T.C.

ATILIM UNIVERSITY

GRADUATE SCHOOL OF SOCIAL SCIENCES

DEPARTMENT OF BUSINESS ADMINISTRATION

BUSINESS ADMINISTRATION MASTER'S PROGRAMME

KNOWLEDGE-BASED LEADERSHIP, INNOVATION AND KNOWLEDGE MANAGEMENT IN ORGANIZATIONAL PERFORMANCE OF THE KENYAN HIGHER EDUCATION SYSTEM

Master's Thesis

Emmanuel Rioba

Ankara-2021

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Supervisor

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ACCEPTANCE AND APPROVAL

This is to certify that this thesis titled “Knowledge-based Leadership, Innovation and Knowledge Management in Organizational Performance of the Kenyan Higher Education System” and prepared by Emmanuel Rioba meets with the committee’s approval unanimously as Master’s Thesis in the field of Business Administration following the successful defense conducted on 16/07/2021

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ETHICS DECLARATION

I hereby declare that:

- I prepared this thesis in accordance with Atılım University Graduate School of Social Sciences Thesis Writing Directive.
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- I cited all sources to which I made reference in my thesis.
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16/07/2021

Emmanuel Rioba

ÖZ

Rioba, Emmanuel. Kenyan Yükseköğretim Sisteminin Organizasyon Performansında Bilgi Temelli Liderlik, İnovasyon ve Bilgi Yönetimi Ankara, 2021.

Amaç- Kenya yükseköğretim sisteminin örgütsel performansında bilgiye dayalı liderlik, yenilikçilik ve bilgi yönetiminin etkisini incelemek için araştırma başlatılmıştır.

Tasarım ve metodoloji - Araştırma, birincil nicel bir araştırmayı, özellikle kesitsel anket tasarımını içeriyordu.

Bulgular- Araştırmanın bulguları, bilgi temelli liderliğin yükseköğretim kurumlarının performansı üzerinde hem doğrudan olumlu bir etkiye sahip olduğunu hem de yenilik ve bilgi yönetimi süreçlerinin aracılık rolü aracılığıyla dolaylı olarak olumlu bir etkiye sahip olduğunu göstermektedir.

Çıkarımlar- Araştırma bulguları, yükseköğretim kurumlarında bilgiye dayalı liderliğin örgütsel performans üzerindeki etkisi ve yenilik ve bilgi yönetimi süreçlerinin aracı rolü hakkındaki mevcut literatürü genişletecektir.

Değer- Bu çalışma, Kenya yükseköğretim sisteminde bilgiye dayalı liderlik, bilgi yönetimi, yenilikçilik ve örgütsel performans arasındaki ilişkiyi kurmaya çalışan bütünleşik bir araştırma modeli öneren az sayıdaki bilimsel çalışma arasındadır.

Anahtar Kelimeler: *Bilgiye dayalı liderlik, yüksek öğrenim yeniliği, bilgi yönetimi, örgütsel performans.*

ABSTRACT

Rioba, Emmanuel. Knowledge-based Leadership, Innovation and Knowledge Management in Organizational Performance of the Kenyan Higher Education System, Ankara, 2021.

Purpose- The research is commenced to examine the effect of knowledge-based leadership, innovation and knowledge management in organizational performance of the Kenyan higher education system.

Design and methodology- The research involved a primary quantitative research, specifically cross-sectional survey design.

Findings- The findings of the research indicate that knowledge-based leadership has both direct positive effect on the performance of higher education institutions as well as an indirect positive effect through the mediating role of innovation and knowledge management processes.

Implications- The research findings will extend the existing literature on the impact of knowledge-based leadership on organizational performance and the mediating role of innovation and knowledge management processes in higher education institutions.

Value- This study is among the few scholarly works that have proposed an integrated research model which seeks to establish the correlation between knowledge-based leadership, knowledge management, innovation and organizational performance in the Kenyan higher education system.

Keywords: *Knowledge-based leadership, higher education innovation, knowledge management, organizational performance..*

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INTRODUCTION

There are a number of challenges faced by businesses in the current world of business that is getting complex. Some of the challenges include customer acquisition, rapid changes in technology, globalization and stiff competition from other industry players (Ostrom, Parasuraman, Bowen, Patrício, & Voss, 2015). Studies from the knowledge-based approach indicate that high performance, increased sustainability, and competitive advantage are dependent on the proper use of the knowledge-based resources in an organization (Iazzolino & Laise, 2016). The higher education sector involves knowledge intensive business process that requires an elaborate management of the knowledge-based resources. Proper management of knowledge-based resources in institutions of higher education makes them innovative and prepared to cope with the educational system complexities in research and innovation.

Problem Situation

Higher education institutions are centers for knowledge development and dissemination. The higher education institutions contribute to societal transformation and economic growth by generating new ideas through research, innovation, teaching, and learning (Aleixo, Leal & Azeiteiro, 2018). Institutions of higher education improve their efficiency, organizational development and performance through knowledge-based leadership and worthwhile knowledge management strategies (Noruzy, Dalfard, Azhdari, Nazari-Shirkouhi, & Rezazadeh, 2013). The Kenyan Higher education system has attracted the attention of many scholars in the past. However, other than the presence

of remarkable scholarly work within the domain in subject, there are remarkable breaches in the prevailing literature which should be linked.

Significance of the problem

Higher education institutions are known for complex knowledge-based resources that are critical for innovation and high performance. The knowledge-based resources in institutions of higher education need proper management strategies, but studies shows that the existing strategies are not sufficient and research is scarce in this realm (Fullwood & Rowley, 2017). In most developing countries such as Kenya, the higher education system is characterized by individualistic culture, rigid management structure and complex bureaucratic norms that serve as a hindrance to elaborate knowledge management activities. There is need for incorporation of facilitators to knowledge management to ensure responsive business processes. Knowledge-based leadership plays a critical role in ensuring that the pillars and infrastructure for knowledge management practices exists in any organization (Pandey & Dutta, 2013).

Knowledge management has a direct correlation with the level of innovation which influences organizational performance. Just like other knowledge-based sectors in the economy, the higher education sector is faced with challenges that require a focus on both process and product innovation for enhanced organizational performance and a competitive edge. The organizational leadership style can promote or hinder both product and process innovation. Transformational leadership has been established to have affirmative correlation through innovation (Escrig-Tena, Segarra-Ciprés, García-Juan, & Beltrán-Martín, 2018). In the context of knowledge-based sectors such as higher

education, knowledge-oriented leadership has a high relationship with innovation (Donate & de Pablo, 2015).

Purpose of the Research and the Research Question

Despite the notable linkage between knowledge management, innovation and organizational performance, there is limited scholarly work on how knowledge-based leadership directly affects performance, innovation and knowledge management in the higher education sector. Majority of the developing countries like Kenya are highly expected to establish knowledge economies and a higher education sector that produces quality graduates who meet the complex requirements of the dynamic job market. The developing countries can borrow from developed countries milestone in integrating knowledge management framework, knowledge-based leadership model and innovation to ensure the higher education sector contributes to economic and social transformation. The research is therefore commenced to examine the effect of knowledge-based leadership, innovation and knowledge management in organizational performance of the Kenyan higher education system. It seeks to answer the research question; What is the impact of knowledge-based leadership, innovation and knowledge management in performances of higher education institutes in Kenya

CHAPTER 1
LITERATURE REVIEW

1.1 Knowledge-based Leadership

Leadership is the process of influencing others to achieve some set objectives through a number of ways such as motivation, encouragement and communication. However, according to Shariq, Mukhtar and Anwar (2018), these ways of influencing others are not enough when the desirable outcome and objectives are related to knowledge. The path-goal theory, one of the contingency theories of leadership, it points out that the effectiveness of a leader majorly depends on the behavior the leader exhibits in a particular situation (Shamim, Cang, & Yu, 2019). Both transformational and transactional leadership are credited for achieving some organizational as well as individual level outcomes. However, evidence shows that in knowledge intensive settings, the leaders are expected to lead through the knowledge lens and and depict divergent behaviors (Ribiere & Sitar, 2003). As a result, knowledge-oriented leadership continues to receive growing attention from scholars such as Naqshbandi and Jasimuddin (2018), which defines knowledge-based leadership as part of an action or attitude attributed to prompt formation, utilization as well as sharing of knowledge that helps in shifting the collective outcomes and thoughts.

Leaders in knowledge intensive work settings such as the higher education sector require a combination of various leadership techniques to ensure efficient and effective knowledge management within their organizations. Information and knowledge are

important in contemporary organizations and leadership plays an essential role in the management of information and knowledge which has prompted scholars to investigate the specific types of leadership behaviors needed for effective knowledge management (Shamim et al., 2019).

1.2 Knowledge Management

Since knowledge is regarded as a critical asset in any organization that is required to be coped efficiently for a competitive edge and sustainability in the industry (Shahzad, Bajwa, Siddiqi, Ahmid, & Raza, 2016). Knowledge management is a business process that applies a systematic approach in formalizing expertise, experience and knowledge to help institutions generate new competencies that are needed in improving organizational performance. Knowledge management is classified into knowledge management processes which are practices that involve the flow of information and knowledge across the different actors in an organization. Knowledge management processes involves the ability of an organization in creating, sharing and utilizing knowledge (Gharakhani & Mousakhani, 2012). Knowledge management infrastructure is another classification of knowledge management that comprises the existing technology in an organization, the organizational culture and structure that are necessary in facilitating knowledge flow. Both knowledge management infrastructure and processes have a direct association with the competitive advantage of an organization. However, knowledge management processes are more critical when it comes to innovation necessary in ensuring higher organizational performance (Ahmad, Lodhi, Zaman, & Naseem, 2017). Most of the scholarly works regarding knowledge

management progressions in the higher education system have focused on the knowledge sharing aspect. Few scholars have investigated the knowledge acquisition and utilization aspects of knowledge management processes (Adeinat & Abdulfatah, 2019). However, this paper focuses on all the three aspects and their role in influencing knowledge-oriented leadership on the organizational performance and innovation in the higher education sector.

The knowledge management process capability of any institution it starts from knowledge acquisition using both internal and external resources (Yasir, Majid, & Yasir, 2017). Knowledge acquisition in an organization involves interaction of people, resources and technology both outside and within an organization. The interaction between people, resources and technology helps an organization to generate new competencies and skills that are added to the existing knowledge stock. Knowledge sharing remains the most crucial aspect of the knowledge management because it fosters a competitive advantage and enhances organizational innovation. Knowledge sharing is regarded as the practice of sharing information, skills, ideas between employees in an organization. According to Tan and Noor (2013), knowledge sharing is credited for fostering productivity and research collaboration in the higher education system. Knowledge utilization alternatively is also regarded as the application of knowledge in the processes, services, products and organizational functions to ensure high performance necessary for commercial value.

1.3 Innovation

Innovation is one of the powerful aspects of sustainability in this era of highly competitive business field. The nature and complexity of business practices in the higher education sector requires innovation to contend with the worldwide trends and to meet the expected societal needs in the higher education that are rapidly evolving. Innovation also serves as the driver for economic and societal development. There are several categories of innovation such as the radical innovation, incremental innovation, product innovation, process innovation, technological innovation and administrative innovation. However, scholars recommend a focus on product and process innovation in the higher education sector to help in improving the performance and the quality of education (Al-Hakim & Hassan, 2016). In the higher education sector, product innovation is regarded as the development and implementation of new teaching materials, methods, programs, courses and research and academic programs. Process innovation is regarded as the process of coming up and implementing new incentive system and embracing the use of new equipment and technology to enhance the educational process. While some scholars (AlHusseini & Al-Beltagi, 2016) have documented how authentic and transformational leadership impact innovation in the higher education system, there is little on the role of both product innovation and process innovation in conveying the effects of knowledge-based leadership aiming the organizational performance of the higher education sector. It is against this background that we have included the two phases of innovation in the domain.

1.4 Organizational Performance

The main objective of knowledge management and innovation as well as other various motivating factors is to ensure higher organizational performances which involves development and progress in an organization's processes (Ahmed et al., 2017). According to Abualoush, Masa'deh, Bataineh, and Alrowwad (2018), organizational performance can be assessed from the level of work quality, the efficiency of the employees, nature of processes and product innovation, the relationship between the leadership and employees and the problem solving ability.

According to Akhavan, Ramezan, Moghaddam, and Mehralian (2014), an organization's performance evaluation is usually based on the goals and objectives. The higher education sector performance organizational performance is based on several indicators which include the institution's responsiveness, the productivity of the graduates, nature of curriculum development, the quality of scholarly publications, the research ranking and the level of student satisfaction.

CHAPTER 2
THEORETICAL BACKGROUND

The work draws from a number of theoretical perspectives which include the model of knowledge-leadership, the knowledge management capability framework and the knowledge based view theory. There are two strands of knowledge management capabilities which include the knowledge process capability and the knowledge infrastructure capability. The knowledge process capability comprises of the knowledge conversion, utilization, acquisition and protection. On the other hand, the knowledge infrastructure capability comprises of technology, structure and culture (Cho & Korte, 2014). Knowledge capability context points out that knowledge infrastructure know-how helps in increasing organizational performance, effectiveness as well as nourishing the knowledge process capability that consequently enhances performance in organizations (Cho et al., 2014). Leadership has been a precarious aspect in the knowledge infrastructure know-how that is essential in facilitating the implementation knowledge management aspects for instance knowledge sharing, acquisition and utilization in the higher education system (Koohang, Paliszkiewicz, & Goluchowski, 2017).

According to Donate et al., (2015), knowledge-based leadership is drawn from the transactional and transformational aspects of knowledge management in the higher education institutions leadership theoretical concept. Knowledge-based leadership is considered critical for effective organizational knowledge management that results in enhanced innovation (Naqshbandi et al., 2018). Knowledge-based leadership promotes learning, creates and environment which enhances creativity that encourages

engagement in explicit and implicit knowledge management activities which includes creating, utilizing and sharing of knowledge (Shamim et al., 2019).

Knowledge-based view is anchored in an organization's resource-based view which holds that knowledge is a critical and valuable aspect in ensuring organizations has a competitive advantage in their respective industries. The knowledge-based view puts emphasis on the need to focus on knowledge activities that include creation of knowledge, its incorporation and uses (Costa & Monteiro, 2016). The rudimentary principle of knowledge-based view posits that organizations that have established framework for efficient and effective organizational knowledge management have improved intellectual capital, high level of innovation and better performance (Ramadan, Dahiyat, Bontis, & Al-Dalahmeh, 2017). As a result, embracing the framework and knowledge-based leadership in the higher education system will result in enhanced innovation and knowledge management processes that prompt high organizational performance.

2.1. Knowledge-Based Leadership in Organizational Performance

Each organization has set objectives and the performance is measured base on whether the organization has achieved the desired objectives. There are a number of factors that play an essential role in the performance of an organization and leadership is regarded as one of the critical aspects that influence the performance of an organization. There is a lot of scholarly work on the impact of traditional forms of leadership on organizational and individual performance. For example, transformational leadership is credited for intellectual stimulation, idealized influence and a focus on the

developmental needs of the followers (Bacha, 2014). Transactional leadership is credited for corrective and constructive traits where there are contingent rewards when the set goals are met and monitoring performance to make corrections when there is a problem (Obiwuru, Okwu, Akpa, & Nwankwere, 2011). Both the aspects of transactional and transformational leadership styles positively contribute to employees' job performance and learning which enhances organizational performances. The knowledge-based leadership is considered as the type of leadership that comprises both transactional and transformational leadership aspects (Donate et al., 2015). Knowledge-based leadership is characterized by knowledge-related traits such as facilitation of external knowledge acquisition, promotion of learning from experience, knowledge application, sharing of rewards and establishing a good teamwork environment. While there is limited scholarly work in the link between knowledge-based leadership and organizational performance, the fact that this leadership comprises the features of both transactional and transformational leadership techniques that makes us theorize the elements of knowledge-based leadership are critical in the higher education system for a number of reasons. The environment for teamwork that is created by knowledge-based leadership increases trust among faculty employees in the higher education system. The increase in trust results in high research productivity and improved knowledge sharing (Fullwood et al., 2017). Knowledge-based leadership encourages knowledge acquisition from diverse sources; this type of leadership also rewards the application and sharing of such knowledge which promotes collaboration in research, responsiveness in development of the curriculum and the quality of education (Tan et al., 2013). The knowledge-based

leadership is credited for fostering a learning culture that enhances organizational performance (Choudhary, Akhtar, & Zaheer, 2013). Based on these claims, we have come up with this hypothesis:

H1. Knowledge-based leadership has affirmative impact towards organizational performance.

2.2 Knowledge-based Leadership, Knowledge Management and Organizational Performance.

Knowledge management in an institutions is as a result of certain stimulating factors that encourage knowledge activities. According to Cho et al., (2014), there are a number of aspects in the knowledge management capability framework such the knowledge culture, good leadership in an institution, a reward system and technology that contribute to knowledge management activities in an organization. The aspects are crucial in knowledge intensive settings such as the institutions of higher education because they help in implementing the knowledge management processes which include acquisition, utilization and sharing of knowledge (Iqbal, Latif, Marimon, Sahibzada, & Hussain, 2019). Leadership plays a critical role in knowledge activities like knowledge sharing in the higher education sector (Koohang et al., 2017). As a result, organizations' leadership should create an atmosphere that motivates knowledge management activities. As Le and Lei (2018) points out, an environment that encourages knowledge management activities in an organization, enhances thoughts and generation of valuable ideas to achieve the common goals. Knowledge-based leadership influences knowledge management processes because it exhibits commitment, active engagement, supports

learning and inspires those that are led to generate, implement and share unique ideas (Naqshbandi et al., 2018). Knowledge-based leadership inspires, project as a paradigm, pay attention to knowledgeable stimulation and use of incentives as well as rewards to encourage knowledge application and sharing (Williams & Sullivan, 2011). Knowledge-based leadership facilitates knowledge acquisition through provision of new technology infrastructure and routines that allows employees to learn new ideas (Naqshbandi et al., 2018). Knowledge-based leadership is critical in institutions seeking to exploit explicit and tacit knowledge. As a result, there is a positive correlation between knowledge-based leadership and knowledge management processes (Naqshbandi et al., 2018). Institutions of higher education are expected to promote learning, nurture the knowledge economy. The institutions of higher education are faced with a number of challenges such as producing quality graduates that are fit for the dynamic job market as well as improving the curriculum regularly. The challenges are more complex in developing countries (Iqbal et al., 2019) such as Kenya and most institutions of higher education are recognizing the need for effective knowledge management as a way of ensuring enhanced performance and sustainability in the industry.

From the knowledge-based view, if knowledge management processes are implemented successfully in an organization, such an organization which have high performance and a competitive edge (Tseng & Lee, 2014). When knowledge-based resources within an organization are managed well, it enhances the organization's ability to innovate and respond to the dynamic market conditions resulting in superior performance. The foregoing account points to a positive correlation between

organizational performance and knowledge management processes. As a result, we argue that knowledge based-leadership is critical in implementing knowledge management processes such as acquisition, utilization and sharing of knowledge in institutions of higher education which result in high academic quality, productivity in research and satisfaction among the students. As a result, we propose the following hypotheses;

H2: Knowledge-based leadership positively impacts knowledge management processes.

H3: Knowledge management processes positively impacts organizational performance.

H4: Knowledge management processes mediate the effect of knowledge-based leadership in the organizations performance.

2.3 Knowledge-based Leadership, Innovation and Organizational Performance

Innovation has been well known for a critical aspect of organizational existence and their competitive edge in the higher education sector. Good leadership can help in improving innovation through provision of conducive environment for creativity and employee motivation. Knowledge based leadership promotes innovation through encouraging staffs to express their state of mind and give them sovereignty to share their unique concepts (Foss, Lyngsie, & Zahra, 2013). The remarkable traditional methods of leadership for example transactional and transformational are equally associated with innovative outcomes. Transformational leaders use inspiration, intellectual stimulation in enhancing the self-efficacy of their employees. Transformational leaders encourage their employees to challenge the norms and experiment with unique ideas (Zuraik &

Kelly, 2019). Transactional leaders on the other hand, reward creative ideas from employees to encourage innovation (Sethibe & Steyn, 2016). Knowledge-based leadership has a combination of both knowledge oriented transactional and transformational leadership aspects that are more linked to innovation in the high education system which has knowledge intensive institutions. The knowledge-based leadership creates a learning environment, promotes knowledge activities and inspires employees to come up with unique ideas, implement and share the ideas (Shamim et al., 2019). Knowledge-based leadership equally motivates the followers, fosters effective communication, rewards novel ideas and encourages exploitation of new knowledge (Donate et al., 2015). Knowledge-based leadership communicates an institutions innovation goals and strategies, defines the followers' roles, offers intellectual stimulation and empowers the followers to implement the unique ideas (Williams et al., 2011). It is against this backdrop that we infer that knowledge-based leadership fosters creation, implementation and integration of novel ideas which leads to improved process and product innovation. Innovation is considered as a vital aspect of positive performance, sustainability and survival of organizations in the competitive business environment. According to Alipour and Karimi (2011), helps organizations to quickly adapt to market changes and improves managerial capabilities that in turn increase organizational performance and customer satisfaction. Process and product innovation have become critical in the higher education to better adapt to the changing demand for higher education (Al-Hakim et al., 2016) because institutions that focus on improving the process and creating innovative products have better quality, low cost and flexibility.

In the higher education system, product and process innovation enhances service quality, high student satisfaction, improved curriculum and research productivity which helps attain higher performance. We therefore propose the following hypotheses;

H5: Knowledge-based leadership positively impacts innovation.

H6: Innovation positively impacts organizations performance.

H7: Innovation intermediate the impact of knowledge-based leadership in the organizational performance.

2.4 Knowledge-based Leadership, Knowledge Management, Innovation and Performance in Organizations

Knowledge based view holds that proper management of knowledge resources in an organization enhances the innovation capability of an organization which results in high organizational performance and a competitive edge. Innovation is enhanced in an organization through the involvement of members in the knowledge management activities such as acquisition, application and sharing of the knowledge (Andreeva & Kianto, 2011). The approach helps in advancing an organization's intellectual capital and enhancing innovation all through compeers and application of innovative concepts. Acquiring knowledge from external resources helps in revamping the existing and developing new knowledge for the organization which fosters creative thinking and improved innovation (Dahiyat & Al–Zu'bi, 2012). The involvement of staffs in sharing of knowledge activities enhances their skills, competencies, ability to adopt new routines and innovative products. The knowledge utilization aspect is the most crucial aspect of knowledge management because it is used in solving organizational problems through

creative ways and that is when the knowledge is transformed into a product, service or innovative process. Knowledge management processes have a positive effect on innovation that results in high organizational performance (Doante et al., 2015). According the knowledge-based view, there is a universal association between innovation, knowledge management processes and performance in an organization. As a result, knowledge management innovation and processes should sequentially arbitrate to the link between organizational performance and knowledge-based leadership. The following hypotheses are proposed;

H8: Knowledge management processes positively impact innovation.

H9: Knowledge Management innovation and processes sequentially arbitrate the impact of knowledge-based leadership on the organizations performance.

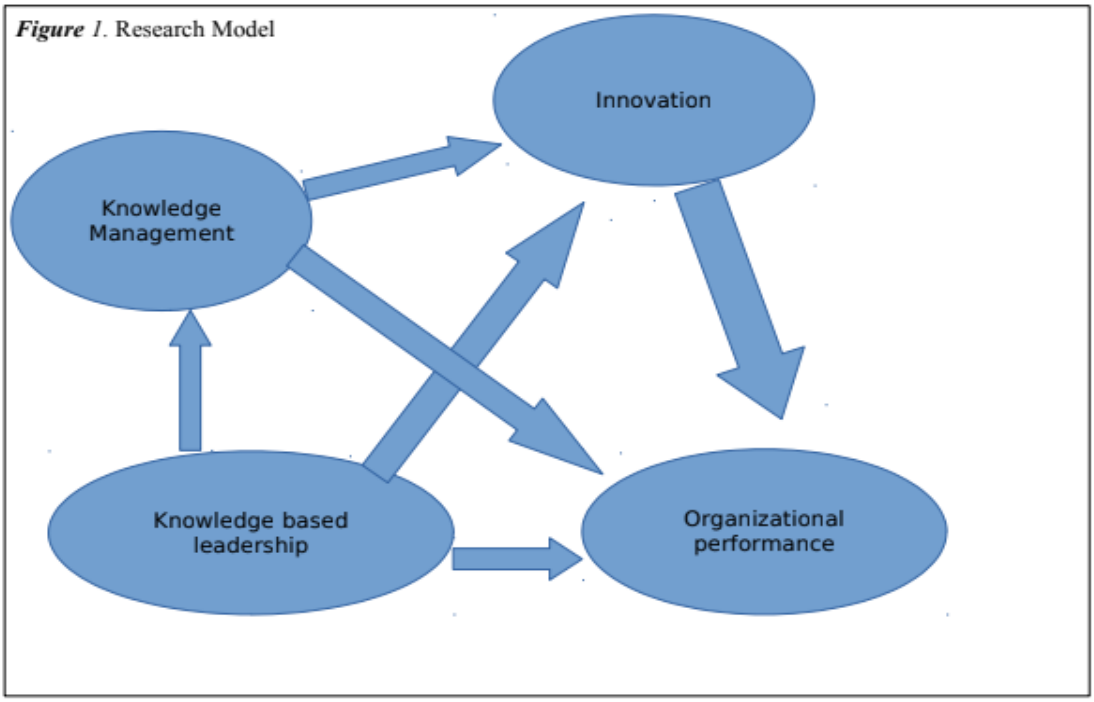
CHAPTER 3
METHODOLOGY

3.1 Method and Study Context

In economies that are knowledge-based, institutions of higher education play an essential role in both the social development and economic growth through research that generates innovative ideas and quality graduates for the dynamic job market. However, institutions of higher education in developing countries such as Kenya experiences challenges such as low funding from the government, fluctuation in the demand and supply for higher education as well as competition for ranking (Iqbal et al., 2019). According to the Commission for University Education in Kenya, there are 65 recognized university education institutions that operate in private as well as public institutions and are involved in progressing higher education in different disciplines which include medicine, technology, agriculture, education, business, humanities and social sciences, law, and business. Regardless of the significant effort contributed by the Commission for University

Education in Kenya to endorse research and innovation, higher education institutions in Kenya appear to not doing well in the global rankings. In order to address the problem, attain a sustainable competitive edge and have improved organizational performance through innovation and research, it is critical for the institutions of higher education to embrace an approach that fosters effective management of organizational knowledge. Accordingly, this research attempts to examine knowledge-based leadership, innovation and knowledge management in organizational performance of the Kenyan higher education system. The method utilized in this study is cross-sectional survey design.

Figure 1 Research Model



3.2 Sample and Population

This study used a sample of 10 private universities and public universities situated in the five counties Nairobi, Kiambu, Kisumu, Nakuru, and Uasin Gishu in Kenya and recognized by the Commission for University Education of Kenya. Faculty members were the respondents, they included: lecturers, tutorial fellows and professors. The main rationale for using faculty members in collecting of data is because they are clearly regarded as the main knowledge backbones in institutions of higher education and are considered the prominent sources of the innovation that results in the competitive edge of the higher education institutions and improved organizational performance. To reduce ambiguity and get accurate responses, 50 questionnaires were

sent out to faculty members of my university. From the 50, 45 respondents filled the questionnaires and others suggested an adjustment of the questions to be clarified. The concluding questionnaire used was adjusted according to the suggestions made during the process of pilot testing. Each questionnaire was accompanied by a well explained cover letter pointing out the purposes of the survey as well as assuring the respondents of their confidentiality. Using the convenience sampling technique, 200 survey questionnaires were distributed to sampled universities faculty members in diverse disciplines. 20 questionnaires were randomly dispersed in all of 10 universities. Convenience sampling was considered an ideal approach because of uncertainty in the schedule of faculty members in their respective universities. An aggregate of 181 questionnaires were acknowledged which indicated a response rate of 90%. The 10 universities from which the sample for the study was taken are the major institutions of higher education in Kenya comprising more than the 80% of the total population of the Kenyan higher education system.

3.3 Measures

In this study, the measurements applied were adopted from preceding case studies and evaluated by a 5 point Likert scale starting from 1 for strongly disagree to 5 for strongly agree.

3.3.1. Knowledge-based Leadership

To measure the measure knowledge-based leadership, we adopted the tool established by Donate et al.(2015) with a few modifications of the questions to fit the context of the research. The tool has also been endorsed by other scholars see

(Naqshbandi et al., 2018). The faculty members also were requested to give their opinion the leadership conduct of their corresponding departmental chairpersons on 5 items in a 5 point Likert scale. The sample question included “The departmental head gives rewards to faculty members for sharing and applying knowledge”.

3.3.2. Knowledge Management

The knowledge management aspect was operationalized as a second construct comprising 3 dimensions which include “acquisition of knowledge”, “ utilization of knowledge” and “sharing of knowledge”. The work of Iqbal et al. (2019) points out to 16 knowledge measurement items in the institutions of higher education picked from previous research works. Acquisition of knowledge was assessed using 6 items. The sample item for acquisition of knowledge included “My university recruits news faculty members as a source of new knowledge”. Sharing knowledge was assessed using 5 tems in a 5 point Likert scale. The sample item included “My University encourages knowledge and information sharing across departments and among faculty members”. Utilization of knowledge was assessed using 5 items in a 5 point Likert scale. The sample item included “My University utilizes existing knowledge in advancing services offered to its clients”.

3.3.3. Innovation

Innovation was operationalized as a second order construct in as demonstrated in the first order constructs of process and product innovation. The work of Elrehail, Emeagwali, Alsaad and Alzghoul (2018) points out 11-item scale borrowed to measure these dimensions in the higher education institutions context. Measuring process

innovation involved 7 items while measuring product innovation involved 4 items in a 5 point Likert scale. The item sample for process innovation included “Our University is coming up with fresh training programs for faculty members”. The sample item for product innovation included “Our University regularly comes up with fresh programs for faculty members and learners”.

3.3.4. Organizational Performance

Organizational performance of the institutions of higher education was by assessing the curriculum development, research ranking and productivity, the responsiveness of the institution and satisfaction of the students. The study picked 7 items from the work of Iqbal et al., (2019) in assessing the construct in a 5 point Likert scal e. The sample included “Our university research productivity is better when compared with our main competitors”. Below are the Variables summery.

Table 1 Summery of Variables, Items and the Variables

VARIABLES	SUB CONSTRUCTS	ITEMS	RELIABELES
Knowledge-based leadership	Transformational leadership Transactional leadership	Knowledge utilization Knowledge sharing	Motivation Encouragement Communication
Knowledge management processes	External knowledge acquisition Internal knowledge acquisition	Creating knowledge Sharing knowledge Knowledge Utilization	Skills Ideas Information
Innovation	Product innovation Process innovation	New technology New equipment New incentives	Teaching materials Methods Programs Courses
Organizational performance	Development organizational performance progress organizational performance	Goals objectives	Programs Work quality Efficiency Innovation

3.4. Data Analysis

The research involved a variance based structural equalization modeling technique in data analysis. The technique was picked because it imposes limited restriction on the normality of data. The technique is prediction oriented and therefore best suited when the research is meant for testing existing theories in an explanatory way (Hair, Risher, Sarstedt, & Ringle, 2019). The work of Iqbal et al., (2019) also points out that the partial least squares structural equalization modeling technique use has increased because of the potential benefits in knowledge management research.

The partial least squares structural equalization modeling SEM tool involves two stages which include the evaluation of the structural model and the valuation of the measurement model (Ringle, Sarstedt, Mitchell, & Gudergan, 2018). The valuation of the measurement model was done to make sure the constructs used in the structural model are valid and reliable. The evaluation of the structural model is done to assess the statistical significance and predictive relevance of the model used in the research.

3.5. Common Method Bias Assessment

Podsakoff, MacKenzie and Podsakoff (2012), gives guidelines on how to avoid method bias in research. The study adopted the guidelines as a procedural remedy by ensuring the anonymity and confidentiality of the respondents in order to avoid dishonest and artificial responses from participants and reduce common method bias. The Harman's single factor test was used and found the single factor less than 50% indicating that common method bias is not a serious backlash in the research.

CHAPTER 4
RESULTS

4.1 Descriptive statistics on variables

Data has been cleaned through the Microsoft Excel software by eliminating some of the missing values for the entire respondent and some of the missing values replaced since they were minor. The minor values were considered as the record of a respondent has two or one missing value. The data cleaning process was done in excel since it is an easy tool for viewing the missing values using direct inbuilt functions. However, the data was then analyzed in SPSS software version 25 which is an elaborate tool for data analysis with inbuilt capabilities suitable for statistical analysis. The analysis involved 181 questionnaires out of the 183 that were returned by respondents from the 200 that were sent out. The 2 Questionnaires did not have enough information for analysis and therefore were not considered for analysis hence considered minor. The demographic features of the respondents are shown in table 1.

Table 2 Respondents' information

Characteristic	Category	frequency	%
Gender	Male	103	56.9
	Female	78	43.09
Age	Above 60 years	5	2.78
	30-40 years	68	37.78
	41-50 years	79	43.64
	51-60 years	17	9.39
	Below 30 years	12	6.67
Academic level	Bachelors	5	2.78
	Masters	57	31.67
	PhD	118	65.55
Academic position	Associate professors	45	25
	Lecturers	69	38.33
	Professors	20	11.11
	Tutorial fellow	46	25.56
Job tenure	10-15 years	57	31.67
	16-20 years	42	23.33
	Below 10 years	64	35.56
	More than 20 years	17	9.44

4.2 Measurement Model Assessment

Constructs reliability and validity of was assessed through measurement model assessment. The study involved two high-order constructs which include knowledge management processes and innovation.

Regression model Interpretation.

Table 3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.997[a]	.993	.993	105.092
a. Predictors: (Constant), Knowledge-based leadership, Knowledge management, Knowledge utilization				

Table 2 indicates the model summary for regression analysis Structural model results SEM. The R-squared value is the coefficient of determination which indicates how the available data fits on the model. Since the value is .993, it shows that the data fit 99.3% to the model. Hence the model accuracy is improved.

The p-value for the model is more than the level of significance, which is 0.05. Hence there is a positive effect on knowledge-based leadership, knowledge utilization, and knowledge management.

The 0.85 coefficient determination from the results indicates that knowledge-based leadership, innovation and knowledge management processes explain 85% of the level of organizational performance. 0.70 coefficient knowledge management processes indicates that Knowledge-based leadership explains 70% in variance of knowledge management processes. 0.90 coefficient for innovation indicates that knowledge-based leadership and knowledge management processes explain the 90 variance in innovation.

The findings from the study indicate that all the indicators loading above 0.70 except the organizational performance. The overall findings point out that the equation model is suitable for structural evaluation.

4.3 Structural Model Evaluation

The Structural model evaluation is generated after PLS-SEM analysis stage regarding the measurement requirement of the model. The technique was picked because it imposes limited restriction on the normality of data. The technique is prediction oriented and therefore best suited when the research is meant for testing existing theories in an explanatory way (Hair, Risher, Sarstedt & Ringle, 2019). The work of Iqbal et al., (2019) also points out that the partial least squares structural equalization modeling technique use has increased because of the potential benefits in knowledge management research.

The partial least squares structural equalization modeling tool involves two stages which include the structural model evaluation and the measurement model assessment (Ringle, Sarstedt, Mitchell, & Gudergan, 2018). The assessment of the measurement model is done so as to make sure constructs used in the structural model are valid and reliable. The evaluation of the structural model is done to assess the statistical significance and predictive relevance of the model used in the research.

First stage we generate coefficient determination (R^2 value) that predicted cross – validated redundancy index and accuracy that predicted the structural model relevance.

Table 4 Factor Generating Reliability and Average

Constructs	Codes	Loading	Cr	AVER
Knowledge-based leadership	KBL1	0.79	0.89	0.68
	KBL2	0.88		
	KBL3	0.89		
	KBL4	0.81		
	KBL5	0.76		
	KBL6	0.77		
Knowledge management processes	K/A	0.88	0.91	0.79
	K/S	0.89		
	K/U	0.84		
Innovation	Product Innovation	0.90	0.87	0.82
	Process Innovation	0.79		
Organizational performance	O/P1	0.61	0.94	0.77
	O/P3	0.81		
	O/P4	0.89		
	O/P5	0.78		
	O/P6	0.96		
	O/P7	0.78		

NB: K/A 5 knowledge acquisition, KbL 5 knowledge-based leadership, K/S 5 knowledge sharing, K/U 5 knowledge utilization, O/P 5 organizational performance.

In the second stage, we involved bootstrapping procedure to compute p-values and t-values to test significance level trail for hypotheses associations' valuation. The technique mostly suits analysis mediation as in this case of study and in the merging of PSL-SEM analysis. Also variance is evaluated to better resolute strength of indirect effect.

Table 5 Structural Model Results

KNOWLEDGE Man processes	0.78			0.71
Innovation {proc & prod)	0.81			0.72
Organizational performance	0.99			0.38
Aggregate outcome	Coefficients	{SE}	*t* values	*p* values
KBL → O/P	0.77	0.09	29.93	0.00
Direct outcome				
KBL → O/P	0.36	0.03	4.43	0.00
KBL → KMP	0.79	0.12	21.98	0.00
KBL → Innov	0.57	0.09	19.98	0.00
KMPS → Innov	0.84	0.12	12.87	0.00
KMPS → Op	0.27	0.05	8.43	0.00
Inno → O/P	0.48	0.09	4.43	0.00
Indirect outcome				
KBL → KMP → O/P	0.19	0.11	2,99	0.00
KBL → Inno → O/P	0.21	0.01	6.32	0.00
KBL → KMP → Innov → O/P	0.12	0.12	3.01	0.00
Overall indirect outcome				
KBL → O/P	0.79	0.06	2.89	0.00

K bl-knowledge-based leadership, KMP 5 K/M processes, Innov 5 innovation, O/P 5 organizational performance, variance accounted for (VAF) 5 0.73 (overall indirect result/overall outcomes.

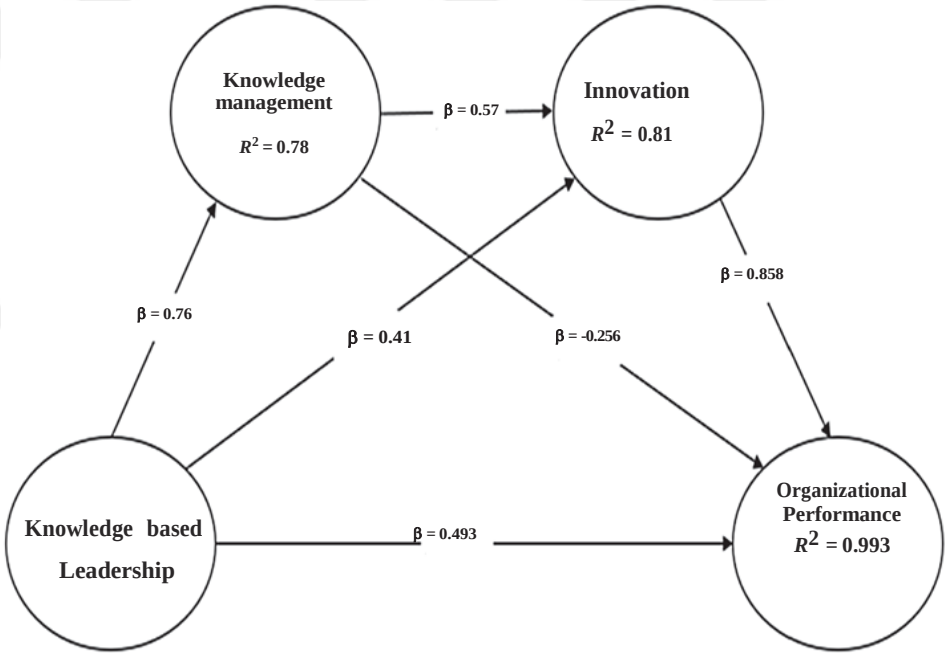
Table 6 Factor generating reliability and AVERAGE at the 2nd order level

	1	2	3	4
1. Innovation	*0.94*			
2. Knowledge M processes	0.96	*0.89*		
3. Knowledge-based leadership	0.49	*0.62*	*0.88*	
4. Organizational performance	0.68	*0.61*	*0.69*	*0.79*

NB: Values are the square root of AVERAGES, above are the generated correlations outcome between the used research constructs.

Figure 2 shows the structural path coefficients and the overall outcome, both indirect effects and both direct effects and each of their impact.

Figure 2 Operational Path Model



The operational path coefficients point out that knowledge-based leadership has a significant positive impact on organizational performance as proposed in H1. The positive impact of knowledge-based leadership towards organizational performance (β 5 0.25, t 5 2.99, $p < 0.01$) shows how it is linked to mediation effect of innovation and knowledge management processes.

H1 predicted that knowledge-based leadership has a positive impact on knowledge management processes (β 5 0.76, t 5 21.98, $p < 0.01$) whereas H3 predicted that knowledge management process have a positive effect on organizational performance (β 5 0.25, t 5 8.43, $p < 0.01$). The result shows that knowledge-based leadership has a positive impact on knowledge management processes while knowledge management processes have a positive impact on organizational performance. The outcome substantiates H2 & H3. The result indicate that knowledge management process have a mediating effect on knowledge based leadership that result in positive organizational performance (β 5 0.493, t 5 4.02, $p < 0.01$). which supports H4. H5 predicted that knowledge-based leadership has a significant impact on innovation (β 5 0.41, t 5 19.98, $p < 0.01$) while H6 predicted that innovation has positive impact on organizational performance. The result from the study support the two hypothesis because it shows that knowledge-based leadership has a significant impact towards innovation (β 5 0.57, t 5 19.98, $p < 0.01$) while innovation has a significant impact towards organizational performance (β 5 0.858, t 5 4.43, $p < 0.01$). The findings also indicate that innovation plays a mediating effect on the impact of knowledge-based leadership on organizational performance (β 5 0.28, t 5 6.32, $p < 0.01$) which supports H7. H8 predicted that knowledge management processes have a positive impact on the level of innovation in an organization. The results of the study supported this hypothesis. The results also indicated that knowledge management processes and innovation play a mediating role in knowledge-based leadership and increased organizational performance (β 5 0.858, t 5 3.01, $p < 0.01$) which supports H9.

Overall assessment shows that mediators' inclusion within the model, shows that direct impact on the knowledge based leadership on organization performance is reduced when compared with the total impact but it is significant.

CONCLUSION

The research was commenced to examine the impact of knowledge-based leadership on organizational performance and that mediation effects of innovation and knowledge management processes. Data was collected from top 10 major universities to examine the predictions of nine hypotheses. The findings of the study supported hypothesis one that knowledge-based leadership improves organizational performance. There are several knowledge related factors in an organization such as the leadership, technology, culture and structure which increase the effectiveness of an organization. Knowledge-based leadership both transactional and transformational helps in aligning the expectations of the employees and their roles with organizational objectives which increase organizational performance. Knowledge-based leaders encourage acquisition of external knowledge, learning and positive employee behavior. As a result, such leadership in higher education institutions increases academic quality, research productivity and the level of student satisfaction.

The result indicated that institutions with knowledge-oriented leaders have positive knowledge management processes. Knowledge-based leadership plays a significant role in effective knowledge management processes such as acquisition, utilization, application and knowledge sharing. Such institutions have responded indicating that they have engaged in research activities to further knowledge. Good knowledge management processes can help higher education institutions to develop effective curriculum increase the level of satisfaction and research productivity. The

results demonstrate a strong link between knowledge-based leadership and the level of innovation in an organization. Innovation helps organizations to survive stiff competition in their respective industries. The study findings indicate that the organizational leadership is critical in ensuring innovative practices in higher education institutions. The study substantiate previous works which hold that knowledge-based leadership is critical in the facilitation of knowledge management processes in higher education institutions because institutions with knowledge-based leaders demonstrated implementation of knowledge management processes.

There is need for knowledge-based leadership in higher education institutions because they are knowledge intensive. Knowledge-based leadership helps in ensuring effective management of the knowledge assets in higher education institutions. Proper management of knowledge assets in higher education institutions promotes innovation and increased organizational performance. The study examined the impact of knowledge-based leadership on the performance of higher education organizations and their intermediating roles of innovation and knowledge management in the relationship. The research involved academic staff members from public and private universities in Kenya. The findings of the research point out that knowledge-based leadership has both direct confident influence on the performance of higher education institutions as well as an indirect positive effect through the mediating role of innovation and knowledge management processes.

Implications

Leadership is widely recognized as an important factor in ensuring positive organizational performance. The postulation also applies in knowledge-intensive organizations such as higher education institutions. The research finds will help extend the existing literature on the knowledge-based leadership impact towards organizations performance and the intermediating roles of innovation and knowledge management processes within higher education institutions.

Limitations and Future Research

The research involved responses from members of the academic staff from the top ten universities in Kenya which might have better knowledge-sharing culture as compared to small higher education institutions, as a result the findings may be less generalized for all the higher education institutions. The institutions are based in relatively developed parts of the country as a result, there is need for future research to focus on samples from remote areas higher education institutions to understand how different settings may influence the outcome.

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APPENDICES

Appendix A: Questionnaire

The study aims to examine the effect of knowledge-based leadership in the Kenyan Higher Education system and the place of innovation and knowledge management.

Social-demographic profile

1. Gender

Male

Female

2. Age

Below 30 Age 30-40 Age 41-50 Above 60 years

3. Highest level of education.

Bachelors Masters PhD

Academic position

Lecturer

Assistant Professor

Associate Professor

Professor

Tutorial fellow

Job tenure

Below 10 years

10 -15 years

16-20 years 

more than 20 years 

KNOWLEDGE BASED LEADERSHIP

The departmental head gives rewards to faculty members for sharing and applying knowledge.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university facilitates external knowledge acquisition.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university retains long serving faculty members to promote learning from experience.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university has established a good teamwork environment.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university fosters a learning culture that enhances organizational performance.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

KNOWLEDGE MANAGEMENT

Knowledge Acquisition-6

My university hires new employees as a source for acquiring new knowledge.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university funds research as a way of acquiring new knowledge.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university has already taken steps towards Covid-19 research.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university uses service collaboration as a strategy in acquiring knowledge.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university has an innovation and incubation center for new knowledge generation.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university focuses on exchanges between distinct disciplines.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

Knowledge sharing 5

My university encourages knowledge and information sharing across departments and among faculty members.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university shares knowledge through dissemination of publications.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university offers exchange programs as a way of knowledge sharing.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university offers scholarship opportunities as a way of knowledge sharing.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university has elaborate alumni programs.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

Knowledge utilization-5

My university utilizes existing knowledge in advancing services offered to its clients.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university has a knowledge management policy.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university has technology that contribute to knowledge management activities.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university is credited for several inventions.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university helps is commissioned by the government and cooporates to conduct research on their behalf.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

INNOVATION

Process innovation 7

Our university is coming up with fresh training programs for faculty members.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university regularly improves the existing knowledge system and inventing new ways of thinking and doing things.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university pays attention to intellectual stimulation and uses incentives and rewards to encourage knowledge application and sharing.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university offers the same content offered in class through the online platform.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university screens all new ideas for potential, it does not allow them to be rejected impulsively.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university experiments on new ideas before implementation.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

Product innovation 4

Our university regularly comes up with fresh programs for faculty members.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

Our university regularly comes up with fresh programs for learners.

(1) Strongly disagree

(2) Disagree

(3) Neither agrees nor disagrees

(4) Agree

(5) Strongly agree

My university has an e-learning system as an innovative program for learners.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university has successfully commercialized some of its works.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

Organizational performance 7

Our university research productivity is better when compared with our main competitors.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university has been improving in the the global ranking of universities.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university curriculum development is aligned to market needs of the employers.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university is responsive to the changing educational needs.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university curriculum is more competitive that our competitors.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

My university focuses on learners' satisfaction.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

The employability of our university graduates is very high.

(1) Strongly disagree

(2) Disagree

(3) Neither agree nor disagree

(4) Agree

(5) Strongly agree

Emmanuel

ORİJİNALLİK RAPORU

%14	%9	%12	%1
BENZERLİK ENDEKSİ	İNTERNET KAYNAKLARI	YAYINLAR	ÖĞRENCİ ÖDEVLERİ

BİRİNCİL KAYNAKLAR

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WORK EXPERIENCE

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Petma Ltd	Assistant Accountants	Jan 2019 – Sept 2019
Kenya National Bureau Of Statistics	Attaché' Monitoring And Evaluation	AUG 2017 - DEC 2017

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