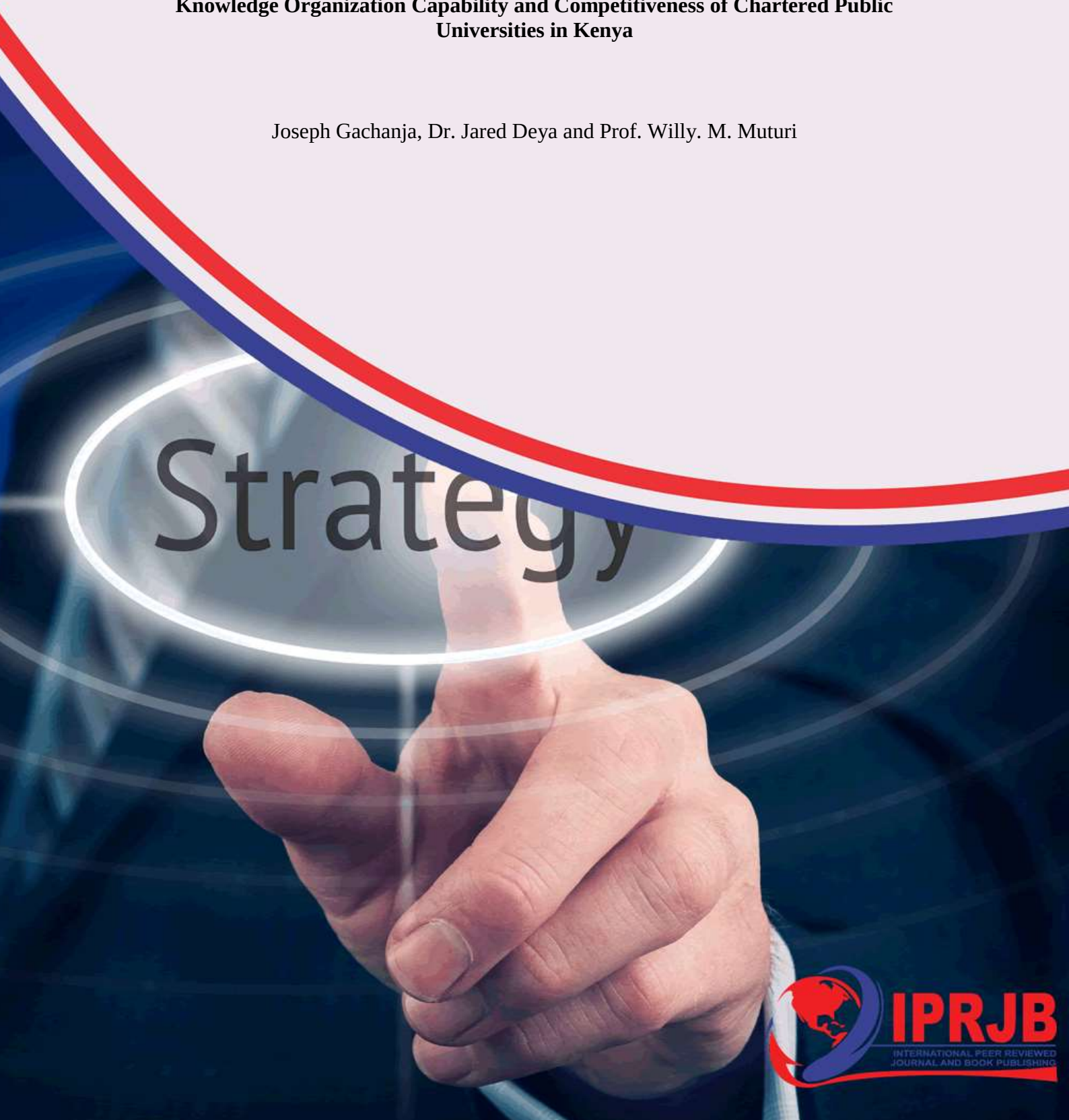


European Journal of Business and Strategic Management (EJBSM)

**Knowledge Organization Capability and Competitiveness of Chartered Public
Universities in Kenya**

Joseph Gachanja, Dr. Jared Deya and Prof. Willy. M. Muturi



Strategy

**Knowledge Organization Capability and
Competitiveness of Chartered Public Universities in
Kenya**



^{1*}Joseph Gachanja

PhD Candidate, School of Business and
Entrepreneurship, Jomo Kenyatta University of
Agriculture and Technology, Kenya



³Dr. Jared Deya and  ³Prof. Willy. M. Muturi
Lecturers, School of Business and Entrepreneurship,
Jomo Kenyatta University of Agriculture and
Technology, Kenya

Article History

Received 21st August 2024

Received in Revised Form 24th September 2024

Accepted 29th October 2024



How to cite in APA format:

Gachanja, J., Deya, J., & Muturi, W. (2024). Knowledge Organization Capability and Competitiveness of Chartered Public Universities in Kenya. *European Journal of Business and Strategic Management*, 9(4), 16–30. <https://doi.org/10.47604/ejbsm.3041>

Abstract

Purpose: Knowledge has increasingly become one of the most critical determining factors for organizational competitiveness. In order to acquire and sustain a competitive advantage, it is vital for an organization to develop effective strategies that foster knowledge creation, transfer and integration in the performance of the organization. Knowledge organization refers to activities such as document description, indexing, and classification that provide systems of representation and order for information and knowledge materials. The purpose of this study was to establish the relationship between knowledge organization capability and competitiveness of chartered public universities in Kenya.

Methodology: The study adopted a descriptive design. The population of the research consisted of 31 chartered public universities authorized to operate in Kenya as at December 2020. The study adopted a census methodology while purposeful and convenient sampling was adopted to select respondents amongst the middle level management staff. The study used both secondary and primary data. A self-administered questionnaire was used as the primary data collection instrument. Out of 155 questionnaires that were sent out, 123 were filled and returned. Statistical Package for Social Studies (SPSS) was used for data analysis. The study used regression model to estimate the level of significance which yielded a positive and significant influence of knowledge organization capability on competitiveness of chartered public universities in Kenya.

Findings: The findings indicate that organizational initiatives such as effective knowledge collaboration and utilization, deployment of information technology systems that support knowledge organisation and easy access to information and data contribute to a healthy environment conducive for knowledge management. Owing to the foregoing, the study concluded that knowledge organization capability had a significant positive impact on competitiveness of chartered public universities.

Unique Contribution to Theory, Practice and Policy: The study recommended that public universities needed to embrace knowledge organization capability in order to obtain sustainable competitive advantage.

Keywords: Knowledge Organization, Knowledge Management, Capability, Competitiveness, Public Universities

©2024 by the Authors. This Article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0>)

INTRODUCTION

Knowledge management plays a crucial role in the competitiveness of an organization. Torres, Ferraz, and Santos-Rodrigues (2018) defined knowledge as a resource that can be found in the core of the organization and people and is a very important source of the organization's prosperity that addresses the major issue of organizational survival, adaptation, and competitiveness. According to Wieczorek-Szymańska (2015), knowledge is the only organizational resource that brings out the competitive nature of a business. Ekambaram, Sørensen, Bull-Berg, and Olsson (2018) argued that an organization's knowledge management capability affects its sustainable competitiveness and productivity. Knowledge is viewed as the major contributor in the enhancement of the organization operations and sustainability (Fuller, 2012). Evidence suggests that knowledge management has a positive effect on the performance of an organization (Valmohammadi, & Ahmadi, 2015). Organizations use knowledge management to identify, select, organize, dynamically learn about, and make decisions about the most essential knowledge and expertise they need to carry out their work (Adjei, & Dei, 2015). Business operations such as governance, accounting, and marketing all rely heavily on the efficiency and efficacy of the information and knowledge systems they employ.

According to Horvath, (2000) organizations should categorize their data, information and knowledge assets in order to establish the resources that they have at their disposal and to identify their strengths and weaknesses. Thus once created, knowledge needs to be organized into something manageable through activities that index, classify, map, and categorize it for easier storage, navigation, and retrieval (Botha et al., 2008). Markus, (2001) assigned the role of knowledge preparation, sanitizing, and organizing to a knowledge manager or the actual producer of the knowledge so that it can be easily shared for reuse. Joudrey & Taylor, (2018) referred to knowledge organization as knowledge enabling processes that are put in place to make resources findable, whether one is looking for a single item or browsing through vast resources of knowledge to get something useful. Thus, knowledge organization comprises the activities and tools used to gather knowledge resources for immediate use and for posterity. This include the processes put in place to make organizational knowledge resources easily accessible, and that support numerous information-seeking scenarios.

Knowledge management involves people, processes and technology in order to be complete and for its potential to be realized (Petrides & Nodine, 2003). Building on the technology perspective, IT-based systems have been generally adopted as a means of organizing and retrieving knowledge and information (Gamble & Blackwell, 2001). According to Azma & Mostafapour (2012) such systems are designed solely for the intense analytical processing of information and generation of crucial knowledge reports.

Public universities undertake a lot of activity in the education market and knowledge management happens to be one of the main assets capable of improving their attractiveness and competitiveness. Competitiveness can be attained by offering a high quality product/service that satisfies both the consumer (student) and the consumer of the finished product (the labour market) where the students realize their potential (Yudina, 2006). The concept of competitiveness of a university is closely linked to the ratings associated with webometric ranking, highly cited researchers, number of papers published, employer reputation, faculty/student ratio, citations, international outlook, innovation, entrepreneurship and university brand assessment (Gedranovich, 2005). These ratings serve as reference points

for prospective students and their parents when choosing one institution over another. This paper therefore sought to establish the relationship between knowledge organization capability and competitiveness of chartered public universities in Kenya.

Statement of the Problem

Public universities are considered as knowledge-intensive environment because they play a vital role in knowledge creation, dissemination and sharing through publications. They play a major role in knowledge transfer via collaboration with business organizations to promote social-cultural development, innovation, and support learning, teaching, research and community service. Hence, universities are expected to assume an active approach to knowledge management and optimization of their knowledge assets. Nonetheless, available evidence posits that universities have adopted inconsistent and passive strategies (Donate & Canales, 2012). Currently, one of the important goals of public universities is their sustainable development, dominated by the paradigm of the developing economy which has forced them to manage themselves economically, to have a positive financial result, to be economical and rational in the use of resources, to be able to generate profit, and in line with the idea of sustainable development, to stop the drive towards the wasteful use of resources. Therefore, there's need to evaluate their sustainability and competitiveness based on economic terms (productivity and efficiency), and also by their impact on their stakeholders (students, staff, industry and community), and on the environment using quantitative and qualitative parameters.

Research has been done on knowledge management practices and firm performance. For instance, Qandah et al. (2020), Rafi et al. (2021) and Shaqrah and Alzighaibi (2021) emphasized that knowledge management capabilities enhance organizational performance and success. In spite of the reported importance of knowledge management on firm competitiveness, few studies have empirically studied the effect of knowledge organization capability on organizational competitiveness, particularly in emerging economies like Kenya. Thus, there's little literature on the effect of knowledge organization capability on organizational competitiveness in developing economies, which amounts to a gap in knowledge. The study sought to fill this knowledge gap by examining the relationship between knowledge organization capability and competitiveness of chartered public universities in Kenya.

Objective of the Study

The objective of the study was to establish the relationship between knowledge organization capability and competitiveness of chartered public universities in Kenya.

Research Hypothesis

H₀₁: There is no statistically significant relationship between knowledge organization capability and competitiveness of chartered public universities in Kenya.

Justification of the Study

The notion of knowledge application has become an important practical sphere after the understanding that attaining and sustaining a competitive edge is dependent on the presence of new ideas that emanate from use of available information and investment for knowledge creation. The above drives constant innovations resulting into new products or service and after service. Nevertheless, knowledge on its own has no value, but it becomes an asset when stimulated and utilized by an organization as a tool to wade off the competition (Mohammed,

2010). Knowledge management is essential in identification and accumulation of knowledge crucial for the business processes of a firm (Gold et al., 2001; Zahra & George, 2002). Further, knowledge management focuses on instilling a culture of partnership that augments organization's knowledge foundation. The practice of managing acquired knowledge is aimed at assisting an institution to achieve competitive advantage over the competitors. Competitive success is no longer based on the strategic alignment of the financial and physical resources, but on the management of its intellectual assets from the point of capture, coding and dissemination which leads to acquisition of new competencies and re-engineering of the business processes (Al-Khalili, 2006). Hence this justifies the need to carry out this study to establish the relationship between knowledge organization capability and competitiveness of chartered public universities in Kenya.

Scope of the Study

The focus of the study was on the relationship between knowledge organization capability and competitiveness of chartered public universities in Kenya. Competitiveness was operationalized based on Porter's (2001) perspective as an organization's ability to successfully compete for business opportunities and perform better than its benchmark competitors in regard to sales, market share and overall profitability, hereby analysed in terms of new student enrollment, return on assets and number of patents. The study focus was 31 public universities accredited by the Commission for University Education in Kenya by December 2020. The universities are spread across twenty five (25) counties in Kenya.

LITERATURE REVIEW

This study was anchored on Resource Based View theory (Penrose, 1959) of enterprise growth and was popularized by (Wernerfelt, 1984) and (Barney, 1991) in their works. As defined by Rothaermel (2012) and emphasizes resources of a university as fundamental determinants of performance and sustainability. It is a theoretical approach that considers strategies like knowledge management as a way of seeking new uses for resources already existing or filling gaps in the resource base of a firm.

Organizational knowledge offers firms with tremendous potential for wealth creation. Unlike the obvious limited factors of production, knowledge generates increased return because of its logical use and nature (Kim and Mauborgne, 1999). Organizational knowledge also has very unique and finite characteristic which set it apart from a firm's physical assets and contributes to formation of sustainable competitive advantage.

Organizational knowledge, contrary to other resources, is such a wonderful resource. It is utilized under different types of forms thereby increasing it. Knowledge can be used in several applications simultaneously and does not lose value unlike other resources (King and Zeithaml, 2003). The firm's knowledge patrimony has strong strategic potentials (Birchall and Tovstiga, 1999), since being an asset it tends to be highly valuable once utilized, and does not depreciate (Stewart, 2000).

According to Wickramasinghe et al. (2005) knowledge management systems facilitate the organization of knowledge in an organization. The tools help to improve and support the knowledge management process and generate value when knowledge is shared amongst employees, departments and even with other organizations to devise best practices (Frost, 2014). Chandran & Raman (2009) defined knowledge management systems as repositories of knowledge from an assortment of experts, organized in a manner such that it can be easily

accessed. According to Bali et al. (2009) , these tools include the intranet and extranet, groupware systems, data mining, decision support systems, data warehousing, document and content management systems, artificial intelligence tools, simulation tools and semantic networks. Young (2010) also mentioned the portal, document libraries, profile, collaborative workspaces, urgent requests, servers, knowledge bases, databases, blogs, and advanced search tools. Further, Capozzi, (2007) proposed the addition of e-learning tools and communities of practice.

Kebede (2010) examined the information science perspective of knowledge management and argued that such systems fulfill key organizational purposes such as improving organizational learning, facilitating strategy development and gaining a sustainable competitive advantage. Elsewhere, Merlo (2017) observed a correlation between human-computer interaction and cultural perspective on knowledge acquisition, knowledge organization (data mining, data warehouse and database), knowledge acquisition and knowledge use. The study concluded that investment in knowledge management and learning culture reflected a leadership type that was favorable for the flow and sharing of intellectual capital and optimization of decision-making and business performance. Alsajjan & Dennis (2010) in a cross-market examination of internet banking acceptance in UK and Saudi Arabia established that information systems enable banks to analyze customer relationships better based on their accounts, led to faster response time to clients' needs and improved customer information. A research by Numprasertchai & Poovarawan (2006) on the role of ICT based knowledge management system on competitiveness of a public university in Thailand established that the system significantly enhanced the university's competitiveness in terms of attaining its mandate of quality and quantity of students, research output and innovativeness of community service.

Han and Wang (2012) focused on the relationship between knowledge management, knowledge management system, and organizational performance. The study conducted an empirical study in which 176 organizations with knowledge management practices were involved. One research model is built up in which a mediated variable, Knowledge Management Capability (KMC) is introduced. The study established that knowledge creation, knowledge organization and knowledge transfer process promoted knowledge management capability.

METHODOLOGY

This study adopted a descriptive survey design to examine the relationship between knowledge organization capability and competitiveness of chartered public universities in Kenya. The target population for this research was 31 public universities which were chartered as at December 2020, and constituted the unit of analysis. The study targeted middle level managers as the unit of observation since as AL-Hakim & Hassan (2011) expounded, middle level managers are knowledge engineers accountable for combining tacit knowledge of the top management and shop-floor workers, and convert it into explicit knowledge. They also have ability to create a wave of new knowledge in the organizational structure, and across different functional areas. A sample size of 155 respondents was considered for this study. The study used both secondary data and primary sources of information. The primary data was gathered through a questionnaire, while secondary data was obtained using a secondary data collection sheet. The study used descriptive statistics and inferential statistics with the help of SPSS software to carry out data analysis. Descriptive statistics specifically frequencies, the mean, and standard deviation were computed. Descriptive statistics allowed the researcher to come

up with meaningful scores that uses few indices. Inferential data analysis was conducted using regression analysis (multiple regression analysis). The coefficient of determination (R^2) was used to establish if the model was significant and the extent to which each of the independent variables explained the changes in the dependent variable. F-statistic was determined at a confidence level of 95% to determine if a significant relationship existed between knowledge organization capability and competitiveness of chartered public universities in Kenya. The analysed descriptive and inferential data was presented using tables and graphs.

FINDINGS

The study sought to establish the relationship between knowledge organization capability and competitiveness of chartered public universities in Kenya. Results on the data collected and analyzed are presented on Table 1.

Table 1: Descriptive Statistics for Knowledge Organization

Knowledge Organization	SD	D	N	A	SA	Mean	SD
The university's organizational knowledge is stored in a database that encourages re-use and sharing	0.8%	8.1%	20.3%	36.6%	34.2%	3.951	0.97
Employees use intranet to share and exchange knowledge and experiences	1.6%	2.4%	24.4%	44.8%	26.8%	3.927	0.87
The university uses technology to monitor its competition and business partners	3.3%	9.8%	26.0%	38.2%	22.8%	3.675	1.04
The university uses technology to that allows people in multiple locations to interact as group	0.8%	3.3%	15.5%	41.5%	39.0%	4.146	0.86
The university has a document management system on the portal that allows for transfer of knowledge	4.1%	8.1%	24.4%	36.6%	26.8%	3.74	1.07
The university has a comprehensive database which is available for all personnel	1.6%	15.5%	22.0%	35.0%	26.0%	3.683	1.07
The university has allowed free flow of information	0.8%	8.1%	25.2%	32.5%	33.3%	3.894	0.99
The knowledge that I require to perform my job is available in the university portal	4.1%	15.5%	17.1%	38.2%	25.2%	3.65	1.14
Knowledge Organization						3.833	0.74

KEY: $n = 123$, SA=Strongly Agree, A= Agree, N= Neutral, D=Disagree, SD= Strongly Disagree, SD= Standard Deviation

The study findings indicate that the respondents agreed that the university's organizational knowledge is stored in a database that encourages re-use and sharing (mean=3.95,SD=0.97), employees use of intranet to share and exchange knowledge and experiences (mean=3.93,SD=0.87), the university uses technology to monitor its competition and business partners (mean=3.68,SD=1.04), the university uses technology that allows people in multiple locations to interact as a group (mean=4.15,SD=0.86), the university has a document management system on the portal that allows for transfer of knowledge (mean=3.74,SD=1.07), the university has a comprehensive database which is available for all personnel

(mean=3.68,SD=1.07), the university has allowed free flow of information (mean=3.89,SD=0.9) and that the knowledge that staff require to perform their job is available in the university portal (mean=3.65,SD=1.14).

The collective responses from participants yielded an overall mean rating of 3.833 and standard deviation of 0.74, demonstrating a prevalent agreement with the various knowledge organisation practices within the university. The findings indicate that the universities' initiatives for knowledge organisation are well-received by the employees, contributing to a positive environment for knowledge management. This suggests that the university has established a foundation for effective knowledge utilization and collaboration. Hajric, (2018) established that IT systems support knowledge organisation and distribution of all knowledge types and providing access to data and information. Baptista et al (2017) expressed that web-based applications such as websites, Email and portals provide information across an entire organization (Igbinovia and Ikenwe, 2017). Numprasertchai & Poovarawan (2006) established that ICT based knowledge management systems enhanced the university's competitiveness in terms of attaining its mandate of quality and quantity of students, research output and innovativeness of community service.

The competitiveness of public universities was measured using the Return on Assets (ROA), New Student Enrolment and Patents as reported by respective institutions for a five years period from 2018 to 2022.

Descriptive Statistics for ROA by Years

The mean ROA values help assess the overall performance, while the standard deviation indicates the degree of variability in financial results. Table 2 provides an overview of the Return on Assets (ROA) for 26 universities over the five-year period.

Table 2: Descriptive Statistics for ROA by Years

Variable	N	Mean	Std. Dev.
ROA 2018	26	0.0031	0.1411
ROA 2019	26	-0.0158	0.2159
ROA 2020	26	0.0666	0.4447
ROA 2021	26	-0.0816	0.8118
ROA 2022	26	0.0264	0.2238

In 2018, universities had an average return on assets (ROA) of about 0.0031, indicating a positive return of 0.3% on their assets. The standard deviation for ROA that year was relatively low at 0.1411, suggesting less variability among universities' ROA values. However, in 2019, the average ROA decreased slightly to around -0.0158, reflecting a negative return of 0.1%. The standard deviation increased to 0.2159, indicating greater variability in ROA among universities for that year.

The year 2020 saw a significant improvement in the average ROA, rising to approximately 0.0666, which means universities achieved a return of 6.7% on their assets, signaling better profitability. Nonetheless, the standard deviation for ROA was relatively high at 0.445, highlighting substantial differences in ROA values across institutions.

In 2021, the average ROA declined notably to around -0.0816, meaning universities recorded a negative return of 8.2% on their assets, indicating a drop in profitability. The standard deviation for that year was also high at 0.8118, showing significant variability among

universities. In 2022, there was a slight recovery, with the average ROA increasing to about 0.0264, suggesting a negative return of 2.6%. The standard deviation decreased to 0.2238, reflecting greater consistency in ROA values among universities that year.

Overall, the analysis of ROA over these five years shows a fluctuating trend. While 2018, 2020, and 2022 had positive average ROA values, 2019 and 2021 were slightly negative. The standard deviations reveal that ROA values were relatively stable in 2018 but became more dispersed in the subsequent years. This increased variability may indicate a wider range of financial performance among universities, warranting further exploration into the underlying factors driving these changes. Similar studies aver that Return on Assets (ROA) is a crucial financial indicator that measures a university's ability to generate income and manage its assets efficiently (Gitman, 2015). In the context of higher education, a higher ROA suggests effective resource allocation and financial sustainability, which are essential for long-term competitiveness of a public university.

Descriptive Statistics for New Student Enrolment by Year

Table 3: Descriptive Statistics for New Student Enrolment by Year

Variable	N	Mean	Std. Dev.
Enrollment 2018	26	2426.7	2161.3
Enrollment 2019	26	2072.5	2004.7
Enrollment 2020	26	2312.4	2085.2
Enrollment 2021	26	2346.1	1586.4
Enrollment 2022	26	2716.8	1912.8

In 2018, the average enrollment across the universities was about 2,427 students, but the data showed significant variation, with a standard deviation of roughly 2,161 students. This variation indicates that while some institutions had very high enrollments, with a maximum of 10,839 students, others had much lower numbers, with a minimum of 357 students. In 2019, the average enrollment decreased slightly to around 2,073 students, but the standard deviation remained high at about 2,005 students, indicating a wide range of enrollments. The minimum enrollment was 438 students, and the maximum was 10,143 students, reflecting the diversity among universities.

By 2020, the average enrollment rose to approximately 2,312 students, signaling a recovery in numbers. The standard deviation was around 2,085 students, suggesting continued variability, with enrollments ranging from a minimum of 540 students to a maximum of 11,373 students. In 2021, the average increased slightly to about 2,346 students, while the standard deviation decreased to approximately 1,586 students, indicating a notable range in enrollments. The data showed a minimum of 630 students and a maximum of 8,064 students, further highlighting the diversity in student populations. In 2022, the average enrollment climbed to around 2,717 students, suggesting another rebound. The standard deviation was about 1,913 students, which still indicated considerable diversity, with enrollments ranging from a minimum of 873 students to a maximum of 9,654 students.

This variability highlights the differing sizes and characteristics of student populations at the sampled institutions, influenced by factors such as program offerings, student demographics, and institutional policies. As Altbach & Knight (2007) observed, student enrolment is a significant indicator of a university's market demand and perceived value by students and stakeholders such as parents and industry.

Number of Patents

Table 4: Number of Patents

Year	N	Mean	Std. Dev.
Number of Patents 2018	26	1.1	2.5
Number of Patents 2019	26	1.8	4.9
Number of Patents 2020	26	2.7	5.4
Number of Patents 2021	26	1.3	5.5
Number of Patents 2022	26	1.4	6.5

In 2018, the average number of patents was 1.1, with a standard deviation of 2.5. This suggests that most universities had relatively few patents, but the high standard deviation indicates that some institutions held a significantly larger number. In 2019, the average rose to 1.8, and the standard deviation increased to 4.9, signaling a trend toward more patents overall, along with greater variability among universities.

By 2020, the average number of patents climbed further to 2.7, while the standard deviation remained high at 5.4, indicating a continued upward trend in patenting activity. In 2021, however, the average dropped to 1.3, though the standard deviation increased to 5.5. This reflects a notable decline in average patents while still showing high variability, meaning some universities continued to have many patents while others had very few.

In 2022, the average rose slightly to 1.4, accompanied by an even higher standard deviation of 6.5. This suggests a minor recovery in the average number of patents, but the high standard deviation points to persistent inconsistencies in patent counts among universities.

Development and commercialization of research outputs such as innovations should be a key component of the universities research so that novel ideas, knowledge, and technological innovations can enter the marketplace for the benefit of a variety of stakeholders including inventors, universities and society. A study conducted by Kiveu (2012) indicated that patent applications from universities were extremely low contrary to expectations and was attributed partly to a lack of incentives in universities for researchers to develop innovations. Bolo et al (2015) revealed that a number of reasons are given for this poor performance including the incentives and rewards systems that are skewed in favor of publications as a yardstick for promotions, the cultural orientation that views knowledge as public goods and doesn't encourage intellectual property protection and lack of clear policy guidelines on the commercialization of research outputs.

Number of Citations

Table 1: Descriptive Statistics for Number of Citations by Year

Year	N	Mean	Std. Dev.
Number of Citations 2018	26	1468.1	2366.2
Number of Citations 2019	26	1837.6	3331.0
Number of Citations 2020	26	2385.5	4706.8
Number of Citations 2021	26	3034.2	6085.4
Number of Citations 2022	26	3293.6	6620.1

In 2018, the average number of citations was 1,468, with a standard deviation of 2,366.2. This indicates that while the average was relatively low, the high standard deviation implies that some universities had a significantly higher number of citations, leading to considerable

variability. In 2019, the average rose to 1,837, accompanied by a standard deviation of 3,331. This upward trend in mean citations continued, along with increased variability, suggesting that some universities had exceptionally high citation totals.

By 2020, the average climbed to 2,385, with the standard deviation rising to 4,706.8. This indicates not only an increase in citations but also a widening range, as some universities likely received very high citation counts. In 2021, the average further increased to 3,034, while the standard deviation jumped to 6,085. This year marks a significant rise in average citations, but the high standard deviation highlights a large disparity in citation numbers.

In 2022, the average citations slightly rose to 3,294, and the standard deviation continued to increase to 6,620. While the average number of citations remained high, the variability suggests that some universities had extremely high citation counts compared to others.

The findings agree with Nosek et al. (2010) assertion that citations represent an impact indicator which is valid, relatively objective and, with existing databases and search tools, straightforward to compute. Accordingly, the utilization of citations, especially as part of a comprehensive set of indicators, generates in principle a more complete, more characteristic picture of the research profile of a university or faculty (Clermont & Dirksen, 2016).

Regression Analysis

The study sought to establish the relationship between knowledge organisation capability and competitiveness of chartered public universities. From this, hypothesis of the study was drawn:

H₀₁ There is no statistically significant relationship between knowledge organization capability and competitiveness of chartered public universities in Kenya.

Regression analysis was used to calculate coefficient of determination in order to estimate the degree of influence that knowledge organization capability had on competitiveness of public universities as shown in Table 6.

Table 6: Regression Model Results on Knowledge Organisation Capability

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	.743a	0.552	0.548	0.67469	

a Predictors: (Constant), knowledge organization

b Dependent Variable: Competitiveness

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	67.846	1	67.846	149.043	.000b
	Residual	55.081	121	0.455		
	Total	122.927	122			

a Dependent Variable: Competitiveness

b Predictors: (Constant), Knowledge Organization

Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.755	0.271		2.789	0.006
	Knowledge Organization	0.797	0.065	0.743	12.208	0.000

a Dependent Variable: Competitiveness

The model revealed that knowledge organization explained 55.2% ($R^2 = 0.552$) of the variation in competitiveness chartered public universities in Kenya. The results showed a [$F(1, 122) = 149.043$, $p < .05$] revealed that knowledge organization was significant in influencing competitiveness of chartered public universities in Kenya. The null hypothesis that “Knowledge Organization has no statistically significant relationship on competitiveness of chartered public universities in Kenya” was thus rejected because the model was statistically significant.

In addition, Analysis of Variance (ANOVA) was carried out to ascertain whether knowledge organization influenced competitiveness of chartered public universities in Kenya.

The regression coefficients were also computed. The findings showed that the coefficient for knowledge organization was 0.797. The model was deduced as follows: $Y = 0.755 + 0.797X_1$

The findings indicated that a unit increase in Knowledge organization led to 0.797 increase in the competitiveness of public universities in Kenya. The p-value was found to be $0.000 < 0.05$ which showed a significant relationship between Knowledge organization and the competitiveness of public universities in Kenya. Hence, the study rejected the null hypothesis that Knowledge organization has no statistical significant influence on Competitiveness of Chartered Public Universities in Kenya. We therefore conclude that Knowledge organization has a statistically significant influence on Competitiveness of Chartered Public Universities in Kenya.

Discussion

The computed ANOVA results were [$F(1, 122) = 149.043$, $p < .05$] which implied that knowledge organization was significant in influencing the competitiveness of chartered public universities in Kenya. The null hypothesis of the study that knowledge organization has no significant statistical relationship on competitiveness of chartered public universities in Kenya was thus rejected. The findings indicate that the universities’ initiatives for knowledge organisation are well-received by the employees, contributing to a positive environment for knowledge management. These initiatives include a foundation for effective knowledge utilization and collaboration, IT systems that support knowledge organisation and distribution and access to data and information. This suggests that the university has established a foundation for effective knowledge utilization and collaboration. Hajric, (2018) established that IT systems support knowledge organisation and distribution of all knowledge types and providing access to data and information. Baptista et al (2017) expressed that web-based applications such as websites, Email and portals provide information across an entire organization). Numprasertchai & Poovarawan (2006) established that ICT based knowledge management systems enhanced the university's competitiveness in terms of attaining its mandate of quality and quantity of students, research output and innovativeness of community service.

Conclusion

The study found that public universities initiatives for knowledge organisation are well received by employees and contribute to a positive environment for knowledge management. The study concluded that the public initiatives such as a foundation for effective knowledge utilization and collaboration, IT systems supported knowledge organisation and distribution and access to data and information. The study concluded that knowledge organization capability had a significant positive effect on competitiveness of chartered public universities.

The study recommended that universities need to enact policies that promote knowledge organisation to leverage on technology to improve performance and increase competitiveness.

REFERENCES

- Adjei, K. O. K., & Dei, D. G. J. (2015). Assessing implementation of knowledge management systems in banks, a case of Ghana. *Journal of Information and Knowledge Management*, 5(1), 133-139.
- AL-Hakim, L. A. Y., & Hassan, S. (2011). The Role of Middle Managers in Knowledge Management *International Journal of Innovation, Management and Technology*, 2(1), 86–94.
- Al-Khalili, S. M. T. (2006). *The role of knowledge management in the Ministry of Education of Jordan*. Yarmouk University, Irbid, Jordan.
- Alsajjan, B., & Dennis, C. (2010). Internet banking acceptance model: Cross-market examination. *Journal of Business Research*, 63(9–10), 957-963.
- Altbach, P. G., & Knight, J. (2007). The Internationalization of Higher Education: Motivations and Realities. *Journal of Studies in International Education*, 11(3-4), 290-305.
- Azma, F., & Mostafapour, M. A. (2012). Business intelligence as a key strategy for development organizations. *Procedia Technology*, 1, 102–106.
- Bali, R. K., Wickramasinghe, N., & Lehaney, B. (2009). *Knowledge Management Primer*. Routledge.
- Baptista, J., Wilson, A. D., Galliers, R. D., & Bynghall, S. (2017). Social Media and the Emergence of Reflexiveness as a New Capability for Open Strategy. *Long Range Planning*, 50(3), 322–336
- Bolo, M., Odongo, D., Awino, V., Achieng', V., & Onyango, C. (2014). Stuck on the Road to the Market: Why Kenya Suffers from Stunted Innovations. The Scinnovent Centre Discussion Paper 01. Nairobi, Kenya: The Scinnovent Centre
- Botha, A., Kourie, D., & Snyman, R. (2008). *Coping with Continuous Change in the Business Environment: Knowledge Management and Knowledge Management Technology (Chandos Knowledge Management)*. Chandos Publishing
- Capozzi, M. M. (2007). Knowledge management architectures beyond technology. *First Monday*.
- Chandran, D., & Raman, K. (2009). Awareness and Problems in Implementing Knowledge Management Systems in Medium Sized Business Organizations in Malaysia. *Journal of Social Sciences*, 19(2), 155–161.
- Chandran, D., & Raman, K. (2009). Awareness and Problems in Implementing Knowledge Management Systems in Medium Sized Business Organizations in Malaysia. *Journal of Social Sciences*, 19(2), 155–161.
- Clermont, M., & Dirksen A. (2016). The measurement, evaluation, and publication of performance in higher education: An analysis of the CHE research ranking of Business Schools in Germany from an accounting perspective. *Public Administration Quarterly* 40 (2): 133–178.
- Donate, M. J., & Canales, J. I. (2012). A new approach to the concept of knowledge strategy. *Journal of Knowledge Management*, 16(1), 22–44.

- Ekambaram, A., Sørensen, A. Ø., Bull-Berg, H., & Olsson, N. O. (2018). The role of big data and knowledge management in improving projects and project-based organizations. *Procedia computer science*, 138, 851-858.
- Frost, A. (2014). *Knowledge Management Tools: What is Knowledge Management?* <http://www.knowledgemanagement-tools.net/knowledge-management.html>
- Fuller, S. (2012). *Knowledge management foundations*. Routledge
- Gamble, P. R., & Blackwell, J. (2001). *Knowledge Management: A State of the Art Guide*. Kogan Page.
- Gedranovich, B. (2005). Assessment of the university competitiveness. *Proceedings of the Minsk Institute of Management*.
- Gitman, L. J. (2015). *Principles of Managerial Finance*. Pearson.
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge Management: An Organizational Capabilities Perspective. *Journal of Management Information Systems*, 18(1), 185–214.
- Horvath, J. A. (2000). Working with tacit knowledge. In J. . Cortada, J.W. & Woods (Ed.), *The Knowledge Management Yearbook 2000-2001* (pp. 34–51). Butterworth-Heinemann.
- Joudrey, D. N., & Taylor, A. G. (2018). *The Organization of Information*. 4th ed. Santa Barbara, CA: Libraries Unlimited 2018.
- Kebede, G. (2010). Knowledge management: An information science perspective. *International Journal of Information Management*, 30(5), 416–424
- Kiveu M. (2012) Patenting in Kenya: Status and Challenges Kenya Institute for Public Policy Research and Analysis Discussion Paper No. 141 2012
- Markus, L. (2001). Towards a Theory of Knowledge Reuse. *Journal of Management Information Systems*, 18(1), 57–93
- Merlo, T. R. (2017). Knowledge management technology: human computer interaction and cultural perspectives on pattern of retrieval and sharing of knowledge. *Knowledge and Performance Management*, 1(1), 46-54
- Mohammed, F. (2010). Knowledge management processes and impact in achieving competitive advantage.
- Nosek, B. A., Jesse G, Nicole M. L, Selin K, Carlee B. H (2010). Cumulative and career-stage citation impact of social-personality psychology programs and their members. *Personality and Social Psychology Bulletin* 36: 1283–1300
- Numprasertchai, S., & Poovarawan, Y. (2006). Enhancing university competitiveness through ICT based knowledge management system. *2006 IEEE International Conference on Management of Innovation and Technology*, 417–421.
- Petrides, L., & Nodine, T. (2003). *Knowledge Management in Education: Defining the Landscape*. The Institute of Study of Knowledge Management.
- Porter, M. (2001). *The Competitive Advantage of Nations*. Free Press.

- Qandah, R., Suifan, T.S., Masa'deh, R. and Obeidat, B.Y. (2020), "The impact of knowledge management capabilities on innovation", *International Journal of Organizational Analysis*, In Press
- Rafi, N., Ahmed, A., Shafique, I. and Kalyar, M.N. (2021), "Knowledge management capabilities and organizational agility", *South Asian Journal of Business Studies*, In Press,
- Shaqrah, A. and Alzighaibi, A. (2021), "Linking knowledge management capabilities and the mediating role of the big data capabilities", *Journal of Information and Knowledge Management Systems*.
- Torres, A. I., Ferraz, S. S., & Santos-Rodrigues, H. (2018). The impact of knowledge management factors in organizational sustainable competitive advantage. *Journal of Intellectual Capital*.
- Valmohammadi, C., & Ahmadi, M. (2015). The impact of knowledge management practice on organizational performance. *Journal of Enterprise Information Management*.
- Wickramasinghe, N., Gupta, J., & Sharma, S. K. (2005). *Creating Knowledge-Based Healthcare Organizations*. IGI Global.
- Wieczorek-Szymańska, A. (2015). Employees' Competencies Management in Bank Sector. *Reports on Economics and Finance*, 1(1), 105-113.
- Young, R. (2010). *Knowledge management tools and techniques manual*. Asian Productivity Organization.
- Yudina, A. (2006). Terminological aspects of university competitiveness. *Gaudeamus Igitur*,
- Zahra, S. A., & George, G. (2002). Absorptive Capacity: A Review, Reconceptualization, and Extension. *Academy of Management Review*, 27(2), 185–203