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Internationalization Status of Public Universities in  
Kenya**

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## **Influence of Knowledge Management Capability on Internationalization Status of Public Universities in Kenya**

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### **Abstract**

**Purpose:** The purpose of the study was to analyze the influence of knowledge management capability on internationalization status of public universities in Kenya.

**Methodology:** The study was conducted in 31 public chartered universities in Kenya and employed a descriptive research design. A cross-sectional survey involving both analytical and descriptive methods to address the objectives of the study was used. To analyze quantitative data, descriptive factor analysis and inferential statistics (correlation and regression) were used. To analyze quantitative data, descriptive factor analysis and inferential statistics (correlation and regression) were used.

**Results:** Regression results showed that knowledge management capability had a significant and positive influence on internationalization status.

**Recommendations:** The study further recommends that universities should utilize knowledge to enhance internationalization status through development of knowledge management policies and to encourage employees to utilize the knowledge gained on internationalization to develop new innovations and come up with new products and services. It is important for policy makers in public universities to develop robust and dedicated knowledge management capabilities. This is because knowledge management lead to growth and expansion of organizations internationally and subsequently improve the firm's performance.

**Keywords:** *Internationalization status, knowledge management capability, organizational capabilities*

## **1.0 Introduction**

### **1.1 Background to the Study**

Knowledge management is identified as the method of creating, sharing, conveying, storing, acquiring, implementing and applying knowledge in a firm (Gholami et al., 2013). Knowledge management also refers to the process that traces knowledge and is able to manage the sharing and the use of knowledge in a firm. Jibeen and Khan (2015) articulates that in commercial functions, the essence behind internationalization is that organizations are expanding outside of their geographic boundaries to raise their revenues, gain experience in other arenas, transfer of knowledge, spread their risks and income systems and also to search for new industry collaborators.

Houssaini (2019) affirms that in internationalization, different elements of knowledge are incorporated such as internationalization knowledge, knowledge of networks and knowledge that is technological in nature. In addition, when organizations venture across borders, the assessment and development of knowledge is required. Research has shown that internationalization reinforces organizational studies and knowledge generation capabilities by augmenting assets, expertise and skills using various inter institutions networks and partnerships (Knight & de Wit, 2018).

The increasing intricacies and expenditures connected with undertaking researches means that an organization or nation individually cannot own enough means and capacity. Given that internationalization of higher education has resulted in an immense integration of the global economy, knowledge has consequently progressively been recognized as a new imperative strategy for organizations (Ravi & Selvi, 2013). The objectives of knowledge management are the leveraging and enhancement of the firm's knowledge assets to make better knowledge practices, enhanced firm behaviours, better choices and enhanced firm performance (Polanyi, 2015).

Knowledge acquisition is the organizational process that enhances creation of knowledge starting at an individual level to the organization level. It denotes the internal process that enables the development of implicit and overt knowledge including the recognition and internalization of data and exterior sources of the knowledge. It also connotes the development of knowledge in a firm using a research process as well as the gain of knowledge from external sources (Gold, Malhotra & Segars, 2015). Knight and Sehoole (2013) noted that there is a growing call towards an economy that is knowledge driven. Therefore, a multinational company's victory often relies on its aptitude to ensure the optimal and successful utilization of knowledge from the Human resource, organizational management, and business environment and technology adoption (Díaz, 2013).

### **1.2 Statement of the Problem**

Universities are encouraged to adopt competitive advantages by incorporating organizational capabilities in a bid to ensure they are able to propel and sustain their internationalization status. Furthermore, universities are progressively more and more being interrogated on their capability to counter the dynamic changes in the commercial, technical and societal arena with researchers underscoring the need to comprehend internal capabilities as a strong determinant of successful performance.

For public universities to flourish sustainably in the rapidly changing and fiercely competitive global landscape, they must develop innovative strategies to maintain their educational significance. It has been proven that organizational capabilities have an impact on the growth and implementation of an organization's strategy on internationalization. The current scenario in Kenya universities depicts a picture of a low status of internationalization. This is evidenced by the perennial poor regional and global rankings. Notably, only six out of the over 74 universities in Kenya made it to the top 200 rank in Africa according to the latest webometrics report of July, 2020. Furthermore, the situation is even worse globally where only the University of Nairobi made it to the top 1000 rank at position 957. In comparison, South Africa had over 20 universities emerging in the top 200 in Africa. In yet another ranking by Nature Index 2018 Rising Stars ranking undertaken by the highly reputed international journal, 'Nature' no Kenyan university is featured in the top 25 institutions in the continent. Moreover, only five of Kenyan universities were featured in the University Ranking by Academic Performance (URAP) in their latest report released in June, 2020.

### **1.3 Objectives of the Study**

The main objective of the study was to analyze the influence of knowledge management capability on internationalization status of public universities in Kenya.

### **1.4 Research Hypothesis**

The research was guided by the following null hypothesis:

H<sub>01</sub>: Knowledge management capability has no significant influence on internationalization status of public universities in Kenya.

## **2.0 Literature Review**

### **2.1 Theoretical Framework**

#### **2.1.1 Knowledge Based View Theory (RBV)**

This hypothesis was first developed by Grant (1996) who argued that the aim of the firm is to attain resources as well as develop knowledge. The hypothesis further argued that knowledge is entrenched and carried over multiple units which includes organizational culture and structure, policies, procedures, systems and staffs (Grant, 2015). In addition, Soderberg and Holden (2002) made an analysis of knowledge management and noted that it involves knowledge development, distribution, implementation, storage and application and it performs a crucial role in the performance of a firm. Knowledge is a key substantial resource in competitive advantage (Acedo, Barroso & Galan, 2006). Grant (2015) further argued that the aim of the firm is to attain resources as well as develop knowledge and that the management needs to establish the procedures required to integrate knowledge. The theory further assumes that resources and capabilities are obtained from specialized knowledge. The created knowledge by individuals can be embedded within the firm (Conner & Prahalad, 1996). The firms can be said to be the social communities within which the individuals with skills transform the valuable goods (Kogut & Zander, 2013). In this case, organizations are knowledge bundles where knowledge serves as an asset and also as a major basis of differentiation (Dierickx & Cool, 2009). The knowledge transfer in a firm is not a major problem

as technologies are used to teach other people (Kogut & Zander, 2013). This theory informed the knowledge management capability variable and explained the concept of knowledge management.

## **2.2 Empirical Review**

Tianrong (2016) undertook a research on the purpose of knowledge and technology in the internationalization in Chinese companies in Russia. The study was based on past literature. It was established that knowledge management is predominant in expedition of an organization's innovative capacity and competitive superiority. However, it was established that cross cultural problems hampered the management of knowledge and that the different cultural settings between two countries resulted in prolonging the time taken in transferring knowledge.

Onyango et al., (2016) undertook a descriptive study on the capabilities of management of knowledge and performance of the Kenyan humanitarian organizations. A census survey was done on all the all the four cane sugar firms operating in Western Kenya and a purposive sampling was done on the heads of departments. The study uncovered that knowledge management capabilities had a bearing on performance of the humanitarian organizations. The study also established that technological capabilities augmented with knowledge management in the transcription and broadcasting of knowledge in the company. The study recommended among others that the management in international organizations should develop a uniform remuneration policy for knowledge transfer and that constant training and advancement should be appreciated and recommended. In addition, the top management ought to clearly reinforce the essence of knowledge management for the organizations to succeed.

Villar et al. (2014) explored the need for knowledge management capabilities on exports. Structural equation modelling was used in data examination. The study targeted multiple multinational companies in China from two categories of industries namely the automotive industry and the high-tech industry through multi case design. The outcomes proposed that dynamic capabilities affect exports, henceforth the application of knowledge management capabilities is essential. In addition, the significance of knowledge strategies to support international sales, availing fresh perspectives for executives dealing with dynamic capabilities in SMEs.

Mburu (2011) studied the functioning of knowledge management in East African Breweries Ltd (EABL) in its internationalization process. The study entailed collection of both secondary and primary data. Secondary data was collected from published reports and country indicators while primary data was collected through interviews. The target respondents were the Directors responsible for international business in different countries as well as senior executives in the Strategy Department. During the study, it was observed that the leadership in EABL comprehended the role of knowledge in internationalization. The study found out that staff in the strategy and in the international divisions understood that knowledge management had an impact in international operations. The study underscored knowledge being a key strategy in organization and which is critical in enhancing competitiveness as well as spurring the internationalization process. Further, the study revealed that knowledge management capabilities were paramount in not only compliance with national legal requirements but also influenced internationalization.

### 3.0 Research Methodology

This research used both descriptive and cross-sectional research design. This study targeted all the 31 public chartered universities in Kenya. The respondents in each institution comprised of the Registrar of Academic Affairs, Registrar of Administration, Director of Research, Director of ICT, Finance Officer, Director of International Programmes and Linkages, Human Resources Manager and Public Relations Officer as the key respondents. Primary data was assembled by administering semi-structured questionnaires which were 248 in total. Research assistants helped in data collection since the study was done in a large area i.e. from County to County. Regression was further used to show the association between the variables.

Model output used;

$$Y = \beta_0 + \beta_1 X_1 + e$$

Where;

Y = Dependent variable

$X_i$  = Independent Variable

$\beta$  = Regression constant (the value of Y when  $X_1 = 0$ )

The study applied the following hypothesis generated from the model:

*Knowledge management Capability has no significant influence on internationalization status in public universities in Kenya*

Internationalization status = f (Knowledge management Capabilities + random error)

$$I = \beta_0 + \beta_2 KM + e$$

### 4.0 Results

#### 4.1 Descriptive Results

Descriptive analysis for both the dependent and the independent variables was conducted. For the purposes of interpretation of the study results, 5 and 4 (strongly agree and agree) were grouped together as agree, 2 and 1 (disagree and strongly disagree) were grouped as disagree while 3 was moderately agree.

##### 4.1.1 Internationalization Status

This segment comprises descriptive analysis for internationalization status. On the statement that the university has active collaborations and linkages with universities in other countries majority of the respondents who were 77.2% agreed with the statement. This implied that most public universities in Kenya had embraced international collaborations and linkages while only few universities that had not embraced international collaborations and linkages. This confirms findings by Dawei (2008) who found that Huawei adopted partnerships with an aim of making highly technical global cooperations and Jayashree and Al-Marwai (2010) who established that some of the popular internationalization strategies adopted by Malaysian companies were strategic alliances.

On the statement that the university has communication channels with international partners, most of the respondents who were 70.2% agreed with the line statement. This affirms that most public universities in Kenya valued their international partners and thus had invested in good communication channels with them. However, few public universities in Kenya did not have good communication channels for international partners. This is in tandem with Griffith (2012) who found that by perceptively handling an organizations strategy on communication with global affiliates, an organization can establish robust alliances thus improving performance and enabling faster reaction to openings and difficulties in the market place.

On the statement that the university promotes study opportunities to enhance enrolment of international students, most of the respondents who were 61.7% agreed with the line statement. This implied that though most public universities had created opportunities of international students to study in their institutions, some public universities did not have chances for international students. This confirmed Altbach et al. (2009) and (Sanyal & Johnstone, 2011) who established rising trend in international student mobility as they search for study opportunities not present in their countries or for prestigious international qualifications, to attain competitive employment advantage in the increasingly globalizing knowledge economies. Further, on the statement that the university has international academic staff 59.6% of the respondents agreed with the line statement. This infers that slightly more than half of the public universities in Kenya have employed international staff while some universities don't have international staff. These findings can be attributed to the fact that internationalization means preparation of college graduates with a variety of expertise and the recruitment of international professors (Mshighadi, 2017). Again, Knight (2013) further notes that there is a lot of competition among countries to source the most talented international students and academics to enhance science and technology as well as the monetary attractiveness. This Knight notes is evidenced by modifications in staffing policies, motivations and strategies of migration policies to appeal and maintain international scholars and faculties seen as capable of improving the manpower in a country.

Further, on the statement that the university has partnered with international professional bodies, most of the respondents who were 67.1% agreed with the line statement. This implied that most public universities have invested in international professional bodies while some public universities have not partnered with any international professional bodies. This can be attributed to the fact that international professional bodies are expensive and thus not all universities can afford them.

Further, on the statement that the university has affiliations with international networks, most respondents who were 74.5% agreed with the line statement. This implied that most public universities have joined some international networks while some public universities have not joined any international network. This can be attributed to the fact that not all universities have the financial capacity to affiliate with international networks. Professional networks and bodies assist organizations in the international arena improve the effects of its brand (Neupane, 2019). In addition, Neupane notes that past studies have established that incorporation of networks and professional development programs that are professional in nature in academic institutions enables the development of solid community linkages.

On the statement that the university holds international research conferences, most of the respondents 74.4% agreed with the line statement. This implied that though most public universities had invested in international research conferences, some public universities did not hold any international research conferences. This can be attributed to the fact that international conferences require specialized resources such as competent staff, technical equipment for online transmission especially in this COVID-19 period as well as finances and this may limit the many universities. This can be related to what is going on in other parts of the world for instance in Bangladesh where lack of adequate financial structures has significantly challenged its higher education system (Zolfaghari et al., 2009).

On the statement that the staff in the university have joint publications with international researchers, 76.6% agreed with the line statement. This infers that most universities have participated in joint publication with international researchers. This could be attributed to the fact that joint publication with international researchers is perceived to improve international ranking and visibility for the institutions. This supports studies by Taylor et al. (1997) who measured internationalization in terms of research in international conferences; international publications; collaborative and/or comparative cross-country research projects.

The statements with the highest mean included; the university holds international research conferences (mean=4.10, std. dev=1.16), staff in the university have joint publications with international researchers (mean=3.98, std. dev=1.33), the university has active collaborations and linkages with universities in other countries (mean=3.96, std. dev =1.32). This implied that most universities held international research conferences, had joint publications with international researchers and had active collaborations and linkages with universities in other countries.

The statement with the lowest mean included; the university has international academic staff (mean=3.48, std. dev=1.33). This implied that though most universities had international conferences, international researchers and international collaborations and linkages, most universities did not have international academic staff. This may be attributed to strict government regulations in acquisition of legal documents for international staff such as work permits (Globalization partners, 2022). In addition, Globalization partners reports the Kenyan Government has preference for employing Kenyan nationals as opposed to international staff. Foreign staff can only be engaged if the engagement of the said staff will trigger economic growth and also on the basis of successful background checks from the home country.

The aggregate mean was 3.85 implying that the higher number of respondents agreed with the line statements on internationalization status. In addition, the standard deviation was 1.29 implying that most responses were varying from the mean.



**Table 1: Internationalization Status Descriptive Analysis**

<b>Inquiry</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Mea n</b>	<b>Std. Dev</b>
The university has active collaborations and linkages with universities in other countries	22 (11.7%)	7 (3.7%)	14 (7.4%)	58 (30.9%)	87 (46.3%)	3.96	1.32
The university has communication channels with international partners	24 (12.8%)	4 (2.1%)	28 (14.9%)	50(26.6%)	82 (43.6%)	3.86	1.35
The university promotes study opportunities to enhance enrolment of international students	19 (10.1%)	6 (3.2%)	47 (25%)	49 (26.1%)	67 (35.6%)	3.74	1.26
The university has international academic staff	22 (11.7%)	26 (13.8%)	28 (14.9%)	63 (33.5%)	49 (26.1%)	3.48	1.33
The university has partnered with international professional bodies	19 (10.1%)	14 (7.4%)	29 (15.4%)	68 (36.2%)	58 (30.9%)	3.70	1.26
The university has affiliations with international networks	23 (12.2%)	2 (1.1%)	23 (12.2%)	53 (28.2%)	87 (46.3%)	3.95	1.32
The university holds international research conferences	8 (4.3%)	15 (8%)	25 (13.3%)	42 (22.3%)	98 (52.1%)	4.10	1.16
Staff in the university have joint publications with international researchers	21 (11.2%)	9 (4.8%)	14 (7.4%)	52 (27.7%)	92 (48.9%)	3.98	1.33
<b>Average</b>						<b>3.85</b>	<b>1.29</b>

#### 4.1.2 Knowledge Management Capabilities

This section contains descriptive analysis for knowledge management capabilities. On the statement that utilization of institutional knowledge aids in improving internationalization, most of the respondents who were 69.70% agreed with the line statement. This implies that the public universities that were able to utilize institutional knowledge well were able to enhance internationalization. This conforms to assertions by Wong and Aspinwal (2004) who alluded that internationalization of higher education has resulted in an immense integration of the global economy and that the harness and leverage of knowledge effectively can drive organizations to be more adaptive, innovative, intelligent and sustainable. Therefore, a multinational company's victory often relies on its aptitude to ensure the optimal and successful utilization of knowledge from the human resource, organizational management, and business environment and technology adoption (Díaz, 2013). In addition, Massey et al. (2002) also expounded that for new product expansion to be successful there must be use of innovation and propagation of knowledge through employment of the resources of the firm.

Further, on the statement that the institutional networks and partnerships help in generation of knowledge on internationalization, most of respondents who were 78.20% agreed with the line statement. This infers that universities that are able to fully utilize their institutional networks and partnerships to generate knowledge enjoy a better internationalization status. This affirmed studies by Ismail and Hassan (2013) who indicated that networking had a significant role towards

sustainable development. In addition, Swan et al. (1999) affirm that the participation of staff in professional development organizations leads to the dissemination and implementation of innovations and that in these extraneous networks, staff gain new knowledge that is important to the firm.

Further, on the statement that having a knowledge management policy in the university aids in internationalization activities, most of the respondents who were 72.30% agreed with the line statement. This points to the fact that universities that have put in place a knowledge management policy are able to enjoy a better internationalization status as opposed to those who have not. The findings do not differ from those of Davenport and Grover (2001) who indicated that knowledge management is an elementary charter of a fruitful going concern and also more importantly that knowledge is one of the vital resources of organizations that required appropriate handling (Jashapara, 2004).

On the statement that staff in the institution have access to internationalization knowledge which has enhanced the internationalization status, 59.60% agreed with the line statement. This implied that most universities have not made knowledge accessible to staff hence the average rate of responses. This is not surprising given that Chuop (2016) noted that small businesses have to overcome numerous hurdles in establishment of systems of managing knowledge. The key challenges comprise of inadequate competency and finances, lack of technological infrastructure and support from the administration as well as lack of knowledge of the international market. Soniewicki and Paliszkiwicz (2019) admit that access to knowledge is useful to staff and the individual firm in that it enables employees undertake their responsibilities, improves decision making and keeps staff updated. Mburu (2011) in a past study found out that knowledge management had an impact on international operations.

On the statement that holding workshops and conferences to share and disseminate information has enhanced internationalization, most of the respondents who were 71.8% agreed with the line statement. This depicts that most of the public universities have been able to hold knowledge dissemination forums. Okwemba (2019) in a past study advised that organizations should facilitate staff to acquire knowledge by organizing onsite and off-site training seminars and workshops as well as guidance and mentorship forums. Mburu (2011) also established that knowledge is gained more when staff are persistent in acquiring knowledge and encouraging others to share their knowledge.

In addition, on the statement that the knowledge gained on internationalization has helped in improving the university services, most of the respondents who were 69.7% agreed with the line statement. This can be interpreted to mean that a good number of public universities had benefited from staff who had gained knowledge on internationalization as it enabled them improve their services. This affirms the findings by Tianrong (2016) who established that knowledge management is predominant in expedition of an organization's innovative capacity and competitive superiority. In addition, Soniewicki and Paliszkiwicz (2019) admit despite the size of the firm, the level of an organization's competitiveness increases just as its level of knowledge management procedures increased. On the percentage of universities that gave a negative response, this can be attributed to findings by Mburu (2011) who found that application of knowledge is limited if firms do not put in place effective systems of managing knowledge.

In addition, on the statement that sharing success stories and reports on internationalization has boosted the internationalization status of the university most of the respondents who were 74.5% agreed with the line statement. The findings indicate that a majority of the universities had put in place mechanisms to share success stories and reports on internationalization and which had boosted the internationalization status. This agreed with Mburu (2011) who noted that it is important for companies to improve their institutional memory by storing knowledge on clients, procedures and products as well as achievements and shortfalls.

On the statement that developing knowledge repositories in the university has enhanced internationalization, most of the respondents who were 62.8% agreed with the line statement. This depicted that just an above average number of institutions had put in place knowledge management repositories. This confirms findings by Kankanhalli et al. (2005) who saw that despite companies trying to establish knowledge repositories, many of these systems do not succeed as staff don't share their knowledge through these repositories. Kankanhalli et al. have recommended that companies should endeavour to strengthen their knowledge by establishing knowledge repositories. In addition, Soniewicki and Paliszkiwicz (2019) affirm that knowledge management procedures and policies are critical for big corporations in order for them to maintain competitiveness and that they require a robust development and financial support. On the statement that knowledge transfer and learning has led to success in international projects in the institution, most of the respondents who were 64.9% agreed with the line statement. This implies that for just an above average number of public universities, knowledge transfer and learning has enabled them perform well internationally. For a good number this was not the case. Chuop (2016) proffered that despite management of knowledge being one of the chief drivers of internationalization in businesses, most of the firms' proprietors have inadequate knowledge and little regard of its benefits. Mburu (2011) found that dissemination of knowledge facilitates acquisition of knowledge and practices which aid in better decision making in international markets and also enhances seamless advancement.

The statement with the highest mean score included; the institutional networks and partnerships help in generation of knowledge on internationalization (mean=4.05, std. dev=1.22), holding workshops and conferences to share and disseminate information has enhanced internationalization (mean=3.89, std. dev=1.38), having a knowledge management policy in the university aids in internationalization activities (mean=3.78, std. dev=1.20). The statement with the lowest mean score included; staff in the institution have access to internationalization knowledge which has enhanced the internationalization status (mean=3.57, std. dev=1.20). This implied that most universities in Kenya concentrated on holding workshops and conferences to share knowledge but had not made internationalization knowledge accessible to staff. This is in sync with findings by (Kogut & Zander, 2013) who found out that knowledge transfer in a firm can be a challenge and Chuop (2016) who proffered that despite management of knowledge being one of the chief drivers of internationalization in businesses, most of the firms' proprietors have inadequate knowledge and little regard of its benefits. The aggregate mean was 3.74 implying that the higher number of respondents agreed with the line statements on knowledge management. In addition, the standard deviation was 1.26 implying that most responses varied from the mean.

**Table 2: Knowledge Management Capabilities Descriptive Analysis**

<b>Inquiry</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Mean</b>	<b>Std.Dev</b>
Utilization of institutional knowledge aids in improving internationalization	23 (12.2%)	24 (12.8%)	10 (5.3%)	61 (32.4%)	70 (37.2%)	3.70	1.40
The institutional networks and partnerships help in generation of knowledge on internationalization	9 (4.8%)	24 (12.8%)	8 (4.3%)	55 (29.3%)	92 (48.9%)	4.05	1.22
Having a knowledge management policy in the university aids in internationalization activities	9 (4.8%)	31 (16.5%)	12 (6.4%)	76 (40.4%)	60 (31.9%)	3.78	1.20
Staff in the institution have access to internationalization knowledge which has enhanced the internationalization status	18 (9.6%)	8 (4.3%)	50 (26.6%)	72 (38.3%)	40 (21.3%)	3.57	1.16
Holding workshops and conferences to share and disseminate information has enhanced internationalization	23 (12.2%)	11 (5.9%)	19 (10.1%)	46 (24.5%)	89 (47.3%)	3.89	1.38
The knowledge gained on internationalization has helped in improving the university services	22 (11.7%)	3 (1.6%)	32 (17%)	72 (38.3%)	59 (31.4%)	3.76	1.25
Sharing success stories and reports on internationalization has boosted the internationalization status of the university	25 (13.3%)	7 (3.7%)	16 (8.5%)	94 (50%)	46 (24.5%)	3.69	1.26
Developing knowledge repositories in the university has enhanced internationalization	7 (3.7%)	27 (14.4%)	36 (19.1%)	74 (39.4%)	44 (23.4%)	3.64	1.10
Knowledge transfer and learning has led to success in international projects in the institution	22 (11.7%)	20 (10.6%)	24 (12.8%)	64 (34%)	58 (30.9%)	3.62	1.33
<b>Average</b>						<b>3.74</b>	<b>1.26</b>

## 4.2 Factor Analysis

### 4.2.1 Factor Analysis for Internationalization Status

The communality for internationalization status in Table 3 below shows the communalities which represent the relation between the variable and the other variables.

### a) Communalities for Internationalization Status

From the results, all the other statements had a factor loading above 0.4 and thus were all included in further analysis.

**Table 3: Communalities for Internationalization Status**

	Initial	Extraction
The university has active collaborations and linkages with universities in other countries	1	0.744
The university has communication channels with international partners	1	0.813
The university promotes study opportunities to enhance enrolment of international students	1	0.654
The university has international academic staff	1	0.409
The university has partnered with international professional bodies	1	0.662
The university has affiliations with international networks	1	0.457
The university holds international research conferences	1	0.613
Staff in the university have joint publications with international researchers	1	0.495

Principal component analysis with orthogonal (Varimax) rotation, was conducted to assess how the component loaded.

### b) Total Variance for Internationalization Status

Principal component analysis with orthogonal (Varimax) rotation, was conducted to assess how the component loaded. Outcomes displayed that one component was rotated based on the eigenvalues higher than one measure. The total variance explained by the one component extracted is 60.579.

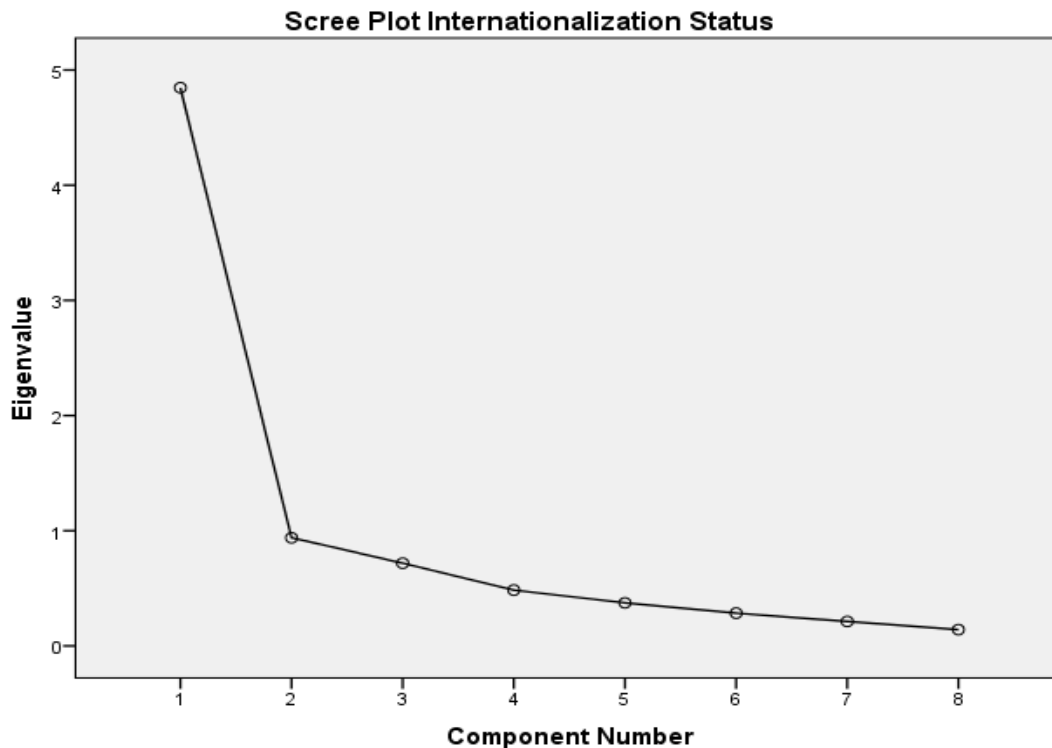
**Table 4: Results of Total Variance for Internationalization Status**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.846	60.579	60.579	4.846	60.579	60.579
2	0.939	11.734	72.314			
3	0.718	8.976	81.29			
4	0.485	6.057	87.347			
5	0.374	4.674	92.021			
6	0.285	3.558	95.579			
7	0.212	2.655	98.234			
8	0.141	1.766	100			

### c) Scree Plot for Internationalization Status

The study obtained scree test results are presented in Figure 4.1 here below. The aim of the scree plot for internationalization status was to determine which factors to drop from further analysis.

According to the scree plot one component can be retained since the curve is leveling off after the first component. The scree plot thus confirms retaining one component as observed in the total variance explained with eigenvalues  $>1$ .



**Figure 1: Scree Plot Internationalization Status**

### d) Rotated Component Matrix for Internationalization Status

The rotation of internationalization status components aided in reducing the number of factors on which variables were under investigations. The results in Table 5 below imply that all the internationalization status measures have close relationship and therefore can easily be combined into one factor.

Therefore, the study results had only one factor of internationalization status which consisted of internationalization status statements.

**Table 5: Results of Rotated Component Matrix for Internationalization Status**

	<b>Component</b>
The university has communication channels with international partners	0.901
The university has active collaborations and linkages with universities in other countries	0.862
The university has partnered with international professional bodies	0.813
The university promotes study opportunities to enhance enrolment of international students	0.809
The university holds international research conferences	0.783
Staff in the university have joint publications with international researchers	0.704
The university has affiliations with international networks	0.676
The university has international academic staff	0.64

#### 4.2.2 Factor Analysis for Knowledge Management Capability

The communality for knowledge management capability in Table 6 below shows the communalities which represent the relation between the variable and the other variables.

##### a) Communalities for Knowledge Management Capability

From the results above, all the other statements had a factor loading above 0.4. Therefore all the statements were included in further Analysis.

Principal component analysis with orthogonal (Varimax) rotation, was conducted to assess how the component loaded.

**Table 6: Communalities for Knowledge Management Capability**

	<b>Initial</b>	<b>Extraction</b>
Utilization of institutional knowledge aids in improving internationalization	1	0.576
The institutional networks and partnerships help in generation of knowledge on internationalization	1	0.485
Having a knowledge management policy in the university aids in internationalization activities	1	0.526
Staff in the institution have access to internationalization knowledge which has enhanced the internationalization status	1	0.408
Holding workshops and conferences to share and disseminate information has enhanced internationalization	1	0.593
The knowledge gained on internationalization has helped in improving the university services	1	0.728
Sharing success stories and reports on internationalization has boosted the internationalization status of the university	1	0.544
Developing knowledge repositories in the university has enhanced internationalization	1	0.562
Knowledge transfer and learning has led to success in international projects in the institution	1	0.499

### b) Total Variance for Knowledge Management Capability

Principal component analysis with orthogonal (Varimax) rotation, was conducted to assess how the component loaded.

Outcomes displayed that one component was rotated based on the eigenvalues higher than one measure. The total variance explained by the one component extracted is 54.664

**Table 7: Results of Total Variance for Knowledge Management Capability**

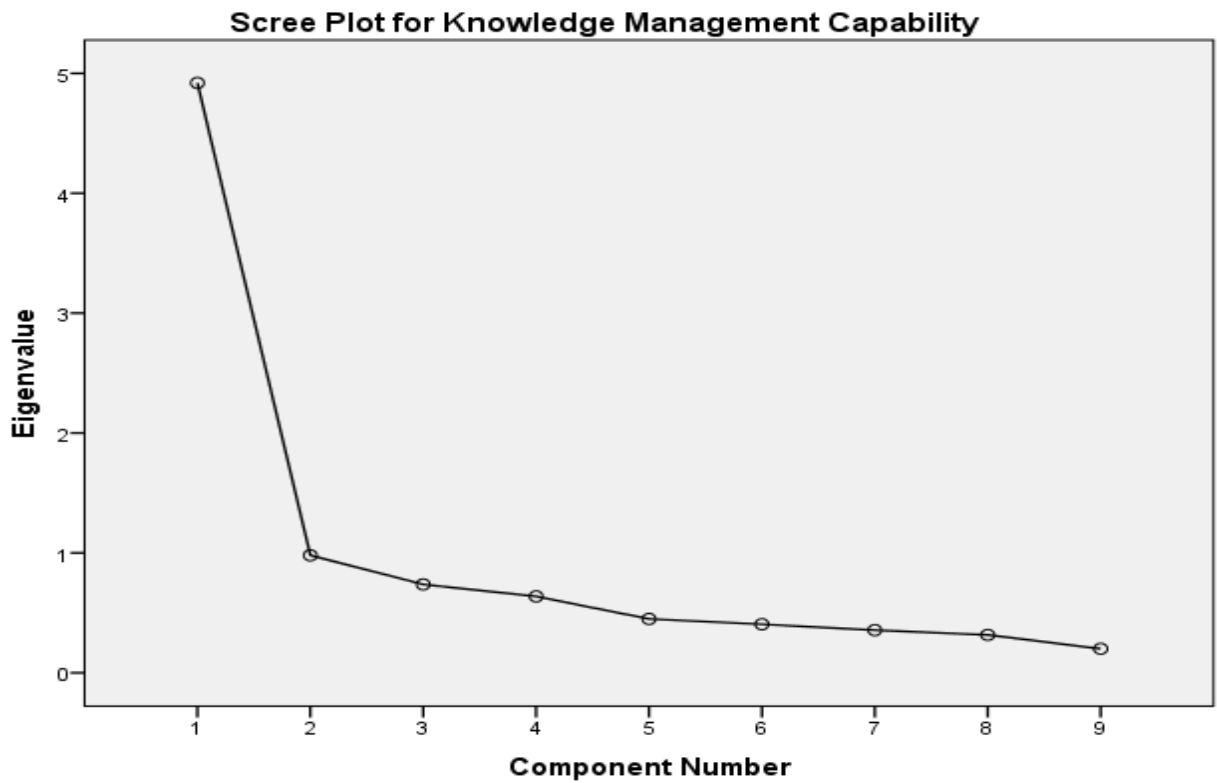
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.92	54.664	54.664	4.92	54.664	54.664
2	0.98	10.886	65.55			
3	0.737	8.192	73.743			
4	0.637	7.083	80.825			
5	0.449	4.992	85.817			
6	0.405	4.498	90.315			
7	0.356	3.952	94.267			
8	0.316	3.509	97.776			
9	0.2	2.224	100			

### c) Scree Plot for Knowledge Management Capability

The study obtained scree test results are presented in Figure 4.2 below. The aim of the scree plot for knowledge management capability was to determine which factors to drop from further analysis.

According to the scree plot one component can be retained since the curve is leveling off after the first component. The scree plot thus confirms retaining one components as observed in the total variance explained with eigenvalues  $>1$ .





**Figure 2: Scree Plot for Knowledge Management Capability**

**d) Rotated Component Matrix for knowledge Management Capability**

The rotation of knowledge management capability components aided in reducing the number of factors on which variables were under investigations. The results in Table 8 below imply that all the knowledge management capability measures have close relationship and therefore can easily be combined into one factor.

Therefore, the study results had only one factor of knowledge management capability which consisted of knowledge management capability statements.

**Table 8: Results of Rotated Component Matrix for Knowledge Management Capability**

	<b>Component</b>
The knowledge gained on internationalization has helped in improving the university services	0.853
Holding workshops and conferences to share and disseminate information has enhanced internationalization	0.77
Utilization of institutional knowledge aids in improving internationalization	0.759
Developing knowledge repositories in the university has enhanced internationalization	0.75
Sharing success stories and reports on internationalization has boosted the internationalization status of the university	0.738
Having a knowledge management policy in the university aids in internationalization activities	0.725
Knowledge transfer and learning has led to success in international projects in the institution	0.706
The institutional networks and partnerships help in generation of knowledge on internationalization	0.696
Staff in the institution have access to internationalization knowledge which has enhanced the internationalization status	0.639

#### 4.3 Regression Results

Knowledge management capability was regressed against internationalization status to explain the relationship between managerial capability and internationalization status. Table 4.9 shows that the R was 0.706. This implies that knowledge management capability had a strong correlation with internationalization of public universities in Kenya. In addition, the R square was 0.499. This infers that knowledge management capabilities explain 49.9% of the variations in the dependent variable which is an internationalization status of public universities in Kenya.

**Table 9: Model Fitness**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.706a	0.499	0.496	0.713

The model in Table 4.9 was further examined for its significance in predicting effect of knowledge management capabilities on internationalization status of public universities in Kenya using ANOVA. The results for ANOVA for knowledge management capabilities and internationalization status of public universities were presented in Table 10.

Table 10 shows that F statistic of 185.341 and the associated P-value of 0.000 which is a value less than a p value of 0.05. This implies that the knowledge management capabilities have statistically significant effect on internationalization status at a 95% confidence level.

**Table 10: ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	94.222	1	94.222	185.341	.000 <sup>b</sup>
Residual	94.557	186	0.508		
Total	188.778	187			

Regression of coefficients showed that knowledge management capability and internationalization status of public universities had a positive and significant relationship ( $\beta=0.766$ ,  $p=0.000$ ). The results thus do indicate that an improvement in knowledge management capability by one unit would lead to an improvement in internationalization status of public universities by 0.766 units.

$$IS = 1.02 + 0.766 KMC + \varepsilon$$

IS – Internationalization Status

KMC – Knowledge Management Capability

$\varepsilon$  - error term

**Table 11: Regression of Coefficient for Knowledge Management Capability**

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.02	0.216		4.725	0.000
Knowledge management capability	0.766	0.056	0.706	13.614	0.000

## 5.0 Conclusions and Recommendations

### 5.1 Conclusions of the Study

From the study findings knowledge management capability had a significant and positive influence on internationalization status. Therefore, the research determined that knowledge management capability had a significant and positive influence on internationalization status. Utilization of institutional knowledge as well as having a knowledge management policy in the university aids in improving internationalization in public universities. Further, holding workshops and conferences to share and disseminate information enhances internationalization. In addition, knowledge gained on internationalization has helped in improving the university services.

### 5.2 Research Contributions to Knowledge and Practice

Knowledge management has been identified as the method of creating, sharing, conveying, storing, acquiring, implementing and applying knowledge in a firm (Gholami et al., 2013). The study found that there is inadequate access of knowledge amongst staff and there is henceforth need for universities to enhance knowledge acquisition among employees through on the job trainings, mentorship programs, coaching and attending workshops. Organizations should also build their knowledge management capability through encouraging workers to identify, develop

and share knowledge across the different sections. Embracing technology will enable organizations also develop and improve on their internal and external knowledge. Further, universities should encourage sharing of knowledge and transfer of learning using avenues such as workshops, seminars, conferences and employee support programmes to share knowledge and disseminate information on internationalization. The establishment of knowledge repositories will also go a long way in boosting access to internationalization information for staff. This will enable staff in the institution take an active role in internationalization activities and international projects. Institutional networks and partnerships were established to be pivotal in generation of knowledge on internationalization. This affirmed studies by Ismail and Hassan (2013) who indicated that networking had a significant role towards sustainable development. It is therefore important that institutions leverage on the existence networks to keep pace with the emerging trends that have a bearing on internationalization.

### **5.3 Contributions to Policy**

The study further recommends that universities should utilize knowledge to enhance internationalization through development of knowledge management policies and to encourage employees to utilize the knowledge gained on internationalization to develop new innovations and come up with new products and services. It was established that 75% of the respondents were over 40 years old. It is thus recommended that institutions should have a succession plan for better management into the future. It is important for policy makers in public universities to develop robust and dedicated knowledge management capabilities. This is because knowledge management leads to growth and expansion of organizations internationally and subsequently improvement of the firm's performance.

### **5.4 Contribution to Theory**

The study supported the Knowledge Based View Theory which asserts that knowledge is a key substantial resource in competitive advantage and that the management needs to establish the procedures required to integrate knowledge.

### **5.5 Recommendation for Further Research**

The study focused only on selected target respondents. However, internationalization being a university wide agenda, there is need to replicate the study to other stakeholders in public universities to compare the findings to gain their perceptions on the subject area.

The research established the influence of organizational capabilities on internationalization status in public universities in Kenya. This study therefore narrowed down to public universities only. Thus further studies could consider private universities for purposes of making comparison. In addition, the study focused on Public Universities in Kenya. Further studies could focus on other Public Universities in other East African Countries such as Uganda and Tanzania.

In addition, the R of the study was not 100%. This implies that there are other organizational capabilities that affect internationalization status of public universities. Thus, further studies could focus on other organizational capabilities such as governance capabilities and marketing capabilities.

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