

**STRATEGIC LEADERSHIP, INNOVATION AND
SERVICE QUALITY OF ACCREDITED UNIVERSITIES
IN KENYA**

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Technology**

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DECLARATION

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

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

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DEDICATION

To my late daughter Mercy, I have achieved what you encouraged me to do. I promised you I will. To my late uncle Jackton Namatsi, you blessed this journey. Special dedication to my loving wife Emmy, and amazing sons James and Terrence. Without their support and sacrifice of time, I would never have gotten past the coursework stages of this endeavor and would have always regretted not finishing this doctoral study. I love you and I can only hope you find me supportive of your goals as I have found you supportive of me. To my dad, Philemon and mum, Eunice, and Sisters Lillian, Grace, Betty and Caroline, for supporting my educational goals and for believing in me.

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ACRONYMS AND ABBREVIATIONS

CEO's	Chief Executive officers
CFA	Confirmatory Factor Analysis
CHET	Centre for Higher Education Transformation
HEI's	Higher Education Institutions
ICT	Information and Communications Technology
IT	Information Technology
KBV	Knowledge Based view
R & D	Research and Development
RBV	Resource Based View
RDT	Resource Dependency Theory
RoK	Republic of Kenya
SME	Small and Medium Enterprise
TMT	Top Management Team
UET	Upper Echelons Theory
UoN	University of Nairobi

DEFINITION OF TERMS

- Administrative Innovation** Something that is new to the established organizational processes Jaskyte (2011). In this study it refers to organizational structure, practices and procedures in the administration of universities.
- Core Competencies** Resources and capabilities that makes a firm be competitive than its rivals is what constitutes core competencies (McMillan, 2010). In this study, core competencies refers to organizational resources and capabilities, employee skills, dispositional values and change anticipation.
- Human Capital** Knowledge and skills of the whole human resources in an organization (Nel, 2008). In this study it refers to all members of staff in the academic and administrative divisions.
- Innovation** Innovation is the introduction of something new, processes or products (Lin & Marvis, 2007). In this study it is exemplified by administrative, service and technological innovation.
- Performance** it is propositioned by the capacity to learn, capacity for change, managerial wisdom, organizational context, organizational innovation and mission trajectory (Phipps & Burbach, 2010). In this study, it is exemplified by quality of service.

Service Quality	is the perceived stakeholder satisfaction (Abidin, 2015). In this study quality of service comprises tangibility, reliability, responsiveness, empathy and assurance.
Service Innovation	Innovation occurring in existing services, new services or gradual development of services already in place (Durst <i>et al.</i> , 2015). In this study it refers to new services offered to stakeholders.
Strategic Direction	is an enduring plan of the organization (Lear, 2012). In this study it comprises the vision, mission and core ideology of the organization.
Strategic Leadership	The capability to generate strategic change, employees' endowment, sustaining flexibility, and foreseeing the future (Hitt, Ireland, & Hoskinsson, 2011). It refers to the leadership at the top of the organization in this study.
Technological Innovation	New procedures, policies and administrative structures. (Walker <i>et al.</i> , 2011). In this study it refers to introduction of new equipment, products, processes and procedures that are new to the organization.

ABSTRACT

The Primary objective of the study was to establish the mediating influence of innovation on the relationship between strategic leadership and service quality of accredited universities in Kenya. The specific objectives were to: determine the effect of human capital development on service quality; establish the effect of maintaining core competencies on service quality; assess the effect of strategic direction on service quality; examine the effect of strategic leadership on service quality and determine the mediating effect of innovation on the relationship between strategic leadership and service quality. The study relied on theoretical and empirical literature on human capital development, maintaining of core competencies and developing strategic direction as the independent variables, innovation as the mediating variable and service quality as the dependent variable. The study was based on four theories: upper echelons theory, dynamic capabilities theory, trait leadership theory and resource based view. The study was guided by positivism research philosophy, cross sectional and explanatory research design. The population in the study comprised of all the 74 universities in Kenya which have been accredited by the Commission of University Education to operate in the country. The unit of inquiry was the deputy vice chancellors of the universities in charge of administrative and academic divisions and the finance officers/managers. A census technique was used involving all the elements of the target population, while purposive sampling was used to select the respondents in the study. A structured questionnaire was used to collect data from the respondents. Descriptive statistical analysis was used to profile the respondents. The hypothesized relationships were developed and tested based on the conceptual model of strategic leadership, innovation and quality service. The measurement model estimation was established through exploratory factor analysis and confirmatory factor analysis. The linear relationships between the independent variables and quality service were assessed using Pearson product-moment correlation coefficient r . The structural or inner model was accomplished by examining path coefficients or betas for hypothesis testing. The hypothesized relationships were tested using Structural Equation Modeling and Sobel test. The result of the hypothetical testing showed that human capital development has a positive and statistically significant relationship with service quality. Out of the five factors of human capital, four factors were found to contribute significantly to service quality, and one was not which is existence of human resource training and development planning program in the institution. Maintaining core competence was established to have a statistically significant relationship with service quality. A statistically significant relationship was established between strategic direction and service quality. Further findings revealed that a statistically significant relationship existed between strategic leadership and service quality. A test of the mediated relationship confirmed that innovation partially mediates the relationship between strategic leadership and service quality. The results present diverse implications for policy, practice and research. Human capital development was confirmed to have a positive effect on service quality. As a result of this perspective policy makers will use these findings to align and increase adoption of strategic leadership practices in order to inspire good managerial practices. It is recommended that CEOs of universities can use

these findings to help in promoting training and development, hire and recruit qualified and suitable personnel and enhance the innovative aspects of human capital, as they play an important role in obtaining service quality outcomes. Future studies could use longitudinal survey which will serve as the foundation for more informed interpretations in future research studies.

CHAPTER ONE

INTRODUCTION

The Background of the study, statement of the problem, research objectives, research hypotheses, justification, scope and limitations of the study are presented in this section. This chapter presents an overview of the concepts of strategic leadership, innovation and service quality. The perspectives of university education globally, regionally and also in Kenya has been presented.

1.1 Background of the study.

The higher education service sector is one of the rapid growing industries in Kenya. The fast growth in this particular sector is characterized by a high and increased student enrolment, reduced Government funding of public universities, and intensified expectation of service quality by overly savvy stakeholders, emergence of competitive private universities to cater for excess demand of university education (Magutu, Mbeche, Nyaoga, Ongeri, & Ombati, 2010; Survey, 2012). Service quality especially in education is therefore gaining importance with the main stay remaining, high service quality for enhanced customer satisfaction and their retention. Unfortunately, in the face of this metamorphosis, Ngware, Onsomu, and Manda (2005) observe that existing and projected supply of public education in Kenya continuously falls short of demand for quality education leading to low customer satisfaction.

Universities are categorized into either public or private universities. Public universities receive their funding from the government, while the private universities get their funding from their internal sources mainly fees collection. Other sources of funding in the universities are grants from donors in terms of research funding, philanthropic bodies and personalities, major lending institutions and from sales of services. While public universities get their students from the government appointed agencies, private universities get their students through direct applications. However in some countries,

the government also allocates students to private universities and supports them financially (Teferra & Altbach, 2004).

The key stakeholders in universities are non-teaching staff, teaching and research staff, authorities, students, service providers, alumni, recruiters, competitors, local communities, the industry and partner organizations as well as public/governmental entities. These various stakeholders demand quality services from these institutions and exert pressure on them to perform by signifying quality outcomes, superior services and cost-efficiency. This arises from the vivid realization that the massification of universities in the late 1990s and early 2000s, created a significant demand for higher education, where education quality suffered as a consequence. The numerical rise in higher education has the effect of heightening the expectations that the public and governments have in terms of quality (Mehmet & Mehmet, 2014). Their fears need to be allayed as pertains quality assurance and in ensuring that the education system addresses the contemporary economic and social needs (Juma, 2016).

Universities face various challenges as they strive to provide and deliver quality services, key among them being financial related issues, equity of access to and during the progression of studies, development of staff, specialised training, and quality teaching maintenance, research and outreach services and relevance of programs. Quality which is dependent on resources and particularly on the ability to attract and retain suitable staff, has suffered in consequence (Sarua, 2009). As a result of the challenges experienced by these institutions, promoters of strategic leadership norms (Hambrick & Mason, 1984; Hitt, Ireland, & Hoskinsson, 2011) have advanced that leadership in organizations need to create conducive environments for teams to work optimally to the limits of their abilities. Strategic leadership is about understanding the competitive and turbulent environment in which the organization is operating, defining clearly what its competitive advantage is and setting and executing strategies that continue to deliver value to stakeholders. Universities require managers with strategic leadership and managerial skills to coordinate, inspire and motivate a team that can deliver.

From the foregoing context, a number of scholars have discerned that strategic leadership is essential for any organization's eventual success and performance in the unsteady and complex environment of the 21st century in order to confront the reality of environmental turbulence and the continuous need for proper organizational change in order to achieve performance goals (Jaleha & Machuki, 2018). Additionally, other scholars have stated that strategic leadership is a vital component in addressing challenges that impede attainment of performance objectives (Davis & Barbara, 2010; Serfontein, 2010; Sifuna, 2012; Vera & Crossan, 2004). This evidently indicates that scores of studies done on universities amplify the significance of strategic leadership and innovation (Uhy's *et al.*, 2004; Shisia *et al.*, 2014; Zaed *et al.*, 2015; Juma, 2016; Kising'u, 2017) on performance.

Leadership in universities in the contemporary times not only do they need to guide their institutions through the routine leadership styles that focuses on the micro level in terms of creating interactions among the leadership and followers, individualized leadership models, trait and styles of leaders but they need also to anticipate, envision the future, facilitate the needed strategic change, creating conducive atmosphere for others to thrive and sustenance of flexibility (Hitt *et al.*, 2011). They also need to be innovative to ensure their long-term survival (Juma, 2016).

Consequently, this study advances that the future of universities in the turbulent, competitive and unpredicted environment in which they are operating will be hinged upon the extent to which the leaders of these institutions will embody strategic leadership and innovative practices in the management of their institutions. Findings of various studies on strategic leadership and innovation have established that they have a significant influence universities service quality. The purpose of this study is to examine the mediating role of innovation in the relationship between strategic leadership and service quality of accredited universities in Kenya. The main words of this study and which are discussed hereafter are: strategic leadership, innovation, service quality and universities in Kenya.

The specific problem in universities is that the institutions have the requisite resources but lacking the ability to deploy them innovatively by the leadership affects performance outcomes. Therefore it is contended here that organizations whose top management team have strategic leadership capability demonstrated by their leaders and who also embrace innovative practices in addressing the challenges faced, are expected to perform well by providing quality services.

1.1.1 Global Perspective of Higher Education

There has been many changes to the landscape of global higher education industry including: decrease in government funding, increase in demand for higher education, changing demographics, new models of higher education, economic development and growth, technological development in information communication technology (ICT), globalization of higher education and changing government policies and regulations in higher education (Mathooko, 2013). Additionally, higher education (HE) systems worldwide are undergoing through diverse transformations due to pressures arising from prevalent global trends, including rapid technological change, the growth of the knowledge economy and high social demand for higher education. (Bruckmann & Carvallo 2014; Lodge & Hood, 2012; Tamrat2017; Trivellas & Dargenidou, 2009).

These changes have created many opportunities, which have attracted private sector to enter the higher education industry, to exploit the opportunities so created (Anand, 2012). Subsequently, Sharabi (2013) postulates that universities both virtual and real, have been established. The consequent forces of demand and supply has eventually made universities to move out of their comfort zone and seriously seek how they can improve the various characteristics of service quality perceived as valuable by different stakeholders (Latif, Latif, Saibzada, & Ullah, 2019). Thus, service quality within Higher Education has received significant attention from managers and academics due to its importance in business performance, cost reduction, and student satisfaction (Khedra, & Fayoumi, 2017).

According to a World Bank report and studies by OECD, European HEIs were found to be extremely under-funded and, in most instances they were not able to support economic growth and social cohesion (EU-RA, 2004). Globally, financing is a major issue. Higher education faces substantial challenges and difficulties in terms of equity, financing, equity of access into and during the duration of studies, staff development enhancement, specialized training, enrichment and maintenance of quality in terms of teaching, research, outreach and extension of services, program relevance, graduates employability, equitable access to the benefits of internal cooperation and the setting up of cooperative agreements which are effective (Taylor, Maria, & Marvin, 2008).

Taking a closer look at several countries in Europe and Asia, brings out the state of affairs in the Higher education sector and the myriad challenges faced. The stakeholders of higher education sector call for managers to justify their actions and demonstrate quality and effectiveness has never been greater as in recent years. These drivers have led the university to focus on efficient and disciplined use of resources; achievement of value for money; increased productivity through the use of systematic planning, organization and control; and measurement of achievement against declared objectives by comparisons across institutions (Chen, 1997; Tang & Zairi, 1998). In Japan, Zhang and Dennis (2013), postulate that the difficulties affecting higher education are not unique to Japan, but are in a wider context a common problem confronting all the world's industrialized countries. Efforts to staunch the rapid deterioration of educational quality are essential arising out of the economy and demographic changes which are observably beyond the control of the institutions themselves. In Italy, there are many signs of educational crisis and a number of practical reasons for introducing innovation within the context of the university (Farabollini & Maurizio, 2001).

The same situation has affected universities in Jordan. There are instability and limitations to the financing of universities. The universities, especially the public universities, face fluctuating and dwindling financial support from the government. Universities reliance on the government financing coincides with their inability to increase tuition fees. This situation has led to incessant budget deficit and debts for the

universities and hinder the implementation process of their strategic plans (Al-Haddad, Taleb, & Badran, 2018; Atoum, Al-Zoubi, Jaber, Al-Dmour, & Hammad, 2017). And also, there is a low number of faculty members in the universities as the students to faculty (Almohtaseb, Almahameed, Shaheen, & Al Khattab, 2019).

1.1.2 Regional Perspective of Higher Education

By international standards, Africa is the least developed region in terms of admissions to institutions of higher education (Teferra & Altbach, 2004). Higher education systems in Africa have been evidenced to be facing serious financial constraints, are severely under-resourced and are not capable of fulfilling the new expectations that are being placed upon them (Sifuna, 2012).

Ng'ethe (2003), states that it is important to identify and appreciate the contemporary and broader global/international issues surrounding African higher education, in relation to which the challenges for innovative change must be seen. The fact is that African universities currently function in very difficult circumstances, as seen in the prism of the continent's social, economic, and political problems, and in the context of globalization, and the road to future success will not be an easy one.

The contexts in which African higher education is operating require, in some ways, greater skill and greater commitment than those in developed countries. The challenges of rebuilding higher education in the African region are great, and it will require a committed and expert leadership to achieve the necessary, profound changes (Trencher, Yarime, McCormick, Doll, & Kraines, 2014). Development of the leadership capacity within higher education to enable it to respond to this challenge is key to achieving this goal (Sarua, 2009). In many African universities, leaders are not recruited for their leadership potential, but rather are selected and compensated for their research, course development and/or teaching. African universities' vice chancellors, deans, heads of departments, school directors and others are often appointed based on academic qualifications, and rarely receive critical training in strategic planning, budgeting, human

resource development and faculty management (Gebreyes, 2015). Leaders within higher education must develop strategies to address today's challenges and champion change within their institutions (Swanger, 2016).

1.1.3 Local Perspective of Higher Education

In Kenya, the situation is no different. While for instance an ISO certification espouses continuous quality improvement, Kenya's universities appear to head in the opposite direction. Universities at one time were beacons of intellectual motivation and promise, but have experienced deteriorating decline in government resources for education (Mwiria *et al.*, 2007) and the decline in terms of government resources for education has affected the education quality and left higher education in a precarious situation (G. O. Odhiambo, 2011). The University of Nairobi (UON) which is the biggest and oldest university in the country has undergone a cash crisis triggered by low state funding and under-collection of internal revenue that has forced it to survive on commercial bank overdrafts (Mutai, 2017). This situation is replicated in several other universities in Kenya. Since independence, access and difficulties of maintaining standards of quality and efficiency with marginal available resources- more recently highlighted by a commission on higher education report- have been some of the key challenges in university education and these have impacted on the sector's contribution to the country's development (Odhiambo, 2018).

The dimensions of service quality in higher education context vary from one institution to another, from one country to another and even from culture to culture, posing a contextual debate. In Kenya, the rapid expansion of university education led to impecunious conditions and deteriorated quality of university education in terms of quality of teaching and research, library facilities, overcrowding in halls of residence, student riots and staff dissolution (Mutula, 2002). Mwaka *et al.* (2011) adds that the high enrolment levels have led to the quantity vis a vis quality debate and ultimately a phenomenon described as non-education. Under this circumstance, the sustainability of service quality in universities in Kenya remains questionable. The emerging service

quality issues facing universities in developing countries calls for a closer examination of service quality dimensions (Owino, 2013).

Recognition of the aforementioned problems can lead to positive solutions with proper planning and effective leadership (Teferra & Altbach, 2004). Sifuna (2012) contends that the many challenges being faced by higher education in Kenya and other African countries, can be addressed through innovative, organizational and leadership approaches that are required to tap into the individual and collective stakeholder creativities and competencies in pursuit of core university functions. A committed and expert leadership to achieve such a goal requires an environment which guarantees autonomy and academic freedom of the institution to provide for quality service delivery and accountability. Leadership, governance and management are key components in addressing the major challenges that face Kenyan universities in particular and African universities in general.

1.1.4 Strategic Leadership

Hambrick and Mason (1984) are the pioneers of this field of strategic leadership research. The term strategic leadership is meant to signify two major things: that we're discussing about people at the apex of the organization; and we're interested in the full scope of their activities, including their strategic choices (Hambrick, Cannella, & Pettigrew, 2001). Strategic leadership is increasingly becoming the main focus for business and academics alike and is the key issue facing contemporary organizations. It is key component of performance success of any organization that operates in the 21st Century (Jaleha & Machuki, 2018), including universities.

Strategic leadership, by definition, links the strategic function with the leadership function. Strategic leadership defines the vision and moral purpose and translates them into action (Davis & Barbara, 2010). It has also been defined as the capability to generate strategic change, employees' endowment, sustaining flexibility, and foreseeing the future (Hitt *et al.*, 2011). It is a process of guidance carried out to make something

happen. The key notions are guiding, with a motive or purpose, to make something go. In the Kenyan context, Abudho-Riwo, Njanja, and Ochieng (2012) on their part define strategic leadership as being the ability to envision the future of the organization. Strategic leaders exhibit noticeable traits that focalizes their orientation. Lear (2012) has outlined the following characteristics that defines them: aligning people and organizations; translating strategy into action; determining effective strategic interventions; and, developing strategic competencies.

Strategic leadership is different from leadership. Whereas leadership refers to leaders at any level within an organization, strategic leadership talks about leaders at the top of the organization (Vera & Crossan, 2004). Another important distinction according to Nguyen (2013), is that leadership studies focus on the micro levels (relationship and leaders and followers, trait and style of leaders, individualized leadership models, etc.), on the other hand, the emphasis of strategic leadership is on the macro level of executive work (e.g., instead of looking at leader-follower relationship, the macro view looks at how the dominant coalition of the company influences the strategic process of the organization (Vera & Crossan, 2004). Hambrick *et al.* (2001) have stated that the term leadership primarily refers to a relational endeavor, implying that there are followers. It has to do with inspiration, energizing, communicating a vision and bringing people along. In contrast, research in strategic leadership is interested in executive work not only as a relational activity, but also as a strategic activity and as a symbolic activity.

A synergistic mix of managerial and visionary leadership is needed. Strategic leadership differs from the other two common leadership styles, that is, managerial and visionary leadership. Managerial leaders are primarily immersed in the day-to-day activities of the organization and lack an appropriate long-term vision for growth and change (Lear, 2012). Conversely, visionary leaders are primarily future oriented, proactive and risk taking. These leaders base their decisions and actions on their beliefs and values, and try to share their understanding of a desired vision with others in the organization (Rowe & Nejad, 2009). Despite the benefits of strategic leadership, many organizations still implement structures or routines that constrain and discourage strategic leadership.

Sound strategic management and the leadership required to implement its benefits will be the hallmark of its success (Taylor *et al.*, 2008).

Strategic leadership has a dynamic and very important role in developing universities to attain their strategic goals, and giving them the ability to ensure their survival, development and growth, and to adapt to contemporary environmental events and changes, through their ability to influence and their larger flexibility in dealing with events (AL-Mrba, 2008). Universities can only develop if there are strategic leaders with a clear and accurate strategic vision that looks to the future and keeps pace with changes in the internal and external environment. According to study of (Hitt & Ireland, 2002), strategic leadership represents the essence of strategic management. To the extent that there is effective strategic leadership at the top of organization in particular and at all levels at large, the extent to which strategic management succeeds in achieving its goals.

1.1.5 Strategic Leadership Practices

This is defined as the leaders' ability to anticipate, envision, maintain flexibility, and to empower others to institute strategic change as required (Hitt *et al.*, 2001; Serfontein, 2009; Jooste & Fourie, 2009). The term "strategic leadership" emanated from work on strategic management and encompasses the following: (1) determining strategic direction; (2) exploring and maintaining unique core competencies; (3) developing human capital; (4) sustaining an effective organizational culture; (5) emphasizing ethical practices; and (6) establishing balanced organizational controls (Hitt *et al.*, 2001; Jooste & Fourie, 2009). Hughes and Beatty (2005), state that strategic leadership is exerted when the decisions and actions of leaders have strategic implications for the organization. They also stress that, it is broad in scope, the impact is felt over long periods of time and that it often involves significant organizational change. It has the ability to influence the opinions, attitudes, and behaviours of others (Hitt & Duane, 2012).

If strategic leadership is to surface, an organization must furnish its leaders autonomy and protection. They need to be free to envision a future as they see it and implement growth strategies without interference. This interference is most evident in large diversified organizations. They need to be protected from the managerial leaders in the organization who may try to enforce austere financial controls at the expense of strategic controls (Rowe & Nejad, 2009). Rowe (2001) postulates that strategic leadership practices become common as a result of several years of concentrated and intense labour. These practices progressively accumulate over a period of time and as they unfold, leaders and organizations perceive and comprehend on how to introduce the subsequent phases of best practices and bring them into the fore.

Davies and Brent (2004) have analyzed factors or characteristics associated with strategic leadership. They aver that first, there are those abilities to undertake organizational activity and, secondly, individual abilities: Strategic leaders have the organizational ability to: be strategically orientated; translate strategy into action; align people and organizations; determine effective strategic intervention points; develop strategic competencies. Strategic leaders display: a dissatisfaction or restlessness with the present; absorptive capacity; adaptive capacity; wisdom. Thus it is imperative for scholars to highlight the integral practices of strategic leadership which will lead to higher levels of performance (Jaleha & Machuki, 2018; Jansen, Vera, & Crossan, 2009; Jooste & Fourie, 2009).

Strategic leadership adherents have highlighted generic strategic leadership practices that will result in attainment of high performance and effectiveness in organizations. Table 1.1 presents a summary of practices that form the basis of this study. Table 1.1 outlines three generic strategic practices that are considered to have a significant effect on service quality: development of human capital, maintaining core competencies; and, core competence development towards accredited universities in Kenya.

Table 1.1: Generic Strategic Leadership Practices

Author	• Generic strategic leadership practices
Hitt <i>et al.</i> , (2001)	<ul style="list-style-type: none"> • Determining the firm’s purpose and vision • Exploiting and maintaining core competencies
Jooste & Fourie 2009	<ul style="list-style-type: none"> • Developing human capital • Sustaining and effective organizational culture • Emphasizing ethical practices • Establishing balanced strategic controls • Making strategic decisions • Creating and communication a vision of the future • Developing key competencies and capabilities • Developing organizational structures, processes and controls • Managing multiple constituencies • Selecting and developing the next generation of leaders • Sustaining an effective organizational culture and • Influencing ethical value systems
Sosik <i>et al.</i> , (2005)	<ul style="list-style-type: none"> • Display key behaviours that allows an organization to execute its strategy effectively • Are strategy centered leaders
Finkelstein & Hambrick (1996)	<ul style="list-style-type: none"> • Making strategic decisions • Picking key executives • Allocation of resources • Formulation of organizational goals and strategy • Providing direction for the organization • Conceptualizing and installing organizational designs and control systems • Representing the organization to various stakeholders such as leaders of financial institutions and government agencies, customer interest groups and labour • Negotiating with such constituencies for legitimacy and resources
Bass (2007)	<ul style="list-style-type: none"> • Focusing attention on outcomes and processes • Seeking to acquire and leverage knowledge • Fostering learning and creativity • Improving work flows by paying attention to relationships • Anticipating internal and external environmental changes • Maintaining global mindset • Meeting the diversity of the interests of the multiple stakeholder • Building long-term while meeting short-term needs • Developing human capital

In line with the foregoing, it was necessary to highlight the importance of strategic leadership practices, given its important role in supporting development processes to improve the quality of the educational service, and to prepare those leaders in our universities (Alayoubi, Al Shobaki, & Abu-Naser, 2020).

1.1.6 Innovation

The term innovation comes from Latin word *innovare* which means to make something new (Tidd & Bessant, 2011). From a micro viewpoint, innovation is management approach that focuses on the organization's mission, searches for unique opportunities, determines whether they fit the organization's strategic direction, defines critical success factors, and continuously reassesses opportunities. A review of literature on innovation, presents various definitions. There is no consensus on the definition of organizational innovation in the innovation literature (Camison & Villar-Lopez, 2014). In today's world, organizational innovation has different meaning to different people or different organizations. At present, this concept is applied in every facet of social lives and activities.

Innovation is the introduction of something new, processes or products (Lin & Marvis, 2007). Innovation affects organizational performance (Walker, 2008). For an organization to be successful, it must innovate (Kandiri, 2014). The generation of innovation results in an outcome. A product, service, or practice that is newly introduced to the state of the art (or in the very least, to a particular population in the organization); the adoption of innovation results in the use of a product, service, or practice new to the unit of adoption, individual, team, or organization (Damanpour & Wischenevsky, 2006). Although the term innovation has different definitions, several characteristics can be identified. It is the introduction of something new, processes or products. Secondly, it impacts on the performance of an organization. Thirdly, innovation also contributes to the development of an organization's strategic resources.

Organizational innovation literature includes both individual and organizational level dimensions. This view is supported by Lin and Marvis (2007) who have stated that research on innovation can be approached from the perspectives of an individual, an organization, and a nation, with emphasis on individual traits, innovation management, and a nation's source of competitiveness, respectively. Damanpour and Aravind (2012) explored managerial innovations noting business and practitioner-based innovation was gaining popularity over research and development while facilitating organizational culture changes and reinforcing the need for performance sustainment through continuous innovation.

Factors that drive organizational innovation are internal and external factors. Internal factors can be motivation, technical background, working experience and innovative ideas of entrepreneurs. On the other hand, external factors of innovation include: customer requirements, information given by the supplier, market opportunity, availability and accessibility of institutional support, economic incentives, competition and etc. However, both internal and external factors are required (Krishnaswamy *et al*, 2010). Drivers of innovation in institutions of higher learning include: massification of higher education; globalization, the rise of the knowledge society and the information-driven global economy; the changing labor market; the impact of new ICTs; the higher education globalization and finally, growing demand for higher education institutions to function as market-like organizations in the context of fiscal constraints (Ng'ethe, 2003). Organizations that accept innovativeness and engage in innovation, responding to contemporary changes and build up new capabilities that will help them to attain higher performance will be more thriving (Moghli, Al Abdullah G., & Al Muala, 2012). Some researchers have suggested that innovation behaviour directly affects service quality (Chang et al., 2019).

1.1.7 Service Quality in Universities

The globalization in education has made it imperative for the HE institutions to enhance their level of service quality (Kristoffersen & Woodhouse, 2005). Hence, there is an

impetus on the institutions of HE to engage in more competitive educational practices that are based on quality assessment (Latif et al., 2019). In Kenya, the sharp increase in the number of universities in the country in recent years and the emergence of global higher education rankings which has subsequently brought about competition in universities, has raised an alarm in terms of quality issues. This has exacerbated the society and public authorities to pile pressure on universities to be more accountable and exhibit quality and effectiveness in their management (Owino, 2013).

The quality of higher education as a service is also central to a country's development because universities train the professionals who will work as managers in organizations, and manage public and private resources, and care for the health and education of the coming generations (Oliveria, 2009). Higher education environment is a pure service that provides person-to-person interaction Oldfield and Baron (2000), and customer satisfaction in this situation is usually achieved through the quality of personal contacts (Fong & Wai, 2008). Additionally, higher education's focus should be directed on the interests and needs of diverse factions, that includes students, employers, government, alumni, parents and funding agencies, among others (Rosza, 2010). Higher education (HE) institutions have to become more efficient with a view to compete in a global market where client expectations are rising frequently. Quality therefore is critical for success in this new normal. While the economic benefits of quality have been established for long, many HE institutions keep on ignoring them at their own peril. This is true, particularly for service quality (Sharabi, 2013).

Service quality is a multi-dimensional concept and byzantine phenomenon that draws the attention of academic researchers, practitioners, and managers on a constant basis (Smith & Smith, 2007). Various service quality definitions and concepts abound in the literature, and it is difficult to reach a consensus on the definition. As such, service quality has been defined as the customer attitude of overall judgment about service superiority, based on the assessment of the customer, and not on a physical item (Mahmoud & Khalifa, 2015). Continuous improvement for HE institutions can only be implemented by triggering the deficiencies through appropriate measurement of service

quality (Zakariah, Zakariah, & Pyeman, 2016). Managing and improving the quality of services provided is of essence, and universities need to regularly measure service quality (Abdullah, 2006). For this to work an important factor would be to implement a measurement system (Sunder & Sunder, 2016). Strong quantitative measures can provide universities with factual information on all manners of service issues that would enable clear strategy for management (Chong & Ahmed, 2012).

Many service quality models have been proposed. Of all the models, the most enduringly popular, widely cited and best researched method of assessing service quality is SERVQUAL developed by (Parasuraman, Zeithaml, & Berry, 1988; Parasuraman, Zeithaml, & Berry, 1985). Thus, an advantage of using SERVQUAL is that it is a tried and tested instrument. It can be relatively used for benchmarking purposes (Byrnsland & Curry, 2001). The scale that is the focus of SERVQUAL is perceived quality, which is a customer's judgment about the excellence of a service (Zeithaml, 1987). Parasuraman et al. (1988) developed the SERVQUAL model to measure customer perceptions of service. This model basically focusses on evaluating the traditional service quality of any service organization where the customer is directly involved in the service process with the service provider (Trivedi, Bhatt, Trivedi, & Patel, 2020) and it gives more weight on the service delivery process rather than the other features of service (Kang & James, 2004). SERVQUAL uses a scale to rate service expectations and performance by asking customers a set of questions on attributes that reflect the five dimensions of quality (Smith and Smith, 2007). Much of the research of the measurement of service quality within educational settings has been influenced by the seminal work of Zeithaml et al. (1990) based on the model from which a 22-item instrument for measuring customer expectations and perceptions has been developed along with five-quality dimensions: tangibility, reliability, responsiveness, assurance, and empathy. This methodology operates by means of identifying "expectations" and "perceptions" with the aim of closing the gap between the two (Yeo, 2008). This is in line with several researchers who have argued that since service quality in higher education has the same

main characteristics as other services, generic service quality instruments can be utilized to appraise it (Mahmoud & Khalifa, 2015).

SERVQUAL which was advanced by Parasuranam et al. (1985) to measure service quality efficiency, has been used by various researchers in HE. Most relevant studies that have utilised SERVQUAL to measure HE service quality include the following: Cuthbert (1996), Soutar and McNeil (1996), Pariseau and McDaniel (1997), Arambwela and Hall (2009), Wong, Tunku, and Rahman (2012), and Kashif, Ramayah, and Sarifuddin (2016). Others are: (Abu Hassan, Ilias, Abd Rahman, & Abd Razak, 2008; Atrek & Bayraktaroglu, 2012; Calvo-Porrall, Levy-Mangin, & Novo-Corti, 2013; Dado, Petrovicova, Riznic, & Rajic, 2011; Gallifa & Batalle, 2010; Ibrahim, Wang, & Hassan, 2013; Stodnick & Rodgers, 2008) adopted the adapted version of SERVQUAL to evaluate service quality in higher education.

University education is witnessing great interest locally, regionally and internationally serious attempts to develop and improve it, as interest in the quality of educational service has become a global phenomenon that governments and institutions of higher education give great attention to in order to reach the best and best. This interest has embodied at the international level the establishment of some international formulas and mechanisms to ensure quality in education Higher education, such as accreditation systems for institutions and programs, which have improved the quality of teaching and learning in many countries of the world (Al-Hadabi & Al-Tai, 2011).

Studies and research have addressed the dimensions of measuring the quality of the educational service from multiple angles, and these studies and research have indicated that the quality of the educational service is evaluated from the perspective of the beneficiary mainly the university student, or faculty members, and from the perspective of the labor market, and from the perspective of the value reflected by the service. There are more than one researcher who have argued that quality has dimensions, and these dimensions are diverse. The opinions of researchers vary in the number of basic dimensions of quality, but the educational institution can study and analyze all

dimensions covered by researchers, and see what suits the educational process more, and what the beneficiaries focus on and focus on, and takes it and focuses on it, and thus it has put its hand on the beginning of the path. Regarding the quality of the educational service variable, the researchers relied on the SERVQUAL scale with its five dimensions (tangibility, reliability, responsiveness, safety, and sympathy), and it measures the actual performance of the service, and it is considered one of the internationally famous standards in measuring the quality of services in educational institutions. Following is an explanation of these dimensions covered by the research in this field (Khan & Naeem, 2018): Tangibility: It relates to the devices used to provide the service, buildings and their manifestations, offices and support services; Reliability: It means the university's ability to provide service on time and meet obligations; Rapid response: responding to requests from beneficiaries, dealing effectively with chest capacity, and initiating their service and welcoming their inquiries; Safety: The ability of the dead to suggest to the recipient of the service means safety and confidence, and that dealing with it is error free; Empathy: It means informing beneficiaries that they are appreciated and cared for.

Karyono (2020) has postulated that there are many dimensions that can be used to measure service quality or service quality. There are at least four service quality measurement concepts: the Nordic Model, the SERVQUAL model, the Three-Component Model, and the Multi-Model. In their research Wasi Bagasworo (2020) measure service quality based on the Multi-Model, which includes three dimensions: quality of interaction, quality of the physical environment, and quality of results. The following reviews the service quality dimensions according to Parasuraman, et al., (1988). Brady and Cronin (2001). Parasuraman et al. (1988) arrange the main dimensions which the main factors are determining the quality of services as follows: Reliability. That is the ability to deliver the promised service reliably and accurately. Responsiveness; Namely the willingness to help consumers by providing fast and precise service; Assurance: That includes knowledge, ability, courtesy or personal kindness, and the ability to gain trust and desire; Empathy: That includes maintaining

and providing individual or personal attention to consumer needs; Tangibles: That includes physical facilities, tools or equipment, price, personal appearance, and written materials.

1.1.8 Universities in Kenya

The Kenyan university sector began in 1963 with less than a thousand students who were admitted in Nairobi University College which began as a constituent college of the University of East Africa. Makerere (Uganda) and Dar-es-Salaam (Tanzania), were its other campuses. In 1970, it became a fully-fledged university and renamed University of Nairobi after receiving its charter, and for a longer period up to 1985, it was the only university in the country (G. O. Odhiambo, 2011). Since then, the university system has undergone some considerable expansion and the number of universities in the country both public and private have increased tremendously. Currently, there are 31 public chartered universities, 6 public constituent colleges, 18 private chartered universities, 5 private constituent colleges and 14 institutions granted interim authority letters.

Universities play a fundamental role in mentoring of the human capital which is key to Kenya achieving its strategic goal of Vision 2030. The Universities Act 2012 creates the Commission of University Education, to plan for the establishment and development of higher education and training. It also created the University Funding Board to coordinate universities financing, whereas The Kenya Universities and Colleges Central Placement Service, was to handle admissions to public universities and colleges; and The Technical and Vocational Education Funding Board (Kenya, 2008).

It would stand to reason that with so many creative and highly educated people, colleges and universities would be institutions of innovation. Students, independent-thinking professors, specially trained administrators, middle level managers and institutional leaders exemplify this visionary segment (Borins, 2002). The challenge has been to harness that intelligence and creative energy into developing a culture of innovation. They have failed to thrive and survive in the dynamic and highly competitive

environment and subsequently failed to achieve organizational performance through provision of quality services due to failure to adapt through innovative products and services. They also lack a committed and visionary strategic leadership to attain their goals (Shisia, Sang, Matoke, & Omwario 2014). The difficult financial difficulties experienced by universities have grossly affected their performance outcomes which would otherwise have been better with the availability of the much-needed resources.

The choice of public and private universities as the focus of this study was premised on the fact that they have considerable flexibility and can easily evolve into innovation institutions if an enabling strategic leadership is put in place. Further, being the engine of the nation's economic growth and development, they have the potential for expansion and also to collaborate with other partners in the industry who can enhance their efforts. They are also the primary vehicles through which knowledge is absorbed, transformed into goods and services, and then diffused throughout the economy (Juma, 2016).

The contribution of university education to sustainable development of society has become one of the most important activities of higher education institutions. After 55 years of independence, it is time to take a critical look at the role of university education in nation building in Kenya. Since independence, access and difficulties of maintaining standards of quality and efficiency with marginal available resources- more recently highlighted by a commission on higher education report- have been some of the key challenges in university education and these have impacted on the sector's contribution to the country's development (Odhiambo, 2018). The key stakeholders in universities are non-teaching staff, teaching and research staff, authorities, students, providers, graduates, recruiters, competitors, local communities, partner organizations and public/governmental entities. Other critical stakeholders within the university fraternity are the parents and family of students, the academic and administrative staff as well as the society, all of whom do experience different quality views of the higher education institutions (Trivellas & Dimitra, 2009).

Because of these many stakeholders, the university has become an aspiration for the rising peoples to achieve their aspirations and goals, and it has become the main gate through which contemporary societies implement the bridge of progress and progress that leads to the highest and highest levels of pride and dignity to a fertile land of science and technology that prevails in today's world. The university is no longer independent from its environment. Rather, it has become a societal institution that affects and is influenced by the political, economic and social conditions of society, and reflects the developments experienced by this society (Alayoubi et al., 2020).

1.2 Statement of the Problem

Universities all over the world are expected to be characterized by quality and excellence, equity, responsiveness, effective and efficient provision of services, good governance and excellent management of resources (Juma, 2016). However, Kenyan universities fall short of these expectations due to a number of challenges that hit them from various fronts. Among the challenges facing universities are lack of strategic leadership, governance and proper management (Sifuna, 2012), environmental challenges like competitive forces from the domestic as well as international education providers, from all education institutions that are either public or private (Mathooko & Ogutu, 2015), have not adapted innovative products and services (Shisia *et al.*, 2014), and continued reduction of government funding (Mbirithi, 2015). They are struggling to meet their financial obligations and are poorly governed with warped strategies that have driven potentially solid institutions into debt and discomfort of technical insolvency. Most universities have been forced to survive on commercial bank overdrafts (Mutai, 2017). In addition, Kenyan universities have ranked lowly internationally compared to universities in other countries in terms of quality standards (Oduor, 2017). This worrying trend is responsible for the continued decline in the performance of universities in Kenya (Gudo, 2016; Shisia *et al.*, 2014; Sifuna, 2012; Wangenge-Ouma, 2008).

Notably, these institutions have people with plenty of readily available knowledge and skills who are at the center of service improvements that is made up of self-motivated professors, highly trained administrative staff, middle level managers and other institutional leaders. Stakeholders in Universities have increasingly continued to demand for quality services from these institutions (Smith and Smith, 2007; Yeo, 2008). The problem however remains that they have been unable to offer quality services outcomes (Alzaydi, Alhajla, Nguyen, & Jayawardhena, 2018). They also lack strategic leadership that can harness the available resources innovatively in a bid to address the many challenges faced. Sifuna (2012) contends that the many challenges being faced by higher education in Kenya and other African countries, can be addressed through innovative, organizational and leadership approaches that are required to tap into the individual and collective stakeholder creativities and competencies in pursuit of core university functions.

Most existing studies on strategic leadership and innovation have dwelt on the direct relationship of these variables independently on quality service with varied findings that have been based on other sectors other than in universities (Elkomy, Murad, & Veleanu, 2020; Hirtz, Murray, & Riordan, 2007; Satti, Babar, Parveen, Abrar, & Shabir, 2020; Sok & O'Cass., 2015). Moreover, they have looked at the two variables of strategic leadership and service quality in isolation with no attempt to have innovation mediate the relationship between strategic leadership and service quality. Such mediation is critical because the presence of strategic leadership alone does not invariably lead to high performance because some other organizational factors may be involved (Jaleha & Machuki, 2018). Additionally, the majority of the studies in higher education service quality have focused on student's view of quality, while little attention has been paid on the perspective of academic and administration staff. Besides, few researchers have empirically tested measurement instruments of service quality referring to teaching processes as well as administration services. Owlia and Aspinall's (1996) have advocated for the synthesizing of two frameworks of service quality measurement that espouse theoretical framework of quality dimensions with an emphasis on teaching

aspects of education (academic resources, competence, attitude, and content). Waugh (2001) model of administrative and supportive services quality (reliability and responsiveness, assurance and empathy). This study on strategic leadership, innovation and service quality in accredited universities in Kenya has been conducted against this backdrop.

1.3 Research Objectives

1.3.1 General Objective

The general objective of this study was to examine the mediating role of innovation in the relationship between strategic leadership and service quality of accredited universities in Kenya.

1.3.2 Specific Objectives

1. To determine the effect of human capital on service quality of accredited universities in Kenya.
2. To establish the effect of core competencies on service quality of accredited universities in Kenya.
3. To assess the effect of strategic direction on service quality of accredited universities in Kenya.
4. To examine the effect of strategic leadership on service quality of accredited universities in Kenya.
5. To determine the mediating effect of innovation on the relationship between strategic leadership and service quality of accredited universities in Kenya.

1.4 Research Hypotheses

To achieve the general objective, the following hypotheses were proposed.

H₀₁: Human capital does not have significant effect on service quality of accredited universities in Kenya.

H₀₂: Core competencies does not have significant effect on service quality of accredited universities in Kenya.

H₀₃: Strategic direction does not have significant effect on service quality of accredited universities in Kenya.

H₀₄: Strategic leadership does not have significant effect on service quality of accredited universities in Kenya.

H₀₅: Innovation does not have significant mediating effect on the relationship between strategic leadership and service quality of accredited universities in Kenya.

1.5 Justification of the Study

The aim of this study was to examine the mediating role of innovation in the relationship between strategic leadership and service quality of accredited universities in Kenya. Role of innovation as a mediator in the relationship between strategic leadership and service quality of accredited universities in Kenya. The study's findings will be valuable to the following categories; university management teams, academicians and researchers, and policy makers. The empirical information this study provides, will be particularly useful to the leaders in university management teams in Kenya, who will be made to realize the importance of implementing strategic leadership practices highlighted in this study to assist them in addressing the various management challenges faced by universities. They will be able to select the best option for increasing their

performance from the innovative options discussed here. Researchers and academicians will benefit in terms of increased theory building, and also increased body of knowledge in this field and also for practice. The study contributes to the growing knowledge base in the context of universities, on the relationship between strategic leadership, innovation and service quality. The findings of this study are expected to inspire policy makers, to appreciate the benefits that accrue out of embracing strategic leadership, innovative practices and also its effect on service quality of universities. The resultant information may provide useful inputs for enhancement of policy development in the sector, as well as provide viable opportunities to revise policies related to issues touching on universities. The choice of universities as the focus of this study was premised on the fact that Universities are critical sources of innovation in the society. They have people with plenty of readily available knowledge and skills who are at the Centre of service improvements.

1.6 Scope of the Study

This study touching on strategic leadership, innovation and service quality was conducted in all the 74 public and private universities accredited by the Commission of University Education in Kenya, to provide university education, and was conducted between January 2018 and June 2021 as indicated in Appendix schedule iv, through cross-sectional and explanatory research design. It involved collection of data by the researcher and two assistants using questionnaires from 222 respondents purposively selected from all the public and private universities in Kenya because of time constraints. The unit of inquiry of data collection was the deputy vice chancellors in charge of administrative division, academic division and finance officers or managers of public and private universities in Kenya. The unit of analysis was the university. Specifically, this study aimed at examining the role of innovation in the relationship between strategic leadership and service quality of accredited universities in Kenya. Although there are other strategic leadership practices which have been employed to address performance outcomes in previous studies, this study focused only on

determining the role of human capital, maintenance of the core competencies, and development of strategic direction on the performance accredited universities in Kenya. Administrative, service and technological denote innovations in universities.

1.7 Limitations of the Study

This study used a cross-sectional research design methodology that collected data at one point in time from a single service sector, that is, universities in Kenya and this makes generalization of the findings to other sectors to be difficult. Conclusions and directions of causality arising from the interactions among the variables were deduced cautiously, because even interpretations of models using structural equation modeling does not provide evidence for actual causality. A longitudinal study which collects data over a long period of time, can satisfactorily test statistical models to provide factual causal inferences. This could have an effect of assessing whether with lapse of time, the perception of service quality changes or not.

1.8 Delimitations of the study

This study on Strategic Leadership, Innovation and Service Quality of Accredited Universities in Kenya was conducted using both cross-sectional and explanatory research designs on all the 74 universities in the country who have been given accreditation by the Commission of University Education to offer university education in Kenya. Census survey was used as the research methodology, and this is in line with Kothari (2009) who contends that census survey is the most appropriate where the universe is small. This is supported by Odera (2017) in his study on the effects of strategic leadership on organizational performance within private universities in Kenya, advocated for a census study for a study of this magnitude. This essentially led to conducting this study on both the public and private universities in the country. Three respondents in each of the universities included the Deputy Vice Chancellors in Academic division, Deputy Vice Chancellors of Administrative division and Finance Officers/Managers, as the key informants or units of inquiry. The university was the unit

of analysis. The distribution of these three questionnaires to the respondents in both academic and administrative managerial categories in the sampled universities was deemed sufficient in line with previous studies by Bontis, Crossan, and Hulland (2002) where key respondents were employees in managerial positions based on the fact that they possess sufficient knowledge in regard to issues under investigation.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents literature related to the study, theories guiding this study, the conceptual framework, and theoretical framework.

2.2 Theoretical Review

A theoretical review of the theories that underlie a study is important for an academic research (Kitonga, 2017). A theory is a set of systematic interrelated concepts, definitions, and propositions that are advanced to explain and predict phenomena (facts) (Cooper & Schindler, 2011). According to Kombo and Tromp (2006), theories provide indicators and examples of what is incorporated in the framework and theories are used to guide the work and help interpret the findings (Kitonga, 2017). Four theories guided this research: Upper Echelons Theory (UET), Dynamic Capabilities Theory (DCT), Trait Leadership Theory (TLT) and Resource Based View theories (RBV). The theories are investigated and discussed with reference to the variables of this study. The theoretical orientation for this study is anchored on RBV theory as advanced by Barney (1986). A brief discussion of these theories is presented in the following sections.

2.2.1 Upper Echelons Theory

Hambrick and Mason propounded the upper echelons theory in 1984. The proponents of this theory affirmed that organizational outcomes were a reflection of the strategic leaders' knowledge, experience, and expertise (Kitonga, 2017). The proponents of this theory argued that top managers' values and the combined synergistic cognitions are greatly shaped and rely on their personal experience, which apprise strategic moves and, to some level, organizational outcomes (Hambrick & Mason, 1984). Top managers' specific knowledge, experience, values and preferences will greatly influence their

assessment of the external environment, and in the end, the choices they opt for, in terms of organizational strategy (Phipps & Burbach, 2010). Strategic leadership practice and organizational performance are reliant on executives' knowledge, experience, and skills. Organizations in the long run becomes a reflection of the cognition and values of their top leaders (Phipps & Burbach, 2010).

Hambrick and Mason (1984) advanced the debate for leadership in the strategic management field. Their ideas on upper echelon theory inform our comprehension of strategic leadership and organizational performance (Kitonga, 2017). This theory asserts the strategic leadership standpoint's perceptions by using demographic characteristics and deductions of strategic leadership behaviour to improve our understanding of the concept (Elenkov, Judge, & Wright, 2005). Age, working experience and educational background are important factors that determine the demographic characteristics of managers who advocate strategic leadership practices in the organization (Kitonga, 2017).

Boal and Hooijberg (2001) hold that strategic leadership essentially entails a leader's capability to generate and uphold three capabilities within the organization: absorptive capacity (or the willingness to learn), adaptability, and the capacity for managerial wisdom. Hitt, Ireland and Hoskinsson (2010) postulate that strategic leaders provide for self-growth, by adapting to change and motivating others to advance upwards by granting them greater control over their activities. They correlate strategic leadership with envisaging and projecting environmental transformations. In the context of this study, this theory offers a framework for viewing strategic leaders as wise, experienced and educated change agents that serve as a key resource with the ability to enhance service quality. Owing to their capacity to initiate changes, top leaders in universities can use upper echelons theory to guide, empower and motivate their staff to be innovative through appropriate strategic leadership practices to improve the performance of their institutions. (Kitonga, 2017; Kuchio, 2012; Lear, 2012; Witts, 2016) are researchers who have used this theory in their studies.

2.2.2 Dynamic Capabilities Theory

The dynamic capabilities concept has largely been developed under the influence of two main papers –Teece, Pisano, and Shuen (1997); Eisenhardt and Martin (2000). Teece et al. (1997) Considered dynamic capabilities role in firm strategy and performance to be a firm's ability to address rapidly changing environments, integrate, build, and reconfigure internal and external competencies. Whereas Eisenhardt and Martin (2000) understood dynamic capabilities as specific strategic processes, the emergence of the dynamic capabilities view was a reaction to the deficiency of both the resource-based and the action-based view (Mintzberg, Lampel, Quinn, & Ghoshal, 2003) in the new conditions of an economy of knowledge and innovation.

The dynamic capabilities approach tends to guide managers on creating distinctive and difficult-to-imitate advantages and to avert losing customers to the competition. Teece (2007), used the term dynamic capabilities to stress the firm's ability to exploit internal and external firm- specific competencies to address the dynamic environment. The majority of studies on dynamic capabilities argue that dynamic capabilities are most valuable when the external environment is changing rapidly or unpredictably (Teece et al., 1997; Teece, 2007) or regularly (Eisenhardt & Martin, 2000).

The Dynamic Capabilities Theory (DCT) expounds on two fundamental issues that were not clarified in other strategy approaches, such as the resource based view; the first being the firm's ability to renew competencies to enable adaptation to changes in the business environment, and the second being strategic management's ability to use these competencies to match the requirements of the environment (Teece et al., 1997). As a consequence of the resource based view perspective's failure to adequately explain how and why certain firms have competitive advantage in situations of rapid and unpredictable change (Eisenhardt & Martin, 2000) Dynamic Capabilities approach is proposed, in which Dynamic Capabilities become the source of sustained competitive advantage (Teece et al., 1997). In this sense the DCT supplements to the resource based view by attempting to improve theory by explaining the nature of sustainable

competitive advantage, as well as informing managerial practices (Teece et al., 1997). Essentially, the DCT makes an attempt to leverage on firm-specific capabilities in order to achieve a competitive advantage, and it subsequently explains how these capabilities are developed, deployed and protected (Teece et al., 1997).

The organization's values, culture, and collective ability to quickly implement a new business model or other changes are integral components of dynamic capabilities (Teece, 2010b). These will have gradually developed with time, taking a path that is unique to each organization. The dynamic capabilities approach expounds why intangible assets, for instance an organization's collective knowledge and capabilities, have become the most valuable class of assets in a number of industries (Hulten & Hao, 2008). This is mainly because knowledge, capabilities, and other intangibles are not only scarce, but are also difficult to imitate.

Learning, combining resources, and leveraging complementary assets, altogether support the development of capabilities. Many capabilities become embedded in routines, and some are designated for the topmost management team. Organizational capabilities can usefully be classified effectively into two interconnected (but analytically distinguishable) categories: ordinary capabilities are principally operational in nature, whereas dynamic capabilities are generally strategic (Teece, 2019) Ordinary capabilities, which comprise operations, administration, and governance of the firm's activities, allows the firm to produce and sell a defined set of products and services. Ordinary capabilities are embedded in some combination of (1) skilled personnel; (2) facilities and equipment; (3) processes and routines; and (4) the administrative coordination required to have the job done. (Teece 2019) Dynamic capabilities are the higher-level capabilities that differ from ordinary capabilities in aspects of priority, availability, imitability, overall objective and results of their application by firms.

The choice of this theory to this study is based on two aspects. First, the theory has defined and demonstrated the ability of dynamic capabilities in timely responsiveness to market dynamics and speedy product innovation (Teece et al., 1997). The leadership in

universities can achieve this through recognizing and appreciating existence of internal knowledge, developing professional competencies and changing the mindset of the employees to adapt to the changing business environment. Secondly, previous studies have utilized the theory in establishing how dynamic capabilities and not ordinary capabilities have influenced organizational performance. This is supported through a study by Mbugua (2015) on firm orientation, firm characteristics, dynamic capabilities and performance of deposit taking savings and credit cooperative societies of Kenya which provided evidence on the positive effects of dynamic capabilities on organizational performance. Also, Nyanchanchu (2018) conducted a study on dynamic capabilities, leadership behaviour and performance of firms engaged in manufacturing in Nairobi, Kenya, where it concluded that dynamic capabilities influence firm performance and that leadership behaviour has a significant effect on the dynamic capabilities and firm performance relationship. Zahra and George (2002) asserted that dynamic capabilities, which firms can utilize to integrate, build and reconfigure internal and external resources, are responsible for long-term firm performance and competencies to match the rapidly changing environments.

2.2.3 Trait Leadership Theory

Trait leadership theory emerged as a result of the studies by Bernard (1926); Stogdill (1948); Mann (1959); McCall and Lombardo (1983); Kirkpatrick and Locke (1991). This essentially makes the trait theory one of the oldest approaches in the leadership trait paradigm and has dominated the initial decades of scientific leadership research in the early 20th century. This theory is anchored on the traits or the individual characteristics of leaders, centering on what a strong leader is than what a strong leader does (Kitonga, 2017). The trait approach, which originated from the 'great man' theories, argued that certain personality characteristics distinguish leaders from non-leaders (Hernandez, Eberly, Avolio & Johnson, 2011).

Hernandez, Eberly, Avolio and Johnson (2011) have postulated that trait theory helps in identifying traits and qualities that are instrumental when leading others. Such traits may

include honesty, responsiveness, decisiveness, good decision-making skills, and likability. Extant literature pertaining to trait theory have established that certain trait significantly influences organizations performance and effectiveness (Northouse, 2013). Equally, several studies on leadership traits, have highlighted criticisms on this theory. For instance, a study performed on failure and achievement by McCall and Lombardo (1983) recognized four main traits through which one can fail or thrive: how one is composed or stable emotionally: how confident or calm one is under a stressful challenge, how one agrees to mistakes, how one takes up responsibility for mistakes, adequate relational skills: excellent communication and persuasion skills: masterly of extensive range of disciplines instead of a narrow-focused expertise.

In a bid to address this debate on traits, five traits notably intelligence, self-assurance, determination, integrity and sociability have been identified as key to transforming organizations (Northouse, 2013; Zaccaro, 2007). They make leaders to discharge and perform their duties effectively. Additionally, (Derue, 2011), argues that even if many of these traits have been researched by many scholars, majority of them categorizes these qualities as: intellect, diligence, appetite for risk, and emotional maturity. Key among the traits is to be a good communicator, ability to make excellent decisions and empathy in various situations.

This theory is relevant to this study to the extent that the key leadership traits which various scholars have identified as critical for effective leaders, bond well and complement strategic leadership practices. Leader effectiveness is the extent of inspiration a leader has on how an employee or employees perform, how they are satisfied, and how effective they are (Derue, 2011). Similarly, strategic leadership has the ability to influence the opinions, attitudes and behaviours of others (Hitt & Duane, 2012). Both these definitions harbor an element of inspiring and influencing employees, essentially guiding the organization to the correct strategic direction path. Therefore, this theory helps in underpinning organizational performance in terms of achieving desired service quality to the stakeholders.

2.2.4 Resource Based View

This study on strategic leadership, innovation, and service quality falls within the purview of RBV. RBV was initiated in the mid-1980s by Barney (1986). The key assumption of this theory is that an organization is seen as a bunch of intangible assets and capabilities (Peteraf & Bergen, 2003). The resource-based theory underscore the roles of external and internal sources of knowledge and the firm's capability to integrate them to gain distinctive competencies (Damanpour, 2017). For Barney and Clark (2007), the terms resources and capabilities are used indiscriminately. Organizational resources are classified into four categories (capital): (1) physical capital resources, (2) financial capital, (3) human capital, (4) organizational capital (Barbosa & Leandro, 2012). (Barney, 1991) suggests that internal firm resources which are valuable, rare, and inimitable and not having strategically equivalent substitutes can provide sources of competitive advantage.

The ability to adapt and develop strategic leadership approach is a critical aspect that affects outcomes in organizations. This makes innovativeness which manifests itself through the tangible and intangible resources and normally ingrained in particular culture, to be one of the leading pillars that enhances performance in organizations (Serfontein, 2010). Leaders in universities can utilize the uniqueness of available resources within their institutions, especially the diverse skills mix within the human capital to significantly influence the effectiveness, efficiency, and competitiveness of the organization. In order for a resource to attain some competitive advantage it has to be rare and inimitable. Therefore, in terms of hiring of its human capital, leaders in universities can strategically aim at sourcing for individuals with high skills and superior ability with valuable, rare and inimitable traits and who can help inject innovative aspects into the organization. The strategic leaders in universities could use these unique resources within their institutions to describe the performances differences between performances of the different institutions. Additionally, the universities' leadership can prioritize for training of its internal manpower with an aim of upgrading

their knowledge and skills, and also attracting individuals with superior capabilities who can help them achieve their strategic vision and mission.

Various researchers have advanced different criticisms on the RBV theory. RBV's main thrust gravitates around internal resources that are scarce, unique, and non-substitutable. This is a blurred statement as it becomes hard to infer the impact they have towards innovation and service quality. since it is not easy to construe what these resources exactly are and how they relate (Tsai, 2001). Others broadly point out the following limitations of RBV: lack of specificity about the required resources to accumulate in order to achieve a competitive advantage; it does not provide a clear definition of competitive advantage; and it has some tautological problems. Other critics point out that the four conditions of rarity, value, inimitability and non-substitutability are essential but inadequate conditions of sustainable competitive advantage. In the current business environment, resources alone are not sufficient. Previous researchers that have used the resource-based view are (Jaskyte, 2017; Kising'u, 2017; Witts, 2016).

2.3 Conceptual Framework

A conceptual framework, according to Ravitch and Mathew (2017), is an aggregation of the researcher's favorite explanations for phenomena. It provides an overview of how different concerns in the research effort are imagined and their relationships; it is also known as a research framework (Kandiri, 2014). According to (Sawang & Unsworth, 2011), the research study gains a deeper grasp of the entire process under inquiry through the challenges produced in establishing the conceptual framework.

The schematic diagram presented in Figure 2.1 shows the relationship between three variables of the study namely strategic leadership (independent variable), innovation (mediating variable) and service quality (dependent variable). Strategic leadership is defined by three elements being the indicators for this study; human capital development, maintenance of core competencies and determination of strategic direction propagated by (Hitt *et al.*, 2010; Jooste & Fourie, 2009). These variables are assumed to

influence the dependent variable. The extent to which strategic leadership influences service quality is mediated by innovation (administrative, service and technological innovations). Mediating variable is used because it is deemed to have an effect on the relationship between the independent and dependent variable. Service quality (dependent variable), is indicated by tangibility, reliability, responsiveness, empathy and assurance.

CONCEPTUAL FRAMEWORK

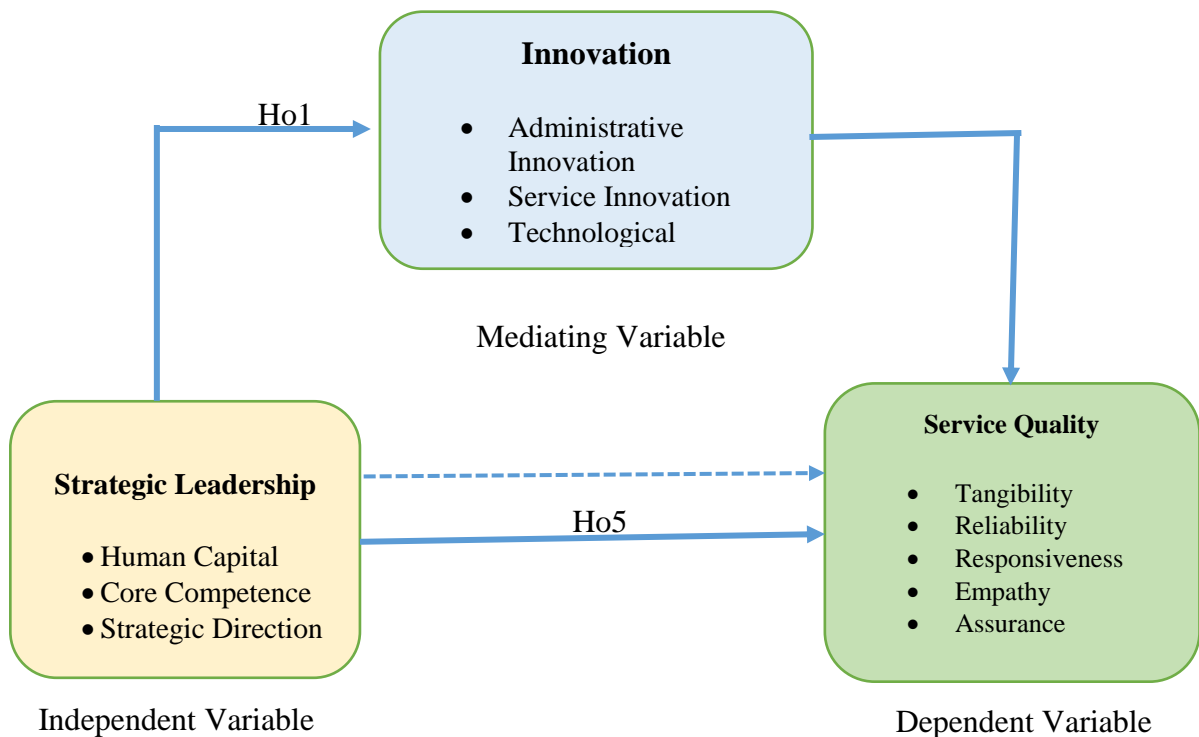


Figure 2.1: Conceptual Framework

The model in the conceptual framework in figure 2.1 above depicts that strategic leadership is hypothesized to influence service quality. It also indicates that this relationship is mediated by innovation. Strategic leadership is defined by human capital,

core competencies and strategic direction and service quality is indicated by tangibility, reliability, responsiveness, empathy and assurance. Innovation is defined as administrative, service and technological innovation. Service quality is shown as the dependent variable, while strategic leadership and innovation are categorized as the independent variables, which have a direct and mediating effect on the dependent variable respectively.

According to the (OECD, 2005), innovation is the implementation of a significantly improved product or service, a novel organizational or marketing strategy, or even new external variables and workplace organization. The appropriate and necessary conditions to enable innovation for sustainability in higher education institutions are indicated by decisive leadership on strategic direction, regular, flexible, and inclusive planning, regular surveys of the culture and climate, continuous progress monitoring, and strategic innovation agility (Zenia & der Derek, 2016). According to earlier research, companies need to have a significant capacity for innovation in order to provide customers with value-added goods and services (Aluede et al., 2006; Vega-Vazquez et al., 2012). The body of research (Hatak, Kautonen, Fink, & Kansikas, 2016; Kijkasiwat & Phuensane, 2020; Yousaf et al., 2020) demonstrates the beneficial relationship between organizational innovation and performance.

This study, like previous empirical research, offers innovation as a potential mediator in the relationship between strategic leadership and service quality. Vincent, Bharadwaj, and Challagalla (2004), for example, conducted a meta-analysis to analyze the factors and results of organizational innovation. Consequently, there was a mediation influence of organizational innovation on the relationships between financial performance and organizational components such as organizational culture and market orientation. The mediating effect of organizational innovation on the relationship between knowledge management and business performance was documented by (Byukusenge, Munene, & Orobia, 2016). Similarly, organizational innovation was found to be a mediating factor in the connections between transactional and transformational performance and organizational performance (Zumitzavan & Udchachone, 2014). The relationship

between management leadership and business performance was found to be significantly mediated by firm innovativeness, according to Zehir et al. (2012) and Feranita, Gumanti, Wahyudi, and Puspitaningtyas (2017), who revealed similar findings in the context of Indonesian small and medium-sized firms (SMEs).

2.3.1 Human Capital Development and Quality Service

Human capital refers to the knowledge and competencies of an organization's entire workforce (Hitt, Ireland & Hoskinsson, 2010). Human capital development is defined as the success of an organization's efforts to realize the full potential of its workforce (Sunder & Sunder, 2016). Strategic leadership has a key role of administering over human and social capital (Hitt & Ireland, 2002). According to Sirmon, Hitt, and Ireland (2007), strategic leaders ensure that strategies that influence proper utilization of organizational resources are put in place to attain a competitive edge and they also oversee the organization's range of resources, transforming them into competencies, reorganizing the organization to utilize the competencies. Strategic leaders consider the organizational employees as an overriding asset that enable organizations to achieve a competitive edge and through whom capabilities are developed (Serfontein, 2010). Capabilities are difficult to be attained and utilized efficiently if suitable human capital are not available. Training and development programmes are critical to developing human capital (Lear, 2012).

There is no single organization that can achieve its aspirations without engaging and maintaining accomplished employees with necessary abilities (Kitonga, 2017). Barney (1991) Contended that competitive edge can be realized by the human capital when four basic requirements are met. First, personal efforts must be able to augment the organization's returns. Secondly, employees' abilities must be rare and enhance able within particular surroundings. Third, employees' total human asset should be inimitable by rival firms. This can be realized by contrasting investments in manpower within particular areas with those of rival firms which can otherwise increase chances of imitation. Lastly, in order to attain a competitive edge, a firm's human assets should not

be prone to substitutes by technological improvements or other alternatives (Barney, 1991).

Nel (2008) is also persuaded that one of the key issues in organizations, is understanding the need to develop new skills, attitudes and knowledge to enable people handle new challenges and circumstances. Additionally, Lear (2012) asserts that exemplary leaders endowed with the gift of synchronizing human resources with business strategy and their leadership planning is a reflection of their strategic thinking. However most organizations have failed to appreciate the critical role employees play and have not availed them with sufficient opportunities for furthering their skills whose benefits would be of significance to the organization and its stakeholders (Serfontein, 2010). When employees have been offered these opportunities, they will enhance their foundations of knowledge and be able to share their experiences with the communities around them (Serfontein, 2010). This would have a compounding effect of generating an inspired and skilled manpower which can yield the desired results (Miller, 1996).

Oseremen and Olley (2022) have observed that due to most firms' inability to keep up with the quick changes in external factors as a result of a lack of proper training and development programs for their personnel, many big Nigerian financial institutions have struggled as a result of low worker quality. Ineffective human resource management has a detrimental influence on the quality of service provided by these employees, and bad turnover management has a negative impact on the degree of employee engagement in these organizations. All of the challenges mentioned jeopardize the organizations' long-term aims and aspirations.

Raising workers awareness of issues, involving them in solving problems and improvement of processes, are attainable ways of making workers to be committed to quality (Zelnik et al., 2012). Workers should be trained to inspect, their work, identify problems and suggest solutions (Sharabi, 2013). One possible reason for the poor service quality excellence could be found in the need for training, as it pertains to the lecturers and administration staff (human resources) (Tetteh, 2019). Several other articles identify

training and development at all levels as the single best strategy to improve and shape human resource positive attitudes toward service quality excellence (Ebrahimpour, 1985). Making reference to workers as small-minded validates that tag, and adds their indifference and lack of concern by them; and so, empowering employees highly boosts their involvement and commitment (Dewettinck & Ameijde, 2011). Additionally, the required resources to attain quality goals crafted wholesomely with workers, have to be availed. Demanding quality from workers yet at the same time denying them essential means and equipment discourages the worker and results in conflicting results (Demming, 2000). Investing in employees and quality tools will result in a quick return on investment. The worker's quality of life is equated to the quality of the product/service. A worker who is mishandled and who also gets insignificant investment, will not deliver quality results (Sharabi, 2013). The following hypothesis was proposed:

H01: Human capital does not have significant effect on service quality of accredited universities in Kenya.

2.3.2 Core Competencies and Quality Service

In management philosophy, core competency is a notion of Prahalad and Hamel (2012) characterized this as a "coordinated blend of varied resources and abilities that differentiates a corporation in the marketplace. Three factors must be met in order for core competences to be considered: Access to a diverse variety of markets is accessible; this contributes greatly to the perceived consumer benefits of the final product, which competitors find difficult to replicate. A number of academics have sought to define competence. According to Faerman, Thompson, and McGrath (1990) engaging tasks or projects were connected to skills. Cardy and Selvarajan (2006) stated that previous research' perspectives on competencies were the traits that could significantly separate high-qualified persons from those who performed poorly. Prahalad and Hamel demonstrate in their 1990 essay, "The Core Competence of the Corporation," that core competencies lead to the production of core goods, which may then be leveraged to

generate a variety of products for end customers. Constant improvement over time, rather than a single huge shift, is how core capabilities are developed over time. Vertical integration is less crucial than the development of basic competencies in a quickly changing global economy. According to Prahalad and Hamel (2012), collective learning throughout the organization is a key competence. They are only applicable to corporate resource allocations since the SBU lacks the resources to execute them. Avoid watering down the idea of "core competency" since it is frequently used interchangeably with "something a company is exceptionally strong at."

Core competence, which has been introduced into the literature roughly twenty five years ago, is a strategic issue for firms. Its meaning can be summarized as "what a company does best." (Arikan, 2016). Core competencies are the integration of knowledge capital, human capital, financial and non-financial capital of the organizations. These assets are the sources of strategic competitive position of organizations in the marketplace. Organizational core competencies are crucial dimensions of the corporate strategic management process. For this reason, core competencies contribute to organizations in providing a powerful competitive advantage (Enginoglu & Arikan, 2016). A company's source of competence may originate from a range of sources, such as modern technology or managerial skills. Organizations are frequently distinguished by their capacity to develop, coordinate, and integrate their competences in order to perform at a high level. As a result, the accumulation of experiences, talents, and derived abilities in the organization's outstanding human and technology resources is a significant and important aspect in the organization's strategy, resulting in the organization's support and enhancement of its competitive position (Leontiades, 2001).

The term "core competencies" was introduced to Baldrige Glossary Definition on late 2007 which define it as an organization's areas of greatest expertise. An organization's core competencies are those strategically important capabilities that are central to fulfilling its mission or a distinctive competence that provides a firm a competitive advantage in its industry (Baldrige Glossary Definition, 2007). Core competencies

frequently are challenging for competitors or suppliers and partners to imitate. Absence of a needed core competency may result in a significant strategic challenge or disadvantage in the marketplace. Core competencies may involve technology expertise, unique service offerings, a marketplace niche, or particular business acumen (e.g., business acquisitions). Core competencies focus on an organization's internal capacities and deep proficiencies that enable a company to deliver unique value to customers. Core competencies also contribute substantially to the benefits a company's products offer customers (Masa'deh et al., 2008; Nair, 2014; Kateb et al., 2015). The distinguishing characteristic of an organization's core competencies are that they develop overtime and represent the continual accomplishment of a firm's critical success factors over time. Another distinguishing characteristic of a core competency is that it's hard for competitors to copy or procure (Rigby, 2015).

Resources and capabilities constitute core competencies that differentiate an organization from its rivals and also gives it a competitive edge. The mix of an organization's resources that can be aptly determined as core competencies are those that are valuable, rare, but also expensive to imitate, and for which there exists unmatched strategic alternatives (McMillan, 2010). Innovation is an indispensable requirement for every organization (Gaynor, 2002). This view is supported by Lin and Marvis (2007) who have stated that one of today's business global competencies is innovation. For innovation to succeed, a complicated set of capabilities, including knowledge resources, technological abilities, and attachments to stakeholders and markets are needed. Strategic capabilities rather than short-term specific capabilities are associated with deep-rooted characteristics central to an organization (Ritter & Gemünden, 2004).

The competitiveness of organizations is based on its ability to develop core competences in the long run (Alexander & Martin, 2013), core competencies are the drivers for developing innovative (core) products and/ or services that minimize costs and maximize speed more than the competitors (Yang, 2015). Competency is a set of skills, attributes, behaviors, techniques, knowledge and abilities that are directly related to

successful performance on the work that are considered an important element for all employees in all managerial levels (Bani Hani, 2014). According to Wheelen et al. (2019), a competency is a cross-functional integration and coordination of resources and capabilities. They distinguish between core competencies and distinctive competencies. Core competencies are a collection of competencies that cross-divisional boundaries, is widespread throughout the organization and is something the organization does exceedingly well, while the distinctive competencies are core competencies that are superior to those of the competitors. An organization core competency is an organization's strategic strength. Core competency is what the organization does the best internally and never outsource (Whittington, et al., 2020). Barney and Hesterly (2021), in their VRIO framework of analysis, proposes four criteria to evaluate a firm's competencies; valuable, rareness, imitability, and organization. The concept of core competence is a complex and challenging concept, a strategic foundation for renewal, and a driving force behind strategic change, which motivate interests both managers and researchers (Barney & Hesterly, 2021; Wang et al., 2004; Aljawarneh& Al-Omari, 2018). Core Competency is a set of strengths, experience, knowledge and abilities that differentiate a organization from its competitors and provide competitive advantage. Employees should possess these qualities in order to advance business goals (Whittington, Regnér, Angwin, Johnson, & Scholes, 2020).

McMillan (2010) postulates that new technologies, new practices and new realizations are the basis for development of “core competencies” in an organization. Hollenbeck, McCall, and Silzer (2006) have stated that organization as a whole and employees in particular can gain from the wealth of knowledge of established leaders, expertise and from helpful examples witnessed over the years. They add that “competent models” may not necessarily be a panacea of efficient leadership in an organization, but they are a reflection of the aforementioned attributes which they strive to achieve. Strategic leaders require competency skills critical for effective delivery of their duties and functions. Guillot (2003) opines that being visionary, having transformative behavior; being change anticipatory and leaders of change, and fostering a mind-set of change;

critical thinking; novel ideology; effective team building through consensus; effective negotiating; cross-cultural communicators which is both a teacher and a mentor are important qualities needed by strategic leaders for efficient discharging of their duties. Spendlove (2007) states that efficient leadership is depicted by consciousness, resilience, integrity, particularity, conspicuousness, extrovertness, owning up to mistakes and being receptive to others perspectives. He points out that in higher education, attitudes, knowledge, and behaviour are critical capabilities needed for effective leadership.

McMillan (2010) is of the view that in the 21st century, those organizations whose strategic leadership will utilize organizational knowledge to generate more knowledge, will exemplify efficient strategic leadership traits and that knowledge held within an organization is a significant factor that defines the worth of its key assets and highlights its significance as a mover of strategic determinations. In the business realm, a drift is being realised where competencies are increasingly seen as the main component that distinguishes an organization from another (Barbosa & Leandro, 2012). Ruas (2005) categorizes competencies as being either strategic or intermediate. In the strategic dimension, a relationship exists between organizational competencies on one side with the vision, mission and strategic intent on the other. Competencies manifest in the organizations “macro processes” and are perceived as being connected and effective to organizations operations. Strategic competencies are transformed to functional competencies through continuous utilization of strategic and intermediate competencies (Barbosa & Leandro, 2012).

Regardless of the organization, good leadership is vital in determining its strategic direction (Kising'u, Namusonge, & Mwirigi, 2016a; Kitonga, Bichanga, & Muema, 2016a). Coherent development of a long-term vision that projects a five to ten year planning is important for determining the strategic direction of an organization (Lear, 2012). The strategic plan is a reflection of the reputation which an organization wishes to portray progressively (Hitt *et al.*, 2010). Hitt *et al.* (2010) also state that strategic direction is framed within the context of the conditions (i.e. opportunities and threats), and that ideal long-term strategic direction has two parts: a core ideology and an

envisioned future. Ireland and Hitt (2005) had earlier observed that it is solely the responsibility of the strategic leader to decide how the organization will run. The following hypothesis was proposed:

H₀₂: Core competencies does not have significant effect on service quality of accredited universities in Kenya.

2.3.3 Strategic Direction and Quality Service

Lear (2012) defines strategic direction as a long – term roadmap of the organization. Ireland and Hitt (2005), have defined it as a journey through which the objectives of an organization’s strategy are attained. Strategic leadership entails three interdependent activities of which a strategic leader must continually reassess. Determining the vision and mission, designing the organization and nurturing a culture dedicated to excellence and ethical behavior are three correlated tasks which have a bearing on the strategic direction the organization takes, and which a strategic leader must routinely examine (Dess, 2008). Strategic leaders therefore have the duty of mobilizing stakeholders’ commitment, and putting into practice strategies that will achieve the desired outcomes.

The strategic direction elements in the study consists of determination of an organization’s vision, mission, goals and objectives. A vision is the mental picture of a firm’s future state that’s developed through creative imagination and also foresightedness. According to Papulova (2014) vision gives direction, acts as a reference point and indicates where a firm is going and possibly why. The vision statement explains an organization’s intention to accomplish goals and it inspires members, staff and even supporters and it conveys the ideals of the organization (David, 2011; Ozdem, 2014; Taiwo, Agwu & Lawal, 2016). Bart (1998) posited that a mission is a statement of purpose which reveals a firm’s clients, products, philosophy and services. Candemir and Zalluhoglu (2013) alluded that a mission identifies the organization’s sphere of operations by focusing on the products/ services offered and also the market being served. According to Abashe (2016) goals are statements of direction or what

organizations or the organizations sub unit intends to do. According to Koontz (2011) objectives describes a firm's intention to attain something within a given time frame including the available resources. David (2007) referred to objectives as specific results that a firm sought to achieve to pursue its basic mission.

Leadership in organizations are entrusted to develop strategic choices that will give their organizations a competitive edge (Lear, 2012). They should be dynamic in developing strategic choices and intensify their efforts in their endeavor to attain the institutions objectives (Taylor *et al.*, 2008). Schilling (2005) Comments that as all leaders strive to transform an organization's strategic direction, the CEOs also have an obligation to motivate the employees by inspiring them to appreciate why new ways of doing things is good, explaining candidly what benefits abound for both the organization and the employees. Additionally, information regarding the strategic direction of the organization about the organization should be readily accessible to all at all times. It seems to be clear that the task of enjoining everyone rests on individual leader's flexibility and their moral dependability to mould a strategy that significantly impacts on everyone (Drew, 2010). The following hypothesis was proposed:

H₀₃: Strategic direction does not have significant effect on service quality of accredited universities in Kenya.

2.3.4 Strategic Leadership and Quality Service

Strategic leadership is a complex form of leadership in organizations. It means that the leader must have the ability to manage through others. Being a strategic leader requires the ability to anticipate, envision, maintain flexibility, and empower others to create strategic change as necessary. Strategically thinking, a strategic leadership is mandatory to run the ongoing change through continuous improvements to employees and processes used, in other words, their main role is to keep and sustain organizational resources and capabilities while searching for another extended resources that support its strategic goals. Strategic leadership must be alert and carefully make balance between

analytics and process development and human dimension. By and large, the harmonized team leaders and employees that understand common tools, framework, and templates for success, is a very promising future for the organization to start smoothly and grow up very fast. Concretely, the new era of the 21st century requires different leaders to contribute more to their organizations; those leaders face tremendous pressure and challenges such as building peoples' ability to innovate, inspiring others to perform harder, stimulating their high potentials, and understanding of rapidly changing technological advancements. Therefore, leaders require more skills, knowledge, capabilities, abilities, and competencies that would certainly achieve organizational strategic goals.

Strategic leadership is an important variable that affects service quality.

Strategic leaders have increased positive expectations of the performance of their superiors, peers, subordinates, and themselves (Hoskinsson, Hitt & Duane, 2013). Strategic leadership design is an integrated set of activities that enhances an organisation's capacity for change and ability to perform. Four critical elements must be incorporated in order to develop and maintain this capacity: the commitment to the organisation's purpose, the makeup of the top management team, the capabilities and motivation of people throughout the organisation and a combination of well-chosen strategic initiatives that can drive the organisation forward (Wheeler, Walter, & Art, 2008). Effective strategic leadership can thus help organisations to enhance performance through provision of quality service while competing in troubling and volatile environments.

Thompson, Strickland, and Gamble (2004), avers that the process of strategic leadership is top - down and vision driven which begins with the leader as a change agent to diagnose the situation and then deciding which of several ways to use to get things done in achieving targeted results thus performance. Strategic leaders are change agents whose success is measured by how effectively they implement strategic vision and mission on a defined path to enable the organization attain her goals (Dess, 2005).

Further, Daft (2011) has stated that strategic leaders think strategically and initiate changes that will create a competitive advantage for the organization in the future. As every firm invariably faces challenges from both change and stability, a strategic leader should identify and exercise the appropriate leadership behavior for any circumstance (Vera & Crossan, 2004).

Strategic leaders operate in an environment that demands unique performance requirements for making consequential decisions. If we look more closely at this environment, we discover four characteristics that define the challenge to strategic leadership in a narrow sense: tumultuous, unpredictability, complexity, and vagueness (Guillot, 2003). However, one of the key challenges, when taking up a senior leadership position, is the move from an operational perspective to a strategic perspective. The lack of strategic leadership and the prevalence of managerial leadership is one of the most important issues facing organizations today. Unless board members, CEOs, and top management teams understand this issue, and the differences among managerial, visionary, and strategic leaders, the problem will persist (Rowe, 2001).

Organizations need to foster environments that allow for the emergence of strategic leaders for them to thrive. Unfortunately, Rowe (2011) observes that large, unrelatedly diversified organizations train their people directly and indirectly to become managerial leaders. This is a good practice, to allow visionary and strategic leadership to thrive, or else it will be detrimental for the organization in the long run when such leadership does not allow the practice to thrive. Some organizations are designed in such a manner that, visionary and strategic leadership becomes unachievable. Hitt, Ireland and Hoskisson (2001) refer to this phenomenon as the loss of strategic control. This occurs in governments, universities (whether state-sponsored or not), and businesses that allow unsuitably diverse diversification.

Leadership is widely accepted as a critical factor to the success, mediocrity, or failure of an organization (Colins, 2001; March & Weil, 2005; Northouse, 2015). This is no less the case in universities, where the impact of leaders and leadership is critical to

academic and administrative effectiveness. This is especially true given the myriad challenges facing university education, including significant decreases in public support, conflicting opinions about the purpose of higher education, opportunities presented by new technologies for teaching and learning, and a rapidly shifting and competitive global economy. Given this tumultuous environment, there is a pressing need for increased attention to leadership development within universities (Buller, 2014; Gmelch & Buller, 2015; Ruben, 2004; Ruben, De Lisi, & Gigliotti, 2017).

Strategic leadership in universities is an issue that deserves to be given much attention for the betterment of the proper functioning and management of these institutions. Strategic leadership can be instrumental in enhancing the overall performance of universities, since leaders with adequate leadership skills and capabilities guide these institutions in the furtherance of the achievement of their core mandates. (Papadakis & Bourantas, 1998; Thong & Yap, 1995) have documented that members of the top management team (TMT) play a significant role in the organizations innovation process. Hence for an innovative culture to be infused and nurtured in an organization, a visionary strategic leadership must be in the forefront to help in confronting the many challenges that face universities today. University leadership will need to embrace quality management methodologies to satisfy their stakeholders. If the university leadership wants to satisfy their stakeholders, they need to perform well on those dimensions. The service quality excellence dimension provides input for strategic management in the universities (Tetteh, 2017). The following hypothesis was proposed:

H₀₄: Strategic leadership does not have significant effect on service quality of accredited universities in Kenya.

2.3.5 Mediating Influence of Innovation on Strategic Leadership - Quality Service Relationship

Innovation is an important variable that influences organizational performance. Many organizations have embraced the necessity for innovation and have created processes, procedures, or even complete R&D departments to discover fresh technologies and opportunities. They have digitized most of their business processes and products and used digital technologies to both improve and create new products and services (Das, Robert, Alexander, & Lodewijk, 2013). Innovation is intended to contribute to performance of the adopting organization. Innovation is a means of changing an organization, whether as a response to changes in its internal or external environment.

Over the years, studies have propounded that innovation must be understood and identified in organizations. The reason being that innovation typology imparts the need to view regular innovation traits in an effective manner as regards a particular study (Liao & Wu, 2010). Consequentially, diverse viewpoints have been advanced as regards the diverse types of innovation. Schumpeter (1983) identified five types of innovation; introduction of new products or qualitative change in a new one (product innovation), new methods of production (process innovation), the opening of new markets (market innovation), new source of supply and other inputs, and new ways to organize business or changes in intra-organization.

Appreciably, various typologies have been fronted, research has time and again gravitated around three common types: product/service versus process innovations (Abernathy & Utterback 1978; Walker & Damanpour, 2008, technological versus administrative/managerial innovations (Damanpour, Walker & Avellaneda, 2009; Kimberley & Evanisko, 1981) and radical versus incremental innovations (Cardinal 2001; Germain 1996). While Damanpour (1987) advocated for research around technological, administrative and ancillary innovations alongside product and process innovations Lin and Marvis (2007) highlighted four divergent typological streams in

which different categories of innovations fall. Innovation typology and its comparisons constitute the first stream. The second stream is defined by issues touching on the diffusion of innovations from diverse sources. While the third stream explores the causes of organizational innovations for example the effect of structures, processes and procedures, the fourth stream takes into account a resultant angle and strives to examine the link between efforts and firm performance. Following this trend, this study will center on the first and fourth streams which the researcher finds appropriate to this study and look at administrative, technological and service innovations in accredited universities in Kenya.

Administrative innovation, organizational management and managerial innovations are terminologies that are used interchangeably. Administrative innovation influences the social system of an organization, that is, the rules, roles, procedures and structures that are associated to communication and exchange among the organization's members and mainly takes place in the administrative stream (Damanpour, 2014). Literature establishes that administrative innovation facilitates technical innovation. It has an impact on an organization although it is not known to bring about any new service or product (Ruiz-Moreno, Haro-Domínguez, Tamayo-Torres, & Ortega-Egea, 2016). Jaskyte (2011) defines administrative innovation as something that is new to the established organizational processes. It could be the execution of a structure, procedure, system or practices that are central in the administration of an organization. It is innovation that touches on organizational structure and governance Bui (2011). Bui (2011) further observes that they are IT-enabled implying IT is critical for those innovations, they bring in social-technological transformations which affects both social and technical aspects and are knowledge intensive necessitating acquisition of knowledge and particular skills which can be put into practice. All these are noticeable traits in administrative innovations.

Jaskyte (2011) States that administrative innovation takes into account procedures, rules, roles, and structures and touch on all divisions of the organization. Jaskyte (2011) adds that in as much as these factors have an outright effect on the daily organizational operations, they equally impact on communication and exchanges on the workforce. Evidence abounds that organizational innovation arises out of intermingling of personal traits like administrative positions and roles, environmental inputs, and structural aspects like size and other intricacies involved (Buyukbalci, 2012). According to Gunday, Ulusoy, Kilic, and Alpkkan (2011), administrative innovation endeavours to reinvigorate organizational procedures, mechanisms, systems, etc., stimulates teamwork, sharing of information, coordination, collaboration, learning and innovation. All these are related to organizational innovation and allows an organization to operate efficiently while at the same time utilizing its resources effectively (Damanpour, Walker, & Avellaneda, 2009).

Administrative innovation is an integral part of an organization, is hardly visible and not easily duplicated unlike other types of innovation. They enhance organizational performance by according a conducive and ambient environment to employees and also inspires contentment in employees (Su & Baird, 2018). The role of organizational leaders in generating interest in administrative innovation through endorsement of prospective innovative practices, and in making it attractive to employees cannot be underscored (Su & Baird, 2018).

The characteristics of an organizational structure influences the generation, development and implementation of new ideas and behaviours in the organization (Ruiz-Moreno *et al.*, 2016). The enormity of centralization, systemization and low professionalism stimulates administrative innovation (Becker *et al.*, 2014). Altering the organization structure significantly, executing development/training programs for staff to nurture creativity and innovation; effecting new employee/volunteer/board member incentive/reward (e.g. employee of the month award; awards banquet); effecting a new employee, board, or executive director performance evaluations; new approach of recruiting employees, volunteers, or board members; and enacting new ways to raise

money (e.g. new fundraising event) are examples of administrative innovation (Jaskyte, 2017).

In a study by Ashraf, Suhaida, Zaidatol, and Abdullah (2014) on the relationship between organizational effectiveness types and organizational effectiveness in private universities in Iran using a survey research design and cluster sampling method, the survey results indicated that administrative innovations significantly predicted organizational effectiveness. They concluded that if universities are to improve in terms of performance, should device administrative and technical innovations to enhance organizational effectiveness. Similarly Chen, Liu, and Wu (2009) using a survey methodology and relying on findings from prior researchers and structural equation model to test the theoretical model, established that organizational performance is positively related to technical and administrative innovation and concluded that organizations should enrich and adopt these two types of innovation for superior organizational performance.

The idea of service innovation was propagated by Miles in 1993 and has been mainly applicable to services and service products (whether new or improved service products that includes commodities or public services) and also service processes which could be new or improved ways of designing and improving services (Mbuchi, 2013). Damanpour and Aravind (2012) Have defined service innovation as the establishment of new services to various customers for the purposes of enhancing organizational efficiency, its quality, and or the customers' satisfaction. According to Durst, Mention, and Poutanen (2015) service innovation refers to innovation occurring in existing services, new services or gradual developments of services already in place. Innovation in the service industry manifests in non-technological areas. They are new acts or processes that are considered new to the adopting organization and to customer/user target group(s), but not necessarily to a whole sector or industry. Additionally, it may arise out of a mix of existing service systems, generation of new value propositions (Danjuma & Amran, 2012) or through utilizing new knowledge to generate new services (Jaskyte, 2017).

Hertog (2000) Presented a four-dimensional service innovation model, which captures the idea of service innovation in a knowledge – based economy. It consisted of service concept which is a new concept in the market; Client interface which refers to new ways as to which clients are involved in the service production; Service delivery system which encompasses new ways the actual services are delivered to the customers; technology; which has to make sure that services can be provided efficiently. Regardless of the type of innovation, a service innovation structure should to address a wide range of innovation aspects. Service concept (creation of new or improved value i.e., set of benefits for customers; client interface innovation (enhancement of customers’ service experience); service delivery innovation (use of or introduction of new or improved service channels); technology innovation (creation of new or improved service software features (Fung, 2014).

Avlonitis, Papastathopoulou, and Gounaris (2001) presented a typology that classifies service innovation into six different categories: new to-the-market services, new-to-the-company services, new delivery processes, service modifications, service line extensions, and service repositioning. Adoption of innovative practices can eventually lead to improved products and services which customers would appreciate. Institutions that adopt innovative practices are bound to benefit and the same benefit would be extended to all stakeholders who will notice a distinctive change in operations. Service innovation is deemed important in terms of improving customer satisfaction and enriching of resultant quality as a means of satisfying the requirements within higher education industry and keeping abreast with global trends. (Danjuma & Amran, 2012; Gbamosi & Jager, 2008).

Emergence of new technology, and accompanying changes which are resultant products of innovation in higher education, are geared towards satisfying the expanding sector of the market. For instance in universities students who are discontented with the existing offers or those not presently getting services are ultimate recipients (Christensen, Horn, Caldera, & Soares, 2011; Sandstrom & Magnusson, 2010). Students hope to get good

services as pertains to all aspects of service quality: tangibles, reliability, responsiveness, assurance and empathy.

Danjuma and Amran (2012) maintain that higher student numbers may be realised following introduction of service innovation in higher education institutions. Various researchers opine that service innovation leads to better ways of doing things (Christensen *et al.*, 2011). Durst *et al.* (2015) using mixed method approaches, conducted research to review existing literature by identifying thirteen empirical studies discussing service innovation measurement and the kind of new knowledge that measurement of innovation has generated. They concluded that the body of knowledge regarding this topic is inconclusive, poor and fragmented. Unlike products which are tangible, any developments in services offered are not easy to quantify or assess. It's practically a challenging undertaking.

In another study by Danjuma and Amran (2012) with attention on higher education, imperatives of service innovation and service quality for customer satisfaction, where they sought to look at issues connected to service innovation, it's characteristics and implications in the higher education institutions setting, concluded that its only through improvising new ways of doing things in higher educational institutions that the general effect can be felt across the board leading ultimately to students satisfaction, who subsequently can reach out to other fellow students and entice them to come and enroll in their institution.

Technological innovation refers to new procedures, policies and administrative structures (Walker, Damanpour, & Devece, 2011). It is the knowledge that links methods, components, and techniques with processes to create a product or service (Popadiuk & Choo, 2006). OECD (2005), gives a much-applied definition of technological innovation as being, the introduction of a new, or significantly improved, product (good or service) or process. Technological innovations are related to work activities, have a market focus, and are client driven. Technological innovation in this

study adopts the definition by Jaskyte (2011) as what is newly introduced in the organizational system, such as a service, program, or product.

Findings from a study by Zhou, Abby, Junzheng, and Shisong (2017) on dynamic capabilities and organizational performance with the mediating role of innovation observe that in order to achieve superior organizational performance, technological innovation should be there. They suggest that in a situation where there is a scarcity of organizational resources, a considerable proportion of the resources should be channeled towards issues that will enhance technological innovation. In another study, Walker, Chen, and Aravind (2015) examined 44 peer-reviewed published articles from 52 samples to establish how managerial and technological innovations impact on organizational performance. Level of analysis, industry, performance type, innovation measurement and performance measure were the specific areas of interest. Managerial and technological innovation were pursued to enhance performance, with positive relationship established between innovation and firm performance.

Similarly, another study by Mokhtarband, Mohammad, and Mahnaz (2015) on the effects of technological innovation on performance of construction industry in Iran showed that the relationship between technological innovation variables and organizational performance is significant. The parameters and factors influencing the innovation process can be divided into two main groups as shown from the study's findings; internal and external factors. Whereas the internal factors also known as the innovation engine, includes the organizations capacity and learning ability to generate new products and processes, technical background, motivation, and working experience, the external factors include the capabilities that amplify the ability of competing and supplying, based on customers' needs, accessibility of institutional support, economic incentives. Chen et al. (2009) established that in order to realize the benefits of technological innovation, it must be applied together with administrative innovation. The study showed there was a significant relationship between technological innovation, administrative innovation, and organizational performance.

There is a relationship between technological innovation and the technological knowledge that informs how things can be done away from the norm and this is related to additional input in research and development (R&D), in information technology and patents (Heij, 2015). Management scientists postulate that technological innovations are not an assurance of obtaining a positive result but are simply avenues for attaining a competitive edge (Heij, 2015; Teece et al., 1997). Organizations need to utilize technological knowledge since it is an indicator of achievements arising out of innovation. It is important also for organizations to substitute technological knowledge into tangibles like products, services and operational processes and to adjust them to suit customer preferences which could distinctively set a particular organization from the others (Heij, 2015).

Uys, Nleya, and Molelu (2004) Study on technological innovation and management strategies for higher education in Africa: Harmonizing reality and idealism, concluded that the process of technological transformation is not easy. It has its ups and downs and in order to achieve sustainable technological transformation the people who are key to this process should be considered. Their findings focus on the need for organizations to utilize a mix of strategies-top-down, bottom-up and inside-out-during the diffusion process in innovation to achieve desired outcomes. They aver that for students to appreciate the virtues arising out of adopting technological innovation, it is important that higher education institutions' curriculums, incorporate aspects of ICT education. They state further that technology-based education is an avenue for meeting the ever increasing global urge for higher education and is also a way of achieving the intended outcome or purpose of reaching out to the larger targeted audience at a lower cost. The following hypothesis was proposed:

H₀₅: Innovation does not have significant mediating effect on the relationship between strategic leadership and service quality of accredited universities in Kenya.

2.3.6 Service Quality

In terms of availing quality service, the quality and efficiency of education is an expected outcome of higher education institutions (Archibald & Feldman, 2008). Sultan and Ho (2010) Writes that although there is a relationship between services and general tasks in higher education and that education services have some significance on teaching, research and communal services, service and education remain as the two critical aspects of quality management. University educators have a key mandate of providing that which meets the aspirations and requirements of the learners and national needs (Longden, 2006). There is therefore the need to satisfy both the needs of students who are the ‘primary consumers’ of higher education and the society at large since both are interdependent (R. Jain, Sinha, & De, 2010).

Realisation of favourable institutional outcomes is dependent on the quality of services offered (Landrum, Prybutok, & Zhang, 2007) and this cannot be taken for granted as it can be detrimental to the institution as a whole (Angell, Heffernan, & Megicks, 2008), since service quality has traditionally been a key determining factor for students when selecting a university of choice (Donaldson & McNicholas, 2004). Galloway and Ho (1996) State that quality and services quality are both composite and multiplex in their general state. It’s not easy to explain the notion of service quality and quality in education. They are understood differently by the various stakeholders considering that beliefs relates to service delivery that serve as baselines or reference points against which performance is evaluated (Zeithaml, Bitner, & Gremler, 2006).

Barinua and Ekeabasi (2022) Argue that services are often described terms of their distinguishing features. These four distinguishing traits include the following: Intangibility: Services that are not visible, touchable, odoriferous, or tasteful; Inseparability: Generally, services are created and consumed concurrently; typically, both the supplier and the customer are present throughout the service’s provision, and therefore both are involved in the service process. They are not detachable from the service; Heterogeneity: Because services are provided by various workers and at

variable time intervals, their quality cannot be constant. It is more difficult to replicate services at the same level of quality as goods, owing to the fact that they are created by people; and finally, Perishability: Services unlike goods, cannot be stored concurrently; services cannot be returned or sold.

In terms of Training and Service Quality Colquitt, Lepine, and Noe (2000) believe that training may result in improved job performance, such as service quality, among employees. According to a recent research, there is a substantial and favourable connection between training transfer and service quality (Kontoghiorghes, 2004). Waqanimaravu and Arasanami (2020) Discovered a strong correlation between workers' perceptions of the advantages of training, their support for training, and the quality of their services. The training's findings suggest that applying acquired knowledge, skills, and attitudes can help employees perform promised services reliably and accurately (reliability), foster a positive willingness to assist colleagues (internal customer), and provide prompt service (responsiveness), as well as enhance employees' knowledge and courtesy and their ability to inspire (empathy). When employees are able to use what they learned during training, they are driven to do well in their employment.

In higher education fraternity, a particular customer may view a certain class, curriculum or university as high-quality educational experience while the same may not have any significance to another (Cheruiyot & Maru, 2013). They additionally state that leadership traits, top management commitment, an adaptable culture and employee empowerment are key aspects of successful quality implementation. Taylor *et al.* (2008) had earlier advanced that the academic staff qualification ranks (fraction of the staff holding PhDs), graduation proficiency rates of undergraduate and post-graduate (masters and PhDs rewarded) as critical quality indicators in institutions of higher education.

Mbuchi (2013) Observes that in Kenya, over the years, the issues concerning quality, and quality entrenchment standards in institutions of higher education, is envisioned in terms of quality standards, with elements like enterprise resource planning (ERP), and

International Standards Organization (ISO) certification. However, while for instance an ISO certification espouses continuous quality improvement, Kenya's universities appear headed in the opposite direction.

Hitt *et al.* (2011) Propounds that qualities and behaviour of academic staff have an effect on how students view quality in higher education. Equally, the administrative division apart from being proactive in service delivery, they ought to be efficient and prompt in offering adequate information and other requisite services (Sultan & Tarafder, 2007). Quality scales based on the values of the society in total are determined by the students, academic and administrative staff who are the main players in higher education level (Sultan & Ho, 2010). SERVQUAL model, which is a vital tool for evaluating the quality of services offered to consumers by various institutions was advanced by Parasuraman et al. (1988). Tangibility, reliability, responsiveness, empathy and assurance are the key aspects of this model used in data collection.

These service quality dimensions can be used to measure the service quality of a service company. Measuring service quality means evaluating or comparing the performance of a service with a predetermined set of standards (Fandy, Tjiptono dan Greforius, 2016). For the measurement model, Parasuraman, A., Zeithaml, V., Berry, (1988) have created a multi-item scale called SERVQUAL. The servqual scale was first published in 1988 and consists of twenty-two question items distributed over the five dimensions of service quality. The servqual scale is intended to measure customer expectations and perceptions and the gaps that exist in the service quality model. Measurements can be made using the Likert Scale or Differential Semantics. The respondent only has to choose the degree of agreement or disagreement with questions regarding service quality delivery. The quality is good and satisfying if the perceived service is as expected. If the service received exceeds consumer expectations, then service quality is perceived as ideal quality. Conversely, the quality is perceived as bad if the service received is lower than expected; thus, whether or not the quality of service depends on the service provider's ability to meet consumer expectations consistently.

Despite the wide application of SERVQUAL, it has also been under extensive criticism, based on topics such as the: applicability of the “perceptions minus expectations” model to measure quality; and type of the instrument’s dimensions as well as their generic applicability to all contexts. Service reliability is a dimension of service quality that examines the ability of the service provider to perform services right the first time and keep service promises (Smith, Smith & Clarke 2007). Buttle (1996) considered responsiveness as the willingness to help customers and provide prompt service. Smith et al. (2007); Kay and Pawitra (2001) both agree that assurance is knowledge and courtesy of employees and their ability to convey trust and confidence. The service provider must instill confidence in customers in the process of transacting, make customer feel safe and display courtesy consistently. Robledo (2001) suggested that empathy is the approachability, ease of access and effort taken to understand customers' needs. Empathy is the individual attention given to customers including showing care and empathy in handling claims and accidents. Tangibility is the physical evidence of the service, meaning physical.

Becket and Brookes (2008) observed that quality in universities can be interpreted and measured in a number of different ways and that there is still no universal consensus on how best to manage quality within universities. According to Parasuraman et al. (1988, p. 17) the perceived service quality is “the degree and direction of the discrepancy between consumers’ perceptions and expectations”. This is also known as the disconfirmation paradigm. When Expected Service (ES) is greater than Perceived Service (PS), service quality is less than satisfactory, when ES is less than PS, service quality is more than satisfactory and when ES equals PS service quality equals satisfaction. The introduction of the SERVQUAL model stimulated the search for a general scale and instrument for the measurement of service quality by both scholars and industry practitioners.

2.4 Empirical Review

The reviewed studies centers on the theoretical and empirical assessment of the objectives of this study: to determine the effect of human capital development on service quality of accredited universities in Kenya; to establish the effect of maintaining core competencies on service quality of accredited universities in Kenya; to assess the effect of strategic direction on service quality of accredited universities in Kenya; to examine the effect of strategic leadership on service quality of accredited universities in Kenya; to determine the mediating effect of innovation on the relationship between strategic leadership and service quality of accredited universities in Kenya. Hoskinsson, Hitt and Duane, (2013) have stated that strategic leadership design is an integrated set of activities that enhances an organization's capacity for change and ability to perform. The integration of these various activities will lead to attainment of quality service outcomes.

2.4.1 Effect of Human Capital on Service Quality

Jonyo, Ouma, and Mosoti (2018) in a study on human capital as a development as a requisite for organizational performance within private universities in Kenya, have examined the contribution of human capital as the most valuable resource in universities' growth and success. They have posited that organizations will essentially flourish when its human resource is empowered and motivated. They aver that the positive outcomes will just exhibit themselves in staff responsiveness to institutional activities. Today's organizations must be aware to the reality that modern institutions change at a very fast rate and that everything is reliant on its human capital adaptability (Kamukama, Ahiauzu, & Ntayi, 2010). To this extent, universities councils' performance of their roles is dependent on the human capital inherent within the people in these institutions. This confirms how critical the role of human capital is to the success of the organization. This view is supported by (Hitt *et al.*, 2016), who have stated that the most important resource in any organization, is its human capital. For one reason or another, most universities have not been able to achieve quality service outcomes. The study by Jonyo et al. (2018) found out that the universities did not have

optimum number of employees, there were some instances where they engaged unqualified professionals, and employees did not fully participate in the formulation of human resource plans. The study recommended that the universities need to involve all the employees in formulation of human resource plans to foster their overall performance, and also to have optimum professional employees on realizing the universities' objectives.

Jooste and Fourie (2009), the primary objective of this study was to investigate the perceived role of strategic leadership in strategy implementation in South African organizations. The conclusion is that strategic leadership positively contributes to effective strategy implementation in South African organizations. The study was conducted in a bid to provide guidelines for the effective use of strategic leadership in general, and selected strategic leadership actions in particular, as drivers of strategy implementation in South African organizations. The population of interest of this study was all the strategic leaders in South Africa. The target population was the strategic leaders of the *Financial Mail* Top 200 companies (2006), while the sample was five randomly selected directors of these organizations. Mail questionnaires were used to get responses from the selected directors. A major conclusion from the study was that human capital development for the organization is one of the strategic leadership actions that is perceived to play an important role in effective strategy implementation.

Echdar (2015) Studied the effect of various determinants and intervening variables on the development of human capital strategies in publicly traded manufacturing companies. There are 151 publicly listed manufacturing companies on the New York Stock Exchange. The data were examined using structural equation modeling on 10 respondents from each company, including managers and workers (SEM). However, data shows that the external environment has little influence on staff growth, performance and recognition, or employee happiness. Employee training and satisfaction are all improved when the internal climate is conducive to human resource planning and management. Third, planning and human resource management, employee development,

education and training, performance and recognition, and employee satisfaction all help to build human capital.

Udu and Ewans (2016) Evaluated human capital development and staff productivity at a double diamond plastic manufacturing business in Aba, Nigeria. The study utilized a correlation design to determine the direction and degree of the relationship between the variables. A standardized five-point scale questionnaire was administered to a random sample of 165 people from the study population. The data were evaluated using Pearson's product moment correlation and p-value. On-the-job training is associated with increased employee productivity. The second goal's result shows a good link between off-the-job training and worker efficiency. A positive correlation coefficient (r) (0.84). Investing in human capital development improves employee productivity, which helps productivity. Based on the findings, the study suggests that businesses invest heavily in human capital development to gain practical skills and a deeper knowledge of operational excellence.

2.4.2 Effect of Core Competencies on Service Quality

Core competence management has evolved into a critical necessity for modern enterprises because of the need for employees to be trained in a number of methods to enable firms soar above competitors thereby gaining competitive edge. The main objective of this study is to evaluate core competence management and organizational performance in First Bank of Nigeria PLC. The study adopted the survey research designed because it was more suitable to elicit information from respondents hence the study is audience research. The researcher made use of tables and percentages and regression analysis was employed to test the hypothesis formulated in this study. The research found quality of training, customer service quality and competitive uniqueness as proxies of core competence management to be significant to organizational performance of First Bank of Nigeria PLC. The paper recommends among others that Human resource experts should embark on continuous training and development of their employee to enhance their skills and improve the overall performance of the

organization; Organizations should seek the help of specialists/consultants to assess them and design a unique competence model. By outsourcing the entire process, a company may find the root reasons of its labour problems; Organisation should ensure continuous improvement of customer service by giving customers value for their money (Oseremen & Olley, 2022).

Competencies may be classified into three types: managerial, generic and technical or functional (Srinivas, 2013). Managerial competencies are applied horizontally and vertically for analysis and decision-making, team leadership, change management, control, planning, organizing etc. Generic skills are essential for all staff, regardless of their function or level for communication, program execution, processing tools, linguistics, etc. The technical or functional competencies are required to perform any job in the organization within a defined technical or functional area of work, i.e. environmental management, industrial process, investment management, finance and administration, and human resource management. Based on intensity and complexity the competencies may be arranged in a hierarchical sequence as primary, proficient and advanced (Srinivas, 2013). The competency may also take hierarchy in the following order: practical competence, foundational competence, reflexive competence and applied competence (Dorn & Pichlmair, 2007).

Businesses use competency mapping to match the capabilities and talent of personnel with specific job tasks and organizational needs. The technique involves conducting a job analysis to identify core skills and behaviors required to perform the role, drafting a job description based on the key competencies and aligning resources to fulfill the competency needs. Competency map makes it easier for firms to identify qualified candidates, assess performance, focus on training efforts and enhance overall productivity. Some competency mapping approaches include assessment center, critical incident technique, interviewing, questionnaires and psychometric tests (Venkat & Vijayalakshmi, 2016).

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Lufthans (2012) assessed the effect of strategic leadership on competitiveness of banks in the United States. Inferential research design was used in the study. The study used primary data which was collected using closed-ended questionnaire. Piloting was done on establish the effectiveness and efficiency of the data collection tool. Data was analyzed using SPSS software. Data presentation tools such as figure and tables were used by the researcher to analyse the relationship between the independent and dependent variables. The study revealed that strategic leadership significantly affect competitiveness of banks in the United States. The study recommended that for strategic leadership to be effective participative management should be emphasized in order to enhance competency in the organization.

Chan (2005) in his study on core competencies and performance management in Canadian public universities sought to present the performance management process and the core competency frameworks of six Canadian public libraries. The core competencies that characterize the qualities for superior performance of library staff are described as well as the way in which competencies are used throughout the performance management process and other related human resource functions. The

paper concludes that in a highly computerized and networked environment, the core competencies needed by the library staff are for the most part, “soft skills” such as communication, interpersonal skills and leadership. The “hard skill” of technological competence is found on the list of four libraries. The use of core competencies allows managers to focus on the recruitment and selection of staff who already demonstrate the competencies, to base work expectations on the competencies, and to prioritize training needs according to the competencies.

Duysters and Hargedon (2000) presented a paper on core competencies and company performance in the world-wide computer industry. The paper has contributed widely to the understanding of dynamic firm capabilities for company performance of companies in the international computer industry. They conclude that a specific set of endogenous technological core capabilities is needed to generate performance differentials. Also the external appropriation of competencies does not seem to be any easy solution through which companies can improve their existing capabilities in the short run.

2.4.3 Effect of Strategic Direction on Service Quality

Midiwo and Ombui (2018) have postulated that strategic planning lies in mobilizing efforts towards achieving goals and integrating works. It functions a “tool to determine the mission, vision, values, goals, objectives, roles and responsibilities, timelines and personnel responsible for moving an organization or institution from the current to the desired state in the future.” Aljuwaiber (2023) examined the role of strategic planning in enhancing higher education institution’s sense of strategic direction and outlining measurable goals. The study established that a university can develop a programmatic framework within which to define new directions and programmes and evaluate its own capabilities against those of competing universities. Additionally, he found out that perceived measure of the success of implementing a strategic plan can occur by assessing any increase in institutional reputation, advancing teaching effectiveness and supporting scientific research. This leads to increased service quality to the institution’s stakeholders.

A study by Breznik and Law (2019) explored how mission statements make a difference among universities. They have stated that the mission statement helps in analyzing the strategic directions of universities and, in turn, translating those directions into operational plans. The role of the leadership of an organization is crucial as they can guide the college members in translating the university's strategic directions to applicable projects for the organization. Kitonga (2016b), sought to find the influence of determining strategic direction on not-for-profit organizational performance in Nairobi County in Kenya. An embedded mixed method research assessing the impact of strategic leadership variable – determining strategic direction and organizational performance was completed by managers representing 328 not-for-profit organizations in Nairobi County in Kenya. The paper sought to examine the link between strategic leaders 'practice of determining strategic direction and organizational performance. The study established a significant positive relationship between determining strategic direction and organizational performance.

Serfontein (2010), using a cross-sectional and exploratory research design sought to assess the influence of strategic leadership on the operational strategy and performance of business organizations in South Africa. Responses were solicited from 200 top South African companies, wherefrom data was collected from 5 randomly selected directors from each company using cross-sectional telephone surveys. The key respondents were either the chief executive officers or member of the executive team. 118 questionnaires were returned after being filled. Data was analyzed using inferential (spearman product moment correlation) and descriptive statistics (means and standard deviation). And according to findings of the study, strategic leadership is directly and significantly related to operational excellence and performance of business organizations in South Africa. Also, it was established that if leaders in the organization implement high-performing strategic leadership practices in their organizations, they will be able to enhance the operational excellence as well as strategy orientation in their organizations.

Lear (2012) using quantitative research design and structuring devices, sought to assess the relationship between leadership and strategic alignment in high - performing companies in South Africa. Responses were sought from Chief Executive Officers of 200 top-performing organizations which appeared in the 2007 *Financial Mail* which is a highly respected South African financial magazine. Data was analyzed electronically by collating it into a database whereby the results are then analyzed using statistical inferential techniques of correlation and linear regression analysis. According to the findings, the study concluded that strategic leadership will positively influence strategic alignment which in turn, will have a beneficial effect on the overall performance of the organization. It is established also that strategic direction is considered as being very important in organizations by top management teams (TMT).

Jooste and Fourie (2009), the primary objective of this study was to investigate the perceived role of strategic leadership in strategy implementation in South African organizations. The conclusion is that strategic leadership positively contributes to effective strategy implementation in South African organizations. The study was conducted in a bid to provide guidelines for the effective use of strategic leadership in general, and selected strategic leadership actions in particular, as drivers of strategy implementation in South African organizations. The population of interest of this study was all the strategic leaders in South Africa. The target population was the strategic leaders of the *Financial Mail* Top 200 companies (2006), while the sample was five randomly selected directors of these organizations. Mail questionnaires were used to get responses from the selected directors. A major conclusion from the study was that determining a strategic direction for the organization is the strategic leadership action that is perceived to play the most important role in effective strategy implementation.

Using a quantitative approach and descriptive research methodology, Bohorquez, Perez, Pena, and Padilla (2020) conducted a study on strategic direction and customer satisfaction to find out how strategic direction determination influences the satisfaction of customers in a tourist transportation company. The respondents included both the company's executives and the service providers' customers. It was concluded that the

administration of the company must improve on the three processes of strategic management in all the managerial levels: managerial, intermediate and operative. Most of the clients felt that improvement needs to be done to improve the quality of services in the company especially in the areas of security, treatment received and job performance.

2.4.4 Effect of Strategic Leadership on Service Quality

Using convergent mixed method design, Kitonga (2017) sought to determine the relationship between strategic leadership practices and organizational performance in not-for-profit organizations in Nairobi County in Kenya. Using survey questionnaires and an interview schedule, qualitative data was collected. A sample size of 305 respondents who were strategic leaders from a target population of 1475 not-for-profit organizations operating in Nairobi and simple random sampling procedure was used in selecting the respondents. Statistical significance using regression analysis, with Pearson's bivariate correlation used to test degree of correlation in the hypotheses were utilized to analyze the collected data. A significant relationship between strategic leadership practices in general and organizational performance was found to exist from the study's findings. Positive correlations between determining strategic direction, developing human capital, ethical practices, strategic control and organizational performance were also found. Besides that, the study recommended that strategic leadership practices be incorporated in not-for-profits organizations as they were found to boost organizational performance. Finally, it was established from the results of the study that those Organizations which implement strategic leadership practices will be expected to perform well.

Chang, Chou, Miao, and Liou (2021b) in their study on the effects of leadership style on service quality: enrichment or depletion of innovation behaviour and job standardisation, found out that leadership style plays an important role in determining service quality. The results further indicated that some researchers have suggested that innovation behaviour directly affects service quality, while others contend that quality improves

with greater job standardisation. Stratified sampling was used in this study to recruit 52 international tourist hotels and 52 standard hotels out of the 2653 hotels registered by the Taiwan Tourism Bureau with the respondents comprising two leaders from each hotel teaming up with between three and five employees in every hotel.

In another study on the effects of leadership on quality, Hirtz et al. (2007) found out that leadership does have an effect on quality. They further found out that the results of followers emulating top management's transformational leadership actions focused on quality management will spread quickly, resulting in a quality-conscious organization committed to total customer satisfaction. They also established that top management support for quality management programs allows management's commitment to successfully implement quality programs to spread among followers. Surveys were administered to all the nonacademic administrative/service departments of University of Missouri-Rolla (UMR) through the campus mail system to 438 employees. The final sample included 109 completed surveys constituting a 24.9% response rate.

Latif et al. (2019) in their study which aimed to develop and validate the construct HiEduQual (Higher Education Service Quality) to measure higher education (HE) institutions quality service level, used exploratory and confirmatory factor analysis in validating scale development through data collection from seven different Higher Education Institutions (HEI's), established that the influence of leadership can help provide the vision for service quality. They further observed that the role of leadership in improving service quality is very crucial. Although there are other dimensions to service quality, leadership has its own value and prominence in creating an optimum service quality experience. Scale development was undertaken through focus group discussions with four different stakeholders of HE that included students, parents, teachers, and employers. The study took into consideration other stakeholders to develop a measure for Higher Education (HE) service quality provided to students.

Palladan, Abdulkadir, and Wen (2016) using a cross sectional survey of 13 tertiary institutions in Kaduna state in Nigeria, sought to study the effect of strategic leadership,

organizational innovativeness, information technology (IT) capability on effective strategy implementation. Data from 188 deans from the institutions was collected using structured questionnaires, and data analysis was done using Partial least square SEM technique, while the degree of correlation of the variables was done using correlation analysis. The study proposed that having strategic leaders in place coupled with innovation attitude and IT capability of the institutions, will increase the efficiency of the overall institutions since they will be able to put into use strategies that will post a positive image of the organization.

Serfontein (2010), using a cross-sectional and exploratory research design sought to assess the influence of strategic leadership on the operational strategy and performance of business organizations in South Africa. Responses were solicited from 200 top South African companies, wherefrom data was collected from 5 randomly selected directors from each company using cross-sectional telephone surveys. The key respondents were either the chief executive officers or member of the executive team. 118 questionnaires were returned after being filled. Data was analysed using inferential (spearman product moment correlation) and descriptive statistics (means and standard deviation). And according to findings of the study, strategic leadership is directly and significantly related to operational excellence and performance of business organizations in South Africa. Also, it was established that if leaders in the organization implement high-performing strategic leadership practices in their organizations, they will be able to enhance the operational excellence as well as strategy orientation in their organizations.

2.4.5 Effect of Innovation on the Relationship between Strategic Leadership and Service Quality

Performance indicators can be used in a variety of contexts, including decision-making, control, and steering, training, learning, and external communication. (Simons, 2000) Customers will be happy, and the firm will be able to compete economically if high-quality service is provided. Improving customer service quality has the ability to boost the country's economic competitiveness. To accomplish this aim, it is necessary to have

a solid understanding of operating processes, be able to identify issues quickly and systematically, have accurate and reliable measurements of service performance, and maintain track of customer satisfaction and other performance indicators. Customers' expectations of a service are influenced by factors such as recommendations, personal requirements, and prior experiences (Oseremen & Olley, 2022).

Uzkurt, Rachna, Halil, and Gözde (2013) Conducted a survey study to determine the mediating effect of innovation on the linkage between organizational culture and firm performance. The main premise of the research is that an organization which has a culture that promotes innovations is likely to be innovative, which, in turn, is likely to result in achievement of superior firm performance. The researcher manipulated incremental and offering of consumer advantages which informed innovation, and profitability, market share and market value which were the firm performance constructs. Data was collected from 154 branches of 10 prominent banks in Turkey. Regression data analysis method was used to analyse the research model.

Using ANOVA, t-Student and descriptive statistics to analyze research data to examine the quality gap of university services on 300 students of five behavioral science faculties of the University of Tehran (Iran), it was established by Abili, Thani, Mokhtarian, and Rashidi (2011), that in three of the five SERVQUAL dimensions (tangibles, reliability, and empathy), there was a negative quality gap ($p < 0.05$). As a result, from the mentioned three dimensions, improvements are necessary. Additionally, between perceptions and expectations of students based on their gender, degree and field of study no significant differences were realised. Higher education institutions can make use of SERVQUAL instrument to identify dimensions of service where they excel or need to improve, positioning their service quality also relative to their societies.

Arrieta and Avolio (2020) in examining the factors that impact on the quality of education service in a private university in Peru involving a sample that included the views of 29 students and 20 graduates respectively, used focus groups and in-depth interviews. Ten factors or the underlying dimensions that drive the quality of the

education service provided by the private Peruvian university. Professors, lecturers, curriculum, extracurricular activities, position and recognition of the university, infrastructure, library, and admission, adequate communication mechanisms with faculty and authorities and services were the factors that were established from the findings of the study. Professors and curriculum planning were the key indicators of quality of the education service. Focus by students was more on how they received the service, rather than what services they received. Mainly, they assessed the quality of the process. More relevance also, as opposed to functional service quality, was given by graduates. They appraised the quality of “what they received,” i.e., the actual result.

Abili, Thani, and Afarinandehbin (2012) Conducted a study to assess university service quality in the international branch of Amirkabir University (Iran). Electronic engineering, Civil engineering, Mechanical engineering, Chemical engineering and MBA totaling to 102 from the five courses in the international branch of Amirkabir University, were requested to fill a SERVQUAL questionnaire. Students’ perceptions and expectations in five dimensions of service that consists of assurance, responsiveness, empathy, reliability and tangibles were measured through this questionnaire. The differences between students’ perceptions and their expectations were used to assess the quality gap of university services. There was a negative quality gap ($p < 0.05$) from the five SERVQUAL dimensions as revealed from the results findings.

Furthermore, responsiveness was the most important dimension for the students and also had the largest gap. They further concluded that the SERVQUAL instrument makes it possible for higher education institutions to identify dimensions of service in which they excel or need to improve, and to also position their service quality in relation to their societies. In all of the five SERVQUAL dimensions, the results demonstrate there is a negative service quality gap, implying the students’ expectations are greater than their perception which means they are dissatisfied with the poor quality of services provided to them. Improvements are therefore needed in related dimensions.

In a study by Sharabi (2013) to assess the management and enhancement of service quality in higher education established that service process analysis within HE institutions shows that the quality of service provided to the customer tier (the students) by the boundary tier (all the employees who have contact with the students) is significantly dependent on the coordination tier (top HE management and its various departments). There are several problems and pitfalls in this service chain that prevent service quality improvement. There is a need to preserve quality culture and reactivity, as viewed from the academic institution management's perspective which contributes to success. Being receptive to new fields of activity, encouraging initiative and flexible thinking, removing the barriers between departments and units, contradicting bureaucracy, reassuring non-formality, maintaining the flexibility of human resources among others are some the ways of achieving this.

Lin and Marvis (2007) examined the innovation and organizational performance relationship. Manufacturing and Service industries directory was used to extract data from 1000 firms in northern part of Taiwan. An 87% response rate, representing 877 questionnaires, were returned. Data collection was done using telephone surveys. Numbers from companies that have less than 200 employees, are the ones which participated in the study, because that is what defines SME's in Taiwan. The findings established that some sort of innovations was conducted by 80% of the industries that took part in the study, with technological and marketing innovations being the two major types. Administrative innovation appeared to be the most important factor in explaining sales rather than technological innovations, but innovation was found to have a weak link with company sales. Additionally, innovation was found as one of the core competencies in the business world today. It was concluded that those companies that embrace it are more likely to outshine those which are uninterested.

Additionally, an earlier study by Elenkov et al. (2005) investigated the effect of executive innovation on strategic leadership. Leadership at strategic level was found to have a significant relationship with the influence of top management on product market and administrative innovations. Elenkov and Manev (2005) Study of 270 top managers'

influence on innovation in 12 European countries found that sociocultural context was important in the leadership–innovation relationship and confirmed that leaders and top managers positively influence innovation processes in organizations.

Ashraf *et al.* (2014) examined relationship between organizational innovativeness types and organizational effectiveness in private universities in Iran. Using a survey methodology design, the study sought to determine the organizational innovativeness type between technical and administrative innovation that best predicts the organizational effectiveness in private universities in Iran as perceived by the faculty members. Cluster sampling technique was used to select 485 full time faculty members from five branches of Islamic Azad University in Iran as respondents of the study. 369 respondents returned the questionnaires. Multiple regression was conducted to determine the best linear combination of technical innovation and administrative innovation for predicting organizational effectiveness. Ashraf *et al.* (2014) research results indicated that both technical and administrative innovations positively and significantly predicted organizational effectiveness. The study concluded that universities must implement both administrative and technical innovations to improve organizational effectiveness. However, each type of innovativeness affects different aspects of organizational performance.

Using descriptive survey research design, Shisia *et al.* (2014) investigated the influence of strategic innovations in the performance of Kenya's public universities. Data collection from heads of department in 14 public universities was collected through questionnaires and there was reported a 63% response rate. The relationship between strategic innovations and the performance of public universities in Kenya was established using multiple hierarchical multiple regression data analysis methodology. The findings revealed the need for universities management to align strategic innovation strategy with wider business strategy. Further they established that universities management have to demonstrate their capability in understanding the customers' insights and offer new and significant value if their long-term success and survival is to be guaranteed. Their findings indicate that innovation of public universities ranges from

the products and services which they offer. The findings from this study on strategic innovation is significant to the current study which proposes that the leadership of universities need to exemplify strategic leadership capabilities for them to perform. The two studies exhibit some similarity around this line of thought.

Uzkurt *et al.* (2013) findings show and emphasize that mechanisms to encourage and foster an innovative culture in the organization are likely to facilitate the introduction, adoption and diffusion of innovations which, in turn, is likely to result in achievement of superior firm performance. Their findings provide useful insights for organizations seeking to be competitive and responsive to environmental changes by successfully introducing innovations. This implies that innovation is a key factor to any organization that is seeking to address the challenges it is facing and hence achieve intended performance levels.

Khayati and Selim, (2019) sought to assess the status of innovation in Saudi universities. They aver that in light of globalization and rapid economic changes, innovation became a necessity for all organizations. They state additionally that that innovation is more complex in the case of universities. They found out that despite the increasing development of higher education, the reality of innovation in Saudi universities does not match the potential of the country. They also found out that innovation also contains many qualitative aspects such as curriculums, and a qualitative leap is needed to promote innovation. In general the pace is low and some constraints persist. It appears that the huge amounts of financial resources allocated to the higher education sector are not sufficient to improve innovation. They conclude that the promotion of a culture of innovation in higher education and in the society in general is done by the transformation of universities into innovative institutions, through different measures such as new ideas, decentralized decision-making mechanisms, entrepreneurship and financial sustainability.

2.5 Critique of the Existing Literature Relevant to the Study

Existing literature reveals that the influence of innovation and strategic leadership on organizational performance is significant. An emerging trend from extensive literature research, exposes most studies as being prescriptive with few of them being grounded in practice. Most studies that have been conducted in this field, have mainly presented a particular attention on the direct effect of strategic leadership and innovation on organizational performance. There has not been a single study that has looked at strategic leadership, innovation and service quality together. Other researchers have looked at the three variables in relation to other strategic management attributes such as culture and knowledge management among others. There has been no attempt that has been conducted to study these three variables together or even to link them. The inference that can be made from existing theoretical and empirical literature is that there exists a gap in knowledge particularly as regards mediating factors touching on strategic leadership and service quality which seems to be lacking and specifically strategic leadership which (Drew, 2010) alludes is one of the key challenges facing higher education. These variables need to be explored together.

Contextually, most of the studies on the three variables of innovation, strategic leadership and service quality have been conducted in the profit-making institutions like manufacturing entities especially in Europe, America and Asia and very few on the universities or higher education context and this makes the generalization of results difficult. Likewise basing on existing empirical studies, however, with ever changing business dynamics, this uni-dimensional approach has been challenged by successive researchers (Miller, 2001). These evidences indicate that there are conflicting outcomes of innovation-performance relationship studies which suggest more research on this complex relationship to be conducted (Tajuddin *et al.*, 2015). For instance, Palladan *et al.* (2016) sought to determine the influence of strategic leadership, organization innovativeness, information technology capability on effective strategy implementation in Nigeria's tertiary institutions. From the findings, it was proposed that having strategic

leaders in place coupled with innovation attitude and IT capability of the institutions, will increase the efficiency of the overall institutions' due proper implementation of good and reputable strategies. Seemingly existence of a gap in knowledge profound in this study as it did not address specifically how innovation and strategic leadership influences organization performance in universities. Contextual as well as objective gaps that have been spotted from this and other studies from the reviewed literature, necessitates this study to be conducted.

2.6 Summary of the Literature Review

Lai et al. (2017) have postulated that literature reviews are a basis for research in every academic field. They can provide researchers overviews of sources and long reference lists and can help to identify gaps in the literature that help direct researchers in planning their further research. This chapter has comprised the theoretical review, conceptual framework, empirical review, critique of the relevant extant literature relevant as well as the research gaps. Theories that guided this study, have been discussed under the theoretical review section. Various theories have been discussed in this chapter that are linked to the independent (strategic leadership), mediating (innovation) and dependent (service quality) variables in this study. They are the upper echelons theory, dynamic capabilities theory, trait leadership theory and resource-based view theory. The conceptual framework exemplifies the relationship of the variables of this study. The empirical review section examined previous studies by researchers on the linkages among strategic leadership, innovation and service quality. Critique of the existing literature relevant to the study is also discussed and the research gaps identified. From the reviewed literature it is apparent that strategic leadership influences quality service in various ways.

2.7 Research Gaps

Review of existing literature on innovation, strategic leadership and service quality relationship, observes that a large number of these studies provide a significant relationship. Further, there exists objective and contextual gaps as most studies have not addressed the role of innovation in the relationship between strategic leadership and service quality. This current study attempts to fill these gaps by focusing on the role of innovation in the relationship between strategic leadership and service quality of universities in Kenya. Table 2.1 below presents a summary of the previous studies and the identified knowledge gaps.

Table 2.1 Research Gaps

Research	Focus	Methodology	Findings	Research Gaps	Current Study
Chang <i>et al.</i> (2021)	The effects of leadership style on service quality: enrichment or depletion of innovation behaviour and job standardisation.	Survey methodology and stratification sampling used to respondents. Questionnaires were used to collect data from the respondents from leaders and employees of international tourist hotels.	Leadership style and innovation behaviour influences service quality. Leadership enriches service quality through innovation. Subordinates produce higher service quality n being inspired by their superiors	Two variables mediate the relationship between the independent and dependent variable. This has the effect of giving conflicting results.	Innovation shall be the meditating variable in the current research
Hirtz, Murray & Riordan (2007)	Effects of leadership on quality.	Two sets of survey questionnaires were distributed to respondents.	The findings revealed that leadership does have an effect on quality.	Two sets of questionnaires are bound to confuse the respondents.	Data will be collected using a single set of questionnaires.
Abili et al. (2011)	Assessing quality gap of university services.	Data was collected using questionnaire from 300 students of five behavioural sciences from University of Tehran (Iran).	SERVQUAL instrument enables higher education institutions to identify dimensions of service where they excel or need to improve.	The study was conducted among students in a selected department only in the university and this makes generalizability of results difficult.	This current study will use structured questionnaires to collect data from respondents in all the universities in Kenya.
Arrieta & Avolio., (2020)	Factors of higher education quality service: the case of a Peruvian university.	Data was collected through focus groups of 29 students and 20 students from a faculty of a Peruvian private university.	Three dimensions driving higher education were identified; academic, administrative and services.	The study was conducted in a single university only and the sample was small and this makes the generalizability of results difficult.	This current study will use structured questionnaires to collect data from respondents in all the universities in Kenya.

Research	Focus	Methodology	Findings	Research Gaps	Current Study
Kitonga (2017)	Strategic leadership practices and organizational performance in not-for-profit organizations.	Data was collected using a questionnaire and a research interview guide from 328 managers representing not-for-profit organizations in Nairobi county in Kenya.	The study established a positive relationship between strategic leadership variables and organizational performance.	Knowledge gap exists. The role of innovation was not incorporated in this study.	Innovation, strategic leadership and performance will be the variables of this study.
Latif et al. ((2019)	In search of quality: measuring Higher Education Service Quality.	In the study, data was collected through focus groups comprising 33 undergraduate students and other stakeholders.	Leadership was found to be a significant factor of quality in higher education setting.	Data was collected from the students only without input from external stakeholders. A study of such magnitude needs some input from other stakeholders.	This current research will solicit from senior management members who will give critical information pertaining to the study.
Al-Hakim and Shahizan (2013)	The study examined the relationships among knowledge management strategies, innovation and organizational performance.	Questionnaires were randomly distributed to collected data from 300 mid-level managers of the Iraqi Mobile Telecommunications System (MTS)	Knowledge management strategies had a positive and statistically significant effect on organizational performance through the partial mediation effect of innovation	Data collected from only the mid-level managers, making generalization of the results questionable. Views from senior managers should have been sought	The current study will get views from both senior managers of Universities in Kenya. Senior management views are critical since they're knowledgeable in the areas of this study.
Sharabi (2013)	Managing and improving service quality in higher education.	The conceptual paper put to use Schneider and Bowen's model based on the three tiers of service organizations and service quality management and improvement methods, on HE institutions.	Service process within HEIs shows that the quality of service given to the customer tier (the students) by the boundary tier (all the employees who have contact with the students) is significantly reliant on the coordination tier (top HE management and its various departments).	Students though vital, are seen as the only customers in higher education setup. This should not be the case since there are other key players both internally and externally who impact on the service quality of an educational institution.	Will fill the gap by incorporating other stakeholders like key managers in the study.

Research	Focus	Methodology	Findings	Research Gaps	Current Study
Lin & Marvis (2007)	“Does innovation lead to performance? An empirical study of SMEs in Taiwan	Data collected using questionnaires and telephone surveys from 1000 manufacturing firms and service industries in Northern Taiwan.	Innovation was found to be a core competence in business world today. Administrative innovation explained sales rather than technological innovations.	Use of telephone surveys makes the issue of respondents’ subjective perception to become unavoidable.	The variable innovation is common in these two studies alongside the two indicators of technological and administrative innovations which influence the ultimate performance.
Elenkov <i>et al.</i> , (2005)	Study examined the relationship between strategic leadership and executive innovation influence: an international multi-cluster comparative study.	Data was collected through a large and ongoing multinational research study through cluster sampling, mail surveys. A total of 1095 top managers provided data for this study.	Strategic leadership behaviours were found to be significantly related with executive influence on innovation processes beyond the effects of organizational size and CEO’s personality traits.	Objective gap exists in this study. It didn’t address about innovation being a key variable affecting performance	Three variables, innovation, strategic leadership and service quality performance will be the subject of this study.
Palladan <i>et al.</i> (2016)	The effect of strategic leadership, organizational innovativeness, information technology capability on effective strategy implementation.	Structured questionnaires used to collect data from 188 deans from 13 tertiary institutions of Kaduna state in Nigeria. Partial Least square SEM used for data analysis.	That having strategic leaders in place with innovative attitude and IT capability will increase the efficiency of the institutions.	This study was conducted in one state only and responses sought from Deans only. Using a single respondent raises the problem of common method bias.	This research will seek views from senior level managers (academic registrars, administrative registrars, and finance officers) to try and get objective results.

Research	Focus	Methodology	Findings	Research Gaps	Current Study
Ashraf, (2014)	The study examined the relationship between organizational innovativeness types and organizational effectiveness in private universities in Iran.	Data was collected from 485 respondents drawn from faculty members mainly lecturers from selected branches of Islamic Azad university using questionnaires. Survey research design, simple and clustered sampling used.	The study concludes that universities must implement both administrative and technological innovations to improve organizational effectiveness. Also, innovations positively and significantly predicted organizational effectiveness.	. Only one private university was used in data collection for this study together with its 5 branches and thus makes the generalization of results questionable.	This study conducts a census study of the public as well as the private universities using Cross-sectional and explanatory research design methodologies.
Shisia <i>et al.</i> , (2014)	To find out the relationship between strategic innovation and performance of public Universities in Kenya.	Data collected using questionnaires from the respondents. Hierarchical regression model for data analysis. Mean and standard deviation calculated.	There existed a positive relationship between strategic innovation and performance of University in Kenya.	Mean was used as a unit of analysis in the study. This was not appropriate. Should have used weighted scores to avoid biased conclusions.	This study will avoid use of means as a unit of analysis because it's biased.
Uzkurt (2013)	The study assessed the role of innovation in the relationship between organizational culture and firm performance. A study of the banking sector in Turkey.	Data was collected using self-Administered questionnaires surveys from 300 bank managers and senior staff.	The study found that there was a significant and positive relationship between organizational culture and organizational innovations.	Data was collected from one region of Turkey only and in the banking sector. Generalizability of the results to other sectors becomes difficult.	This current study collected data from all the universities in Kenya using a cross – sectional survey.

Research	Focus	Methodology	Findings	Research Gaps	Current Study
Serfontein (2010)	The study sought to assess the impact of strategic leadership on the operational strategy and performance of business organizations in South Africa	Data was collected using questionnaires from CEOs of 200 top South African companies, through cross sectional and exploratory research design. Data analysis was done using inferential and descriptive statistics.	The study established a positive relationship between strategic leadership variables with operational excellence and performance.	Knowledge gap exists. Data was collected from only one respondent per company. This may easily lead to common method bias.	This current study will collect data from several respondents within a university. Both studies also propose that those organizations whose leadership exhibit strategic leadership capability will be expected to perform.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter includes the research methodology of the study. It also includes the research philosophy of the study, research design, and target population, sampling frame, data collection methods, pilot study, data processing and analysis.

3.2 Research Philosophy

Research philosophy is a belief about the way in which data on a phenomenon should be gathered, analysed and used. This study was guided by the positivist domain which is a major doctrine or theory in social sciences largely used in survey types of research, and is also based mainly on existing body of knowledge, and literature reviewed from previous related studies. Positivism doctrine embodies the notion that useful research is hinged upon theory, hypotheses and also quantitative data. It embraces a clear quantitative approach to exploring phenomena. Saunders, Lewis, and Thornhill (2009) contended that the researcher centers on facts, addresses causal factors, lessens phenomena to simplest elements, formulates hypotheses and tests them. A key feature of positivist approach is the use of self-administered questionnaires to gather large amounts of data normally based on sampling. A research hypotheses and conceptual framework model have been formulated and were tested using statistical techniques leading to either acceptance or rejection.

3.3 Research Design

The arrangement of conditions for collection of data and analysis in a manner that aims to combine relevance to the research purpose, with economy in procedure is defined as a research design (Kothari, 2009), Oso and Onen (2009) describe research design as a plan or strategy for carrying out research. The function of research design is to provide for

the relevant evidence with minimal expenditure of effort, time and money (Kothari, 2009). There are various types of research designs. Survey research design determines and reports the way things are, for example attitudes, values and characteristics and possible behavior. It could be descriptive, exploratory or involving advanced statistical analysis (Mugenda & Mugenda, 2003). *Ex-posto* design also known as causal comparative research is used to explore relationships among variables. Causes are studied after they have exerted their effect on another variable. Correlation design enables analysis of correlation between two or more variables (Orodho, 2005). Historical data on the other hand is the study of a problem that requires collecting information from the past, whereas experimental design or Quasi design is where subjects are assigned at random to either an experimental group which receives treatment or to a control group that does not receive any treatment.

This quantitative study employed both cross-sectional research design and explanatory research design. In cross-sectional design, data on the population study was be collected at a single point in time to examine the relationship among the variables without any manipulation of data as is the case with quasi design. This research design was considered appropriate for collecting data from the population that was sampled with respect to the variables of the study since it collected data cutting across both private and public universities in Kenya. Cross-sectional design is relevant to this study because it is considerably highly economical, and it takes little time to conduct and it employs survey techniques in gathering of data. This design was chosen because the study is a survey involving collection of data at one point in time from a sizeable population. It also allows comparison of many different variables at the same time (Orodho, 2005). Previous studies have adopted use of surveys in collecting data (Al-Hakim & Shahizan, 2013; Elenkov et al., 2005; Kising'u, 2017; Kitonga, 2017; Lin & Marvis, 2007; Masungu, Marangu, & Lilungu, 2015; Mathooko & Ogutu, 2015; Mbirithi, 2015; Palladan et al., 2016; Serfontein, 2010; Shisia et al., 2014). Explanatory research design attempts to connect ideas to understand cause and effect, implying that the researcher wants to explain what is going on. It makes people understand something by describing

or illustrating it. According to Orodho (2005), gathering of data is done at a given point in time with a view to describing the existing conditions while establishing the conditions that exist.

3.4 Population of the Study

Oso and Onen (2009) describe the target population as the total number of subjects or the total environment of interest to the researcher. Thus it is advisable that before one commences a study, the target population needs to be identified and defined. The target population comprised the 74 universities accredited by the country’s Commission for University Education (CUE) to provide university education in the country. (*Status of Universities – Universities authorised to operate in Kenya*, Nairobi: Website: www.cue.org.ke) The targeted institutions comprise; public universities in Kenya (31) and their constituent colleges (6), private universities (17) and their constituent colleges (5), registered private university (1) and institutions with interim letters of authority (14). The detailed list of all the universities in the country are listed in appendix iii and summarized in table 3.1 below.

Table 3.1: Accredited Universities in Kenya

Universities categories	Frequency	
Percentage		
Public Chartered Universities	31	41.9
Public University Constituent Colleges	06	8.1
Private Chartered Universities	17	23
Private University Constituent Colleges	05	6.6
Institutions with Letters of Interim Authority	14	19.0
Registered Private Institution	01	1.4
Total number of universities	74	100

Status of Universities: (Commission for University Education - Universities authorised to operate in Kenya, 2021; www.cue.org.ke, 2021)

3.4.1 Census Technique

Census survey has been chosen in this study. Kothari (2009) has defined a census inquiry as a complete enumeration of all items in the population, and contends that census survey is the most appropriate where the universe is small. Census counts have the advantage of being bias-free. The researcher is convinced that the 74 number of all the universities in Kenya is a small number and this is in line with Israel (2009) who has proposed that a census be used to cater for all the elements of the population where they are less than 200. The respondents consisted of the deputy vice chancellors in administrative and academic divisions, and finance officers/managers. These respondents were purposively selected since they are strategic leaders' representative of the key levels in the organization managing the daily operations of the institutions, and who are bound to give the researcher the important information needed for this study. The 3 key strategic leaders from each of the 74 universities made a total respondent size equal to 222. The unit of inquiry who were the respondents, were the deputy vice chancellors in charge of the administrative and academic divisions as well as the finance officers or finance managers of both the public and private universities in Kenya. The unit of analysis was the university. Previous researchers who have used census survey in their studies are (Abuzaid, 2016; Mahdi & Mahmoud, 2014; Masungu, Marangu, & Lilungu, 2015; Mathooko & Ogutu, 2015; Shisia et al., 2014).

3.5 Data Collection Instrument

Data is anything given or admitted as a fact on which a research inference will be based. It is anything actual, or assumed, used as a basis of reckoning (Oso & Onen, 2009). The main data collection tool was a questionnaire. Questionnaires consists of a number of questions printed or typed in a definite order on a form or a set of forms and is used to collect a lot of information over a short period of time. Self-administered, Structured questionnaires were used for this study. This follows Cooper and Schindler (2013) recommendations, in order to enhance the response rate and quality of data collected. A personally-administered questionnaire is desirable because of low cost and adequacy of

time for respondents to give responses. It is free of interviewer's biases and a large number of respondents can be reached (Kothari, 2009). Questionnaires work best with standardized questions that are interpreted the same way by all respondents (Cooper & Schindler, 2013). The questionnaire appearing in Appendix ii was framed to solicit for responses touching on the study objectives and from the formulated hypotheses. Part of the questions in the questionnaire have been extracted from previous studies and modified to fit in this study. Strategic leadership questions from the studies by Lear (2012); innovation from Adela and Donika (2017); Yang , Sue, and Dennis (2008); Bennett and Rehnuma (2009); Faizan, Yuan, Kashif, Pradeep, and Neethiahnanthan (2016); Kising'u (2017); and service quality using the SERVQUAL model developed by Parasuraman et al. (1988); Zeithaml et al. (2006).

3.6 Data Collection Procedure

The process of gathering specific information to either prove or refute facts in a study is known as data collection (Kombo & Tromp, 2011). Primary data collection was done using a self-administered questionnaires by way of drop and pick by the researcher and assisted by two assistants who were briefed on how to administer questionnaires among the respondents targeted. They were also closely supervised to ensure the data collected from the respondents is error free. Three respondents in each of the universities included the Deputy Vice Chancellors in Academic division, Deputy Vice Chancellors of Administrative division and Finance Officers/Managers, as the key informants or units of inquiry. The university was the unit of analysis. The distribution of these three questionnaires to the respondents in both academic and administrative managerial categories in the sampled universities was deemed sufficient in line with previous studies by Bontis et al. (2002) where key respondents were employees in managerial positions based on the fact that they possess sufficient knowledge in regard to issues under investigation. It also helps reduce on the common methods bias.

Before the collection of data from the respondents, all the requisite authorizations and clearances as well as an introduction letter from the university was sought. The respondents were first informed about the intended study explaining its purpose and inviting their participation and were assured of anonymity and confidentiality. These assurances were stated in the cover letter and in the questionnaire. Respondents were allowed five days to fill the questionnaires and those not returned thereafter were followed up by way of telephone calls, text messages and personal visits. Based on the above-mentioned factors a self-administered questionnaire was sufficient for collection of data in this study

3.7 Variable Definition and Measurement

Saunders et al. (2009) observed that it's critical to operationalize variables in a study since these variables facilitate measurement of facts. The operationalized scales in this study were developed purposely for this study while others were extracted from other evaluation tools and models and contextualized in the current study. Hair, Black, Baln, and Anderson (2010) asserts that for identification purposes, each determinant needs to be measured by at least three indicators. Resulting from this, Strategic Leadership being the independent variable was operationalized by human capital, core competencies and strategic direction which are generic strategic leadership practices selected from studies by Bass (2007), Jooste and Fourie (2009), Hitt *et al.* (2001). They consisted of 15 items.

The dependent variable service quality, was determined by five dimensions being tangibility, reliability, responsiveness, empathy and assurance in line with Parasuraman et al. (1988) SERVQUAL model, an evaluating tool which is used for assessing the quality of services offered to consumers by various institutions. It consisted of 22 items. Innovation which is the mediating variable was operationalized using three indicators. They are administrative, technological and service innovation consisting of 15 items. A five-point Lickert scale was used for all the item scales, thus the interval scale as a unit of measurement. The five-point Lickert scale ranges from 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree and 5 = strongly agree. Saunders et al. (2009) has

proposed use of this interval scale largely utilized in social researches in assessing psychometric attributes, as a quick and easy tool for the respondents to fill.

3.8 Pilot Study

Sekaran and Bougie (2010) noted that pilot testing questionnaire before it's administered, helps 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. It will also help to check that the survey questionnaire elicits data for analysis on all of the concepts intended by the study, and it allows the researcher to check for repeated and ambiguous questions and to get an idea of the approximate time the research instrument takes to fill. The rule of thumb is that 1% of the sample should constitute the pilot test (Cooper & Schindler, 2013). Following this recommendation, questionnaires were distributed to seven universities randomly selected. These questionnaires were distributed to 21 respondents of those universities that were not to be part of the final study (Kibabii, Maseno, Kabianga, University of Eldoret, Catholic University of Eastern Africa, KCA and Zetech universities). Feedback received during the pilot study informed modification of the research instrument by eradicating any ambiguities and unsatisfactory terms, and were also to be integrated in the preparation of the final version of the survey questionnaire.

3.8.1 Reliability of Research Instrument

Kombo and Tromp (2011), state that the measure of the consistency and dependability of a tests results, is known as reliability. All the variables in the study are included. The Cronbach alpha coefficient (α) measure that is used to assess the internal consistency of a research instrument, was used to determine the reliability. The questionnaire was designed using measures, scales and items from previous studies and literature, with further checks done through a pilot study that necessitated pretesting of the research instrument (Saunders *et al.*, 2009) before final administration to ensure that the study

measurements are dependable. The survey instrument was tested in its entirety, and the subscales of the instruments tested independently.

Reliability was measured by the value of Cronbach's Alpha (α) coefficient that must be greater than 0.7 a good enough condition for the variable items to be accepted as reliable; otherwise, the variable items are unreliable, and needs to be deleted as suggested by the analysis until finally the value of α is accepted (Hair et al., 2010). The Cronbach's alpha value usually ranges between 0 and 1.0; a value of 1.0 indicates perfect reliability, whereas the value 0.70 is considered as the lower level of acceptability. For social studies, reliability coefficients of 0.7 or greater are considered sufficient (Hair et al., 2010). Pilot test was conducted at 7 accredited universities, and the results are presented in table 3.6. The result findings assisted the researcher to know the extent to which data collected and analysis procedures yielded consistent finding and provide assurance that the same results could be expected in any other subsequent occasions. Other previous researchers (Elenkov & Manev, 2005; Kitonga, 2017; Lear, 2012; Masungu, Marangu, Obunga, & Lilungu, 2015; Obunga, Marangu, & Masungu, 2015) have used this approach in their studies.

3.8.2 Validity of Research Instrument

Validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study Mugenda and Mugenda (2011). Content validity, criterion-related and construct validity are goodness of measures tests advanced by literature, that measure validity. Content validity which focuses on all parts of a defined measure, ensures that the measures include an adequate and representative set of questions that measure concepts. Criterion-related validity is an indicator that relates to the ability to predict some outcome. When compared to another measure, it holds the same result. Construct validity also called measurement validity, will reflect how well the results of a measure used, fit the theories around which the test is designed (Sekaran & Bougie, 2010). Factor analysis is used to assess validity.

This study focused on construct and content validity. Construct validity was tested through the use of survey items drawn from existing theory-driven research (Lear, 2012); Adela and Donika (2017). SERVQUAL model dimensions developed by Zeithaml *et al.* (2006) has been used by various researchers to test performance dimensions in organizations. Similarly, this study adapted the dimensions of SERVQUAL proposed by the said authors. Content validity was determined by conducting a pilot test on purposely selected respondents outside the main study sample but with homogenous characteristics within the same target population. Pretesting allowed for removal of problems after identifying them. Scrutiny and modification of the research instrument was done by consulting experts, professionals and colleagues in strategic management area to help increase levels of clarity. The order of questions, question content and wording of questions was given distinctive attention. It has been advocated that content validity can be established by using expertise in a field to judge whether the set of items actually represent the concept under study (Cooper & Schindler, 2013; Mugenda & Mugenda, 2011) are previous researchers who have used this this method

3.9 Measurement and Scaling Techniques

The process of assigning numbers to observations is known as measurement, and the level of measurement is determined by the criteria by which the assignment of the numbers is done (Kothari, 2009). While measuring something, we generate a scale in the range and then convert the attributes of objects from the domain onto it. Data or information that can be analyzed is then produced from the operational definition of the variables. The kind of measuring scale employed in the operationalization of the variable impacts significantly on the statistical approach that should be performed (Mugenda & Mugenda, 2003). There are four measuring scales: nominal, which assigns a numerical value to an attribute; ordinal, which allows attributes to be orderly; interval, which permits attributes to be divided by meaningful lengths; and ratio, in which an absolute zero is allowed to be employed (Hart, 2009).

Structured questionnaires are used as the basis for the survey report and cover a particular topic or issue (Hart, 2009). They request for information and come with a list of all possible answers from which respondents select the one that best defines their situation (Mugenda & Mugenda, 2003). The questionnaire is usually an operational instrument to measure the number of variables of a concept by sampling respondents from a larger population in order to make generalizations about a population (Hart, 2009). They can be used to measure attributes using various scales like Lickert scales and will provide information from a larger number of people and can be analysed at nominal, ordinal and interval levels (Hart, 2009). Lickert scale are developed by utilizing the item analysis approach and comprises a number of statements which prompt either a favourable or unfavourable attitude towards the given object to which the respondent is asked to react (Kothari, 2009). Most statements are in terms of several degrees, usually five degrees because they are more reliable and can provide more information (Kothari, 2009). All the objectives in this study were measured by a 5-point Lickert scales ranging from “strongly disagree” to “strongly agree”. Odera (2017) in his study on the effects of strategic leadership and organizational performance within private universities in Kenya, used a 5-point Lickert scale.

3.9.1 Measurement of Independent and Mediating Variables

This study used a cross – sectional and explanatory survey consisting structured scale questionnaire items. Lickert scales were solely used in the questionnaire to solicit responses. Lickert scales are commonly used in most social and business studies. Lickert scaling technique assigns a scale value to each of the responses (Kothari, 2009). They are used to measure perception, attitude, values and behaviour and they are declarative in form (Mugenda & Mugenda, 2003). Scale items were measured on 5-point, Lickert scale ranging from strongly disagree (1) to strongly agree (5), with all the hypotheses to test the relationship between innovation and service quality being measured using structural equation modeling.

Human capital development was measured through training and development, hiring or recruitment and also through creativity subscales; maintaining core competencies was determined by recognizing and appreciating knowledge, professional competencies and change of mindset subscales; strategic direction was determined by informed decisions, mission and vision statements and strategic processes subscales. In this study, the mediating variable was innovation. The mediating variable used the Lickert scale to measure the respondents perceptions to the extent with which they strongly disagree or agree with the key indicators that define innovation: administrative, service and technological innovations subscales defined innovation (Bennett & Rehnuma, 2009; Faizan et al., 2016; Yang et al., 2008). Baron and Kenny (1986) and, Preacher and Hayes (2004) suggested that mediation statistics provides the ability for researchers to quantitatively estimate direct and indirect effects of mediator variables to reliably uncover the relationship between two variables.

3.9.2 Measurement of Dependent Variable

Servqual model which was developed by Parasuranam et al. in 1988, contains most of the dimensions of service quality and was used to measure the dependent variable. The Servqual model that was used in this study has five dimensions which elicit the respondents' perceptions on service quality: tangibility, reliability, responsiveness, empathy and assurance. Owino (2013) In his study on the influence of service quality and corporate image on customers' satisfaction among university students in Kenya used Servqual model.

3.10 Data Processing and Analysis

Easa and Bazzi (2020) Categorized data analysis for SEM into three categories: descriptive statistics through which an illustration of the characteristics of the study data set is done, measurement model evaluation that relates the latent variables to their indicators and, finally, structural model evaluation to examine how the latent variables of the study relate. Data analysis involves understanding the meaning of information,

reducing it to a manageable size, configuring it for decision making and applying statistical techniques. Data processing entails editing, classification and tabulation of the data collected so that they are amenable to analysis (Kothari, 2009). The collected data was coded and entered into the IBM SPSS data analysis program version 23 to test if the path coefficients of H1 to H4 were statistically significant in the predicted directions of the conceptual model, and also for data cleaning and running of the Exploratory Factor Analysis (EFA). Data cleaning process ensures the researcher detects errors and removes these errors for quality improvement purposes (Cai & Zhu, 2015).

Both descriptive (mean scores for central tendency, percentages for simplifying data by reducing all the numbers to a range of between 0 and 100, coefficient of variation to summarize the organization's characteristics, respondents and the variance for standard deviation) to describe the collected data properties, and also inferential statistics (simple linear regression and structural equation modelling) were used to analyze the data. The purpose of descriptive statistics is to enable the researcher to meaningfully describe a distribution of scores or measurements using a few indices or statistics (Mugenda & Mugenda, 2003). Inferential statistics was used to ascertain the extent and nature of the relationship among the variables as well as testing the hypothesized relationships.

Initial descriptive data analysis to analyze qualitative data, was performed using IBM SPSS version 23. The analyzed qualitative data was interpreted and presented in frequency tables. Once initial descriptive analysis was completed, the study construct measures were subjected to exploratory factor analysis and confirmatory factor analysis. Other application softwares were also used in sequential order as outlined by Ndung'u (2014): Ms-Excel windows 8 for case cleaning, variable screening and a transit package in that the data from SPSS was saved in Ms-Excel first for it to be exported to SmartPLS; Analysis of Moment Structures (AMOS) version 18, which analyses mainly co-variance structures and the mean, for preliminary EFA, Confirmatory Factor Analysis, generation of fit models, Path Analysis and Structural Equation Modelling (SEM); SmartPLS version 2.0 for Path Analysis, SEM with mediating and model diagnostics; STATA version 12.0 to test for the assumptions of the variables used in the

analyses; and R-GUI version 2.10.0 for building plots like box-plots using Ggplot2 package, and for univariate and multivariate testing of outliers in the dependent variable. Lastly, ATLAS was used for qualitative analysis.

Statistical tests rely on certain assumptions about variables used in the analysis. It is important to note that exploration of the data and running of the appropriate preliminary analysis is critical in order to be certain that the data does not violate the assumptions of the statistics planned to be used. Testing of assumptions provides support for the statistical analysis of correlation relationships (Tabachnick & Fidell, 2014). When these assumptions are not met, the results may not be valid, thus resulting in either type I or type II error, or overestimation or underestimation of statistical significance or effect size (Osborne & Waters, 2002). Data in regression analysis is assumed to be normally distributed. So, a violation of the normality results in the in-ability of the tests to verdict statistical significance (Siddiqi, 2014). The data was tested for normality using the graphical and numerical methods that include skewness and kurtosis.

Linearity test was also conducted to determine normality graph. Linearity of data refers to values of the outcome variable for each increment of a predictor variable which lie along a straight line (Ombaka, 2014). The relationship between the dependent and the independent variables, must be linear. Absence of a linear relationship between the two variables leads to the results of regression analyses to underestimate the true relationship. The assumption of linearity was measured using the normal probability plot (Q-Q plot) to show whether there is a linear or curvilinear relationship. A scatter plot that includes residuals and y values is drawn. Whereas the Y values are plotted on the vertical y axis, the horizontal x axis will comprise the standardized residuals. Linearity assumption will be met once the scatter plot displays a linear pattern.

The study also checked for multicollinearity. Multicollinearity occurs when there is a high degree of correlation between the predictor (independent) variables implying that one variable could be predicted by the other (Kandiri, 2014). Variance inflation factor (VIF) was used to test the assumption in this study. The VIF which includes tolerance

values and their reciprocals, indicates the degree that the variances in the regression estimates are increased due to multicollinearity. Hair et al. (2010) Opines that VIF value greater than 5 is a sign of collinearity and a cause of concern. Multicollinearity increases the standard errors of the coefficients and thus makes some variables statistically not significant while they should otherwise be significant. According to (O'Brien, 2007) a tolerance value of less than 0.20 indicates serious collinearity problems. Some studies have suggested that multicollinearity can be ruled out when the correlation coefficients are not in excess of 0.75 (Hair et al., 1998; Tabachnik and Fidell, 1989; Pallant, 2005) while others suggest that it should not exceed 0.80 (Bryman & Cramer, 2006).

The hypothetical relationship of this study was tested by using structural equation modeling (SEM-PLS) with AMOS software approach by employing Partial Least Squares (Ringle, Wende, & Will, 2005) to establish causal relationships among the variables. This procedure translates the theoretical construction into mathematical models in order subsequently to estimate and evaluate them empirically (Jöreskog & Sörbom, 1996). These were the null hypotheses that human capital development, maintaining core competencies and developing strategic direction have no relationship with quality performance and the null hypothesis also that innovation does not mediate the quality performance of accredited universities in Kenya. It used a two-stage procedure to test predictive models. The initial step was the evaluation of the outer or measurement model which determines the validity and reliability of the construct. The next step was the assessment of the inner or structural model. In this study, SEM-PLS was used because Walker *et al.* (2011), asserted that SEM is a rigorous analytical procedure for examining mediating effect. Additionally, SEM is considered as an extension of multivariate techniques such as regression analysis as it allows the use of multiple indicators to measure unobserved variables (i.e. constructs) whilst taking into account measurement errors when statistically analyzing data (Hair et al., 2010). Several aspects of SEM set it apart from the older generation of multivariate procedures.

Outliers are any values that have standardized scores in excess of the absolute value which can be either positive or negative for that variable, and which can lead to both type 1 and type 2 errors, thereby making the solution unreliable (Morrow, 2011). Data should be carefully examined for outliers by reviewing the frequencies and scatter plots (Khan & Naeem, 2018). Kline (2011) Indicates that variable outliers and missing data can inflate the estimates and should be screened from the sample. In respect to data, cleaning in preparation for conducting inferential statistics data has to be examined to minimize or eradicate outlier of variables.

Exploratory factor analysis is used for scale validation (Tetteh, 2019). Exploratory Factor Analysis (EFA) of both the independent and dependent variables was used to establish the adequacy of sample size and to determine whether constructs are suitable for Confirmatory Factor Analysis (Psomas & Jaca, 2016). The aim of EFA was to explain the matrix of correlations with as few factors as possible (Cheruiyot, Jagongo, & Owino, 2012). The output of the descriptive statistics, correlation matrix, Bartlett's Test of sphericity and Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy were adopted as pretest condition to EFA, to confirm whether there is a significant correlation among the variables to warrant the application of EFA (Narteh, 2013). Factor analysis was undertaken in two stages namely Principal Component Analysis (PCA) and varimax rotation method.

Another way to determine the veracity of the factorial analysis is from sampling adequacy tests, or through a Kaiser-Meyer-Olkin test or the Bartlett sphericity test. These tests provide the statistical probability to demonstrate if the data matrix used has significant correlations between the variables (Mulaik, 2010). Also, the Kaiser-Meyer Olkin (KMO) measure is used to assess the suitability of the sample for each unifactorial determination (Sakthivel, Rajendran, & Raju, 2005). The KMO statistic ranges from 0 to 1, and a value over .60 is deemed as acceptable and shows that the sample is fit for application of factor analysis technique (Huck, 2012; Pallant, 2011) as values below this would mean that much of the variability in the data will not be able to be accounted for by factor analysis (Hinton, 2004). Bartlett's test of sphericity which examines whether

the correlation matrix fits an identity matrix is the second test to be done. A significant Bartlett test is indicative that the correlation matrix varies significantly from an identity matrix. Kaiser-Meyer-Olkin test and Bartlett tests were used in this study to test whether the scale was suitable for factor analysis (Eres, 2011).

The quantitative techniques such as confirmatory factor analysis (CFA) as well as principal component analysis (PCA) and via partial least square (PLS) method-based structural equation modeling (SEM) have been used to validate and estimate the effect of one or more independent variables upon dependent variable and thereby helping in justifying nomological validity (Manohar, Mittal, & Tandon, 2021). Factor analysis was further performed using the Principal Component Analysis (PCA) method based on varimax rotation. The decision to ascertain the number of factors is based on the eigenvalue rule. Only factors with an eigenvalue of 1 or more are retained (Pallant, 2011). Once a factor structure is revealed, the next step is to decide which variables make up which factor (Field, 2005). A components method with orthogonal rotation (Varimax rotation) was used in order to facilitate the interpretation of each one and to minimize the number of variables with “high loading” on a factor, to reinforce their interpretation (Malhotra, Birks, & Wills, 2012), and to maximize the variance of the load factor (Johnson & Wichern, 2007).

The variable’s commonality, which indicates the amount of variance in each variable, was also assessed to ensure acceptable levels of explanation (Latif et al., 2019). To start the process of verifying the model’s reliability, the main parameters indicated in the literature are tested (Hair et al., 2017). The first concerns the reliability indicator, where the squared load of each indicator, hereafter referred to as commonality, was checked. When less than 30 variables are analyzed and once extraction has been done, communalities should be more than 0.7 (Field, 2009). They must be more than 0.4 for exploratory studies (Gomes, Seman, & Carmona, 2021). Principal axes factor analysis was used for extracting factors. Factor extraction is used to find the number of factors that can adequately explain that the observed variables do have a correlation (Kim & Mueller, 1978). A factor that accounts for less than 5% of the variance is considered not

important for further investigation. Also, only factors with an eigenvalue of 0.1 or more are retained.

In addition to EFA, confirmatory factor analysis (CFA) and structural path analysis were also performed to test the validity of the multi-item scales. Structural equation modeling (SEM) based analysis was performed using AMOS 18 software. As compared to EFA, CFA is considered to be a far more rigorous method for validating multi-item scales (Jain & Jain, 2015). CFA was preferred over exploratory factor analysis (EFA) and other classical validation techniques, since EFA has quite significant shortcomings. Additionally, EFA can give rise to distorted factor loadings and incorrect conclusions concerning the number of factors, and furthermore, the solution obtained is only one of an infinite number of solutions (Segars & Grover, 1993). To further assess the scale validity and unidimensionality, a CFA analysis was performed (Jain & Jain, 2015).

Anderson and Gerbing (1988) advocate for a two phase process consisting of confirmatory measurement model and confirmatory structural model, without which it would be difficult to identify the source of model fit problems (Kline, 2005). In order to assess the measurement model, data quality including construct reliability and construct validity CFA was utilised. A measurement model was developed based on the results of EFA. Fit indices utilized to evaluate the model fit include CMIN, comparative fit index (CFI), standardized root mean square residual (SRMR), Tucker-Lewis index (TLI) and RMSEA (Latif et al., 2019). Given the rationale for adopting the CFA method, factor validity is usually assessed using either the exploratory or the confirmatory modes. EFA is adopted when the researcher is uncertain about the dimensionality of a measure, so he or she seeks for identifying the minimal number of factors that observed variables are linked to. Alternatively, CFA is followed under the circumstances where the researcher has some knowledge of the measure structure, so he or she will postulate the linkages between observed measures and the underlying latent variables *a priori* then test this hypothesized model statistically (Byrne, 2010).

To empirically investigate the structural relationships of strategic leadership (represented by human capital development, maintaining core competencies and developing strategic direction dimensions) and service quality (tangibility, reliability, responsiveness, empathy and assurance) with innovation as the mediating variable, SEM approach was applied using AMOS software. The structural modeling approach was preferred to regression analysis technique as the former approach is considered statistically a superior method due to its ability to take into account the measurement error present with variables that are both the endogenous and exogenous (Jain & Jain, 2015). In past studies, endogenous and exogenous variables were treated as observed variables (represented by their composite scores), but in this current study, each of the endogenous and exogenous variables was treated as a latent construct and as such has been operationalized through its manifest variables, i.e., indicators or scale items.

Adoption of this approach permits the researchers to more exhaustively capture the variations present in the endogenous variables, and thus arriving at more reliable parameter estimates (Jain & Jain, 2015). For data analysis, the algorithm for Partial Least Squares Path Modeling (PLS-PM) was applied. The choice for this method is adequate when the purpose of the research lies between the need to test a theory and to predict patterns (Hair et al. 2017).

3.10.1 Confirmatory Structural Model and Hypothesis Testing

The assessment of structural measurement model and hypothesis testing was done using SEM approach based on CFA with analysis of moment structures (AMOS) (Byrne, 2010; Pattusamy & Jacob, 2017). The structural model assessment assists in establishing the relationship between latent and observed variables as well as their constructs. Additionally, it assists in giving each dimension's contribution to the unobserved variable and also to establish the direct and indirect effects of the variables on each other. Total effect, indirect effect and their significance using path coefficients were calculated (Satti et al., 2020). SEM is a multivariate method that measures the relationships across both latent factors and measurable variables through both factor

analysis and regression equations (Hair, Jr., et al., 2010). Latent variables were modeled as second-order constructs to achieve general understanding of the full model (Mir, Casadesus, & Petnji, 2016). With the CFA, a series of analyses were performed including the adjusted χ^2 (CMIN/df), goodness-of-fit index (GFI), adjusted GFI (AGFI), normed comparative fit index (CFI) and root mean squared error of approximation (RMSEA) to assess the models (Tetteh, 2019).

In order to determine the internal consistency of multiple indicators for each construct, reliability analysis was done. To evaluate the reliability for the factors, a composite reliability coefficient was stated (Hair, Sarstedt, Ringle, & Mena, 2012). Convergent and discriminant validity are used to establish construct validity (Bajpai, 2011). Convergent validity is confirmed when the concepts that should be related to each other are in fact correlated (Zikmund, Babin, Carr, & Griffin, 2013). Convergent validity is established when using factor analysis technique; the representation of the underlying construct for a group of items measuring the same construct converges. Average Variance Extracted (AVE) is calculated as a result of the factor loadings derived from factor analysis. Convergent validity is established if an AVE of .50 or greater is achieved for the constructs (Fornel & Larcker, 1981). According to (Zikmund et al., 2013), discriminant validity points to the distinctiveness of a construct. The criterion to evaluate discriminant validity is that square root of AVE for each construct must be greater than inter-correlations with other constructs (Gefen, Straub, & Boudreau, 2000). In the second part measurement model was analyzed using composite reliability to assess internal consistency; to assess convergent validity, individual indicator reliability and average variance extracted (AVE) were utilized. Discriminant validity was evaluated using Fornell–Larcker qualifying measure and cross loadings (Hair et al., 2014).

3.10.2 Regression Weights

The descriptive analysis used mean measures to find out the weighted average of the answers of respondents towards each statement and standard deviation (Indrawati & Suarnam, 2020). The path coefficients were calculated for the purpose of testing the

relationships amongst the variables. The strengths of the relationships between the two variables is shown by the path coefficients (Choshaly & Mirabolghasemi, 2019). Path coefficient can be referred to as the coefficient linking constructs in the structural model, hence it is used to test hypotheses and the relationship strength. Whereby, any coefficient value close to 1 reveals a robust positive relationship. On the other hand, coefficient value close to -1 represents a strong negative relationship. Furthermore, any path coefficient value close to 0 is considered insignificant (Garson, 2016). The path diagram provides an illustration of how the variables relate to each other, helps illustrate the research hypothesis, and helps identify errors related to variable omission in both the model and statistical analysis (Timmerman, 2013). T-tests was conducted to examine the hypotheses to ascertain the p-values significance level at the common threshold value of 0.05 (Sadeh & Garkaz, 2015).

3.10.3 Goodness of Fit Test (Normed Chi Square)

Confirmatory factor analysis (CFA) was applied to calculate fit indices for all variables (Sadeh & Garkaz, 2015), and to confirm existing theories or concepts (Rahmidani, 2014). In order to assess fitness of measurement constructs, firstly, loading of each measured variable should be 0.5 or higher. Then results of CFA could be applied to measure the fitness of each construct composed in the conceptual model (Sadeh & Garkaz, 2015). The researcher should report at least one absolute index and one incremental index to evidence overall fitness of the conceptual model (Hair et al., 2010). These two are the most common types of fit statistics. In order to evaluate the models, a series of analyses were performed using the CFA; goodness-of-fit index (GFI), normed comparative fit index (CFI) and root mean squared error of approximation (RMSEA) (Timmerman, 2013).

The χ^2 statistics divided by the degree of freedom results in what is referred to as the goodness-of-fit (normed chi-squared). In order to demonstrate good fit of the proposed model to the data, the expected p-value for the chi-square statistic should not be significant to accept the null hypothesis. Chi square statistic is said to be remarkably

sensitive to sample size, thus the ratio of chi-square to degrees of freedom (χ^2/df) may be used to assess fit (Robinson. Jr, Neely, & Williamson, 2011). A (χ^2/df) ratio value less than 5 is acceptable fit between the hypothesized model and the sample data (MacCallum, Browne, & Sugawara, 1996). Hu and Bentler (1999) Advanced that the parsimony – adjusted index (Root Mean Square Error of the Approximation, (RMSEA) is used to measure residuals and also adjusts cautiousness in the model. Smaller RMSEA values indicate better models. The values normally run on a range of 0 to 1, An adequate model fit arises when the value is less than 0.08 (Hu & Bentler, 1999). On the other hand, Kline (2011) pronounced that RMSEA is an indicator of badness-of-fit with a value of zero indicating the best fit and values near 0.10 statistic a poor fitting model.

SEM has been used for this study for several reasons. First, it takes a confirmatory rather than an exploratory approach to data analysis. By contrast, most other multivariate procedures are essentially descriptive in nature such as exploratory factor analysis, which makes hypothesis testing to be difficult, or near impossible. Additionally, while SEM provides explicit estimates of these parameters, traditional multivariate procedures are incapable of either assessing or correcting for measurement error. Finally, whereas the former methods of data analysis rely entirely on observed measurements solely, SEM procedures can also include both unobserved (i.e. latent) and observed variables (Lo'pez, Jose', & Camilo, 2005). Egan, Baiyin, and Bartlett (2004) Stated that SEM enables researchers to explicitly examine measurement error and tests of both direct and indirect structural hypotheses. Both endogenous variables (underlying dependent variables) and exogenous variables (external predictors) can be explored (Koufteros, Babbar, & Kaighobadi, 2009).

In general, to commence the process, SEM necessitates having a hypothetical model (Mohamed, 2003). Analysis is then performed to determine whether such a theoretical model is valid by specifying, estimating and evaluating linear relationships amongst a selection of both observed and unobserved variables (Shah & Goldstein, 2006). The SEM models comprise both measurement models and structural models. The measurement models depict the links between the latent variables and their observed

measures (CFA model); whereas the structural models depict the links among the latent variables themselves (Lo'pez *et al.*, 2005). The relationships between the theoretical constructs are represented by regression or path coefficients between the factors (Hox, Timo, & Bechger, 1999).

The SEM model for this study as outlined by (Baron & Kenny, 1986) to meet the required conditions for a true mediation relationship is as follows:



$$Y = \beta_0 + \beta_2 M + \varepsilon \quad (\beta_2 \text{ is significant}) \quad (1)$$

$$M = \beta_0 + \beta_1 X + \varepsilon \quad (\beta_1 \text{ is significant}) \quad (2)$$

$$Y = \beta_0 + \beta_1 X + \beta_2 M + \varepsilon \quad (\beta_1 \text{ is significant}) \quad (3)$$

(β_2 should be smaller in absolute value than the original mediating effect in equation 2)

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \quad (\text{Multiple regression model for} \quad (4)$$

this study)

Where: Y - dependent variable (Service Quality).

β_0 - are constants or intercepts.

$\beta_1, \beta_2, \beta_3$ & β_4 - are coefficient values.

X_1 - represents Human Capital Development (HCD).

X_2 - represents Maintaining Core Competencies (MCC).

X_3 - represents Developing Strategic Direction (DSD).

X_4 - represents the mediator variable for innovation (I).

ε is a random variable introduced to accommodate effects of other factors that affect service quality within or outside strategic leadership and innovation that are not included in the model.

The interpretation of the parameters is described in table 3.2. Baron and Kenny (1986) have asserted that the equation models 1, 2 and 3, are mandatory requirements that must be fulfilled in order to have a true mediation relationship. The three criteria have to be met to support full mediation.

Table 3.2: Interpretation of the parameters/variables involved in the hypotheses

Equation (1)	β_2 Total effect of X on Y , that is, the sum of the possible direct and indirect effects. It implies regressing the DV on the IV to confirm that the IV is a credible predictor of the DV
Equation (2)	$-\beta_1$ Effect of X on M . It means regressing the mediator on the IV, so as to confirm that the IV is a significant predictor of the mediator. Essentially, if the mediator is not associated with the IV, then it couldn't possibly mediate anything.
Equation (3)	β_1 Direct residual effect of X on Y controlled by M , that is, after discounting the indirect effect exerted via M and β_2 Effect of M on Y . Implies regressing the DV on both the mediator and IV. In other words, to confirm that the mediator is a significant predictor of the DV, while controlling the IV. This step involves demonstrating that when the mediator and the IV are used simultaneously to predict the DV, the previously significant path between the IV and DV (step # 1) is now greatly reduced if not significant.

Baron and Kenny (1986) in summary have stated that to test mediation, one should estimate the three following regression equations: first, regressing the mediator on the independent variable; second, regressing the dependent variable on the independent variable; and third, regressing the dependent variable on both the independent variable and on the mediator. To establish mediation, the following conditions must hold: First, the independent variable must affect the mediator in the first equation; second, the independent variable must be shown to affect the dependent variable in the second equation; and third, the mediator must affect the dependent variable in the third equation (Zhao, Lynch, & Qimei, 2010).

Baron and Kenny (1986) asserted that the evidence for mediation is strongest when there is an indirect effect but no direct effect, which they call “full mediation.” When there are both indirect and direct effects, they call it “partial mediation.” Although full mediation is the gold standard, (Iacobucci, Neela, & Xiaoyan, 2007) notes that, “when all tests are properly conducted and reported, the majority of articles conclude with ‘partial mediation.’” That is, mediation is usually accompanied by a direct effect.

The procedure of testing for mediation provided by Baron and Kelly (1986) and adopted by Shaver (2005) was assumed. According to Shaver (2005), the first order condition is if B13 is statistically significant and given that B11, was statistically significant in equation (6), the results would be interpreted to mean that corporate image mediates the relationship between service quality and customer satisfaction. The second order condition is, if the estimates of B14 is non-significant, then the interpretation would be that corporate image fully mediates the relationship between service quality and customer satisfaction. The third order condition is, if B14 is statistically significant then the interpretation would be that corporate image partially mediates the relationship between service quality and customer satisfaction.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

The main objective of this chapter was to provide analyses, interpretations, and conclusions about the outcomes. The open-ended questions were analyzed qualitatively in this chapter. In addition, numerous measures were taken to ensure the development of a strong quantitative model, as well as important basic recommendations for designing a quantitative model.

4.2 Response Rate

The study targeted 222 senior management leaders from the 74 sampled universities in Kenya and three questionnaires were administered to each university where the key respondents comprised the Deputy Vice Chancellors in the Administrative division, Deputy Vice Chancellors in the Academic division and Financial Officers/Managers based on the guidelines of Field (2013). Data was collected for a period of 4 months from April 2021 to July 2021 and yielded a return rate of 160 questionnaires out of 222 questionnaires that were issued. This represented a response rate of 72.1% in terms of respondents and 78.4% on the basis of the universities that were targeted and subsequently responded/participated respectively for this study. Following Mugenda and Mugenda (2009), a response rate of 50% is acceptable for the purposes of analysis and publishing, 60% is adequate, 70% onwards is extremely good. According to Sekaran and Bougie (2010), a sample size of 30 is satisfactory and less than 500 is ideal for most studies. The data collection exercise was flawed with delays by the respondents most of whom were working from home or in shifts because of the Corvid-19 pandemic that hit the country from March 2020 and the government pronounced protocols that demanded a lean work force in the offices.

The main reason attributed to the high response rate can be attributed to: professional presentation of the questionnaire and comprehensiveness of data collection tool which was achieved through pilot test survey. The response rate was considered representative as those of previous studies. Chepkurgat (2019) obtained an 84.93 percent response rate in her study on the effect of strategic leadership and organizational change on organizational performance in chartered universities in Kenya, Kising'u, (2017) attained a 75 percent response rate in his study on the role of strategic leadership for sustainable competitive advantage in Kenyan public and private universities, Odera (2017) obtained a 91 percent response rate in is study on the effects of strategic leadership on organizational performance within private universities in Kenya while Ogaja and Kimiti (2014) received an 87.7 percent response rate in their study on the influence of strategic leadership on implementation on tactical decisions in public universities.

4.3 Institution Demographics

The institutions demographics was organized and summarized. The data collected from the questionnaire was then used to carry out the analysis. The number of years since chartering, number of employees, and category of the university and the length of service were captured. The demographic characteristics were analyzed using frequencies and percentages and produced in the form of frequency tables. Although the demographic data did not have an overall effect on the level of analysis, it assisted in providing general information about the population under study. Several studies have used descriptive statistics to analyze and present demographic data of study respondents. The results of the institutional demographic analysis are shown in table 4.1.

Table 4.1: Institution Demographics

Main Factor	Factor Level	Frequency	Percentage (%)
Period since chartering	5 to 10 years	134	83.8
	10 to 15 years	12	7.5
	15 to 20 years	14	8.8
Employees Number	301 to 400 employees	96	60
	401 to 500 employees	64	40
Category of institution	Public Chartered University	64	40.0
	Private Chartered University	38	23.8
	Public University Constituent College	12	7.5
	Private University Constituent College	12	7.5
	Institution with letter of interim authority	31	19.4
	Registered Private Institution	3	1.9
	Length of Service	0 - 1 year	1
	1 -5 years	7	4.4
	More than 5 years	152	95.0

Majority of the universities 84% were in existence for a duration of 5-10 years period since they were awarded charters. 40% of the respondents who had worked in public chartered university were the majority. In the categories of universities, majority 40% were public chartered universities. Respondents who had worked for a period of more than five years, were the majority comprising 95%.

4.3.1 Period since Chartering

The data findings as illustrated in Table 4.1 showed that the majority of the respondents (83.8%) indicated that their Universities had been in service for a period of 5 to 10 years since they were issued with a charter to operate. 8.8% of the respondents indicated that their Universities were in operation for between 15 to 20 years, while 7.5% of the respondents stated that their institutions had been in operation for between 10 to 15 years since they were chartered. This indicated that the information provided by the respondents was strong enough having come from respondents whose institutions had been in operation for a considerable number of years. It further implies that most of the universities are in the maturity stage with well embedded routines that focuses on routine problems.

4.3.2 Employees Number

The data findings in Table 4.1 showed that in majority of the institutions (60%) of the respondents stated that in their Universities, the number of employees were between 301 - 400, while 40% stated that the number of employees in their institution were over 401. This illustrated that the institutions in this study were adequately staffed.

4.3.3 Category of Institution

The findings of the study in table 4.1 illustrated that 40% of the respondents indicated that their institutions were public chartered, 23.8% indicated that their institutions were privately chartered, 19.4% indicated that their institutions were those with letters of interim authority, 7.5% indicated that their institutions were public university constituent colleges. Another 7.5% indicated their institutions were private university constituent colleges and 1.9% indicated that their institutions had been registered as private institution. This illustrated that all the institutions participated in this study and their different levels were shown as a demonstration of how the various institutions responses

compared to one another. It also implies that despite the privatization of higher education, public universities still dominate the industry.

4.3.4 Length of Service

The findings of the study in table 4.1 illustrated that majority of the respondents (95%), had worked in their institutions for more than 5 years, 6% indicated that they had worked for less than 1 year, while 4.4% had worked for between 1 to 5 years. This illustrated that the respondents had worked for these institutions for a considerable number of years, had a good understanding of their institutions and were competent enough to participate and respond to the issues under this particular study. These are the employees who had been repeatedly been exposed to service performance and who had over the years formed a composite service quality perception of the service provider.

4.4 Correlation of Study Variables

Pearson correlation analysis was performed to examine the strength and direction among strategic leadership practices, innovation, and service quality relationship, and also assisted in testing for multicollinearity. Further, Pearson's correlation was utilized to investigate the direction and strength of the relationships among the variables in hypothesis one up to five. Thus, according to Bryman and Cramer (2006), a correlation value of 0 indicates that two measures are unrelated; 0.19 and below is very weak; 0.20 to 0.39 is moderate; 0.70 to 0.89 is strong; and 0.90 to 1 is very strong.

As shown by Table 4.2, the least significant correlation in this study was found between core competencies and strategic direction ($r=0.397$, $p<0.05$). The highest significant correlation ($r=0.659$, $p<0.05$) was observed between service quality and human capital. A correlation significantly larger, and over 0.90, means that the variables may be measuring the same thing (Tabachnick & Fidell, 2013). The fact that all the correlations were less than 0.90 show that the factors were sufficiently different measures of separate variables, and as a possible consequence, all of the variables were included in this study.

Table 4.2: Correlation of the study variables

Variables		Human Capital	Strategic Direction	Core competencies	Innovation	Service Quality
Human Capital	Pearson Correlation	1				
Strategic Direction	Pearson Correlation	.408**	1			
Core competencies	Pearson Correlation	.430**	.397**	1		
Innovation	Pearson Correlation	.572**	.524**	.438**	1	
Service Quality	Pearson Correlation	.659**	.422**	.545**	.429**	1

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

4.5 Description of Factors of the Study Variables

This section includes the description of the factors of the study as shown in Appendix IV. The description was valuable for cross referencing purposes as these factors were used all through in this study. The described factors here are extracted from the following variables: human capital development; maintaining core competencies; developing strategic direction; administrative innovation; service innovation; technological innovation; tangibility; reliability; responsiveness; empathy and assurance. All the variables have 5 factors each with the exclusion of tangibility, responsiveness and assurance which have 4 factors each.

4.6 Descriptive and Qualitative Analysis of the Variables of the Study

The research tool was divided into four sub-sections for each of the research variable. The first sub-section consisted of demographic questions. The second, third and fourth sub-sections consisted of questions touching on the main variables of the study: innovation, strategic leadership and service quality respectively. All respondents were subjected to a five-scale Likert table with questions ranging from strongly disagree to strongly agree. These were further subjected to qualitative analysis which involved several stages, *inter alia*, sorting and classification, coding. Innovation was operationalized into administrative, service and technological innovation. These are itemized below:

4.6.1. Administrative Innovation

Administrative Innovation was measured using a five-point Likert scale stretching from 1 = strongly disagree to 5 = strongly agree and the results, conveyed as percentages. The statistics for the Administrative Innovation composite scores using an average mean score for the five dimensions are displayed on table 4.3. Administrative Innovation realized a mean score value (Mean=3.001, SD=1.0138, n=160). This shows that the majority of respondents demonstrated high level of indecisiveness as concerns administrative innovation.

Statements that result with a high mean demonstrate that the respondents are in agreement (> 3.00). Statements with a low mean proposes that respondents are not in agreement (< 3.00). Standard deviation (SD) expresses how far data values generally move away from the mean (Cooper and Schindler, 2006). Since it excludes the variance square and states the derivations in their original units, standard deviation is the most largely used measure of dispersion. A small SD (< 1) indicates that majority of the sample means are close to the center (mean) implying also that the sample is a good indicator of the population mean. A large SD (1 >) implies that the sample mean does

not accurately predict the population mean because data points are spread over a broader array of values (Harper, 2000).

Findings by Kising'u (2017) revealed that universities have underscored the need for administrative innovation for educational purposes and administrative processes. Despite this emphasis, the indecisiveness of the respondents in this study conforms to the findings of Jaskyte (2011) who in his study on predictors of administrative and technological innovations in non-profit organizations found out that most organizations introduced more technological than administrative innovation. He concluded this indecisiveness could be as a result of the high preference given to technological innovation by organizations than administrative innovation. They are also top down unlike technological which is bottom-up innovation.

Table 4.3: Measurement of Administrative Innovation

Administrative Innovation	SD (%)	Un D (%)	Un (%)	SA A (%)	SA (%)	Mean	Std. Deviation
AI1	3.1	31.3	35.0	25.0	5.625	2.988	0.958
AI2	4.4	23.1	33.8	30.6	8.1	3.150	1.011
AI3	6.9	21.9	46.3	18.1	6.9	2.963	0.977
AI4	7.5	25.0	32.5	26.3	8.8	3.038	1.081
AI5	6.9	28.8	40.0	15.0	9.4	2.913	1.042
<i>Composite</i>						<i>3.0100</i>	<i>1.0138</i>

4.6.2 Service Innovation

Likert scale was used to measure service Innovation and the results, stated as percentages. Table 4.4 shows the statistics for service Innovation composite scores. Service Innovation recorded a mean score value (Mean=3.978, SD=0.640, n=160). This exemplified high level of agreement by the respondents on service innovation.

Table 4.4: Measurement of Service Innovation

Service Innovation	SD		Un		SA		Std.	
	(%)	D (%)	(%)	A (%)	(%)	Mean	Deviation	
SI1	0.0	1.3	26.3	61.3	11.3	3.825	0.630	
SI2	0.0	0.6	13.8	68.1	17.5	4.025	0.582	
SI3	0.0	1.3	18.8	58.8	21.3	4.000	0.673	
SI4	0.0	1.3	19.4	58.8	20.6	3.988	0.673	
SI5	0.0	0.6	16.3	60.6	22.5	4.050	0.642	
<i>Composite</i>						3.978	0.640	

4.6.3 Technological Innovation

Likert scale was used to measure technological innovation, and the results were stated as percentages. The statistics for the Technology Innovation composite scores are displayed on table 4.5. Technological Innovation realized a mean score value (Mean=3.955, SD=0.677, n=160). This showed high level of agreement by the study respondents on technological innovation. This is in agreement with previous literature by researchers that technological innovation is a key factor in improving firm performance (Hailekiros & Renyong, 2016).

Table 4.5: Measurement of Technological Innovation

Technological Innovation	SD		Un		SA		Std.	
	(%)	D (%)	(%)	A (%)	(%)	Mean	Deviation	
TI1	0.0	0.0	31.9	48.1	20.0	3.881	0.713	
TI2	0.0	0.0	20.0	61.9	18.1	3.981	0.619	
TI3	0.0	0.6	22.5	56.3	20.6	3.969	0.677	
TI4	0.6	0.6	20.6	58.8	19.4	3.956	0.695	
TI5	0.0	0.0	23.8	53.8	22.5	3.988	0.682	
<i>Composite</i>						3.955	0.677	

4.6.4 Strategic Leadership

Strategic leadership was operationalized into human capital development, maintaining core competencies and developing strategic direction.

4.6.5 Human Capital Development

Human Capital Development was measured using the Likert scale and the results, expressed as percentages. Table 4.6 shows the statistics for the Human Capital Development composite scores. Human Capital Development recorded a mean score value (Mean=4.024, SD=0.734, n=160). This demonstrated a higher level of agreement of Human Capital Development by the study respondents.

Table 4.6: Measurement of Human Capital Development

Human Capital Development	SD (%)	D (%)	Un (%)	A (%)	SA (%)	Mean	Std. Deviation
HCD1	0.0	1.9	33.1	49.4	15.6	3.788	0.722
HCD2	0.0	1.3	20.6	46.9	31.3	4.081	0.752
HCD3	0.0	1.3	20.6	48.8	29.4	4.063	0.741
HCD4	0.0	1.9	16.3	49.4	32.5	4.125	0.742
HCD5	0.0	1.9	16.9	54.4	26.9	4.063	0.715
<i>Composite</i>						<i>4.024</i>	<i>0.734</i>

4.6.6 Maintaining Core Competencies

Likert scale was used to measure Maintaining Core Competencies, and the results, conveyed as percentages. The statistics for the Maintaining Core Competencies composite scores are displayed on table 4.7. Maintaining Core Competencies realized a

mean score value (Mean=4.081, SD=0.715, n=160). This showed that the respondents in this study had a high level of agreement with Maintaining Core Competencies. In a study by Agha, Alrubaiee and Jamhour (2010) on the effect of core competence on competitive advantage and organizational performance established that core competence has a strong and positive effect on competitive advantage and organizational performance.

Table 4.7: Measurement of Maintaining Core Competencies

	SD (%)	D (%)	Un (%)	A (%)	SA (%)	Mean	Std. Deviation
MCC1	0.0	0.6	17.5	46.9	35.0	4.163	0.726
MCC2	0.0	1.9	20.6	53.1	24.4	4.000	0.727
MCC3	0.0	0.6	18.1	51.3	30.0	4.106	0.706
MCC4	0.0	0.6	20.0	56.3	23.1	4.019	0.677
MCC5	0.0	1.3	18.1	48.1	32.5	4.119	0.739
<i>composite</i>						<i>4.081</i>	<i>0.715</i>

4.6.7 Developing Strategic Direction

Likert scale was used to measure developing strategic direction, and the results, conveyed as percentages. Table 4.8 displays the statistics for Developing Strategic Direction composite scores. Developing Strategic Direction recorded a mean score value (Mean=4.026, SD=0.715, n=160). This showed high level of agreement by the study respondent on Developing Strategic Direction.

Table 4.8: Measurement of Developing Strategic Direction

	SD (%)	D (%)	Un (%)	A (%)	SA (%)	Mean	Std. Deviation
DSD1	0.0	1.3	17.5	50.0	31.3	4.113	0.727
DSD2	0.6	1.9	18.1	60.0	19.4	3.956	0.712
DSD3	0.0	2.5	11.9	60.0	25.6	4.088	0.686
DSD4	0.625	4.4	15.0	59.4	20.6	3.950	0.767
DSD5	0.0	2.5	14.4	61.3	21.9	4.025	0.682
<i>composite</i>						<i>4.026</i>	<i>0.715</i>

4.6.8 Service Quality

4.6.8.1 Tangibility

Tangibility was measured using the Likert scale and the results, stated as percentages. Statistics for the Tangibility composite scores are shown on table 4.9 below. Tangibility had a mean score value (Mean=4.000, SD=0.769, n=160). This showed a high level of agreement of Tangibility by the respondents in the study.

Table 4.9: Measurement of Tangibility

Tangibility	SD (%)	D (%)	Un (%)	A (%)	SA (%)	Mean	Std. Deviation
TAN1	0.625	3.1	15.0	57.5	23.8	4.006	0.756
TAN2	0.6	5.0	16.3	56.3	21.9	3.938	0.798
TAN3	1.3	2.5	15.6	57.5	23.1	3.988	0.777
TAN4	0.625	2.5	13.1	56.9	26.9	4.069	0.745
<i>composite</i>						<i>4.000</i>	<i>0.769</i>

4.6.8.2 Reliability

Likert scale was used to measure reliability and the results, expressed as percentages. Table 4.10 displays the Reliability composite scores. Reliability had a mean score value (Mean=4.034, SD=0.772, n=160). This shows a high level of agreement by the study respondents on Reliability.

Table 4.10: Measurement of Reliability

Reliability	SD (%)	D (%)	Un (%)	A (%)	SA (%)	Mean	Std. Deviation
REL1	1.3	1.9	20.0	48.8	28.1	4.006	0.820
REL2	1.3	1.3	18.1	56.9	22.5	3.981	0.756
REL3	1.25	0.6	15.6	55.0	27.5	4.069	0.753
REL4	1.3	1.3	15.0	52.5	30.0	4.088	0.780
REL5	1.3	0.6	17.5	55.6	25.0	4.025	0.752
<i>Composite</i>						<i>4.034</i>	<i>0.772</i>

4.6.8.3 Responsiveness

Likert scale was used to measure responsiveness and the results, stated as percentages. Table 4.11 displays statistics for the Responsiveness composite scores. Responsiveness realized a mean score value (Mean=3.641, SD=0.103, n=160). This showed some level of agreement of Responsiveness by the respondents in this study.

Table 4.11: Measurement of Responsiveness

Responsiveness	SD		Un		SA		Std.
	(%)	D (%)	(%)	A (%)	(%)	Mean	Deviation
RES1	3.8	12.5	19.4	48.8	15.6	3.600	1.017
RES2	1.3	15.0	19.4	42.5	21.9	3.688	1.017
RES3	5.6	18.8	6.9	46.3	22.5	3.613	1.187
RES4	5.6	16.9	8.8	43.1	25.6	3.663	1.192
<i>composite</i>						<i>3.641</i>	<i>1.103</i>

4.6.8.4 Empathy

Likert scale was used to measure empathy and the results, stated as percentages. Table 4.12 displays the statistics for the Empathy composite scores. Empathy realized a mean score value (Mean=3.989, SD=0.718, n=160). This showed a high level of agreement of Empathy by the respondents in this study.

Table 4.12: Measurement of Empathy

Empathy	SD (%)	D (%)	Un (%)	A (%)	SA (%)	Mean	Std.
							Deviation
EMPA1	0.6	2.5	17.5	55.6	23.8	3.994	0.756
EMPA2	0.6	2.5	19.4	58.1	19.4	3.931	0.736
EMPA3	0.63	1.9	16.9	56.3	24.4	4.019	0.739
EMPA4	0.63	0.6	21.3	60.0	17.5	3.931	0.683
EMPA5	0.0	1.3	15.6	58.1	25.0	4.069	0.674
<i>composite</i>						<i>3.989</i>	<i>0.718</i>

4.6.8.5 Assurance

The Likert scale was used to measure assurance and the results, expressed as percentages. The statistics for the Assurance composite scores are shown on table 4.13. The mean score value for Assurance is (Mean=4.005, SD=0.726, n=160). This showed a high level of agreement of Assurance by the respondents in the study.

Table 4.13: Measurement of Assurance

Assurance	SD (%)	D (%)	Un (%)	A (%)	SA (%)	Mean	Std. Deviation
ASSU1	0.625	1.9	16.3	53.1	28.1	4.063	0.758
ASSU2	0.6	1.3	21.9	55.0	21.3	3.950	0.734
ASSU3	0.6	0.6	17.5	58.8	22.5	4.019	0.696
ASSU4	1.25	1.9	13.1	64.4	19.4	3.988	0.718
<i>composite</i>						4.005	0.726

4.7 Test of Assumptions of the Study Variables

4.7.1 Testing for Outliers

An outlier is a score which is extreme on either the low or high end of a quantitative variable's frequency distribution (Warner, 2008). Outliers can significantly alter results and lead to incorrect analytical decisions, such as Type I and Type II errors (Tabachnick & Fidell, 2007). Outliers both in the dependent and independent constructs were removed. Cases or observations that have characteristics or values that deviate greatly from the majority of cases in a data set are normally dropped (Kline, 2005; Hair *et al.*, 2010). This is attributable to the fact that they distort the true relationship between variables, either by bringing a correlation that should not exist or suppressing an established correlation (Abbott & McKinney, 2013). Figure 4.1 shows that the procedure

produced reasonable boxplots that also implies that all of the constructs are symmetrical and that there are no outliers identified in the box plots.

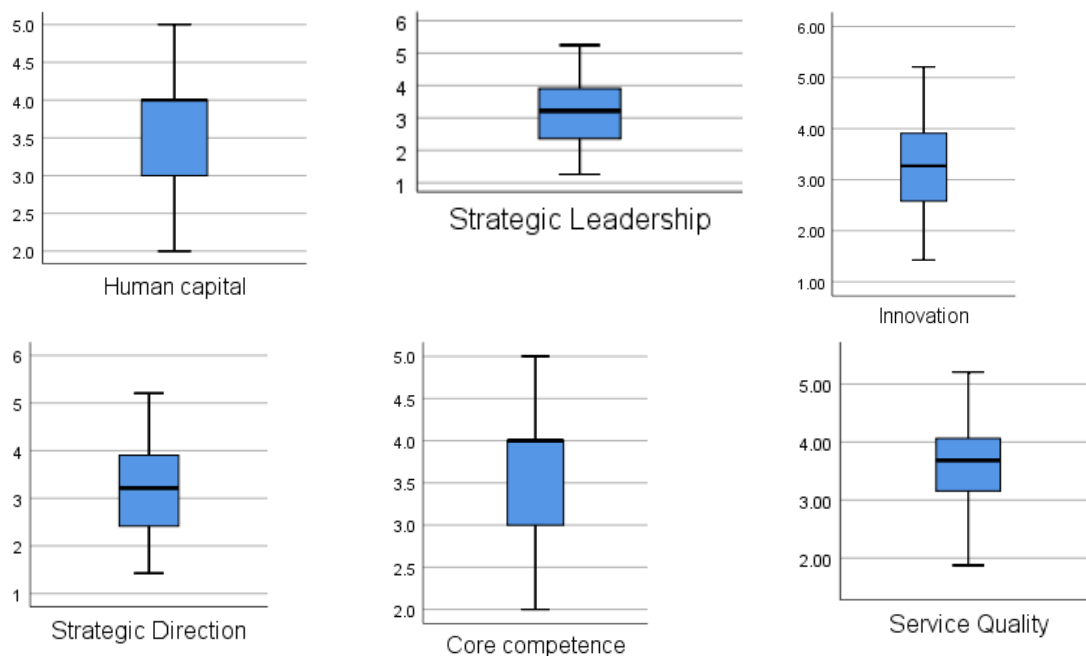


Figure 4.1: Testing of Outliers for the Dependent and independent Variables

4.7.2 Testing for Normality

The skewness and kurtosis of the data distribution were investigated to determine its normality (Kline, 2005). A variable with an absolute skew-index value greater than 3.0 is considered highly skewed whilst a kurtosis index greater than 8.0 is regarded extreme kurtosis (Kline, 2005). 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 (Hair *et al.*, 2010). Cunningham (2008) opines that, an index just under an absolute value of 2.0 for skewness and higher than an absolute value of 7.0 appears to violate of the assumption of normality the least. The normality test results for both the dependent and independent variables demonstrates that skewness and kurtosis in the range of -1 and +1, as shown Appendix VI. This implies that the normality assumption was achieved.

Normal QQ plots

The graphical analysis results indicate that in the normal Q-Q plot, the line representing the actual data distribution closely trails the diagonal, as shown in figures 4.2 to 4.6, inferring normal distribution (Hair, Tatham, Anderson & Black, 2006). The observed value for each score is plotted against the expected value from the normal distribution in the q-q plot, where a prudently straight line indicates a normal distribution (Pallant, 2007). So, when the points in a q-q plot move away from a straight line, the assumed distribution is called into question (Aas & Haff, 2006).

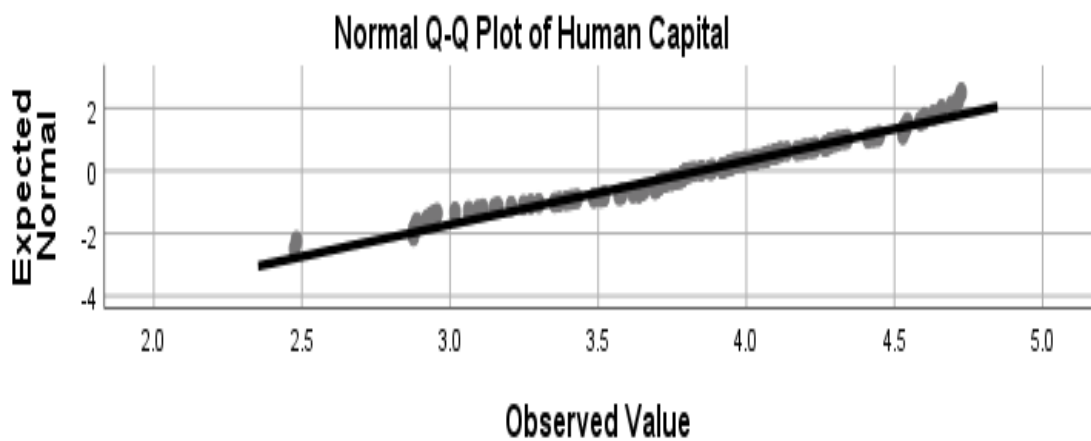


Figure 4.2: Normal QQ plot for Human capital

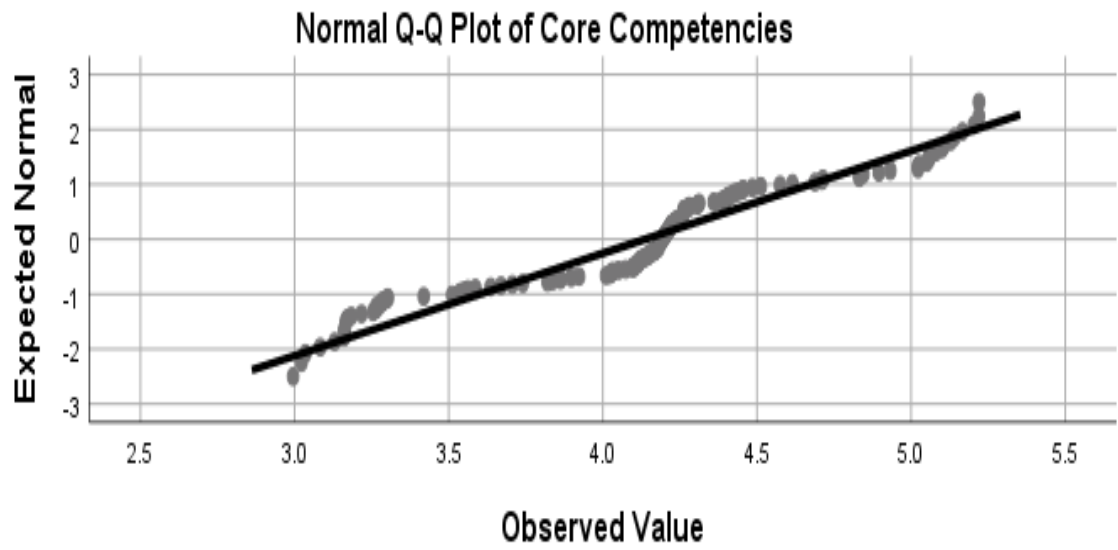


Figure 4.3: Normal QQ plot for core competencies

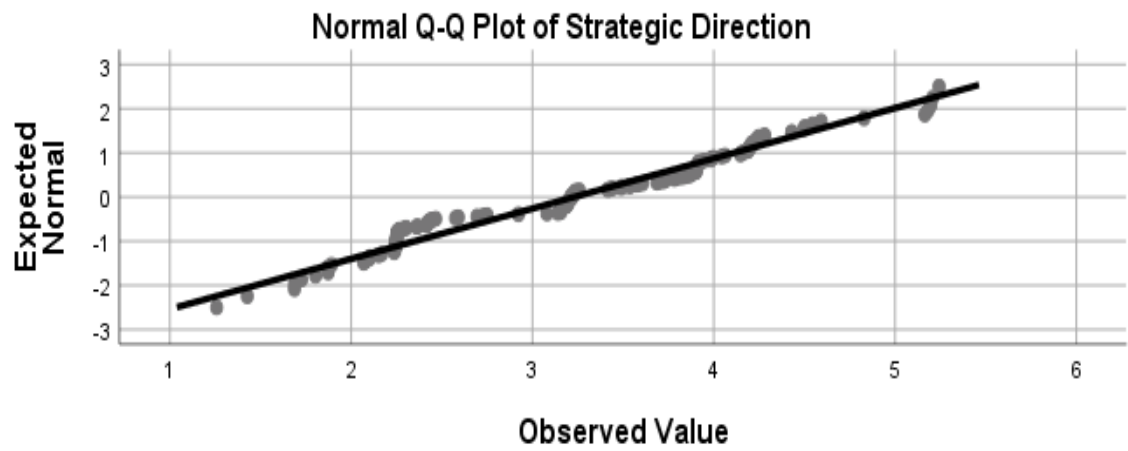


Figure 4.4: Normal QQ plot for Strategic Direction

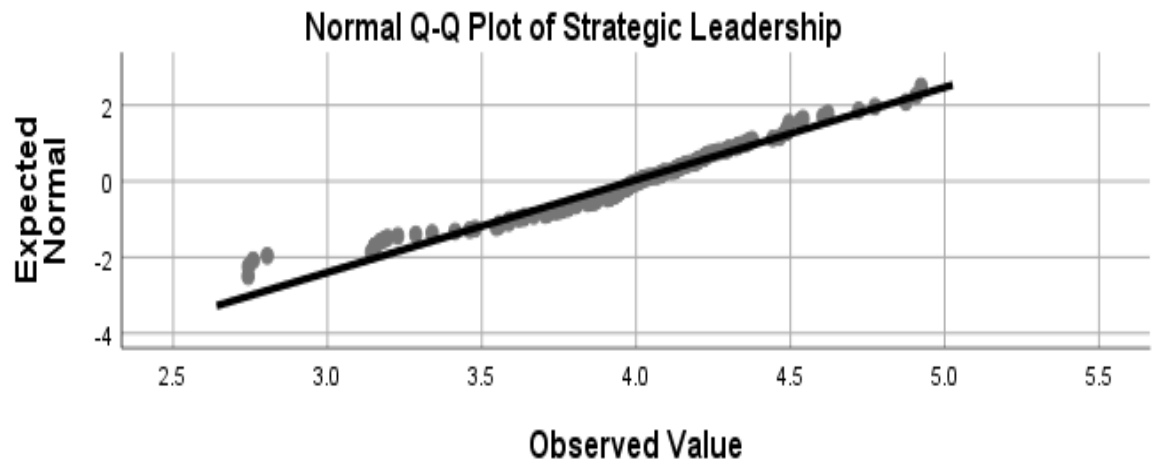


Figure 4.5: Normal QQ plot for Strategic Leadership

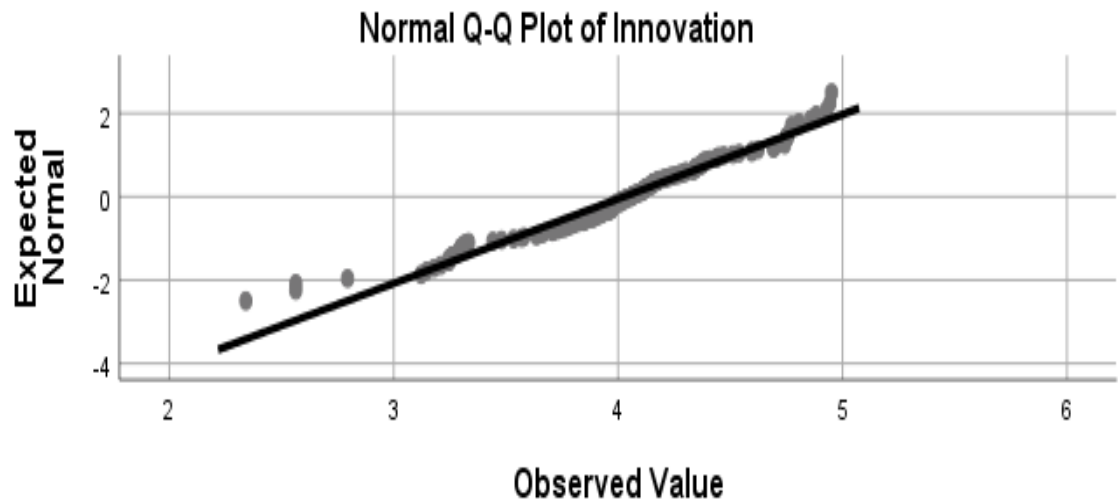


Figure 4.6: Normal QQ plot for Innovation

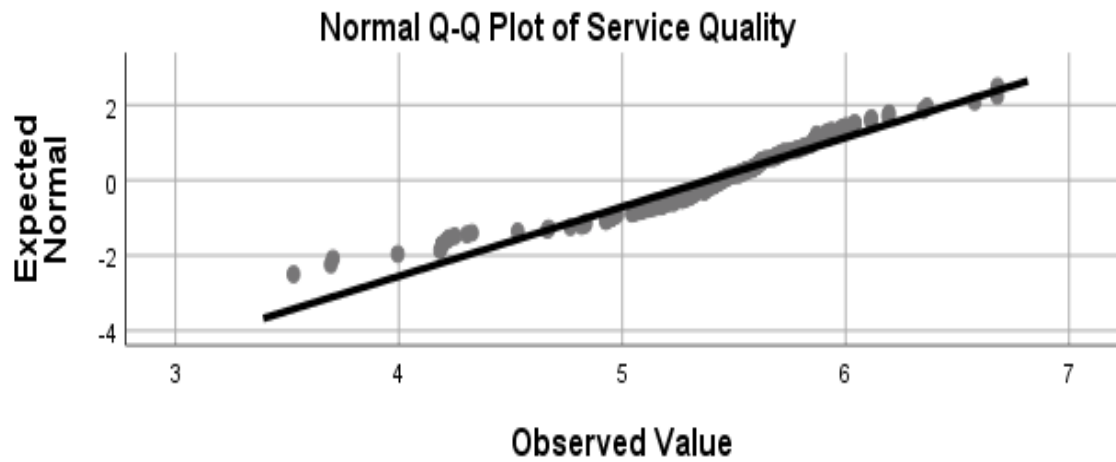


Figure 4.7: Normal QQ plot for Service Quality

4.7.3 Heteroscedasticity

When the variance of the errors varies across observations, this is regarded as Heteroscedasticity (Long & Ervin, 2000). When the errors are heteroscedastic, the OLS estimator remains unbiased but ineffective and the normal procedures for hypothesis testing are no longer applied. The Breusch-Pagan method was used to check for heteroscedasticity in this study. The Breusch-Pagan is used to test the null hypothesis that all error variances are equal towards the alternative hypothesis that error variances are a multiplicative function of one or more variables (Sazali, Haslinda, Jegak & Raduan, 2009). The result of the heteroscedasticity test using the Breusch-Pagan is displayed in table 4.14. A greater chi-square value, greater than 9.21 (Sazali *et al.*, 2009), signifies heteroscedasticity. The chi-square value in this study was small, 3.850, revealing that heteroscedasticity was not an issue of concern.

Table 4.14: Heteroscedasticity test

Test	Test value	Sig
Breusch-Pagan	3.850	.352
Koenker test	0.505	.477

4.7.4 Multicollinearity.

Multicollinearity is a horrible situation whereby the correlations among the independent variables are strong. In other words, multicollinearity magnifies the standard errors. Consequently, some variables get to be statistically insignificant when actually they should be significant (Martz, 2013). A tolerance of a specified independent variable is calculated as $1-R^2$. A tolerance close to 1 implies that there is little multicollinearity, whereas a tolerance close to 0 signifies that multicollinearity may be a threat (Belsley, Kuh & Welsch, 2004). The Variance Inflation Factor is the reciprocal of the tolerance (VIF). Likewise, the VIF measures multicollinearity in the model in such a way that if no two independent variables are correlated, all VIF values are 1, implying that there is no multicollinearity among factors. Nevertheless, if the VIF value for one of the variables is nearer or greater than 5, then that variable is multicollinear (Martz, 2013). Table 4.15 displays the multicollinearity test results, using both the VIF and tolerance. With VIF values less than 5, it was concluded that multicollinearity did not exist in this study. The VIF illustrates how much multicollinearity increases the variance of the coefficient estimate.

Table 4.15: Collinearity test

Variables	Collinearity Statistics	
	Tolerance (1-R²)	VIF
(Constant)		
Human Capital	0.622	1.608
Strategic Direction	0.714	1.401
Core competencies	0.723	1.383
Innovation	0.917	1.090

4.8 Non-Response Bias

This was deduced using Armstrong and Overton's extrapolation method (1977). Out of 160 responses, 80% (n=128) were classed as early responses, while 20% (n=32) were classed as late responses. Non-response bias was evaluated by comparing the means of the characteristics of early and late responses. The student test (*t*-test) results showed no significant differences between early responses and late responses (at $p=0.05$) for the study variables as seen in table 4.16, denoting a representative and unbiased research sample.

Table 4.16: Non-Response Bias

			Levene's Test for Equality of Variances		t-test for Equality of Means		
			F	Sig.	t	df	Sig. (2- tailed)
Human Capital	Equal variances assumed		2.208	0.139	1.484	158	0.140
	Equal variances not assumed				1.347	42.909	0.185
Core competencies	Equal variances assumed		0.446	0.505	-0.002	158	0.998
	Equal variances not assumed				-0.003	48.423	0.998
Strategic Direction	Equal variances assumed		21.658	0.000	0.450	158	0.653
	Equal variances not assumed				0.313	35.313	0.756
Strategic Leadership	Equal variances assumed		0.675	0.412	0.882	158	0.379
	Equal variances not assumed				0.829	44.423	0.412
Innovation	Equal variances assumed		1.101	0.296	0.546	158	0.586
	Equal variances not assumed				0.503	43.574	0.617
Service Quality	Equal variances assumed		0.500	0.481	-0.370	158	0.712
	Equal variances not assumed				-0.329	42.096	0.744

4.9 Factor Analysis

The main objective of factor analysis is to summarize patterns of correlations among observed variables, to reduce a large number of observed variables to a smaller number of factors, and to provide an operational definition (a regression equation) for an underlying process using observed variables, or to test a theory about the nature of underlying processes using observed variables (Tabachnick & Fidell, 2007). Factor analysis can also be used to compress a large number of related variables together into a manageable number, prior to actually using them in other analyses such as multiple regression or multivariate analysis of variance (Pallant, 2005).

There are two steps to Factor Analysis. The first step includes exploratory factor analysis (EFA) that involves the computation of a factor loading matrix, communalities, and Principal Component Analysis (PCA). Confirmatory Factor Analysis (CFA) is used in second phase to evaluate the measurement model against multiple criteria such as internal reliability, convergent and discriminant validity.

4.9.1 Exploratory factor analysis

The constructs were modified by utilizing exploratory factor analysis. The data was first checked for factorability using the following components; (Kaiser Meyer-Olin Measure of Sampling adequacy, Bartlett’s Test of Sphericity and communalities). As displayed in table 4.17, KMO Measures of Sampling Adequacy of manifest variables were higher than the 0.6 threshold value (Kaiser, 1974), and p-values for Bartlett’s test of Sphericity were significant (below 0.05).

Table 4.17: KMO and Bartlett's Test

Tests		Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.824
	Approx. Chi-Square	5252.608
Bartlett's Test of Sphericity	Df	946
	Sig.	.000

4.9.2 Total Variance Explained

Nine variables, out of a total of 44, were assigned based on Kaiser’s criteria. They were able to explain 70.981percent of total variance in the data among themselves. The cumulative percentage should not be less than 50%, but should be preferably 60% or higher (Tabachnick & Fidell, 2006). Appendix VII illustrates the variance explained just before rotation and shows that the nine factors in the initial solution have eigenvalues greater than 1.0, with the threshold being eigenvalue greater or equal to 1.0. (Hair, Black, & Babin, 2010). The fewer the variables that explain a bigger portion of the

variability in the original variables, the higher the possibility of eliminating redundant information (Hair et al., 2010).

Principal Component Analysis, Principal Axis Factor Analysis, and Maximum Likelihood Estimation are among the methods for extracting factors. Principal Component Analysis (PCA) varimax rotation was used to extract the components in this study. The Varimax method tries to reduce the number of variables that have high loadings on each factor. PCA's main objective is to extract as much variance as possible from each component of a data set (Tabachnick & Fidell, 2013), and it yields results that make recognizing of each variable in a single factor simple (Hair et al., 2011). Principal Component Analysis (PCA) is a method of decreasing a set of variables into a smaller number of variables that represent the original set or an entirely new set of composite variables, or factors, that account for the variance in the data as a whole (Cooper & Schindler, 2011).

4.9.3 Pattern Matrix

A simplified loading matrix, defined also as a pattern matrix, is a matrix that consists of the coefficients or "loadings" to express the item in terms of the factors, as shown in table 4.18. (Rummel, 1970). As a basic rule, the more factors there seem to be, the lower the pattern coefficients will be since there will be more common contributions to the variance explained. Rummel additionally contends that pattern matrix loadings are zero when a variable is not involved in a pattern and close to 1.0 when a variable is almost perfectly related to a factor pattern. The pattern coefficients in this study ranged from 0.574 to 0.927 implying that variables are almost perfectly related to a factor pattern.

Table 4.18: Pattern Matrix

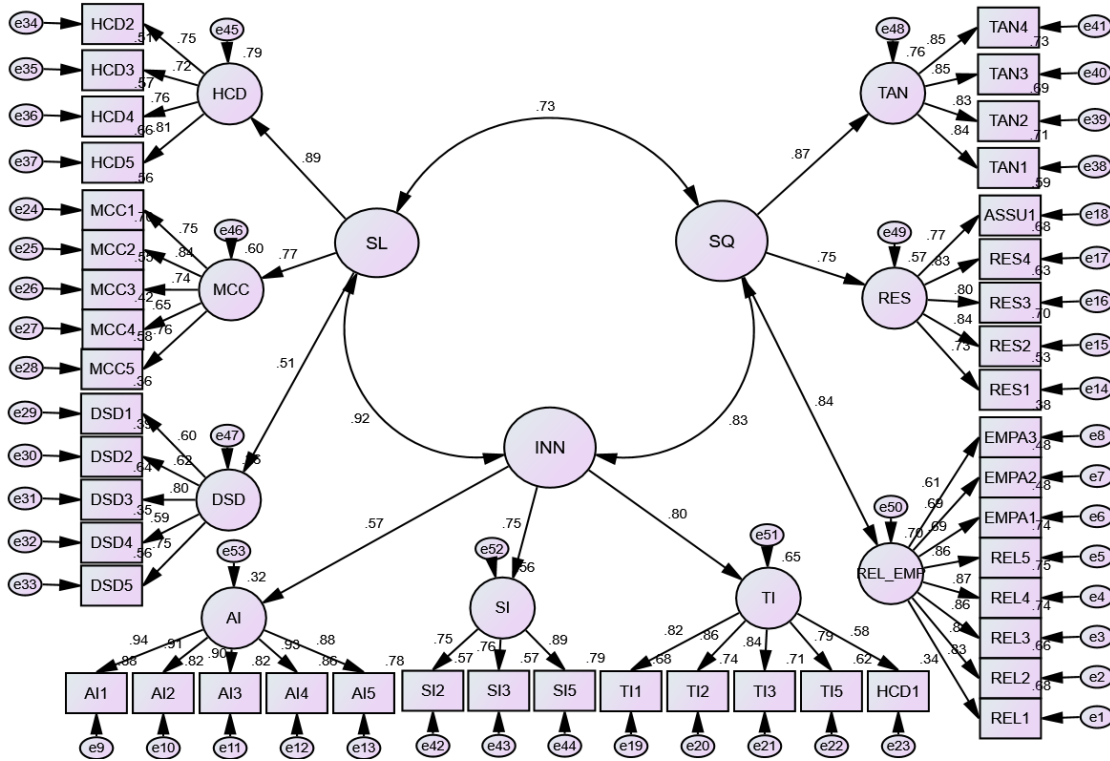
	Component								
	Reliability and empathy	Administrative Innovation	Responsiveness and Assurance	Technological Innovation	Core competencies	Strategic Direction	Human capital	Tangibility	Service Innovation
AI1		.927							
AI2		.889							
AI3		.866							
AI4		.912							
AI5		.851							
SI2									.665
SI3									.695
SI5									.818
TI1				.715					
TI2				.697					
TI3				.821					
TI5				.684					
HCD1							.574		
HCD2							.614		
HCD3							.735		
HCD4							.715		
HCD5							.780		
MCC1					.791				
MCC2					.846				
MCC3					.727				
MCC4					.645				
MCC5					.778				
DSD1						.734			
DSD2						.766			
DSD3						.787			
DSD4						.631			
DSD5						.740			
TAN1								.717	
TAN2								.796	
TAN3								.749	
TAN4								.818	
REL1	.669								
REL2	.614								
REL3	.690								
REL4	.724								
REL5	.722								
RES1			.756						
RES2			.733						
RES3			.837						
RES4			.810						
ASSU1			.811						
EMPA1	.797								
EMPA2	.757								
EMPA3	.848								

Extraction Method: Principal Component Analysis.
 Rotation Method: Promax with Kaiser Normalization.^a
 a. Rotation converged in 12 iterations.

4.9.4 Confirmatory Factor Analysis.

Before using the measures in the research model, Confirmatory Factor Analysis (CFA) was performed using IBM AMOS software to evaluate their reliability and validity (Anderson & Gerbing, 1988). Confirmatory Factor Analysis is a statistical technique that is used to confirm the factor structure of a cluster of observed variables. CFA allows the researcher to examine and test the hypothesis that there is a relationship between the observed variables and their underlying latent constructs. The researcher utilizes either theoretical concepts or empirical research, or both, to postulate the relationship pattern a priori and then statistically tests the hypothesis (Suhr, 2006). Confirmatory factor analysis was determined using a number of criteria which included construct reliability, convergent and discriminant validity.

The construct reliability in this study was obtained by determining the reliability and internal consistency of the items that constituted the constructs. SmartPLS was used to evaluate composite reliability measures, and Cronbach alpha (α) was used to estimate internal consistency. Convergent and discriminant validity are both considered construct validity subcategories (Bahl & Wali, 2014). Their interaction is such that if proof for both convergent and discriminant validity can be demonstrated, then there is evidence for construct validity by definition. The factor loadings should be 0.5 or greater for convergent validity (Pansuwong, 2009; Hair *et al.*, 2010). Notwithstanding, the factor loadings should ideally be 0.7 or in order to make sure that the construct has convergent validity (Kline, 2005; Hair *et al.*, 2010). As displayed in Table 4.22, the Cronbach alpha (α) values were found to be significantly higher than 0.5 threshold and ranged from 0.701 to 0.945 denoting acceptability to good reliability (Mugenda, 2008). Moreover, as it appears in Table 4.20, the study findings indicated that composite reliability of all items was higher than the acceptable threshold of 0.6 implying acceptable level of construct reliability (Hair *et al.*, 2010).



$\chi^2 = 2071.183 ; df = 891 ; \chi^2/df = 2.325 ; CFI = .957 ; GFI = .962 ; RMSEA = 0.033$

Figure 4.8: 2nd order Confirmatory Factor Analysis for study variables.

Observed variables are represented in rectangles and unobserved variables (including latent variables and errors) are represented in eclipses and circles. Directed arrows indicate regression coefficients and bidirectional arrows represent covariance (Fox, 2006).

The overall measurement model’s CFA fit statistics for study variables were extracted, as shown in Figure 4.8. The CFA model adequately fit the data since its fit indices were within a suitable range (Gold *et al.*, 2001).

Confirmatory factor analysis (CFA) was used to calculate fit indices for all variables and to confirm existing theories or concepts (Sadeh & Garkaz, 2015). To determine the fitness of measurement constructs, firstly, the loading of each measured variable should be 0.5 or bigger. Since the Chi square statistic has shown to be very sensitive to sample size, the ratio of chi-square to degrees of freedom (χ^2/df) may be used to assess fit (Robinson. Jr *et al.*, 2011). A (χ^2/df) ratio less than 5 signifies a good fit between the hypothesized model and the sample data (MacCallum *et al.*, 1996). According to Hu and Bentler (1999), the parsimony – adjusted index (Root Mean Square Error of the Approximation, RMSEA) is used to measure residuals and adjusts prudence in the model. Values range from 0 to 1, with small values being an indication of better models. Should the value be less than 0.08, then the model fit will be deemed (Hu & Bentler, 1999).

4.9.5 Construct Reliability

The composite reliability and Cronbach’s alpha of the constructs were computed to determine construct reliability. Cronbach alphas were all higher than 0.6, as considered necessary for PLS analysis (Hair *et al.*, 2006). Composite reliability of reflective items was higher than the acceptable 0.7 threshold, implying that all the variables in the study exhibited construct reliability, as displayed in table 4.19.

Table 4.19: Construct Reliability

Construct	Composite Reliability > 0.7	Cronbach's Alpha > 0.6
Human Capital	0.769	0.845
Strategic Direction	0.962	0.792
Core competencies	0.934	0.844
Innovation	0.855	0.945
Strategic leadership	0.876	0.814
Service Quality	0.762	0.701

4.9.6 Convergent Validity.

The degree to which a set of variables converge in measuring the concept on a construct is defined as convergent validity (Hair *et al.*, 2010). Average variance extracted (AVE) was used to assess convergent validity. According to Table 4.20, the AVE of all constructs was found to be higher than 0.5, indicating that the latent constructs account for at least fifty percent of the variance in the items. This indicates that the measurement scales showed adequate measurement validity (Hair *et al.*, 2006).

4.9.7 Discriminant Validity.

Discriminant validity is concerned with the degree to which the construct measures differ significantly from each other (Baker & Sinkula, 2009). The Fornell and Lacker (1981) test of the square root of the average variance extracted, which compares the AVE to the highest squared correlation of each construct, is normally used to determine discriminant validity. In order to fulfil discriminant validity requirement, the square root of a construct's AVE must be greater than the correlation between the construct and other constructs in the model (Madhoushi, Sadati & Delavari, 2011). The diagonal elements in bold in correlation matrix table 4.20 are the square root of the average variance extracted (AVE) of all latent constructs. If the diagonal elements are higher in their rows and columns than other off-diagonal elements, discriminant validity is assumed (Compeau, Higgins, & Huff, 1999). The measurement model's discriminant validity was confirmed.

Table 4.20: correlation matrix

Constructs	AVE	Strategic Leadership	Service Quality	Innovation
Strategic Leadership	0.548	0.74		
Service Quality	0.677	0.532***	0.823	
Innovation	0.511	0.521***	0.429***	0.715

Note: Diagonals represent the square root of the average variance extracted, while the other entries represent the correlations.

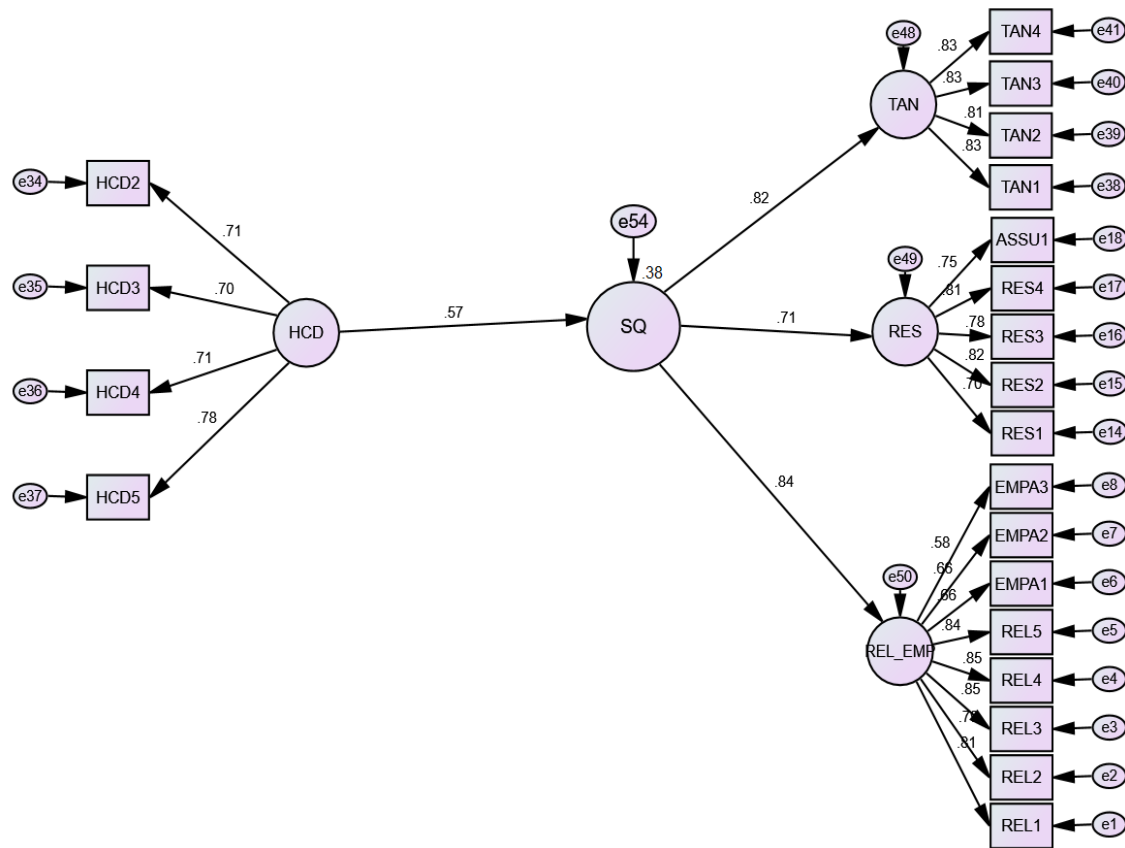
4.10 Hypothesis testing of study Variables.

4.10.1 Effect of developing human capital on service quality of accredited universities in Kenya.

The first specific objective of this study was to determine the effect of developing human capital on service quality of accredited Kenyan universities.

The hypothesis to test for this specific objective was:

H₀₁: Developing Human capital does not have significant effect on service quality of accredited universities in Kenya.



$$\chi^2 = 504.083 ; df = 185 ; \chi^2/df = 2.725 ; CFI = .955 ; GFI = .979 ; RMSEA = 0.039$$

Observed variables are represented in rectangles and unobserved variables (including latent variables and errors) are represented in eclipses and circles. Directed arrows indicate regression coefficients or path coefficients (Fox, 2006).

Figure 4.9: Structural Model for relationship between developing human capital and service quality

This study found that there was a positive path coefficient (beta = 0.571) between human capital development and service quality, as shown in figure 4.9. In this regard, the relationship between human capital development and service quality was significant, Since the T value was 5.174 (p<0.05) as shown on table 4.21, the null hypothesis is

rejected while the alternative hypothesis is accepted, and concludes that Human capital development significantly affect service quality of accredited universities in Kenya. Human capital development explained 38% ($R^2=0.38$) of the variance in service quality of accredited universities in Kenya. The study findings are consistent with studies by Kitonga, (2017), Munjuria, K’obonyo & Ogutu (2015), Yusuph (2015), Odhong, Were and Omollo (2014) who found out that there was a strong and positive relationship between developing human capital and service quality.

Table 4.21: Regression Analysis for the Relationship between Developing Human Capital and Service Quality

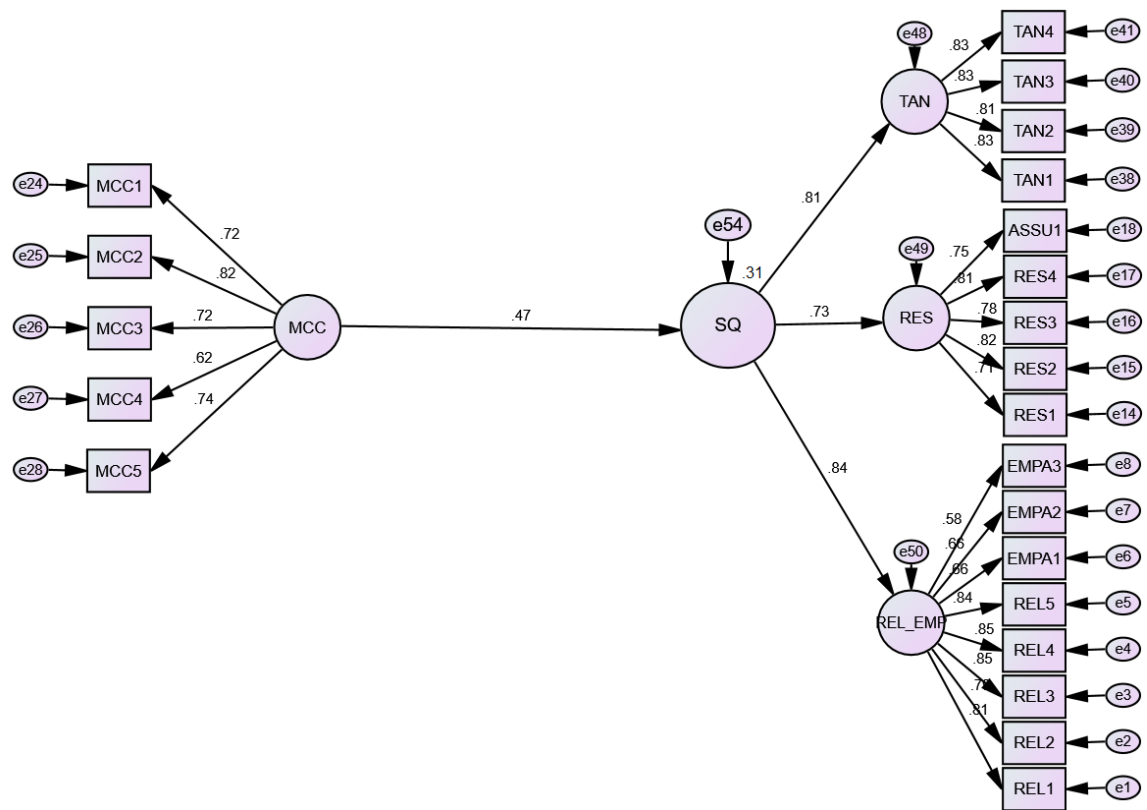
Path		B	Beta	S.E.	T. Value	P
Human Capital	<--- Service Quality	0.548	0.571	0.106	5.174	0.000

4.10.2 Effect of Maintaining Core Competencies on Service Quality of Accredited Universities in Kenya.

The second specific objective of this study was to establish the effect of maintaining core competencies on service quality of accredited Kenyan universities.

The hypothesis that tested for this specific objective was:

H₀₂: Maintaining core competencies does not have significant effect on service quality of accredited universities in Kenya.



$$\chi^2 = 501.998 ; df = 205 ; \chi^2/df = 2.449 ; CFI = .963 ; GFI = .982 ; RMSEA = 0.036$$

Observed variables are represented in rectangles and unobserved variables (including latent variables and errors) are represented in eclipses and circles. Directed arrows indicate regression coefficients or path coefficients (Fox, 2006).

Figure 4.10: Structural Model for Relationship between Maintaining Core Competencies and Service Quality

The model fit statistics indices were within the appropriate range, and this implies the structural model fit the data adequately.

This study established that there was a positive path coefficient (beta = 0.474) between maintaining core competencies and service quality, as shown in figure 4.10. In this regard, the relationship between maintaining core competencies and service quality was significant, Since the T value was 4.552 (p<0.05) as shown on table 4.22, the null hypothesis is rejected by the study and alternative hypothesis is accepted and concludes that core competencies significantly affect service quality of Kenya’s accredited universities. Maintaining core competencies explained 31% ($R^2=0.31$) of the variance in service quality of accredited universities in Kenya. In a study by Agha, Alrubaiee and Jamhour (2010) on the effect of maintaining core competence on competitive advantage and organizational performance established that maintaining core competence has a strong and significant effect on competitive advantage and organizational performance.

Table 4.22: Regression Analysis for the Relationship between Core Competencies and Service Quality

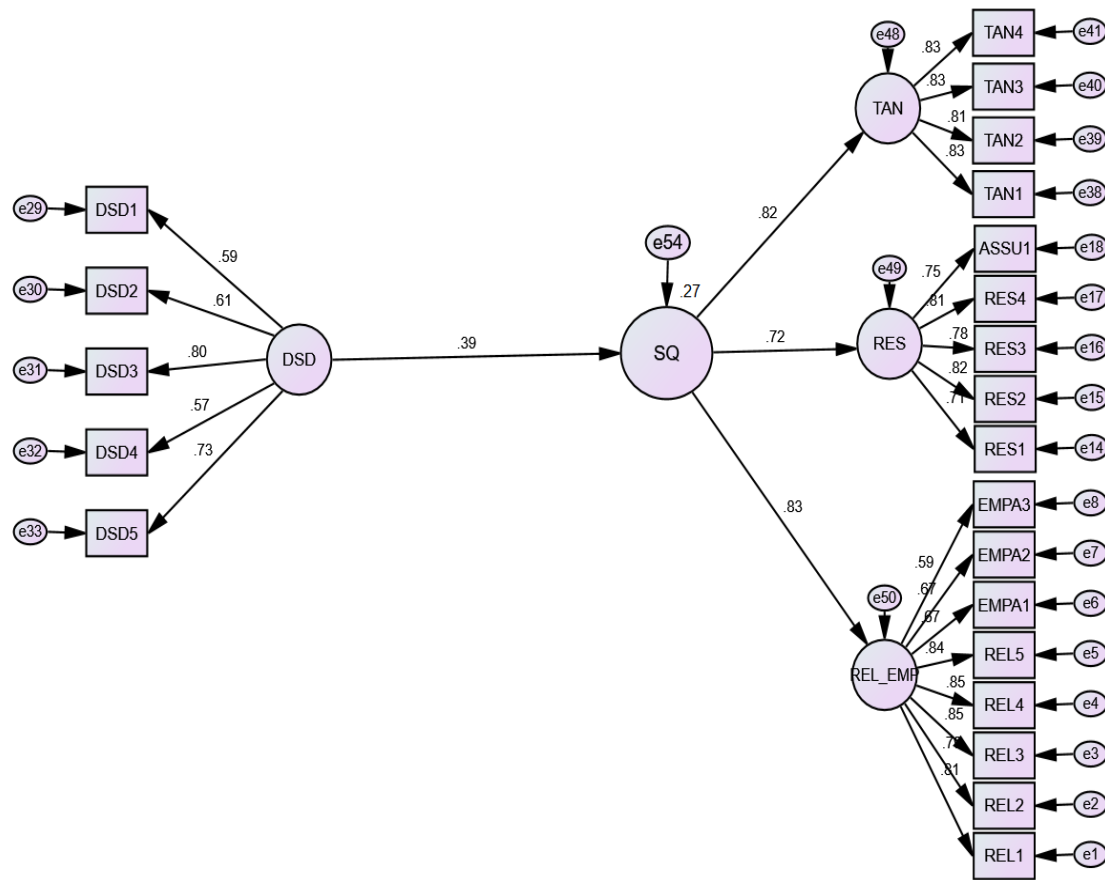
	Path	B	Beta	S.E.	T-Value	P
core competencies	<--- Service Quality	0.461	0.474	0.101	4.552	0.000

4.10.3 Effect of Strategic Direction on Service Quality of Accredited Universities in Kenya.

The third specific objective of this study was to assess the effect of strategic direction on service quality of accredited Kenyan universities.

The hypothesis that tested for this specific objective was:

H₀₃: Strategic direction does not have significant effect on service quality of accredited universities in Kenya.



$\chi^2 = 518.825$; $df = 205$; $\chi^2/df = 2.531$; $CFI = .953$; $GFI = .972$; $RMSEA = 0.032$

Observed variables are represented in rectangles and unobserved variables (including latent variables and errors) are represented in eclipses and circles. Directed arrows indicate regression coefficients or path coefficients (Fox, 2006).

Figure 4.11: Structural Model for Relationship between Strategic Direction and Service Quality

The model fit statistics indices were within the appropriate range, and this implies the structural model fit the data adequately.

It was found from the study that there was a positive path coefficient (beta = 0.394) between Strategic Direction and service quality, as it's shown in figure 4.11. In this regard, the relationship between Strategic Direction and service quality was significant, Since the T value was 3.619 ($p < 0.05$) as shown on table 4.23, the null hypothesis is rejected and the alternative hypothesis is accepted and concludes that Strategic Direction significantly affect service quality of accredited Kenyan universities. 27% ($R^2=0.27$) of the variance in service quality of accredited universities in Kenya is explained by Strategic Direction. The findings are in agreement with Nthini (2013) who in her study, the influence of strategic leadership on the outcome of commercial and financial state corporations in Kenya, established that there is a significant and positive relationship between corporate strategic direction and high customer satisfaction. Kitonga (2017) in his study also, established that there was a strong relationship between corporate strategic direction and high customer satisfaction in his study that sought to examine strategic leadership practices and organizational performance in not-for-profit organizations in Nairobi County in Kenya.

Table 4.23 Regression Analysis for the Relationship between Strategic Direction and Service Quality

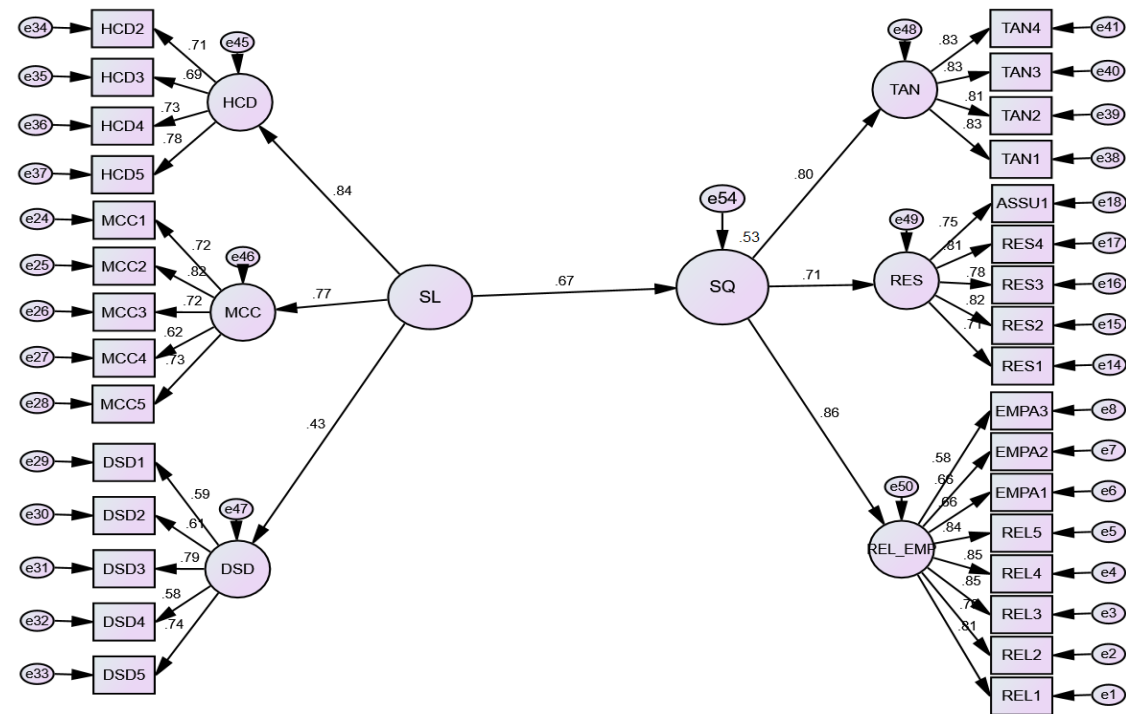
	Path	B	Beta	S.E.	T-Value	P
Strategic Direction	<--- Service Quality	0.471	0.394	0.130	3.619	0.000

4.10.4 Effect of Strategic Leadership on Service Quality of Accredited Universities in Kenya.

The fourth specific objective of this study was to establish the extent to which strategic leadership influences the service quality of Kenyan accredited universities.

The hypothesis that tested for this specific objective was:

H₀₄: Strategic leadership does not have significant effect on service quality of accredited universities in Kenya.



$$\chi^2 = 907.774 ; df = 427 ; \chi^2/df = 2.126 ; CFI = .957 ; GFI = .978 ; RMSEA = 0.026$$

Observed variables are represented in rectangles and unobserved variables (including latent variables and errors) are represented in eclipses and circles. Directed arrows indicate regression coefficients or path coefficients (Fox, 2006).

Figure 4.12: Structural Model for Relationship between Strategic Leadership and Service Quality

The model fit statistics indices in this study were within the acceptable range and this implies the structural model fit the data adequately.

A positive path coefficient (beta = 0.674) was established between Strategic Leadership and service quality, as shown in figure 4.27. In this regard, the Strategic Leadership and service quality relationship was significant, Since the T value was 4.874 ($p < 0.05$) as shown on table 4.24, the null hypothesis was rejected by the study and the alternative hypothesis accepted, and concludes that Strategic Leadership significantly affect service quality of Kenya’s accredited universities. Strategic Leadership explained 53% ($R^2 = 0.53$) of the variance in service quality of accredited Kenyan universities.

Table 4.24: Regression Analysis for the Relationship between Strategic Leadership and Service Quality

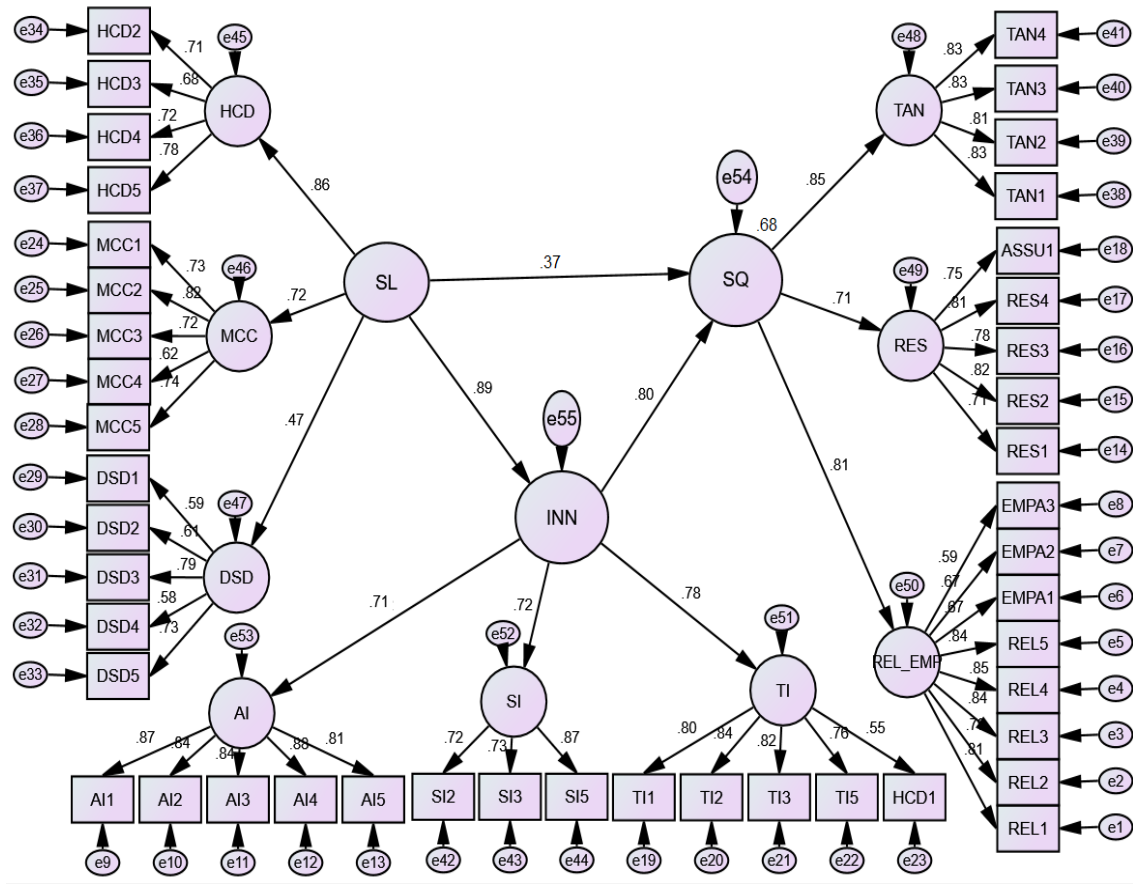
	Path	B	Beta	S.E.	T-Value	P
Strategic leadership	<--- Service Quality	0.75 5	0.67 4	0.15 5	4.87 4	0.00 0

4.10.5 Mediating Effect of Innovation on the Relation between Strategic Leadership and Service Quality of Accredited Universities in Kenya.

The fifth specific objective of this study was to determine the mediating effect of innovation on the relationship between strategic leadership and service quality of Kenyan accredited universities.

The hypothesis that tested for this specific objective was:

H₀₅: Innovation does not have significant mediating effect on the relationship between strategic leadership and service quality of accredited universities in Kenya.



$\chi^2 = 2010.684$; $df = 890$; $\chi^2/df = 2.259$; $CFI = .959$; $GFI = .969$; $RMSEA = 0.029$

Observed variables are represented in rectangles and unobserved variables (including latent variables and errors) are represented in eclipses and circles. Directed arrows indicate regression coefficients or path coefficients (Fox, 2006).

Figure 4.13: Structural Model for Mediating Effect of Innovation on the Relationship between Strategic Leadership and Service Quality

The model fit statistics indices were within the acceptable range and this implies that the structural model fit the data adequately.

Table 4.25: Regression Analysis for the Relationship between Strategic Leadership, Innovation and Service Quality

	Path		B	Beta	S.E.	T-Value	P
Strategic leadership	<---	Service Quality	0.695	0.366	0.109	6.383	0.000
Strategic leadership	<---	Innovation	1.464	0.804	0.253	5.839	0.000
Innovation	<---	Service Quality	0.582	0.890	0.114	5.113	0.000

Sobel test: $Z=9.339, p=0.000$

Results indicated that Strategic leadership was a significant predictor of Service Quality, Beta = .366, T = 6.383, $p < .05$, and that Innovation was a significant predictor of Service Quality, Beta = .890, T = 5.113, $p < .05$. These results support the mediational hypothesis.

Strategic leadership was a significant predictor of service quality after controlling for the mediator, Perceived value, B = .804, T = 5.839, $p < .05$. Approximately 68% of the variance in service quality was accounted for by the predictors ($R^2 = .68$).

A Sobel test was conducted and found partial mediation in the model ($z = 9.339, p < .05$). These results rejected the null hypothesis and concluded that the relationship between Strategic leadership and service quality was partially mediated by innovation. Therefore, the null hypothesis that innovation does not have a significant mediating effect on the relationship between strategic leadership and service quality of accredited Kenyan universities is rejected at 0.05 level of significance. The alternative hypothesis that innovation does have significant mediating effect on the relationship between strategic leadership and service quality of accredited in Kenyan universities is thus accepted. Alharbi, Jamil, Mahmood, Shaharoun (2019) in their study, organization innovation: a review paper, found out that most scholars agree on the positive effect of innovation on the organization.

4.11 Summary of Hypothesis Testing Results

The results of hypothesis testing show that all the six hypothesised relationships, had a significantly positive relationship with service quality. Initially, Innovation was found to partially mediate the relationship between strategic leadership and service quality thus leading to the rejection of the null hypothesis and thus accepting the alternative hypothesis. This is in agreement to findings by Zafar and Mehmood (2019) who in their study innovation as a mediator between innovative culture, transformational leadership, knowledge management, learning orientation, and performance, concluded that innovation does play a mediatory role. It is also in agreement to the findings by Muenjohn, Ishikawa, Muenjohn, Memon and Ting (2021) who in their study on the effect of innovation and leadership on performance in China and Vietnam concluded that workplace innovation either has positive relationships with the organizational performance or mediate the relationship between leadership and performance. The summary of the hypothesis testing results is in table 4.26 below.

Table 4.26: Summary of Hypothesis Testing Results

Hypothesis	Beta	Standard error	T – Statistics & Z Scores	Conclusion	Empirical Results
H ₀₁ : Human capital does not have significant effect on service quality of accredited universities in Kenya.	0.571	0.106	5.174	Positive & significant	Rejected
H ₀₂ : Core competencies do not have significant effect on service quality of accredited universities in Kenya	0.474	0.101	4.552	Positive & significant	Rejected
H ₀₃ : Strategic direction does not have significant effect on service quality of accredited Universities in Kenya	0.394	0.130	3.619	Positive & significant	Rejected
H ₀₄ : Strategic leadership does not have significant effect on service quality of accredited Universities in Kenya.	0.674	0.155	4.874	Positive & significant	Rejected
H ₀₅ : Innovation does not have significant motivating effect on the relationship between strategic leadership and service quality of accredited Universities in Kenya.	0.804	0.253	5.839 Z=9.339(p<0.000)	Partially Mediated	Rejected

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study findings, conclusions and recommendations of the study on the determination of strategic leadership and innovation on service quality of accredited universities in Kenya. The chapter summarized the collected data and the analysis; discussion and conclusions with reference to the specific objectives. Research objectives guide the arrangement of this chapter. The chapter finally gives direction on areas of further research.

5.2 Summary of Findings

The purpose of the study was to establish the mediating influence of innovation on the relationship between strategic leadership and service quality of accredited universities in Kenya. The summary of the study is guided by five specific objectives which included: to determine the effect of human capital development on service quality of accredited universities in Kenya, to establish the effect of maintaining core competencies on service quality of accredited universities in Kenya, to assess the effect of strategic direction on service quality of accredited universities in Kenya, to examine the effect of strategic leadership on service quality of accredited universities in Kenya and to determine the mediating effect of innovation on the relationship between strategic leadership and service quality of accredited universities in Kenya. The study relied on theoretical and empirical literature on human capital development, maintaining of core competencies and developing strategic direction as the independent variables, innovation as the mediating variable and service quality as the dependent variable.

The study was guided by positivism research philosophy, cross sectional and explanatory research design. The population in the study comprised of all the 74

universities in Kenya which have been accredited by the Commission of University Education to operate in the country. The unit of inquiry was the deputy vice chancellors of the universities in charge of administrative and academic divisions and the finance officers/managers. A census techniques was used involving all the elements of the target population (the 74 universities), while purposive sampling was used to select the respondents in the study. A structured questionnaire was used to collect data from the respondents. Frequency distributions, percentages and means were used in descriptive statistical analysis. The hypothesized relationships were developed and tested based on the conceptual model of strategic leadership, innovation and quality service. The measurement model estimation was established through exploratory factor analysis and confirmatory factor analysis. The linear relationships between the independent variables and quality service was assessed using Pearson product-moment correlation coefficient r . The structural or inner model was accomplished by examining path coefficients or betas for hypothesis testing. The hypothesized relationships were tested using Structural Equation Modelling and Sobel test.

5.2.1 Human Capital Development and Service Quality

The first objective sought to determine the effect of human capital development on service quality of accredited universities in Kenya. The results of the descriptive analysis revealed that leaders of universities illustrated high level of agreement of human capital development. The result of the hypothetical testing showed that human capital development has a positive and statistically significant relationship with service quality of accredited universities in Kenya as shown by *beta* value of 0.571. This means that in every one-unit change in human capital development, service quality increases by 0.571 hence implying a positive impact of human capital development on service quality. The *r*-value of 0.38 implies that human capital development explains about 38% of the variation in service quality of accredited universities in Kenya. The T value of 5.174 ($p < 0.05$) shows that the null hypothesis H_01 was rejected and the alternate hypothesis that stated there is a relationship between human capital development and service quality of accredited universities in Kenya was supported. Out of the five factors of human

capital, four factors were found to contribute significantly to service quality, and one was not which is existence of human resource training and development planning program in the institution.

These findings are in line with Sumumma and Agbodike (2021), who found out that human capital development has a positive significant relationship with quality of service delivery. Additionally, Nchuchuwe and Etim (2020) in their study on Human Capital Development and Service Delivery in Lagos State, concluded that more attention should be paid to the development of human capital in Lagos State public sector for efficient and effective service delivery and also recommended for regular training and performance appraisal for the employees. This confirms how essential the role of human capital development is to the success of the organization.

5.2.2 Maintaining Core Competencies and Service Quality

The second objective sought to establish the effect of maintaining core competencies on service quality of accredited universities in Kenya. The results of the descriptive analysis revealed that leaders of universities illustrated high level of agreement of maintaining core competencies. The result of the hypothetical testing showed that maintaining core competence has a positive and statistically significant relationship with service quality of accredited universities in Kenya as shown by *beta* value of 0.474. This means that in every one-unit change in maintaining core competencies, service quality increases by 0.474 hence implying a positive impact of maintaining core competencies on service quality. The *r*-value of 0.31 implies that maintaining core competence explains about 31% of the variation in service quality of accredited universities in Kenya. The T value of 4.552 ($p < 0.05$) shows that the null hypothesis H_02 was rejected and the alternate hypothesis that stated there is a relationship between maintaining core competence and service quality of accredited universities in Kenya was supported. The result of the hypothetical testing showed that maintaining core competence has a positive and statistically significant relationship with service quality of accredited universities in

Kenya. All the five factors of maintaining core competence, were found to contribute significantly to service quality.

The study found that the leadership in Universities utilizes internal and external competencies to match the requirements of the environment. The study further found out that employees in the universities are encouraged to improve their professional competencies. In accordance with these findings, Chan (2005) established that the use of core competencies allows managers to focus on the recruitment and selection of staff who already demonstrate the competencies, to base work expectations on the competencies, and to prioritize training needs according to the competencies. Furthermore, training efforts can be concentrated on those skills that have been deemed essential for the organization's strategic direction. Employees receive training when they have a need for it, increasing the likelihood that the relevant skills will be applied on the job. In addition, funds do not need to be allocated for skills that all employees are expected to have already obtained.

5.2.3 Strategic Direction and Service Quality

The third objective sought to assess the effect of strategic direction on service quality of accredited universities in Kenya. The results of the descriptive analysis revealed that leaders of universities illustrated high level of agreement of strategic direction. The result of the hypothetical testing showed that strategic direction has a positive and statistically significant relationship with service quality of accredited universities in Kenya as shown by *beta* value of 0.394. This means that in every one-unit change in strategic direction, service quality increases by 0.394 hence implying a positive impact of strategic direction on service quality. The *r*-value of 0.27 implies that strategic direction explains about 27% of the variation in service quality of accredited universities in Kenya. The T value of 3.619 ($p < 0.05$) shows that the null hypothesis H_{03} was rejected and the alternate hypothesis that stated there is a relationship between strategic direction and service quality of accredited universities in Kenya was supported. The result of the hypothetical testing showed that strategic direction has a positive and

statistically significant relationship with service quality of accredited universities in Kenya. All the five factors of strategic direction, were found to contribute significantly to service quality.

The study found out that the mission and vision statements are regularly reviewed and also if necessary revised. Additionally, this study revealed that the leadership in universities provides strategic direction in their institutions. This is in agreement with Kitonga (2017) who affirmed that determining strategic direction involves defining the long-term vision of the organization

The study also found out that decisions by the leadership of the universities are informed, decisive and bold at all levels of the organization. This is in agreement with Ogaja (2016) who established out that strategic decision making takes place within a context defined by the organization's strategy and varies according to the extent to which this strategy is a deliberate, as opposed to an emergent, process.

5.2.4 Strategic Leadership and Service Quality

The fourth objective sought to establish the effect of strategic leadership on service quality of accredited universities in Kenya. The results of the descriptive analysis revealed that leaders of universities illustrated high level of agreement of strategic leadership. The result of the hypothetical testing showed that strategic leadership has a positive and statistically significant relationship with service quality of accredited universities in Kenya as shown by *beta* value of 0.674. This means that in every one-unit change in strategic leadership, service quality increases by 0.674 hence implying a positive impact of strategic leadership on service quality. The *r*-value of 0.53 implies that strategic leadership explains about 53% of the variation in service quality of accredited universities in Kenya. The T value of 4.874 ($p < 0.05$) shows that the null hypothesis Ho4 was rejected and the alternate hypothesis that stated there is a relationship between strategic leadership and service quality of accredited universities in Kenya was supported. The result of the hypothetical testing showed that strategic

leadership has a statistically significant relationship with service quality of accredited universities in Kenya. All the five factors of strategic leadership, were found to contribute significantly to service quality.

Ogaja (2016) found out that strategic leadership enables followers to be motivated and perform, but also small teams to synergize and organizations to accomplish goals through the differentiated yet synchronized efforts of these individuals and teams. Kuchio (2012) found out that it is only through effective strategic leadership that organizations are able to achieve planned objectives. Organizations need competent leaders and should build the capabilities to develop leaders with appropriate competencies required to achieve planned objectives. Witts (2016) findings confirmed that it is the responsibility of the top management team to develop strategic and operational plans. Additionally, his study revealed that creation and communication of the vision and vision statements, development of sustainability strategy, creativity, innovation and risk management were the main strategic leadership responsibilities. This indicates that strategic leaders use of these key components have a very significant effect on the outcome of the overall direction that the institutions take.

5.2.5 Innovation on Strategic Leadership and Service Quality

The fifth objective sought to determine the mediating effect of innovation on the relationship between strategic leadership and service quality of accredited universities in Kenya. The results of the descriptive analysis revealed that leaders of universities illustrated high level of indecisiveness on administrative innovation, but had a high level of agreement of both service and technological innovations. In this study, administrative innovation, technological innovation and service innovation were combined and used to develop the innovation variable as a second order construct. All the fifteen factors of innovation were found to contribute significantly to innovation of accredited universities in Kenya. The result of the hypothetical testing showed that strategic leadership was a significant predictor of service quality after controlling for innovation in accredited universities in Kenya as shown by *beta* value of 0.804. This means that in every one-unit

change in innovation and strategic leadership, service quality increases by 0.804 hence implying a positive impact of the predictors on service quality. The r -value of 0.68 implies that the predictors explain about 68% of the variation in service quality of accredited universities in Kenya. The T value of 5.839 ($p < 0.05$) and the results of the Sobel test in the model ($z = 9.339$, $p < .05$), shows that the null hypothesis H_05 was rejected and the alternate hypothesis that innovation mediates the relationship between strategic leadership and service quality of accredited universities in Kenya was supported.

5.3 Conclusions

The purpose of this study was to examine the mediating role of innovation in the relationship between strategic leadership and service quality of accredited universities in Kenya. This study drew on the findings of different research into leadership theories stated in the literature review section. The study found very little published literature that is closer to strategic leadership, innovation and service quality, although this may be changing with time as there have been scholarly calls for attention to strategic leadership practices in the universities. Based on the findings and discussions of the study, the following conclusions were made in the study.

5.3.1 Effect of Human Capital Development on Service Quality

This study concludes based on the findings that human capital development significantly predicted and is a strong contributor to service quality in accredited universities in Kenya. According to the findings, human capital development had a strong positive contribution to the relationship on service quality. Based on the results from the findings, human capital development explained a significant proportion of variance in service quality of accredited universities in Kenya. These findings suggest that leaders need to put into consideration the aspects of human capital development to enhance service quality in Universities in Kenya. This is consistent with empirical literature. Serfontein (2010), identified organizational employees as an overriding asset that enable

organizations to achieve a competitive edge and through whom capabilities are developed. Kitonga (2017) has also stated that there is no single organization that can achieve its aspirations without engaging and maintaining accomplished employees with necessary abilities.

5.3.2 Effect of Core Competencies on Service Quality

The study concludes based on the findings that maintaining core competencies as applied in universities was statistically a very significant factor in relation to service quality of accredited universities in Kenya. Findings of the study further revealed that core competencies explained a significant proportion of variance in service quality of accredited universities in Kenya. This confirms that core competencies impact on the service quality of accredited universities in Kenya. The role of core competencies in enhancing service quality in Kenyan universities is revealed and therefore the leaders of universities should appreciate staff competencies and develop them to achieve better service quality in their institutions. This is consistent with empirical literature. Barbosa and Leandro (2012) postulated that in the strategic dimension realm, a relationship exists between organizational competencies on one side with the vision, mission and strategic intent on the other. That competencies manifest in the organizations “macro processes” and are perceived as being connected and effective to organization’s operations. Strategic competencies are transformed to functional competencies through continuous utilization of strategic and intermediate competencies.

5.3.3 Effect of Strategic Direction on Service Quality

The study concluded that strategic direction contributes significantly in enhancing service quality in accredited universities in Kenya. Strategic direction had a significantly positive contribution on service quality. Strategic direction explained a significant proportion of variance in service quality. The analysis of variance results shows that determining strategic direction is a critical predictor of service quality of accredited universities in Kenya. These findings suggest that strategic leaders should put more on

determining strategic direction in order to improve service quality of accredited universities in Kenya.

5.3.4 Effect of Strategic Leadership on Service Quality

The study concluded that strategic leadership contributes significantly in enhancing service quality in accredited universities in Kenya. Strategic leadership had a significantly positive contribution on service quality. Strategic leadership explained a significant proportion of variance in service quality. The analysis of variance results shows that strategic leadership is a critical predictor of service quality in accredited universities in Kenya. The study also concluded that for every one-unit change in strategic leadership, service quality increases by 0.674 hence implying a positive impact of strategic leadership on service quality.

5.3.5 Effect of Innovation on the Relationship between Strategic Leadership and Service Quality

The study results indicated a positive mediating effect of innovation on the relationship between strategic leadership and service quality of accredited universities in Kenya. The analysis of variance results indicated that strategic leadership and innovation were significant predictors of service quality and that innovation was also a significant predictor of service quality. The results of the findings in the model revealed and concluded that strategic leadership and service quality were mediated by innovation.

5.4 Recommendations

Based on the study findings, discussions and conclusions, the following recommendations were made in the study. These recommendations, deduced from the study's findings, discussions and conclusions, have been presented in terms of policy, practice and theory.

5.4.1 Managerial Recommendations

First, human capital development has a positive effect on service quality in accredited universities in Kenya. Top management should place more emphasis on human capital development to improve the institution's service quality. The CEOs of accredited Kenyan universities should help in promoting training and development, hire and recruit qualified and suitable personnel and enhance the innovative aspects of human capital, as they play an important role in obtaining service quality outcomes.

Secondly, maintaining core competencies significantly and positively affected service quality in Kenyan universities. The leadership of universities should take measures when employing personnel and pay more attention to recognizing and appreciating knowledge by staff in their institutions, valuing their professional competencies and providing assistance in changing their mindsets, all which lead to quality service in accredited Kenyan universities.

Third, the results reveal that strategic direction had a significant impact on quality service. The leadership of accredited Kenyan universities should embrace strategic direction development aspects that have a strong predictive influence on service quality. Leaders should pay attention to all strategic direction development drivers by making rational choices, helping develop mission and vision statements, and putting in place strategic processes in the institution, since these are important strategic direction tools to facilitate service quality in Kenyan universities.

Fourth, the results reveal that strategic leadership had a significant effect on service quality. The leadership of accredited Kenyan universities should embrace strategic leadership aspects that have a strong predictive influence on service quality. Strategic leaders in universities should enhance strategic leadership practices by designing an integrated set of organizational activities that enhances an organization's capacity for change and ability to provide high level of service quality to the stakeholders. They need to commit to the organization's purpose, the makeup of the top management team, the capabilities motivation of people throughout the organization and a combination of well-chosen strategic initiatives that can push the organization forward.

Fifth, the findings indicated that innovation has a positive mediating effect on the relationship between strategic leadership and service quality at accredited Kenyan universities. The role of innovation in the relationship between strategic leadership and organizational performance is revealed, and leaders should place more emphasis on introducing innovative practices in their leadership to achieve high service quality performance in Kenyan universities. To realize maximum levels of service quality, they should incorporate administrative, service and technological aspects of innovation. The leaders should give greater attention to technological innovation, which has been shown to make a significant contribution to accredited universities in Kenya.

5.4.2 Implications of the Research Findings and Recommendations

This study was guided by the following theories; Upper echelons, dynamic capabilities, trait leadership and Resource Based View theories to determine the effect of human capital development on service quality; to establish the effect of maintaining core competencies on service quality; to assess the effect of strategic direction on service quality; to establish the extent to which strategic leadership influences service quality and to determine the mediating effect of innovation on the relationship between strategic leadership and service quality. The implications of the study findings that were conducted among 222 respondents from accredited universities' academic and administrative divisions, as well as finance officer, are presented below.

5.4.3 Implications for Management Policy and Practice

The study's findings have implications over both practice and policy. To start with, the study's findings showed a significant and positive effect of strategic leadership on service quality. The three strategic leadership practices which were identified for this study were all found to be statistically significant in predicting service quality in accredited universities in Kenya. As a result of this perspective, this study recommends that strategic leaders in universities be aligned and increase their adoption of strategic leadership practices in order to inspire good managerial practices in universities.

Second, the study analysis found that innovation mediates the relation between strategic leadership and service quality at Kenyan universities. This implies that there is need for leadership in universities to embrace innovative practices in the management of the universities' affairs. According to Kandiri (2014) and Tohidi & Jabari (2011), in order to be successful, organizations must embrace innovation into their system. This is supported further by Chang, Chou, Miao, and Liou (2021a) who have stated that some researchers have suggested that innovation behaviour directly affect service quality. This study posits that those leaders who embrace strategic leadership and innovative practices in their leadership will be able to undertake and achieve the desired outcomes. Since universities operate in a very competitive environment with resource constraints, leaders should think and act innovatively in order to be successful in the harsh environment. Strategic leadership in accredited universities should integrate the identified aspects of strategic leadership skills in the short-, medium- and long-term strategic leadership training and development programs for both employees and their respective institutions improvement in the wake of increasing workplace complexities and demand for innovative solutions in achieving quality service. As all universities are accountable to the public they serve, their leadership initiatives in responding to their quality challenges are important, not only for making universities accountable to the public, but also for increasing public confidence in their services (Mgaiwa, 2021).

From the findings of this study, it is recommended that the management of Kenyan universities should weigh in change-oriented strategic leadership and organizational innovation practices to enhance the provision of service quality to the consumers of their services and products. Past research work suggests that change-oriented strategic leadership has a significant role in understanding the attainment of service quality in institutions. It is proposed all the same that a model in which innovation was included as a mediator in this study. To maintain sustained service quality in universities, innovative practices and activities are significant contributing factors. As such, Kenyan universities ought to achieve enhanced service quality by wisely investing in innovative activities that can realize organizational objectives.

Finally, the Kenya vision 2030 aims at transforming Kenya into a newly industrialized, middle-income economy capable of delivering a high quality of life to all its citizens in a clean and secure environment by 2030. Leaders in universities can leverage on the resources they have in their institutions, utilizing them innovatively by taking advantage of the massive opportunities available to become the key drivers in the country's vision 2030.

5.4.4 Implications for the Theories

The study's findings contribute significantly to the theories underpinning the relationship between strategic leadership, innovation and service quality. Damanpour (2017) has stated that the Resource Based View approach emphasizes the roles of external and internal sources of knowledge and the firm's ability to incorporate them to gain distinctive competencies. The mix of an organizations resources that can be effectively determined as core competencies are those that are valuable, rare, but hard to imitate, and for which there exists unmatched strategic alternatives (McMillan 2010). Consequently, the finding that maintaining core competencies affects service quality in accredited Kenyan universities is in line with resource-based view theory. Since competencies are increasingly regarded as the main component that distinguishes one organization from another (Barbosa & Leandro, 2012), university leadership need to use a diversified set of the organization's resources to provide a high-quality service to its clients.

Likewise, the finding that strategic direction impacts service quality in Kenyan universities is in line with the trait leadership theory. The theory argues that strategic leaders have the ability to influence other's opinions, attitudes and behaviours (Hitt & Duane, 2012). The implication of the theory is that the leader has the responsibility to motivate employees to perform, satisfying their needs and providing them assistance in attaining their goals, as all these are result oriented and are based on the long-term vision and strategies that leaders put in place to provide a significant impact on everyone.

Additionally, the finding that Human Capital affects service quality is consistent with the Upper Echelons theory. Since the execution of strategic leadership practices is highly reliant on the executive's knowledge, experience and skills (Hambrick & Mason, 1984), this theory

offers a framework for viewing leaders as wise, experienced and educated change agents who serve as a critical asset capable of enhancing service quality in their institutions.

Dynamic capabilities theory enables managers generate distinct and difficult to imitate advantages and to avert losing customers to competition (Teece, 2007). University leadership should recognize and appreciate the existence of internal knowledge, developing professional competencies and transforming employees' mindsets. These difficult to imitate characteristics should inspire leaders to adapt to the changing business environments as a way of encouraging employees to be innovative.

5.4.5 Implications for Academia/knowledge

The findings from this study on strategic leadership, innovation and service quality provides valuable knowledge on the three variables in the context of universities. Strategic leadership practices were identified as human capital development, strategic direction and maintaining core competencies. Innovation was identified as administrative, service and technological. The researcher recommends more studies to be conducted in the context of universities by incorporating other strategic leadership practices other than the one which have been used in this study and also use other innovation indicators like radical and incremental innovation and compare the results on how they impact on service quality.

5.5 Areas of Further Research

This study only measured the views and experiences of senior managers; and hence, the viewpoints of other employees were overlooked. The researcher recommends that different studies be conducted on the same subject area, incorporating the viewpoints of other employees at higher management levels like the Deans, Directors of Directorates, Departmental heads and senior lecturers, and the results used for comparison. Since this study used the cross-sectional design, robust conclusions about the causal directions implied by the model cannot be drawn. Model interpretation through use of structural equation modeling is also not proof of causality. Only by testing models with

longitudinal data can true causal inferences be made. A longitudinal survey will serve as the foundation for more informed interpretations in future research studies.

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APPENDICES

Appendix I: Cover Letter

JKUAT Eldoret CBD
Campus,

P.O. BOX 81310-30100,

ELDORET.

Dear Participant,

**RE: STRATEGIC LEADERSHIP, INNOVATION AND SERVICE QUALITY
OF ACCREDITED UNIVERSITIES IN KENYA.**

I am a PhD student at JKUAT, Kenya. You are cordially invited to participate in this survey targeted at top management from established, reputable and accredited Universities in Kenya. The purpose of this survey is to solicit views on strategic leadership, innovation and service quality of accredited 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 for 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 nyongesa75@gmail.com.

We truly appreciate your valuable contribution to the knowledge base strategic leadership, innovation and service quality of accredited 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.

Regards.

Godfrey Nyongesa,

Dr. Doris Mbugua,

Dr. Rose Boit,

PhD candidate,

Supervisor,

Supervisor.

JKUAT, Kenya
Kenya

JKUAT, Kenya

Moi University,

Appendix II: Survey Questionnaire

This questionnaire is designed to collect data on the Strategic Leadership, Innovation and Service Quality of Accredited Universities in Kenya. Please tick (v) the answer that applies to your University.

SECTION A: BACKGROUND INFORMATION

Please tick (v) appropriately to give us some background information

1. Category 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. Number of years since your institution was chartered/received interim letter of authority

- Less than 5 years
- 5 to 10 years
- 10 to 15 years
- 15 to 20 years
- More than 20 years

3. No. 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. How long have you worked in this institution?

- 0 -1 year
- 1 -5 years
- More than 5 years

SECTION B: INNOVATION

Description

This section aims at obtaining information about administrative innovation, service innovation and technological innovation.

Instruction: Please indicate your level of agreement with each of the statement below

S. No.	Statement	SD(1)	D(2)	U(3)	A(4)	SA(5)
Administrative Innovation						
1.	Social systems within our organization are regularly reviewed.					
2.	The institution regularly makes changes to the employees' tasks and functions.					
3.	The governance structures are adequate to enable the university operate efficiently.					

4.	Certain elements of the organizational structure are continuously altered to facilitate innovations.					
5.	There is an effective organizational structure in place that supports innovative practices.					
Service Innovation						
6.	Products delivered impact positively on service quality perceptions.					
7.	The university strives to improved ways of performing tasks.					
8.	The university encourages information sharing among the employees.					
9.	Service delivery processes have been enhanced to achieve efficient service channels.					
10.	Service software features have been put in place to enhance service delivery processes.					
Technology Innovation						
11.	There is enhanced institutional efficiency through provision of management support systems.					
12.	The institution utilizes new technological knowledge to develop new products.					
13.	Information technology is used in all our processes and services.					
14.	Technology based education system is utilized in teaching.					
15.	New technological knowledge has helped in differentiating our operational processes from our competitors.					

SECTION C: STRATEGIC LEADERSHIP

Description: This section aims at obtaining information about human capital development, maintaining core competencies and developing strategic direction.

Instruction: Please indicate your level of agreement with each of the statement below

S. No.	Statement	SD(1)	D(2)	U(3)	A(4)	SA(5)
Human Capital Development						
1.	There exists a human resource training and development planning program in the institution.					
2.	There are continuous on-the-job training programs to enhance efficiency in this institution.					
3.	The hiring/recruitment in this institution is guided by knowledge and skills competencies.					
4.	Employees are encouraged to be creative and innovative in the service delivery.					
5.	The capacity requirements for our programs, services and activities are carefully evaluated.					
Maintaining Core Competencies						
1.	There is development of firm specific competencies to respond to changes in the business environment.					
2.	The University management reconfigures functional competencies to form new and innovative forms of competitive advantage.					
3.	The University encourages transformative behaviour as a key driver of change					
4.	Employees in our University are encouraged to improve their professional competencies					
5.	The leadership utilizes internal and external competencies to match to the requirements of the environment.					
Developing Strategic Direction						
1.	Decisions made are informed, decisive and bold at all levels of the organization.					

2.	The University's leadership provides strategic direction in the University.					
3.	The mission and vision statements are regularly reviewed and if necessary revised.					
4.	There is a clear compelling and realistic map to the right direction in this institution.					
5.	There is a robust and formal strategic setting process (e.g. strategic planning) that results in clear strategic direction.					

SECTION D: SERVICE QUALITY

Description: This section aims at obtaining information about tangibility, reliability, responsiveness, empathy and assurance.

Instruction: Please indicate your level of agreement with each of the statements below

S. No.	Statement	SD(1)	D(2)	U(3)	A(4)	SA(5)
Tangibility						
1.	The university has modern tools and equipment					
2.	The physical facilities in our university are visually appealing.					
3.	Materials associated with the physical facilities (such as working and teaching materials) are visually appealing.					
4.	The physical environment of our university is clean.					
Reliability						
1.	The university provides services at the time it promises to do so.					
2.	The university insists on error – free records.					
3.	Safety is given prominence when services are being provided.					
4.	When the university promises to do something by certain time it does so.					
5.	The university gets things done right the first					

	time.					
Responsiveness						
1.	The university has sincere interest in solving problems.					
2.	Staff in the university give prompt services.					
3.	Staff in the university are always willing to help customers.					
4.	Information in the university is always made easily obtainable.					
Empathy						
1.	The university insists on giving individual attention to students.					
2.	The university insists in giving students personal attention.					
3.	Staff have students' best interest at heart.					
4.	Staff understand the specific needs of the students.					
5.	Operating hours are convenient to all.					
Assurance						
1.	Staff in the university are never too busy to respond to customers' requests.					
2.	Staff are consistently courteous with our customers.					
3.	Staff instill confidence to students.					
4.	The university passes out information when services are performed.					

END!!!

THANK YOU FOR PARTICIPATING IN THIS STUDY

**Appendix III: Commission for University Education Accredited Universities-
November 2017**

NO.	UNIVERSITY	YEAR OF ESTABLISHMENT	YEAR OF AWARD OF CHARTER
PUBLIC CHARTERED UNIVERSITIES			
1.	University of Nairobi	1970	2013
2.	Moi University	1984	2013
3.	Kenyatta University	1985	2013
4.	Egerton University	1987	2013
5.	Jomo Kenyatta University	1994	2013
6.	Maseno University	2001	2013
7.	Chuka University	2007	2013
8.	Dedan Kimathi University	2007	2012
9.	Kisii University	2007	2013
10	Masinde Muliro University of Science and Technology	2007	2013
11	Pwani University	2007	2013
12	Technical University of Kenya	2007	2013
13	Technical University of Mombasa	2007	2013
14	Maasai Mara University	2008	2013
15	Meru University of Science	2008	2013
16	Multimedia University of Kenya	2008	2013
17	South Eastern Kenya University	2008	2013
18	Jaramogi Oginga Odinga University of Science and Technology	2009	2013

19	Laikipia University	2009	2013
20	University of Kabianga	2009	2013
21	Karatina University	2010	2013
22	University of Eldoret	2010	2013
23	Kibabii University	2011	2015
24	Kirinyaga University	2011	2016
25	Machakos University	2011	2016
26	Murang'a University of Technology	2011	2016
27	Rongo University	2011	2016
28	Taita Taveta University	2011	2016
29	The Co-operative University of Kenya	2011	2016
30	University of Embu	2011	2016
31	Garissa University	2011	2017
	TOTAL 31		
PUBLIC CONSTITUENT COLLEGES			
1.	Alupe University College	2015	
2.	Kaimosi Friends University College	2015	
3.	Tom Mboya Univesity College	2016	
4.	Turkana University College	2017	
5.	Bomet University College	2017	
6.	Tharaka University College	2017	
	TOTAL 6		
PRIVATE CHARTERED UNIVERSITIES			

1.	University of Eastern Africa, Baraton	1989	1991
2.	Catholic University of Eastern Africa	1989	1992
3.	Daystar University	1989	1994
4.	Scott Christian University	1989	1997
5.	United States International University	1989	1999
6.	Africa Nazarene University	1993	2002
7.	Kenya Methodist University	1997	2006
8.	St. Paul's University	1989	2007
9.	Pan Africa Christian University	1989	2008
10	Kabarak University	2002	2008
11	Strathmore University	2002	2008
12	Africa International University	1989	2011
13	Kenya Highlands Evangelical	1989	2011
14	Mount Kenya University	2008	2011
15	Great Lakes University of Kisumu	2005	2012
16	Adventist University	2005	2013
17	KCA University	2007	2013
18	TOTAL 17		
REGISTERED PRIVATE INSTITUTION			
1.	KAG-EAST University	1989	2016
PRIVATE CONSTITUENT COLLEGES			
1.	Tangaza University	1997	

2.	Marist International University College	2002	
3.	Regina Pacis University College	2012	
4.	Uzima University College	2012	
5.	Hekima University College	1993	
TOTAL 5			
INSTITUTIONS WITH LETTERS OF INTERIM AUTHORITY			
1.	Aga Khan University	2002	
2.	Kiriri Women's University of Science and Technology	2002	
3.	GRETSA University	2006	
4.	Presbyterian University of East Africa	2007	
5.	The East African University	2010	
6.	Management University of Africa	2011	
7.	Pioneer International University	2012	
8.	Riara University	2012	
9.	UMMA University	2013	
10	International Leadership University	2014	
11	Zetech University	2014	
12	Lukenya University	2015	
13	RAF International University	2016	
14	AMREF International University	2017	
TOTAL 14			

Summary

Public Chartered Universities	31
Public Constituent Colleges	6
Private Chartered Universities	17
Private Constituent Colleges	5
Institutions with Letters of Interim Authority	14
Registered Private Institution	1
Total	74

Source: The Commission for University Education (February, 2022). *Status of Universities – Universities Authorized to Operate in Kenya*, Nairobi. Website: www.cue.or.ke

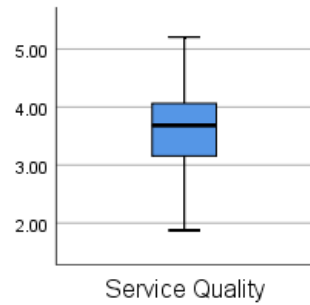
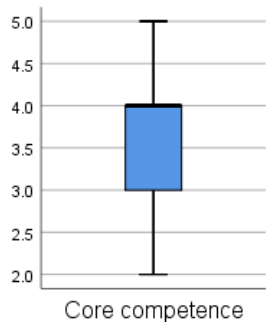
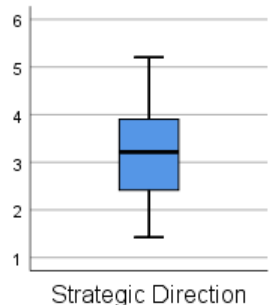
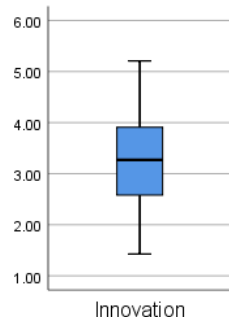
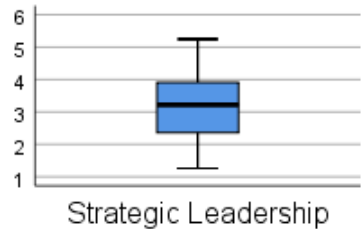
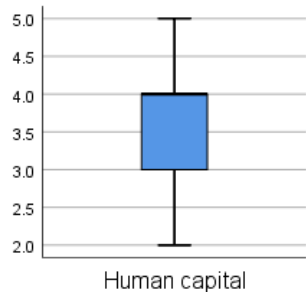
Appendix IV: Description of Factors of the Study Variables

Construct	Item	Label
Administrative Innovation	AI1	Social systems within our organization are regularly reviewed.
	AI2	The institution regularly makes changes to the employees' tasks and functions.
	AI3	The governance structures are adequate to enable the university operate efficiently.
	AI4	Certain elements of the organizational structure are continuously altered to facilitate innovations.
	AI5	There is an effective organizational structure in place that supports innovative practices.
Service Innovation	SI1	Products delivered impact positively on service quality perceptions.
	SI2	The university strives to improved ways of performing tasks.
	SI3	The university encourages information sharing among the employees.
	SI4	Service delivery processes have been enhanced to achieve efficient service channels.
	SI5	Service software features have been put in place to enhance service delivery processes.
Technology Innovation	TI1	There is enhanced institutional efficiency through provision of management support systems.
	TI2	The institution utilizes new technological knowledge to develop new products.
	TI3	Information technology is used in all our processes and services.
	TI4	Technology based education system is utilized in teaching.
	TI5	New technological knowledge has helped in differentiating our operational processes from our competitors.
Human Capital Development	HCD1	There exists a human resource training and development planning program in the institution.
	HCD2	There are continuous on-the-job training programs to enhance efficiency in this institution.
	HCD3	The hiring/recruitment in this institution is guided by knowledge and skills competencies.
	HCD4	Employees are encouraged to be creative and innovative in the service delivery.
	HCD5	The capacity requirements for our programs, services and activities are carefully evaluated.

Maintaining Core Competencies	MCC1	There is development of firm specific competencies to respond to changes in the business environment.
	MCC2	The University management reconfigures functional competencies to form new and innovative forms of competitive advantage.
	MCC3	The University encourages transformative behaviour as a key driver of change
	MCC4	Employees in our University are encouraged to improve their professional competencies
	MCC5	The leadership utilizes internal and external competencies to match to the requirements of the environment.
Developing Strategic Direction	DSD1	Decisions made are informed, decisive and bold at all levels of the organization.
	DSD2	The University's leadership provides strategic direction in the University.
	DSD3	The mission and vision statements are regularly reviewed and if necessary revised.
	DSD4	There is a clear compelling and realistic map to the right direction in this institution.
	DSD5	There is a robust and formal strategic setting process (e.g. strategic planning) that results in clear strategic direction.
Tangibility	TAN1	The university has modern tools and equipment
	TAN2	The physical facilities in our university are visually appealing.
	TAN3	Materials associated with the physical facilities (such as working and teaching materials) are visually appealing.
	TAN4	The physical environment of our university is clean.
Reliability	REL1	The university provides services at the time it promises to do so.
	REL2	The university insists on error – free records.
	REL3	Safety is given prominence when services are being provided.
	REL4	When the university promises to do something by certain time it does so.
	REL5	The university gets things done right the first time.
Responsiveness	RES1	The university has sincere interest in solving problems.
	RES2	Staff in the university give prompt services.
	RES3	Staff in the university are always willing to help customers.
	RES4	Information in the university is always made easily obtainable.
Empathy	EMPA1	The university insists on giving individual attention to students.

	EMPA2	The university insists in giving students personal attention.
	EMPA3	Staff have students' best interest at heart.
	EMPA4	Staff understand the specific needs of the students.
	EMPA5	Operating hours are convenient to all.
Assurance	ASSU1	Staff in the university are never too busy to respond to customers' requests.
	ASSU2	Staff are consistently courteous with our customers.
	ASSU3	Staff instill confidence to students.
	ASSU4	The university passes out information when services are performed.

Appendix V: Testing of Outliers on the Dependent and Independent Variable



APPENDIX VI: Testing of Normality (Skewness and Kurtosis)

Variable		Statistic	Std. Error
Service Quality	Mean	4.0698	0.03829
	Variance	0.235	
	Std. Deviation	0.48431	
	Skewness	-1.701	0.192
	Kurtosis	4.634	0.381
Innovation	Mean	5.3854	0.04287
	Variance	0.294	
	Std. Deviation	0.54230	
	Skewness	-0.888	0.192
	Kurtosis	1.667	0.381
Strategic Leadership	Mean	3.9859	0.03246
	Variance	0.169	
	Std. Deviation	0.41061	
	Skewness	-0.675	0.192
	Kurtosis	1.031	0.381
Human Capital	Mean	4.0265	0.03901
	Variance	0.243	
	Std. Deviation	0.49341	
	Skewness	-0.606	0.192
	Kurtosis	0.745	0.381
Strategic Direction	Mean	3.1499	0.03085
	Variance	0.152	
	Std. Deviation	0.39021	
	Skewness	-0.701	0.192
	Kurtosis	1.938	0.381
Core competencies	Mean	3.8459	0.03880

Variance	0.241	
Std. Deviation	0.49077	
Skewness	-0.459	0.192
Kurtosis	-0.078	0.381

APPENDIX VII: Principal Axis Factor Analysis

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	Variance	Cumulative %	Total	Variance	Cumulative %	Total
1	12.740	28.954	28.954	12.740	28.954	28.954	8.839
2	4.442	10.095	39.049	4.442	10.095	39.049	4.276
3	3.330	7.568	46.617	3.330	7.568	46.617	6.719
4	2.506	5.695	52.312	2.506	5.695	52.312	5.387
5	2.327	5.288	57.600	2.327	5.288	57.600	6.434
6	1.961	4.456	62.056	1.961	4.456	62.056	5.002
7	1.492	3.391	65.446	1.492	3.391	65.446	5.910
8	1.264	2.873	68.320	1.264	2.873	68.320	7.756

9	1.171	2.662	70.981	1.171	2.662	70.981	4.597
10	.994	2.259	73.241				
11	.899	2.044	75.285				
12	.823	1.870	77.155				
13	.790	1.795	78.950				
14	.697	1.584	80.534				
15	.682	1.549	82.083				
16	.607	1.379	83.462				
17	.584	1.328	84.790				
18	.545	1.239	86.029				
19	.502	1.142	87.171				
20	.453	1.029	88.200				
21	.445	1.012	89.212				
22	.410	.931	90.144				
23	.399	.907	91.051				
24	.390	.887	91.937				
25	.352	.800	92.738				
26	.330	.750	93.488				
27	.301	.684	94.172				
28	.272	.618	94.790				
29	.248	.565	95.355				
30	.241	.547	95.902				
31	.210	.477	96.379				
32	.188	.427	96.806				
33	.180	.409	97.215				
34	.170	.386	97.601				
35	.159	.361	97.962				
36	.141	.320	98.282				
37	.128	.291	98.573				
38	.115	.260	98.834				
39	.108	.245	99.079				
40	.106	.241	99.320				
41	.091	.206	99.526				
42	.075	.170	99.696				
43	.074	.169	99.865				
44	.059	.135	100.000				

Extraction Method: Principal Component Analysis.

- a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

APPENDIX VIII: Pattern Matrix

Table 4.21 Pattern Matrix

Component

	Reliability and empathy	Administrative Innovation	Responsiveness and Assurance	Technological Innovation	Core competencies	Strategic Direction	Human capital	Tangibility	Service Innovation
AI1		.927							
AI2		.889							
AI3		.866							
AI4		.912							
AI5		.851							
SI2									
SI3									
SI5									
TI1				.715					
TI2				.697					
TI3				.821					
TI5				.684					
HCD1							.574		
HCD2							.614		
HCD3							.735		
HCD4							.715		
HCD5							.780		
MCC1					.791				
MCC2					.846				
MCC3					.727				
MCC4					.645				
MCC5					.778				
DSD1						.734			
DSD2						.766			
DSD3						.787			
DSD4						.631			
DSD5						.740			
TAN1								.717	
TAN2								.796	
TAN3								.749	
TAN4								.818	
REL1	.669								
REL2	.614								
REL3	.690								
REL4	.724								
REL5	.722								

RES1		.756
RES2		.733
RES3		.837
RES4		.810
ASSU1		.811
EMPA1	.797	
EMPA2	.757	
EMPA3	.848	

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.^a

a. Rotation converged in 12 iterations.