us to work efficiently.					

B3: Implementing Knowledge Management (KM)

Description: This section aims at obtaining information about the implementing knowledge management in terms of implementing knowledge acquisition, implementing knowledge transfer, and implementing knowledge application.

Instructions: Please select the most appropriate response to indicate your level of agreement to the following statements:

No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Implementing Knowledge Acquisition (KA)						
1	Employees are encouraged to undertake further studies on a full-time basis to acquire knowledge about our learners.					
2	Employees are encouraged to undertake short courses to acquire knowledge about our learners.					
3	We organize in-house training seminars to acquire knowledge to continuously improve on our performance.					
4	We encourage any knowledge acquisition that improves on our performance.					
5	We strive for any opportunity that improves on our capabilities for acquiring new knowledge from existing knowledge.					
6	Interaction between our university and learners plays an important role in acquiring new knowledge throughout the industry.					
7	We have regular meetings with employees for acquiring knowledge about our learners and to discuss issues concerning our university.					

No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Implementing Knowledge Transfer (KT)						
1	There are regular meetings between departments to discuss business trends and developments.					
2	We make use of technology and other techniques to disseminate knowledge in our university.					
3	Information on learners is communicated across departments in the university.					
4	Our university periodically circulates documents such as reports, newsletters, which provide information on our business.					
5	We encourage people with similar interests to work together to solve a problem.					
6	Our employees normally exchange their knowledge and experiences while working.					
7	The university encourages team work as one of the methods to disseminate knowledge.					
No.	Statement	1	2	3	4	5

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
Implementing Knowledge application (KI)						
1	Our university has processes for using knowledge to solve new problems.					
2	Our university has processes for using knowledge in development of new products/services.					
3	Our university matches sources of knowledge to problems and challenges.					
4	Our university uses knowledge to improve efficiency.					
5	Our university uses knowledge to adjust strategic direction.					
6	Our university is able to locate and apply knowledge to changing competitive conditions.					
7	Our university takes advantage of new knowledge.					

B4: Fostering Organizational Innovation (OI)

Description: This section aims at obtaining information about the fostering organizational innovation in terms of fostering product innovation, fostering process innovation, and fostering administrative innovation.

Instructions: Please select the most appropriate response to indicate your level of agreement to the following statements:

No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Fostering Product Innovation (PI)						
1	Our university is delivering new courses for members of staff.					
2	Our university constantly emphasizes development and doing research projects.					
3	Our university often develops new teaching materials and methodologies.					
4	Our university often develops new programmes/services for members of staff and students.					
5	Our university is extending its programmes/ services to new groups of employees not previously served by the university.					

6	Our university is delivering new courses for our students.					
7	Our university is extending its programmes/services to new groups of students in new colleges not previously served by the university.					

No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Fostering Administrative Innovation (AI)						
1	New multimedia software is used by this university for educational purposes and administrative operations.					
2	This university is implementing a reward system (i.e. promotions, thank----you) to encourage members of staff to come up with innovative ideas for educational purposes and administrative operations.					
3	Our university is trying to bring in new equipment (i.e. computers) to facilitate educational operations, work procedures and administrative					

	operations.					
4	Our university pays close attention to administrative innovation to facilitate educational operations, work procedures and administrative operations.					
5	Our university penalizes those persons who do not give ideas for new administrative innovations for educational purposes and administrative operations.					
6	Our university emphasizes the need for administrative innovation for educational purposes and administrative operations.					
7	Our university is always first to initiate administrative innovations for educational purposes and administrative operations to which competitors then respond.					

No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Fostering Process Innovation (PI)						
1	Our university is developing new training programmes for staff members.					
2	Our university encourages teamwork and good working relationships between staff members.					
3	Our university emphasizes the need for radical innovation for development.					
4	Our university is implementing an incentive system (i.e. higher salaries, bonuses, --) to encourage members of staff to come up with innovative ideas.					
5	Our university often develops new technology (internet, databases, ---) to improve the educational process.					
6	Our university emphasizes offering innovative approaches to deliver new services.					
7	Our university often uses new technology to improve the educational process.					

C: Sustainable Competitive Advantage (SCA)

Description: This section aims at obtaining information about the sustainable competitive advantage in terms of organizational excellence, organizational effectiveness, and organizational responsiveness.

Instructions: Please select the most appropriate response to indicate your level of agreement to the following statements:

No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Organizational Excellence (OE)						
1	University management is excellently capable of achieving sustainable competitive advantage.					
2	University management excellently carries out work through participation and employees interaction in order to build sustainable competitive advantage.					
3	University management excellently selects new university hires subject to experience, competence, and qualification standards in order to build sustainable competitive advantage.					
4	University management excellently and highly values openness and					

	accepts change in order to build sustainable competitive advantage.					
5	University management and employees excellently carry out their duties with high morale and enthusiasm in order to build sustainable competitive advantage.					
6	University management and employees are excellently aware of achieving a strong linkage among its vision, mission, and objectives in order to build sustainable competitive advantage.					
7	University management is excellently capable of providing development opportunities in order to build the university's sustainable competitive advantage.					

No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
Organizational Effectiveness (OE)						
1	We are more effective than our competitors to provide innovative learning to student in order to build the university's sustainable					

	competitive advantage.					
2	The university's staff turnover was lower than that of the competitors indicating sustainable competitive advantage.					
3	The university's employee morale is higher than that of the competitors indicating sustainable competitive advantage.					
4	The university's effective attraction to professionals was higher than that of the competitors indicating sustainable competitive advantage.					
5	The university's image is better than that of the competitors indicating sustainable competitive advantage.					
6	The university's growth rate was higher than that of the competitors last year indicating sustainable competitive advantage.					
7	The university's employee productivity was higher than that of the competitors last year indicating sustainable competitive advantage.					
No.	Statement	1 Strongly Disagree	2 Disagree	3 Neither Agree nor Disagree	4 Agree	5 Strongly Agree
1	Organizational Responsiveness (OR) We are faster than our competitors to respond to student complaints in order to build the university's sustainable competitive advantage.					
2	We are faster than our competitors to respond to concerns raised by employees in					

	order to build the university's sustainable competitive advantage.					
3	We are faster than our competitors to access future student needs and respond in time in order to build the university's sustainable competitive advantage.					
4	We are faster than our competitors to respond to changes in technology in order to build the university's sustainable competitive advantage.					
5	We are faster than our competitors to respond to concerns raised by suppliers in order to build the university's sustainable competitive advantage.					
6	We are faster than our competitors to respond to concerns raised by government in order to build the university's sustainable competitive advantage.					
7	If a major competitor launches an intensive campaign targeted at our students, we would implement a response immediately in order to build the university's sustainable competitive advantage.					

Appendix 3: List of Accredited Universities in Kenya

	Accredited Universities	Date of Accreditation
Public Chartered Universities		
1.	University of Nairobi (UoN)	Established - 1970 Chartered - 2013
2.	Moi University (MU)	Established - 1984 Chartered - 2013
3.	Kenyatta University (KU)	Established - 1985 Chartered - 2013
4.	Egerton University (EU)	Established - 1987 Chartered – 2013
5.	Jomo Kenyatta University of Agriculture and Technology (JKUAT)	Established - 1994 Chartered - 2013
6.	Maseno University (Maseno)	Established – 2001 Chartered - 2013
7.	Masinde Muliro University of Science and Technology (MMUST)	Established - 2007 Chartered - 2013
8.	Dedan Kimathi University of Technology	2012
9.	Chuka University	2013
10.	Technical University of Kenya	2013
11.	Technical University of Mombasa	2013
12.	Pwani University	2013
13	Kisii University	2013

14.	University of Eldoret	2013
15.	Maasai Mara University	2013
16.	Jaramogi Oginga Odinga University of Science and Technology	2013
17.	Laikipia University	2013
18.	South Eastern Kenya University	2013
19.	Meru University of Science and Technology	2013
20.	Multimedia University of Kenya	2013
21.	University of Kabianga	2013
22.	Karatina University	2013
Public University Constituent Colleges		
1.	Murang'a University College (JKUAT)	2011
2.	Machakos University College (KU)	2011
3.	The Co-operative University College of Kenya (JKUAT)	2011
4.	Embu University College (UoN)	2011
5.	Kirinyaga University College (JKUAT)	2011
6.	Rongo University College (MU)	2011
7.	Kibabii University College (MMUST)	2011
8.	Garissa University College (MU)	2011
9.	Taita Taveta University College (JKUAT)	2011
	Accredited Universities	**Date of Accreditation**
Private Chartered Universities		
1.	University of Eastern Africa, Baraton	1991
2.	Catholic University of Eastern Africa (CUEA)	1992
3.	Daystar University	1994
4.	Scott Christian University	1997
5.	United States International University	1999
6.	Africa Nazarene University	2002

7.	Kenya Methodist University	2006
8.	St. Paul's University	2007
9.	Pan Africa Christian University	2008
10.	Strathmore University	2008
11.	Kabarak University	2008
12.	Mount Kenya University	2011
13	Africa International University	2011
14.	Kenya Highlands Evangelical University	2011
15.	Great Lakes University of Kisumu	2012
16.	KCA University	2013
17.	Adventist University of Africa	2013
Private University Constituent Colleges		
1.	Hekima University College (CUEA)	1993
2.	Tangaza University College (CUEA)	1997
3.	Marist International University College (CUEA)	2002
4.	Regina Pacis University College (CUEA)	2010
5.	Uzima University College (CUEA)	2012
Institutions with Letter of Interim Authority		
1.	Kiriri Women's University of Science and Technology	2002
2.	Aga Khan University	2002
3.	GRETSA University	2006
4.	Presbyterian University of East Africa	2008
5.	Inoorero University	2009
6.	The East African University	2010
7.	GENCO University	2010
8.	Management University of Africa	2011
9.	Riara University	2012

10.	Pioneer International University	2012
11.	UMMA University	2013
12.	International Leadership University	2014
13	Zetech University	2014
Registered Private Institutions		
1.	KAG - East University	1985

Source: The Commission for University Education (2014). *Status of Universities-Universities Authorized To Operate In Kenya*. Nairobi, Quality: The Agenda, www.cue.or.ke

Appendix 4: Reliability of the Survey Questionnaire

Scale: Shaping Organizational Culture (OC)

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.986	24

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CC 1	90.57	188.806	.861	.986
CC 2	90.57	188.806	.861	.986
CC 3	90.77	187.633	.885	.986
CC 4	90.80	187.683	.863	.986
CC 5	90.63	190.378	.844	.986
CC 6	90.63	186.861	.794	.986
AC 1	90.73	186.547	.902	.986
AC 2	90.70	186.700	.918	.985
AC 3	90.73	186.547	.902	.986
AC 4	90.70	186.700	.918	.985
AC 5	90.73	186.547	.902	.986
AC 6	90.70	186.700	.918	.985
HC 1	90.60	189.628	.849	.986
HC 2	90.57	188.806	.861	.986
HC 3	90.77	189.978	.758	.986
HC 4	90.77	187.633	.885	.986
HC 5	90.63	190.378	.844	.986
HC 6	90.57	188.806	.861	.986
MC 1	90.63	190.240	.852	.986
MC 2	90.57	188.806	.861	.986
MC 3	90.57	188.806	.861	.986
MC 4	90.67	190.713	.790	.986
MC 5	90.63	190.378	.844	.986
MC 6	90.57	188.806	.861	.986

Scale: Fostering Organizational Learning (OL)

Reliability Statistics

Cronbach's Alpha	N of Items
.982	21

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ILL 1	77.97	124.999	.760	.982
ILL 2	77.87	124.947	.917	.981
ILL 3	78.00	128.897	.727	.982
ILL4	77.87	124.947	.917	.981
ILL5	77.87	124.947	.917	.981
ILL 6	77.97	124.999	.760	.982
ILL7	78.03	122.240	.800	.982
GLL 1	77.90	128.024	.725	.982
GLL 2	78.13	124.051	.856	.981
GLL 3	77.90	125.128	.797	.982
GLL 4	78.03	127.482	.732	.982
GLL 5	78.00	124.966	.867	.981
GLL 6	78.03	122.861	.920	.981
GLL 7	77.97	124.999	.760	.982
OLL 1	77.90	125.748	.906	.981
OLL 2	77.87	124.947	.917	.981
OLL 3	77.87	124.947	.917	.981
OLL 4	77.90	125.748	.906	.981
OLL 5	77.87	124.947	.917	.981
OLL 6	77.87	124.947	.917	.981
OLL 7	77.87	124.947	.917	.981

Scale: Implementing Knowledge Management

Reliability Statistics

Cronbach's Alpha	N of Items
.998	21

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
KA 1	78.23	160.323	.982	.998
KA 2	78.20	160.717	.992	.998
KA 3	78.23	160.323	.982	.998
KA 4	78.23	160.323	.982	.998
KA 5	78.23	160.323	.982	.998
KA 6	78.27	161.720	.945	.998
KA 7	78.20	160.717	.992	.998
KT 1	78.20	160.717	.992	.998
KT 2	78.23	160.668	.961	.998
KT 3	78.20	160.717	.992	.998
KT 4	78.23	160.668	.961	.998
KT 5	78.20	160.717	.992	.998
KT 6	78.23	160.668	.961	.998
KT 7	78.20	160.717	.992	.998
KI 1	78.20	160.717	.992	.998
KI 2	78.20	160.717	.992	.998
KI 3	78.20	160.717	.992	.998
KI 4	78.23	160.323	.982	.998
KI 5	78.30	163.183	.905	.998
KI 6	78.23	160.323	.982	.998
KI 7	78.20	160.717	.992	.998

Scale: Fostering Organizational Innovation (OI)

Reliability Statistics

Cronbach's Alpha	N of Items
.997	21

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PI1	78.83	143.937	.995	.996
PI 2	78.83	143.937	.995	.996
PI 3	79.00	144.759	.863	.997
PI 4	78.83	143.937	.995	.996
PI 5	78.83	143.937	.995	.996
PI 6	78.83	143.937	.995	.996
PI 7	78.83	143.937	.995	.996
AI1	78.83	143.937	.995	.996
AI 2	78.83	143.937	.995	.996
AI 3	78.83	143.937	.995	.996
AI 4	78.83	143.937	.995	.996
AI 5	78.83	143.937	.995	.996
AI 6	78.83	143.937	.995	.996
AI 7	78.83	143.937	.995	.996
PCI 1	78.83	143.937	.995	.996
PCI 2	78.83	147.730	.810	.997
PCI 3	78.83	143.937	.995	.996
PCI 4	79.00	144.759	.863	.997
PCI 5	78.83	143.937	.995	.996
PCI 6	78.83	143.937	.995	.996
PCI 7	79.00	144.759	.863	.997

Scale: Sustainable Competitive Advantage (Sca)

Reliability Statistics

Cronbach's Alpha	N of Items
.994	21

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
OE 1	78.73	154.409	.946	.993
OE 2	78.80	152.441	.927	.993
OE 3	78.73	154.409	.946	.993
OE 4	78.80	152.441	.927	.993
OE 5	78.73	154.409	.946	.993
OE 6	78.80	152.441	.927	.993
OE 7	78.73	154.409	.946	.993
OEF 1	78.80	152.441	.927	.993
OEF 2	78.80	152.441	.927	.993
OEF 3	78.73	154.409	.946	.993
OEF 4	78.73	154.409	.946	.993
OEF 5	78.80	152.441	.927	.993
OEF 6	78.73	154.409	.946	.993
OEF 7	78.73	154.409	.946	.993
OR 1	78.73	154.409	.946	.993
OR 2	78.80	152.441	.927	.993
OR 3	78.73	154.409	.946	.993
OR 4	78.80	152.441	.927	.993
OR 5	78.73	154.409	.946	.993
OR 6	78.80	152.441	.927	.993
OR7	78.73	154.409	.946	.993

SCALE: **Shaping Organizational Culture (OC), Fostering Organizational Learning (OL), Implementing Knowledge Management (KM), Fostering Organizational Innovation (OI), and Sustainable Competitive Advantage (SCA)**

Case Processing Summary

		N	%
Cases	Valid	30	100.0
	Excluded[a]	0	.0
	Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.993	108

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CC 1	420.03	2805.826	.456	.993
CC 2	420.03	2805.826	.456	.993
CC 3	420.23	2799.840	.517	.993
CC 4	420.27	2800.340	.499	.993
CC 5	420.10	2802.093	.554	.993
CC 6	420.10	2786.369	.603	.993
AC 1	420.20	2782.855	.716	.993
AC 2	420.17	2791.178	.623	.993
AC 3	420.20	2782.855	.716	.993
AC 4	420.17	2791.178	.623	.993
AC 5	420.20	2782.855	.716	.993
AC 6	420.17	2791.178	.623	.993
HC 1	420.07	2807.099	.455	.993
HC 2	420.03	2805.826	.456	.993
HC 3	420.23	2795.633	.574	.993
HC 4	420.23	2799.840	.517	.993
HC 5	420.10	2802.093	.554	.993
HC 6	420.03	2805.826	.456	.993
MC 1	420.10	2808.024	.463	.993
MC 2	420.03	2805.826	.456	.993
MC 3	420.03	2805.826	.456	.993
MC 4	420.13	2803.361	.513	.993
MC 5	420.10	2802.093	.554	.993
MC 6	420.03	2805.826	.456	.993

	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Scale Mean if Item Deleted
ILL 1	420.20	2782.855	.716	.993
ILL 2	420.10	2783.128	.848	.993
ILL 3	420.23	2799.013	.699	.993
ILL 4	420.10	2783.128	.848	.993
ILL 5	420.10	2783.128	.848	.993
ILL 6	420.20	2782.855	.716	.993
ILL 7	420.27	2768.202	.781	.993
GLL 1	420.13	2795.430	.694	.993
GLL 2	420.37	2776.792	.828	.993
GLL 3	420.13	2783.430	.749	.993
GLL 4	420.27	2800.478	.584	.993
GLL 5	420.23	2786.392	.757	.993
GLL 6	420.27	2773.995	.851	.993
GLL 7	420.20	2782.855	.716	.993
OLL 1	420.13	2784.326	.875	.993
OLL 2	420.10	2783.128	.848	.993
OLL 3	420.10	2783.128	.848	.993
OLL 4	420.13	2784.326	.875	.993
OLL 5	420.10	2783.128	.848	.993
OLL 6	420.10	2783.128	.848	.993
OLL 7	420.10	2783.128	.848	.993
KA 1	420.17	2776.006	.891	.993
KA 2	420.13	2776.120	.920	.993
KA 3	420.17	2776.006	.891	.993
KA 4	420.17	2776.006	.891	.993
KA 5	420.17	2776.006	.891	.993
KA 6	420.20	2782.441	.840	.993
KA 7	420.13	2776.120	.920	.993
KT 1	420.13	2776.120	.920	.993
KT 2	420.17	2777.109	.875	.993
KT 3	420.13	2776.120	.920	.993
KT 4	420.17	2777.109	.875	.993
KT 5	420.13	2776.120	.920	.993
KT 6	420.17	2777.109	.875	.993
KT 7	420.13	2776.120	.920	.993
KI 1	420.13	2776.120	.920	.993
KI 2	420.13	2776.120	.920	.993
KI 3	420.13	2776.120	.920	.993
KI 4	420.17	2776.006	.891	.993
KI 5	420.23	2785.978	.835	.993
KI 6	420.17	2776.006	.891	.993
KI 7	420.13	2776.120	.920	.993

	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Scale Mean if Item Deleted
PI 1	420.10	2786.714	.793	.993
PI 2	420.10	2786.714	.793	.993
PI 3	420.27	2788.271	.710	.993
PI 4	420.10	2786.714	.793	.993
PI 5	420.10	2786.714	.793	.993
PI 6	420.10	2786.714	.793	.993
PI 7	420.10	2786.714	.793	.993
AI 1	420.10	2786.714	.793	.993
AI 2	420.10	2786.714	.793	.993
AI 3	420.10	2786.714	.793	.993
AI 4	420.10	2786.714	.793	.993
AI 5	420.10	2786.714	.793	.993
AI 6	420.10	2786.714	.793	.993
AI 7	420.10	2786.714	.793	.993
PCI 1	420.10	2786.714	.793	.993
PCI 2	420.10	2800.990	.633	.993
PCI 3	420.10	2786.714	.793	.993
PCI 4	420.27	2788.271	.710	.993
PCI 5	420.10	2786.714	.793	.993
PCI 6	420.10	2786.714	.793	.993
PCI 7	420.27	2788.271	.710	.993
OE 1	420.10	2786.714	.793	.993
OE 2	420.17	2777.661	.805	.993
OE 3	420.10	2786.714	.793	.993
OE 4	420.17	2777.661	.805	.993
OE 5	420.10	2786.714	.793	.993
OE 6	420.17	2777.661	.805	.993
OE 7	420.10	2786.714	.793	.993
OEF 1	420.17	2777.661	.805	.993
OEF 2	420.17	2777.661	.805	.993
OEF 3	420.10	2786.714	.793	.993
OEF 4	420.10	2786.714	.793	.993
OEF 5	420.17	2777.661	.805	.993
OEF 6	420.10	2786.714	.793	.993
OEF 7	420.10	2786.714	.793	.993
OR 1	420.10	2786.714	.793	.993
OR 2	420.17	2777.661	.805	.993
OR 3	420.10	2786.714	.793	.993
OR 4	420.17	2777.661	.805	.993
OR 5	420.10	2786.714	.793	.993
OR 6	420.17	2777.661	.805	.993
OR 7	420.10	2786.714	.793	.993