

**Relationship between Knowledge Management and Organizational
Performance: A Case Study of United States International University -
Africa**

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UNITED STATES INTERNATIONAL UNIVERSITY – AFRICA

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ORGANIZATIONAL PERFORMANCE: A CASE STUDY OF UNITED
STATES INTERNATIONAL UNIVERSITY - AFRICA**

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DECLARATION PAGE

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University - Africa in Nairobi for academic credit.

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ABSTRACT

The main purpose of the study was to determine knowledge management and its effect on organizational performance. The study focused on the effect of knowledge management on United States International University-Africa (USIU-A). The study focused on determining the following: to examine knowledge management in universities; to determine the impact of knowledge management systems on organization performance; and to examine the strategies that facilitates the adoption of knowledge management in universities.

The research design adopted for the study was descriptive survey method aimed at establishing how knowledge management affected organizational performance. The target population of this study was all the staff members of United States International University - Africa (USIU-A) whose total number was 446. The study used stratified sampling. This sampling procedure was convenient due to its nature and formation of representation. The sample size for the study was 97 employees that was adopted from the entire study population. The study collected primary data by use of semi-structured questionnaires. The completed questionnaires were edited for completeness and consistency, checked for errors and omissions and then coded to SPSS version 16 for qualitative and quantitative analysis. Qualitatively the data was sought into themes, categories and patterns. This enabled the researcher to make general statements in terms of the observed attributes hence conceptualization.

The study has shown that the university has infrastructure, info-structure, and info-culture that facilitates knowledge management. The study also revealed that USIU-A has a chief knowledge officer who provides strategic leadership for knowledge management, as well as builds political alliances to promote knowledge sponsorship, placing the university at a better position in terms of knowledge management. The university has knowledge analysts who identify knowledge practice and trends, as well as knowledge engineers/ technicians who support the knowledge management service and its use.

The study concludes that the university has the ability to acquire knowledge for utilization and that the acquisition process has been oriented to obtain the needed knowledge from both internal and external sources. This means that the university has complete access to knowledge acquisition and management. The study also concludes that the university has proper storage and sharing processes in place that facilitate sharing with all stakeholders.

The study concludes that the university uses written documents as part of its knowledge management sharing strategy, however, some of this has become redundant due to their nature in becoming relic. The study concludes that USIU-A makes use of spoken knowledge-sharing strategies in their knowledge management process, to draw participants from larger geographic areas as well as supporting intense participation, increasing both the acquisition and sharing process of the university. The university also makes use of workshops to facilitate active engagement from participants increasing the knowledge data for the university.

The study recommends the university to update its sources of knowledge from time to time to ensure that they are updated. The university needs to create a policy on the knowledge data stored so as to ensure that they minimize the risk of using relic data. The knowledge stewards need to be trained on the proper processes of updating the knowledge stored with the university and the process of managing the relic data that may be useful. This study has focused on the effect of knowledge management on university performance with a key focus on USIU-A. The study recommends that further studies be carried out that will focus on other areas that will facilitate improvement in both performance and knowledge management dissemination.

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LIST OF ACRONYMS

ATM:	Automated Teller Machines
CADe:	Centre for Academic Development
CHE:	Commission for Higher Education
CoP:	Communities of Practice
CUE:	Commission of Universities Education
HEIs:	High Education Institutions
ICT:	Information and Communication Technologies
IT:	Information and Technology
KM:	Knowledge Management
SPSS:	Statistical Package for the Social Sciences
USIU - A:	United States International University - Africa
WASC:	Western Association of Schools and Colleges

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

Universities face many challenges in a rapidly changing global economy (Birgeneau, 2005). As we enter the 21st century, universities face a world that is more interconnected, one in which knowledge, creativity, and innovation are the essential elements of thriving societies. Duderstadt (2005) supports this by stating that, “we are entering a new age, an age of knowledge in which the key strategic resource necessary for prosperity has become knowledge itself - educated people and their ideas”. Universities today and in the near future, will experience different and intensified external pressure influenced by globalization, and the past few decades have witnessed the pressure on universities to respond to this global integration (Bloom, 2005).

Globalization refers to the process whereby countries become more and more integrated, mainly via movements of goods, capital, labour and ideas (Scott, 2005). Scott highlights two main attributes of what he terms the 21st century globalization and they are acceleration of trends associated with a ‘knowledge society’. Some of these trends include the rise of information and communication technologies, which has been accompanied by a cultural revolution; and secondly, the process of acceleration and innovation has brought about ‘uncertainty’ about individual identity, about social affinities, about gender roles and about jobs and careers.

Universities and colleges generate extraordinary quantities of knowledge and innovation, but in many ways the academy struggles to keep pace with the digital revolution. Growing pressures are reshaping how universities must do business - students expecting enhanced access and support, administrators eager to make data-driven strategic decisions, researchers working in virtual global collaboratories, faculty looking for ways to assess learning outcomes, and computer hackers probing networks for vulnerabilities (Metaxiotis & Psarras, 2013).

Many universities seek creative and innovative ways to enhance their nimbleness in knowledge translation, access, and usability (Rowley, 2010). Successful universities embrace these challenges creatively, including revisiting and repurposing the roles of their academic libraries and Information and Technology (IT) organizations (Metaxiotis & Psarras, 2013). As information transitions away from printed works, universities are enhancing their digital collections and repositories, creating “commons” to synergize support for technology and information access and forging partnerships between library, information, and technology professionals (Bergeron, 2013). The need to manage and assimilate a constantly growing pool of information, technology, and human expertise creates unique challenges for faculty, staff, administrators, and students in the modern university has led to the need for knowledge management in universities.

Knowledge Management (KM) has sparked a plethora of definitions, and a variety of explanations, and encompasses diverse disciplines, which hence gives rise to the different perspectives. An extensive literature review yielded many different models, thoughts, perspectives, frameworks and definitions for KM. For the purposes of this research, a particular view of KM was taken as a lens through which to view KM in universities. Knowledge Management pillars to enterprise learning in leadership, organization, technology and learning as a systemic and holistic framework (Stankosky, 2012).

Universities already engage in Davenport and Prusak’s (2000) view on knowledge, and KM, who presents knowledge as deriving from information as information derives from data. Davenport further contends that for information to be transformed into Knowledge it requires human intervention hence humans apply their skills, ability, experience, know-how, values and culture via some transformation (comparison, communication, connections, and consequences) to change the information into knowledge.

From the learning point of view, there is no better type of organisations as universities and schools in general. A university environment seems to be by its nature especially suitable for the application of knowledge management principles and methods. The main reasons for this

are: universities usually possess a modern information infrastructure; to share their knowledge with others is very natural for professors and teachers in general; to acquire knowledge from accessible sources as fast as possible is a natural desire of students; and there is usually a trustful atmosphere at universities, no one is hesitating nor being afraid of publishing or otherwise disseminating her or his knowledge (Metaxiotis & Psarras, 2013).

As modern universities are very much also business organisations with a lot of business activities on the "educational market", any method of increasing their competitive advantage might be very useful and interesting for them. Knowledge management seems to be one of recent leading technologies in this direction. According to Stankosky (2012) there are three basic possibilities how universities can exploit the knowledge management ideas and principles: to teach them in a suitable study programme; to use it for its management decision support, to improve the internal document management and exploitation, to increase the level of information and knowledge dissemination; and to make use of it for a qualitative change in the educational process itself.

Almost any institution in Kenya will make reference to the capturing of knowledge, the sharing of knowledge and the delivery of knowledge from faculty to students. Higher education institutions have significant opportunities to apply knowledge management practices to support every part of their mission (Kidwell, Vander-Linde, & Johnson, 2001). Knowledge management should not strike higher education institutions as a radically new idea; rather it is a new spin on their "*raison d'être*".

As public, private, and for profit higher education institutions alike respond to the phenomenal growth of online courses, cyber colleges, and virtual universities, these same reasons to adopt KM apply. It is with integration and application of KM that universities will be better able to increase student retention and graduation rates; retain a technology workforce in the face of severe employee shortages; expand new web based offerings; work to analyze the cost effective use of technology to meet more enrollment; transform existing transaction-based systems to provide information, not just data, for management; and

compete in an environment where institutions cross state and national borders to meet student needs anytime/anywhere (Kidwell, Vander-Linde, & Johnson, 2001).

United States International University-Africa (USIU - A) is located in the Kasarani area, off Thika Road in the suburb of Kenya's capital city of Nairobi. The university is an independent; not-for-profit institution serving approximately 5,000 students, of whom 88% are domestic and 12% are international representing about 54 nationalities. It was founded in 1969 as the Africa campus of USIU in San Diego, California. The university was first accredited in 1981 by the accrediting commission for senior colleges and universities of the Western Association of Schools and Colleges (WASC) as part of USIU-San Diego. However, the university was mandated to become chartered in Kenya with the Gazettement of the Universities Act in 1985. Regulations and procedures for the accreditation of private universities were published in 1989, and in 1999 USIU - A was awarded its charter as an independent institution through the Commission for Higher Education (CHE) currently known as Commission of Universities Education (CUE).

The institution is well known for its state of the art facilities and programs. To successfully manage KM initiatives in universities, the management need to consciously and explicitly manage the processes associated with the creation of their knowledge assets, and to recognize the value of their intellectual capital to their continuing role in society (Rowley, 2000). However, focusing on the technical side alone, such as increasing the level of computer literacy and providing adequate information and communication infrastructure will not ensure the success of the KM initiatives. The management needs to also overcome the more difficult problems related to social and cultural issues in organizational knowledge management.

1.2 Statement of the Problem

Knowledge has become a precious property and Knowledge Management (KM) has been widely practiced by many organisations as one of the most promising ways of achieving success in the information age (Rycroft-Malone *et al.*, 2002). Realizing the importance of

knowledge as an intellectual asset is vital to improving performance. In Malaysia, the Ministry of Higher Education has identified KM as one of the prerequisites to turn Malaysia into a center of excellence for higher education and to achieve its mission to develop and put in place a higher education environment that encourages the growth of premier knowledge centers and individuals who are competent, innovated with high moral values in order to meet national and international needs (Mohayidin, Azirawani, Kamaruddin, & Margono, 2007).

There are many good practices that support the important role of the university as an institution for critical thinking, where knowledge is developed and disseminated widely throughout the organisation as a source of value creation. However, a culture of creativity must be nurtured and knowledge must be shared through teaching and learning methodologies where the goal of a university is to provide an environment in which university staffs and students develop skills, understanding, and common values to university education (Rowley, 2010).

The main concern of a university is to develop quality graduates, who should possess analytical and problem solving skills and interpersonal understanding as part of their learning achievements, thereby, contributing to the nation's goal of building a knowledge-based (k-based) society. Organizational knowledge has been stored in numerous ways, including in human minds, documents, notes, manuals, and reports; and it has also been shared among individuals through several communication channels such as conferences, seminars, training programs, and forums (Wickramasinghe, 2012). These have been applied for many years and although they are still being used, the emergence of new computer-based communication technologies has, not only complemented the traditional storage and delivery methods, but has also improved the efficiency and effectiveness of the overall knowledge delivery mechanisms.

Based on a survey by the Centre for Academic Development (CADe), most universities have invested heavily in information and communication technologies (ICT); however, the new

technologies have not enabled the free flow and sharing of knowledge among members of the respective organisations, including the academic staffs and students (CAdE, 2005). Universities are the ideal place for knowledge creation (Cronin, 2000) and the best place for practicing knowledge management system. Unfortunately, as knowledge service providers, many universities are not utilizing knowledge to the fullest to improve their performance (Mohayidin, Azirawani, Kamaruddin, & Margono, 2007) and this is because the data, information and knowledge available in the universities are not properly managed such that they could be efficiently shared and reused to generate new knowledge (Wickramasinghe, 2012). Thus, this study was driven to determine whether United States International University - Africa (USIU-A) utilizes knowledge management and what is its effect.

1.3 Purpose of the Study

The main purpose of the study was to determine knowledge management and its effect on organizational performance.

1.4 Specific Objectives

1.4.1 To examine knowledge management in universities.

1.4.2 To determine the influence of knowledge management systems on organizational performance.

1.4.3 To examine the strategies that facilitates the adoption of knowledge management in universities.

1.5 Importance of the Study

1.5.1 Universities and Institutions of Higher Learning

A research into the effect of knowledge management in universities may be of uttermost importance to the managers and the board of USIU-A since it has shown the implications of knowledge management and it has offered recommendations that may enable the institution to properly implement knowledge management in instances where they have not.

1.5.2 Organizational Policy Makers

The results of this study may be useful to policy makers and project officers in various universities. The policy makers may use the results and benchmark what has worked for USIU-A and they may alter what has not by fashioning it to fit their various needs.

1.5.3 Future Scholars

The results of this research have added to the scarcely available information in Kenya on the impact of knowledge management. To the business scholars and researchers, this study has formed a foundation for future researchers who would like to pursue a study in the area of knowledge management.

1.6 Scope of the Study

The scope of the study was USIU-A. The study sampled the staff members of USIU-A. The study sampled the staff members that work in different departments in order to have an overall perspective of the entire university. Their category and breakdown is as shown in Appendix II. The study was carried out in Nairobi, and in USIU-A specifically. The study was carried out between the months of September and December 2015. The study was limited to USIU-A.

1.7 Definition of Terms

1.7.1 Knowledge Management

Knowledge management is the process of capturing, developing, sharing, and effectively using organizational knowledge. It refers to a multi-disciplined approach to achieving organizational objectives by making the best use of knowledge (Rowley, 2010).

1.7.2 Organizational Performance

Organizational performance comprises the actual output or results of an organization as measured against its intended outputs (or goals and objectives). According to Pan and Scarbrough (2009) organizational performance encompasses three specific areas of firm outcomes: financial performance (profits, return on assets, return on investment); product

market performance (sales, market share); and shareholder return (total shareholder return, economic value added).

1.7.3 Academic Institutions

Institutions dedicated to education and research are known as academic institutions. Academic institutions usually grant academic degrees (Barquin, 2007).

1.8 Chapter Summary

This chapter has given readers the background of the study problem. The chapter has also covered the research problem. The chapter has highlighted the objectives of the study that guided the research report. The chapter has also given readers the study scope and importance and finally it has offered the definition of terms. Chapter two has discussed the literature review as guided by the study objectives; chapter three offers a detailed information on the methodology adopted for the study' chapter four has presented the study findings; and chapter five offers the study discussions, conclusions and recommendations.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter discusses how knowledge management impacts performance in institutions of higher learning. The chapter highlights the various knowledge management systems that exist in universities, examine the extent to which knowledge systems affect organization performance and to determine the strategies that facilitate the adoption of knowledge management in universities.

2.2 Knowledge Management in Universities

Academic institutions, particularly higher educational institutions like the universities are seen as ‘knowledge hubs’, where diverse activities are carried out for the generation, preservation, diffusion and application of knowledge. Teachers, students and researchers are integral parts of academic institutions and all of them are engaged in the above activities (Metaxiotis & Psarras, 2013). However, from knowledge management perspective, another group of people are considered crucial for setting and implementing the ‘knowledge agenda’ of the university. They are the knowledge workers, who work across the sectors of the university community and provide support to Communities of Practice (CoP), professional and inter-disciplinary groups and individuals seeking to enhance their professional skills (Barquin, 2007).

Universities are complex academic institutions which undertake a whole plethora of activities other than classroom teaching. Among these, ‘research’ is the most important activity which sets universities apart from other academic institutions. Research requires the presence of huge information repositories and accessibility to online and offline sources of information. University knowledge management systems must take adequate measures to foster creation and sharing of knowledge among the researchers as well as the teaching and non-teaching staff, students, patrons and other stakeholders (Gloet & Terziovski, 2010).

2.2.1 Understanding Knowledge Management in Universities

As far as knowledge management is concerned, foremost task of the universities is to have a clear understanding of desirable strategic knowledge (expertise and understanding that support the strategic direction of the university) and the sources of such knowledge in the community. Greengard (2008) suggests, ‘an organisation aiming to develop a knowledge base first needs to identify the sources of knowledge available, and then to capture and manage these resources properly’. Although the knowledge acquired by teachers and researchers are regularly captured by scholarly journals, books, compilations, etcetera, these knowledge usually remain scattered without necessary links and correlations made among them. This is the task of the knowledge management team to establish these links and correlations and manage the knowledge in a coherent form. This part of the task is rather easy because it deals with explicit knowledge which is easy to capture and preserve. But capturing the tacit knowledge of not only the teachers and researchers, but also the non-teaching staff and students, poses a different challenge altogether.

Modern universities are complex organisations, with faculties, departments, institutions, research labs and administrative branches performing diverse activities. When a distinguished teacher, a competent administrator or an accomplished librarian retires or leaves the university, a big vacuum is created. The people who fill their places are frequently compared to their predecessors and, in many cases, are found inadequate or inappropriate. Although it is true that, knowledge is an essence of a sustained effort of learning and problem solving over a long period of time, and hence it cannot be automatically transferred to someone else by pressing a button; but at the same time, experience and expertise can be shared with others, and when this sharing takes place within an organizational setting, following specific rules and procedures, coordinated by designated professionals and using appropriate technologies, one can say that, knowledge management is happening (Gloet & Terziovski, 2010).

In the university environment, knowledge is shared through the use of teaching-learning methodologies and the university provides an environment in which university staff and

students develop skills, understanding and common values. Universities are higher learning centers bear the responsibility of creating human resources who would contribute to the nation's goal of building a knowledge-based society. Mikulecky and Mikulecka (2009) observe that, by its nature, university environment is suitable for the application of knowledge management principles and methods because universities usually possess modern information infrastructure, knowledge sharing with others is natural for teachers and the desire of students is to acquire knowledge from accessible sources as fast as possible.

Metaxiotis and Psarras (2013) outline three major missions of universities which are: teaching - to prepare students to become successful lifelong learners; research - to expand the frontiers of human knowledge and to promote creativity; and service - to serve on communities and in leadership positions within the university and in professional organisations, and to participate in outreach activities that serve the local, national, and international communities.

2.2.2 New Roles

These days, universities are assuming new roles not only in education and research, but also as a think tank for policy formulation and decision making at various levels. The society expects new ideas and concepts to be emanated from the universities. To fulfill this demand, universities are investing more and more in building knowledge management infrastructure and pursuing knowledge management practices. This enables the universities in doing fundamental and applied research, teaching suitable curricular programs, utilizing knowledge for management decision support to increase the level of knowledge dissemination and utilizing knowledge for a qualitative change in the educational process (Metaxiotis & Psarras, 2013).

Rowley (2010) maintains that, the university management needs to consciously and explicitly manage the processes associated with the creation of their knowledge assets in order to successfully manage the knowledge management initiatives and to recognize the value of their intellectual capital to their continuing role in the society.

2.2.3 Socio-Technical Elements of Knowledge Management

Pan and Scarborough (2009) suggest that knowledge needs to be seen as intrinsic in social interaction, rather than as a resource disseminated from one person to another. In their view, organizational knowledge is socially constructed and shaped by the reciprocal interaction between technological and organizational elements. Therefore, the implementation of socio-technical elements on knowledge management could unfold the interaction between technological, informational and organizational components.

They further propose that these socio-technical components comprise three major layers of knowledge management system: infrastructure - comprises of technical components such as hardware and software that enables the physical and communicational contact between people using network; info-structure - incorporates the formal rules governing exchanges and sense making between people; and info-culture - the background knowledge embedded in social relations and work group process. Mohayidin *et al.* (2007) observe that, these three layers or factors, which influence the level of success or failure of any knowledge management initiative, may eventually determine the university's overall performance in fulfilling its functions as knowledge providers.

2.2.4 Role of Knowledge Workers

For coordinating different streams of knowledge activities which are performed in various parts of the university, competent knowledge workers are recruited in the universities of the developed countries. These knowledge workers work across the sectors of the university community, providing support to communities of practice, professional and inter-disciplinary groups and individuals seeking to enhance their professional skills (Barquin, 2007).

Bergeron (2013) suggests that knowledge workers support knowledge management activities in five roles, which are: the chief knowledge officer provides strategic leadership for knowledge management and builds political alliances to promote knowledge sponsorship; knowledge analysts identify knowledge practice and trends; knowledge engineers or

knowledge technicians support the knowledge management service and its use; knowledge managers coordinate the task of knowledge management implementation; and knowledge stewards operate locally as knowledge champions and enablers.

In addition, members from different strata of the organisation may contribute in the knowledge management and knowledge service activities without essentially becoming a formal member of the core group. These knowledge workers are constantly involved in fostering the university's learning culture and promoting knowledge sharing (Rowley, 2010). Based on the assumptions made by Davenport and Prusak (1998), the following roles of a University Knowledge Workers may be suggested: given the important role of knowledge in the strategies and processes of modern universities, the knowledge workers can advocate knowledge discovery and use. They can champion changes in organizational cultures and individual behaviors relative to knowledge. They can design, implement and oversee the knowledge infrastructure of the university, including its libraries, knowledge bases, human and computer knowledge networks, and research centers.

Knowledge management workers can manage relationships with external providers of information and knowledge and negotiate contracts with them. In the context of a university, these external partners include developers and suppliers of educational materials, software and hardware, other universities, research organisations, commercial and other organisations (potential employers of the students). They can provide critical input to the process of knowledge creation and use around the university and facilitate efforts to improve such processes if necessary (Rowley, 2010). They can design and implement the university's knowledge codification process. Their goal is to specify key categories of information or knowledge that the university would address, and entails mapping both the current knowledge inventory and future knowledge models. They can measure and manage the value of knowledge, either by conventional financial analysis or by comparing the knowledge inputs and outputs in the context of a university (Lang, 2011).

In the context of universities, the group of people who most obviously qualify as knowledge workers are the university library staff. Traditionally, library workers have not only been playing an important role in the management of knowledge products like books, periodicals and databases, but also in the sharing of knowledge, information and ideas among teachers, students, researchers, university staff and people from outside who interact with the above-mentioned groups of people (Barquin, 2007). Therefore, the onus of designing and maintaining a successful knowledge management infrastructure in the university should primarily lie with the library professionals. However, the role of other stakeholders, particularly teachers, staff members, students and the university authority is also crucial for knowledge management in universities (Duffy, 2010).

2.3 Influence of Knowledge Management on Organizational Performance

In this information era, virtually all organizations are becoming knowledge -driven in order to achieve or maintain the competitive advantage (Chilton, 2013). According to King (2009), KM has been practiced in 80 percent of the most prominent companies in the world. The author concluded that the power of KM in an organization could not be overestimated considering the fact that for organization to maintain her growth and development.

From literature, the concept of KM is generally described based on a number of key processes of KM. Such processes have several interpretations; the term of processes is sometimes referred to as activates or practices. Whichever a way it is addressed, it still refers to the same thing which is the dimensions of KM and in this paper, the term “processes” is used, since it is a way to emphasize that these processes are essential and should work together to improve the performance of an organization. However, KM without certain key processes is expected to yield little in the way of real benefits (Sheryl, 2012).

Various studies (Edwards, 2011; Zaim, 2010; McInerney & Koenig, 2011) have addressed KM processes with a view to identify the key aspects/dimensions of KM processes. These dimensions include acquisition, innovation, protection, integration, and dissemination

(Karadsheh *et al.*, 2009); acquisition, conversion, application, and protection (Gholami *et al.*, 2013); development, utilization, and capitalization (Zack, McKeen & Singh, 2009); creation, accumulation, sharing, utilization, and internalization (Hegazy & Ghorab, 2014); identification, collection, organizing, storage, sharing, and evaluation (Kiessling, Richey, Meng, & Dabic, 2010). An examination of these diverse views enables the researcher to group them into five processes: identification, acquisition, storage, sharing, and application. These five processes have received the most consensus attention in KM literature (Daud & Hamid, 2006; Liao & Wu, 2009).

2.3.1 Academic Performance (AP)

Higher education today is subject to the same pressures of the marketplace. Profound changes in competition have made universities, and high education institutions (HEIs) think like business to the extent that students are now being treated as customers. In addition, the stakeholders' demands are getting more and more complex, which must be attended to whether the educational organization must maintain its competitive advantage (Becerra-Fernandez & Sabherwal, 2014). The HEIs then must ensure that the students receive high - quality service. HEIs have the responsibility to produce graduates that are able to accommodate challenges emerging in society, such as graduates producing high - quality profile and competence in their respective professions (Suryadi, 2010).

HEIs are changing from a public service to a market - driven one, and HEIs now face pressing concerns such as international competition (Kebao & Junxun, 2008). For that reason, HEIs are faced with the need to improve many of their existing management practices and attitudes. One of the current issues of significance is the need for performance management, particularly measurement of key performance indicators (Zaied, Hussein & Hassan, 2012). It is believed that knowing such performance indicators will enable the organizations to achieve an acceptable level of AP. According to Becerra-Fernandez and Sabherwal (2014), the performance indicators in HEIs can be measured based on objective's achievement; this has to do with how well the core process (educational process) is operating.

2.3.2 Link between Knowledge Identification (KID) and Performance

Knowledge identification is an action of discerning the location and value of knowledge, restraints to knowledge flow, and opportunities to leverage the value of knowledge. Either looking at this perspective, knowledge can be identified by individual employees or organization (Liao & Wu, 2009). Therefore, knowledge identification is well known as the initial stage of managing knowledge.

This dimension also captures all that is related to determining core competencies, recognize strategic capabilities, and assess the expertise level for each knowledge domain. In short, determining the knowledge gaps between the existing and needed (McInerney & Koenig, 2011). According to Sarawanawong *et al.* (2009), identifying the knowledge gap is necessary to support the work done by staff daily successfully. Thus, knowledge identification plays a key role in enhancing academic performance.

2.3.3 Link between Knowledge Acquisition (KAC) and Performance

Once the needed knowledge is identified, it has to be acquired for utilization. Thus, acquisition process is then oriented to obtain the needed knowledge from both internal and external sources (Mohammad, Hamden & Sabri, 2010). This requires one to have complete access to knowledge and having knowledge-based resources that facilitate the capturing of new knowledge, and exploiting the available knowledge (King, 2009).

According to Mohammad, Hamden and Sabri (2010), there are two activities through which organizations acquire knowledge, and they include: searching and organization learning. Knowledge acquisition via “searching”, can be achieved through three means, namely: scanning, focused research, and performance monitoring. Meanwhile, organization learning takes a fundamental part in knowledge acquisition since there is a need for organizations to enhance their performance constantly (*ibid*). This further stresses how significant it is for organizations to determine the best practices to be adopted in order to achieve excellent

performance (Asoh, Belardo & Crnkovic, 2007; Liao & Wu, 2009). As a result, knowledge acquisition is linked to academic performance.

2.3.4 Link between Knowledge Storage (KST) and Performance

It is generally believed that if knowledge is valuable, then storing such valuable assets should be given an utmost concern (Becerra-Fernandez & Sabherwal, 2014). After obtaining the required knowledge, it is expected to be coded and recorded to enable easy access to such knowledge (Kiessling *et al.*, 2009). From competitive advantage perspective, there is no way one can talk about knowledge storage without mentioning a special kind of database known as the ‘Knowledge Base’, which allows collection, organization and retrieval of knowledge to be carried out in a computerized manner (Becerra-Fernandez & Sabherwal, 2014; Asoh *et al.*, 2007).

Knowledge base can be categorized into two major forms: The Machine-readable and the Manual knowledge base (Kiessling *et al.*, 2009; Liao & Wu, 2009). According to Becerra-Fernandez and Sabherwal (2014), academic performance measurement in HEIs should focus on students’ achievement, which requires a comprehensive and integrated reliable based system. This can be achieved through sound database and effective processes of knowledge storage, which should provide reliable data, which in turn affects the academic performance.

2.3.5 Link between Knowledge Sharing (KSH) and Performance

Knowledge sharing involves the exchange of information and knowledge from one source (person, group or organization) to another (Fugate, Theodore & Mentzer, 2009). According to Chilton (2013), the success of any KM processes in any organization relies on the effectiveness of the knowledge sharing. The general problem in KM is that most of the large organizations are not conscious of the valuable knowledge they possess (Kiessling *et al.*, 2009). With effective KM processes, hidden knowledge can easily be discovered, and such process is mostly facilitated through sharing.

According to Liao and Wu (2009), knowledge sharing plays an intermediate role to support knowledge exchange in the organization and aids the achievement and sustenance of their competitive advantage. Therefore, in the higher-education context, knowledge sharing as a vital pillar of KM is critical to academic performance (Zaied *et al.*, 2012). It is clear that knowledge sharing is greatly supported by various studies (Fugate, Theodore & Mentzer, 2009; Chilton, 2013; Kiessling *et al.*, 2009; Liao & Wu, 2009) to be the link in improving academic performance.

2.3.6 Link between Knowledge Application (KAP) and Performance

Knowledge application concerns the process of using knowledge that has been stored in the organization (Zaim, 2010). McInerney and Koenig (2011) revealed that knowledge as a process cannot be separated from its respective action - application. Meaning that knowledge without application process is considered as information. Within KM context, the concept of application has another interpretation, sometimes in literature, it is also referred to as utilization (Liao & Wu, 2009). Many researchers stated that knowledge application process denoted actual utilization of the knowledge (Asoh *et al.*, 2007; Zaim, 2010; McInerney and Koenig, 2011).

Moreover, Karadsheh *et al.* (2009) argued that the process of applying knowledge happens when new knowledge is acquired and put to use. Lee and Lee (2010) described knowledge application as the effective retrieval mechanisms that facilitates access to knowledge. The authors further revealed that knowledge application is the actual process of knowledge retrieval and knowledge dissemination. This means that, knowledge application involves effective retrieval mechanisms that enable members of the organizations to access relevant knowledge (Zaim, 2010; McInerney & Koenig, 2011; Karadsheh *et al.*, 2009). Undeniable, academic performance will be improved since the knowledge application will be supported among educational partners (Lee & Lee, 2010).

2.4 Strategies that Facilitate the Adoption of Knowledge Management in Universities

It is unlikely that there is a single knowledge-sharing strategy that is effective in all situations. Some knowledge-sharing professionals caution against getting caught in a “one-size-fits-all” mindset, which may result in a failure to tailor the content, timing, setting, and format of knowledge sharing with different audiences (Lomas, 2007). “One-size-fits-all” strategies are rarely successful, and representatives among researchers, policymakers, and service providers should be consulted to determine their preferences for format, timing, and location (Canadian Health Services Research Foundation, 2008). When communities determine what they need to share and what forum will best enable them to share it, they can more readily own both the knowledge and the forums for sharing it.

Until clear evidence is available on which knowledge-sharing strategies will work best in a variety of contexts, when choosing strategies it may be best to consult with the target audiences when choosing strategies. Studies done at CUP have shown that a common trap in choosing knowledge-sharing strategies may be jumping on board too quickly with new, high-tech knowledge sharing strategies. For example, although internet media may be accessible in theory to anyone with an internet connection, individual comfort levels with online technologies may vary greatly. Knowledge-sharing strategies are categorized here based on delivery method, and fall into three categories: writing, speaking, and information technologies (McDermott, 2009).

2.4.1 Writing

Writing creates permanent knowledge-sharing products. The biggest advantage of written documents is durability: a well-written article on a research project or body of research can be useful for years after it is written, even if the author has moved on to other things. Access to written documents is usually available to all interested parties, regardless of proximity to the author. Writing also allows for extensive planning and editing during the creation of documents, a “safe” way to communicate as writers can take time to compose their messages. For readers, written documents allow them reflect on their reading and return to previous sections of text to clarify understanding (Shortland & Gregory, 2011).

However, the permanence of written documents is also a potential weakness. Depending on the pace at which knowledge on a particular topic evolves, written documents may become relic-like, containing out-of-date information. If the pace of ideas and innovations is fast enough, a written document may become out-of-date before it even reaches intended audiences (McDermott, 2009).

2.4.2 Speaking and Conferences

Spoken knowledge-sharing strategies include conferences, lectures and presentations, workshops, conversation sessions, and meetings. Although scientific conferences have traditionally been events for researchers to present and discuss their work (Canadian Health Services Research Foundation, 2012), increasingly researchers, policymakers, and service providers are networking at conferences on areas of shared interest. Conferences are usually a mix of workshops, lectures, and presentations, lasting from one to several days in duration. As conferences often draw participants from larger geographic areas, one advantage is the opportunity to bring together individuals who would not have the chance to interact face-to-face with one another on a day-to-day basis. Conferences may support intense participation in knowledge sharing on one or several related topic areas. Beyond the knowledge shared at conferences, opportunities for networking may support the formation or expansion of knowledge-sharing communities.

Unfortunately, conferences require a huge investment of time and resources by organizers, often more than what is available to many organizations and professional communities. Depending on the target audiences, costs of travel and related expenses to attend may be prohibitive. The time required to participate for a full day or a number of days may be particularly limiting to service providers and policymakers (Shortland & Gregory, 2011).

2.4.2.2 Lectures and Presentations

Lectures and presentations may be particularly appropriate for sharing theoretical knowledge. Large numbers of participants can usually be accommodated, particularly when there are minimal interactive elements. The Canadian Health Services Research Foundation offers the

following recommendations for preparing and delivering research presentations (Lomas, 2007).

2.4.2.3 Workshops

Workshops are training sessions typically ranging from a few hours to a few days in length. Workshops tend to require active engagement from participants with emphasis on problem solving and hands-on training. The interactivity of workshops places a limit on the possible number of participants; however, break-out groups and other workshop strategies may be used to accommodate higher numbers of participants (McDermott, 2009).

Workshops can have a variety of formats, but are essentially a group of people coming together to share problems, learn from each other, change practices, and find solutions.⁴⁵ One source recommends that when organizing a workshop, five essential steps are needed: decide on an appropriate format for the workshop; choose a suitable venue; ensure the content is relevant to the group; after each content section and at the end of the workshop, make a list of outcomes/recommendations/steps for action to ensure that emerging ideas are summarized; and stay on schedule (Shortland & Gregory, 2011).

2.4.2.4 Meetings

Outside of formal knowledge-sharing contexts, any meeting or gathering of people with common interests may present opportunities for knowledge sharing. CUP's experience working with researchers, policymakers, and service providers has resulted in valuable insights into the cultures within which each group operates, and has increased understanding of one another's knowledge sharing needs (Giles, 2005).

2.4.3 Online

Given the power attributed to face-to-face interaction in knowledge sharing, the use of online communication tools for knowledge sharing requires further study to determine whether they can replace face-to-face opportunities. If a group of people does not already share knowledge, have plenty of contact, and understand what insights and information will be

useful to one another, creating a community with information technology is not likely to be effective (McDermott, 2009). However, if a community has been established already, online knowledge-sharing strategies can provide space for a group to maintain contact even when large distances and other barriers limit face-to-face interaction. Therefore, where possible, online knowledge-sharing strategies should be used to support existing knowledge-sharing communities rather than be considered as stand-alone knowledge-sharing activities.

2.4.3.1 Websites

Websites are the least interactive of the three online strategies discussed here. However, advances in website design and online technologies are resulting in increased website interactivity. Contents of websites are typically authored by one or several individuals, sometimes representing an organization, and may leave users with little input as to the content available online (Rogers, 2009).

Websites are most like lectures and presentations in that they primarily put information “out there” for consumption, with opportunities for providing feedback varying greatly between websites. However, websites have the potential to reach wider audiences than lectures and presentations as anyone interested in a particular topic or organization can access a website as long as they have a computer and an Internet connection (Giles, 2005).

As the web increasingly becomes a common resource people turn to when seeking information, websites become critical to knowledge sharing. Websites may represent an organization’s first contact with an individual. Given the sheer amount of information available online, well-designed websites are necessary to keep users interested and engaged with the content (McDermott, 2009).

2.4.3.2 Discussion Forums

Online discussion forums, also known as message boards, internet forums, and bulletin boards are web-based applications⁴⁶ that support ongoing discussions. Discussion forums are usually focused on particular topic areas, and led by forum moderators whose role is to

keep discussions on topic and to censor abusive behavior. The degree to which moderators intervene and are actively involved in the day-to-day activity of a particular forum varies (Rogers, 2009).

Possible advantages include: interactive discussions that are not limited by geographical location; records of previous discussions as posts to a forum can be automatically archived; this practice permits discussions to be traced back to the beginning and examined to determine how they evolved over time; and knowledge-sharing communities that may develop when individuals participate regularly, especially if this is supported by opportunities to interact face-to-face (Giles, 2005).

Possible disadvantages include: difficulty gaining momentum, particularly when a forum is first formed and there may be limited or no shared history between potential participants; requirements for users to have a certain degree of comfort with online software; the double-edged sword of anonymity: while anonymity may inspire candidness in controversial discussions, being protected from identification may also escalate conflict (leading to flaming); and new users may find the social norms of online forums, “netiquette”, obscure or difficult to adhere to (Rogers, 2009).

2.4.3.3 Email Listservs

Email *listservs*, also known as electronic mailing lists, are a special use of e-mail that facilitates the distribution of information to many users (Giles, 2005). *Listservs* are typically organized around a shared interest of some sort and have a list “owner,” who is responsible for setting the guidelines around acceptable content and behavior of subscribers. A number of mailing list software programs make mailing-list administration accessible to anyone who is moderately web-savvy (Rogers, 2009).

Email *listservs*, in addition to their accessibility by relative large numbers of people, share some of the advantages of discussion forums in their ability to foster interactivity and automatic archiving of messages (Rogers, 2009). However, dependence on the listserv

administrator may be greater than dependence on forum moderators in that established forums tend to self-police within the forum in reaction to undesirable behavior. With a *listserv*, more responsibility may be placed on the listserv administrator when use of the mailing list is inappropriate.

2.5 Chapter Summary

This chapter has discussed how knowledge management impacts performance in institutions of higher learning. The chapter has highlighted the various knowledge management systems that exist in universities, examined the extent to which knowledge systems affect organization performance and has examined the various strategies that facilitate the adoption of knowledge management in universities. The next chapter looks at the research methodology that was used in the study.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

The chapter summarizes the overall methodology that was used in the study. Research methodology in this study includes research design, population and sampling design, data collection methods, research procedures, data analysis methods and chapter outline. Sampling design in the research methodology comprised of sampling frame, sampling technique and sampling size.

3.2 Research Design

The research design adopted a descriptive survey method aimed at establishing how knowledge management affected organizational performance. According to Maxwell (2012), descriptive research studies are designed to obtain information concerning the current situation and other phenomena and wherever possible to draw valid conclusion from the facts discussed. Descriptive research studies are based on some previous understating of the nature of the research problem (Krishnaswamy, 2009). This study utilized a survey approach that explored the existing status of two variables at a given point in time. This method was preferred because it allowed for a prudent comparison of the research findings as it put together a profile of a group of problems, people or events by collection of data and processing of the frequencies on the research variables that were knowledge management (independent variable) and its effect on organizational performance (dependent variable).

3.3 Population and Sampling Design

3.3.1 Population

Target population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions (Martirosyan *et al.*, 2010). The target population of this study was all the staff members of United States International University - Africa (USIU-A). The population distribution was as shown in Appendix II.

3.3.2 Sampling Design

3.3.2.1 Sampling Technique

According to Mugenda and Mugenda (2003), selecting a given number of subjects from a defined population as representative of that population is referred to as sampling. Byrnes (2010) in his study emphasized that any statements made about the sample should also be true of the population. This research employed a simple random sampling procedure which is a method of selection of a sample comprising of n number of sampling units out of the population having N number of sampling units such that every sampling unit has an equal chance of being chosen. Stratified sampling in this study was convenient due to its nature and formation of representation.

According to Silver (2012), stratified sampling is defined as a method of sampling from a population. In statistical surveys, when subpopulations within an overall population vary, it is advantageous to sample each sub-population in stratum and thus independently. Byrnes (2010) also defined strata as layer within any structure this clustered or assigned according to their social status and education. He regarded statistics as a group into which members of a population are divided in stratified sampling. According to Silver (2012), stratified sampling technique gives all departments the probability of being selected into the sample, and this was considered while choosing the sampling technique.

3.3.2.2 Sample Size

According to Rubin and Babbie (2009), the major criterion used when deciding on the sample size is the extent to which the sample size represents the entire population. According to Creswell (2013) the formula for selecting a sample size dictates that the researcher needs to account for the margin of error also known as the confidence interval, the researcher needs to state the confidence level, as well as the standard deviation. The sample size formula employed for this study was as shown, resulting to a sample size of 97 employees from the entire study population.

$$n = \frac{(Z)^2 \times \text{Std. Dev} (1 - \text{Std. Dev})}{(\text{Margin of Error})^2}$$

Where:

n = Sample Size

Z = Confidence Error of 90% (1.645)

Std. Dev = Standard Deviation of 0.1

Margin Error = + or – 5 divided by 100

Thus:

$$n = \frac{[(1.645)^2 \times 0.1 (0.9)]}{(0.05)^2}$$

$$n = \frac{(2.706025 \times 0.09)}{(0.0025)}$$

$$n = \frac{0.24354225}{0.0025}$$

$$n = 97.42$$

$$n = 97$$

3.4 Data Collection Methods

The study collected primary data for analysis to ascertain the research objectives. Primary data is the information the researcher obtained from the field. Primary data was collected using semi-structured questionnaires. The questionnaires used closed-ended and open-ended questions. The likert scale was used in the questionnaire to determine if the respondents agreed or disagreed in a statement that they were provided with. The questionnaires were administered by the researcher in each and every category of respondents in the institution. The questionnaires were used because they allowed the respondents to give their reactions in a free environment and helped the researcher to get information that would not have been given out if interviews would have been used.

Rubin and Babbie (2009), indicated that the importance and advantage of questionnaires is that they are easier to analyze since they are in a usable form. They are also easy to administer because each item is followed by an alternative answer and is economical to use in terms of saving time. They further note that, a self-administered survey is the only way to draw out self-report on people's view, attitudes, thinking and principles.

3.5 Research Procedures

The questionnaire was tested by pre-administering it to five employees, and five faculty. These employees were not included in the study response group. During this exercise, questions that were perceived to be vague were re-adjusted accordingly for clear communication in the actual data collection process. For maximum and complete participation of the respondents, the questionnaires were administered through drop and pick method whereby, the questionnaires were left for the respondents to be filled and then picked after some time.

Strategies to ensure a high response rate included a clear notification to the respondent(s) that their responses would be used for research purposes only and that the anonymity of their identity would be maintained. To encourage the respondents to participate in the study, the selected members were requested to spend a portion of their working day to fill the questionnaires and they were informed that the questionnaires would be collected after five days.

3.6 Data Analysis Methods

The procedure of data analysis involved several stages: the completed questionnaires were edited for completeness and consistency, checked for errors and omissions and then coded to the Statistical Package for the Social Sciences (SPSS) version 16 for qualitative and quantitative analysis. Qualitatively the data was sought into themes, categories and patterns. This enabled the researcher to make general statements in terms of the observed attributes hence conceptualization.

According to Byrnes (2010), quantitative analysis employs both descriptive and inferential statistics. Data was analyzed using descriptive analysis such as descriptive statistics mean scores and standard deviations frequencies distributions and percentages. The results were presented in the form of tables and charts. The regression and correlation analysis of the data enabled the researcher to identify the relationship that existed between the study variables.

3.7 Chapter Summary

Chapter three of this study has summarized the generally methodology that was used in the study. This included the research design, population of the study, sampling procedures, data collection methods, research procedures and data analysis and presentation. Descriptive research design was used and stratified random sampling technique was adopted to select the sample size from the population. This study through this chapter had depicted the ethical manner, and compliance in conducting the research. The next chapter provides the analysis part of the study in compliance to the research objectives and data findings from the field.

CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the study findings received after analyzing the collected data using SPSS. The section presents the data in the form of tables and graphs, with brief explanations on the figures presented within the graphs and tables. The researcher handed out 97 questionnaires to the targeted population and only 89 questionnaires were completely filled. This gave the study a response rate of 91.8% which is above the required thresh-hold.

4.2 Bio Data

4.2.1 Gender of Respondents

The questionnaire prompted respondents to indicate their gender and from the results, it was noted that 57.3% of the population were male, while 42.7% were female. These results indicated that the majority of the respondents in the study were male.

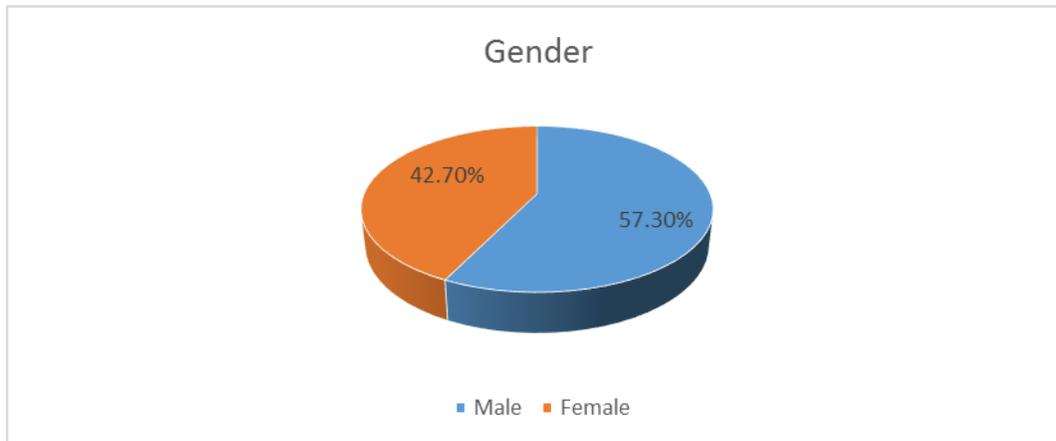


Figure 4.1 Gender of Respondents

4.2.2 Marital Status

The respondents were asked to indicate their marital status and the study results showed that 76.4% were single, and 23.6% were married. The study results showed that majority of the respondents were single.

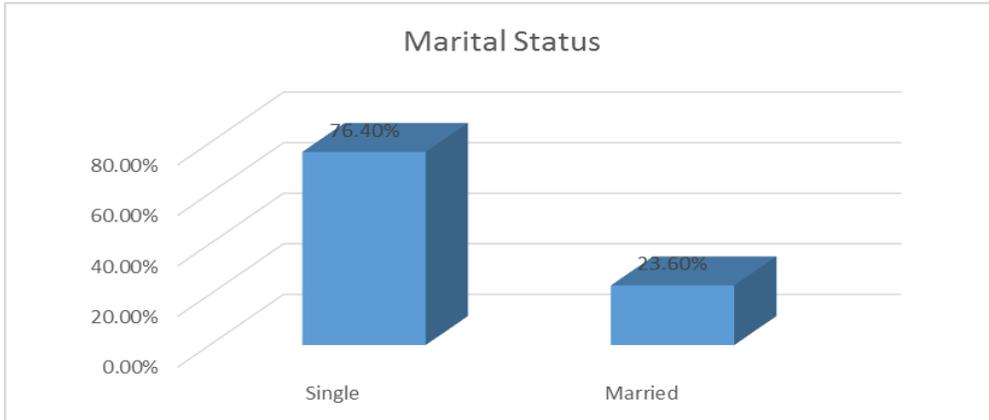


Figure 4.2 Marital Status

4.2.3 Age Group of the Respondents

The respondents were asked to indicate their age group and the results showed that 51.7% were aged between 21-25 years, 25.8% were aged between 26-30 years, and 22.5% were aged between 31-35 years. The results showed that majority of the respondents were youths.

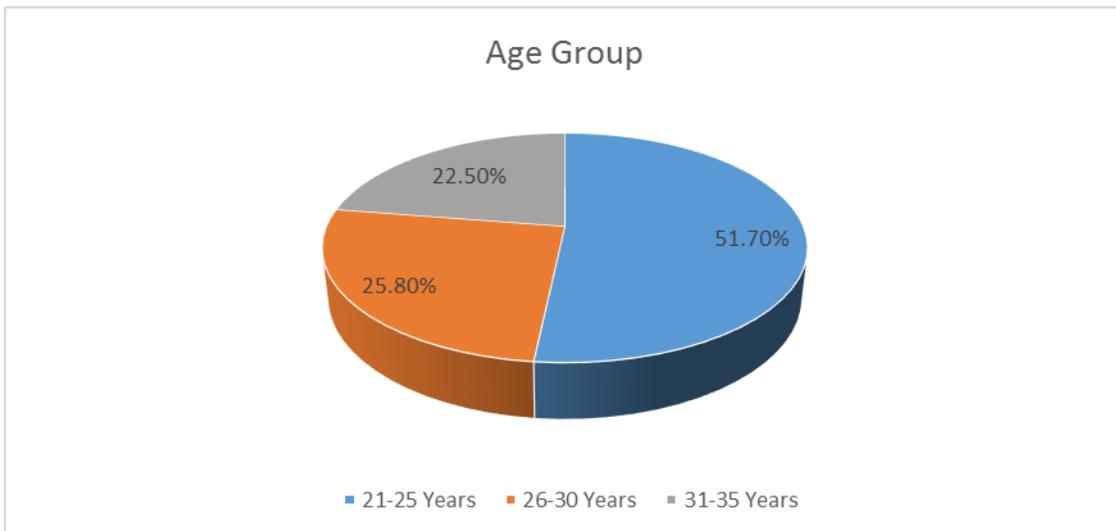


Figure 4.3 Age Group of the Respondents

4.2.4 Years Worked in USIU-A

The researcher inquired the number of years the respondents had worked with the institution and the results showed that majority of them, 64%, had worked with USIU-A for 1-5 years,

and 36% had worked with USIU-A for 6-10 years. The results showed that respondents had been with the institution for a good number of years.

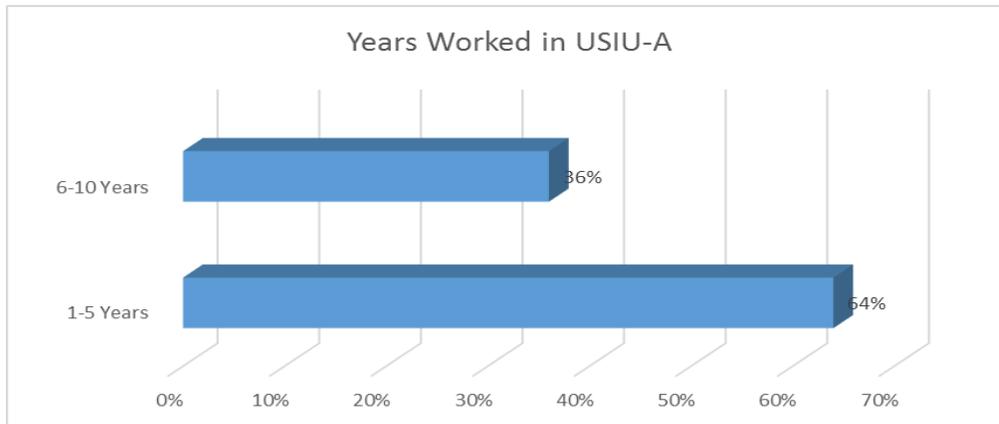


Figure 4.4 Years Worked in USIU-A

4.2.5 Utilization of Knowledge Management

The respondents were asked whether the institution utilized knowledge management and the results showed that all respondents 100% concurred that the institution used knowledge management. These results showed that USIU-A applied knowledge management.

Table 4.1 Utilization of Knowledge Management

Category	Distribution	
	Number	Percent
Yes	89	100
No	0	0
No Idea	0	0
Total	89	100

4.3 Knowledge Management in Universities

4.3.1 Sources of Knowledge Management

The respondents were asked to indicate the various sources of knowledge management that exist within the institution and their response indicated that knowledge management sources

include: information, communication and technology systems (ICT), books, journals, the Internet, library and library sources, lectures, and internal and external workshops.

4.3.2 Shared Experience and Expertise

The respondents were asked whether they believed that experience and expertise was shared among staff and students within the university. Their response showed that all respondents 100% believed that knowledge management experience and expertise was shared within the institution.

Table 4.2 Shared Experience and Expertise

Category	Distribution	
	Number	Percent
Yes	89	100
No	0	0
No Idea	0	0
Total	89	100

4.3.3 Sharing Rules and Procedures

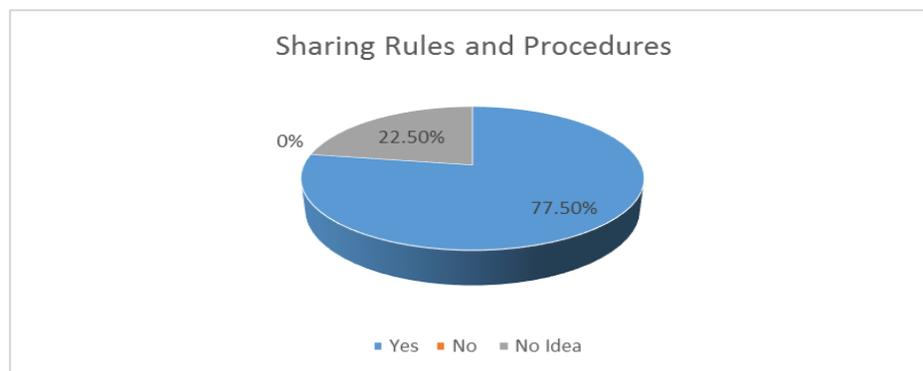


Figure 4.5 Sharing Rules and Procedures

The respondents were asked whether there were particular rules and procedures that were followed during the sharing process. The results showed that 77.5% stated that rules and procedures for sharing knowledge management were existent, while 22.5% had no idea.

These results showed that USIU-A had rules and procedures that governed sharing of knowledge management.

4.3.4 Coordination by Professionals

The respondents were asked whether knowledge sharing within the institution was coordinated by professionals. The results showed that 75.3% stated that it was coordinated by professionals, while 24.7% had no idea. These results showed that USIU-A knowledge sharing was coordinated by professionals.

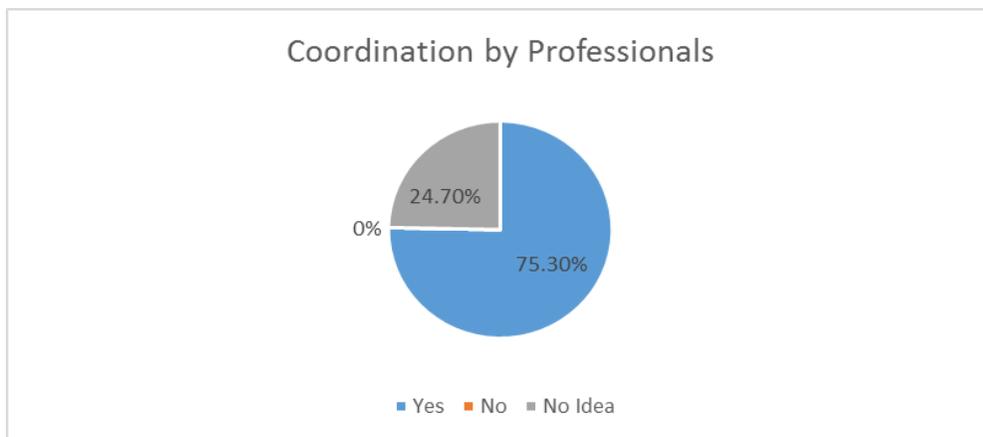


Figure 4.6 Coordination by Professionals

4.3.5 Use of Appropriate Technology

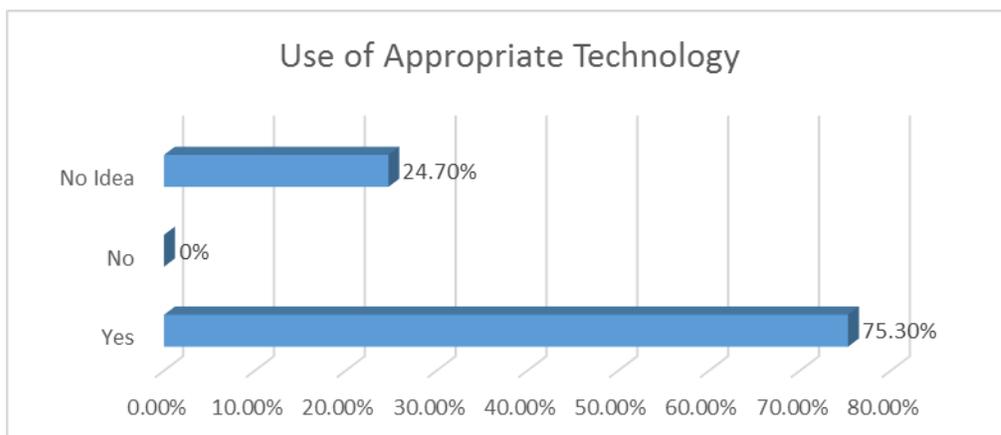


Figure 4.7 Use of Appropriate Technology

The respondents were asked whether knowledge sharing within the institution was carried out using appropriate technologies. The results showed that 75.3% stated that it was carried out using the appropriate technologies, while 24.7% had no idea. These results showed that USIU-A knowledge sharing was carried out using the appropriate technologies.

4.3.6 Socio-Technical Elements of Knowledge Management Systems

The respondents were asked to rate the socio-technical elements of knowledge management systems in the university and its knowledge workers using brief statements that were offered using the key (SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree). Their results were as shown in Table 4.3. The result Mean of >3.0 showed that the institution had proper socio-technical elements of knowledge management and the Standard Deviation of <1.5 indicated that the difference of responses was insignificant.

When the respondents were asked whether the university has infrastructure that facilitate knowledge management, 23.6% agreed, and 76.4% strongly agreed. Their response had a mean of 4.76, and a standard deviation of 0.427. The respondents were also asked whether the university has info-structure (formal rules governing exchanges and sense making between people), and 25.8% were neutral, 47.2% agreed, and 27.0% strongly agreed. The response had a mean of 4.01, and a standard deviation of 0.731. For the question on whether the university has info-culture (the background knowledge embedded in social relations and work group process), 13.5% were neutral, 34.8% agreed, while 51.7% strongly agreed. The results had a mean of 4.38, and a standard deviation of 0.715.

When asked whether the institution has a chief knowledge officer who provides strategic leadership for knowledge management, 12.4% strongly disagreed, 13.5% disagreed, 24.7% were neutral, 25.8% agreed, and 23.6% strongly agreed. The results had a mean of 3.35, and a standard deviation of 1.315. When asked whether the institution has a chief knowledge officer who builds political alliances to promote knowledge sponsorship, 12.4% strongly disagreed, 13.5% disagreed, 34.8% were neutral, 27.0% agreed, while 12.4% strongly agreed. The results had a mean of 3.13, and a standard deviation of 1.179.

Table 4.3 Socio-Technical Elements of Knowledge Management Systems

	SD	D	N	A	SA	MEAN	STD DEV
	%	%	%	%	%		
The university has infrastructure that facilitate knowledge management	0.0	0.0	0.0	23.6	76.4	4.76	0.427
The university has info-structure (formal rules governing exchanges and sense making between people)	0.0	0.0	25.8	47.2	27.0	4.01	0.731
The university has info-culture (the background knowledge embedded in social relations and work group process)	0.0	0.0	13.5	34.8	51.7	4.38	0.715
The institution has a chief knowledge officer who provides strategic leadership for knowledge management	12.4	13.5	24.7	25.8	23.6	3.35	1.315
The institution has a chief knowledge officer who builds political alliances to promotes knowledge sponsorship	12.4	13.5	34.8	27.0	12.4	3.13	1.179
The university has knowledge analysts who identify knowledge practice and trends	12.4	13.5	0.0	74.2	0.0	3.36	1.121
The campus has knowledge engineers or knowledge technicians that support the knowledge management service and its use	12.4	13.5	10.1	51.7	12.4	3.38	1.229
The campus has knowledge managers who coordinate the task of knowledge management and implementation	0.0	25.8	10.1	50.6	13.5	3.52	1.024
The university relies on its knowledge stewards that operate locally as knowledge champions and enablers	0.0	25.8	0.0	61.8	12.4	3.61	1.007
The campus has knowledge workers that are constantly involved in fostering the university's learning culture	0.0	13.5	0.0	74.2	12.4	3.85	0.806
The campus has knowledge workers that are constantly promoting knowledge sharing	0.0	13.5	0.0	73.0	13.5	3.87	0.815

When probed on whether the university has knowledge analysts who identify knowledge practice and trends, 12.4% strongly disagreed, 13.5% disagreed, 74.2% agreed. The results had a mean of 3.36, and a standard deviation of 1.121. When asked whether the campus has knowledge engineers or knowledge technicians that support the knowledge management service and its use, 12.4% strongly disagreed, 13.5% disagreed, 10.1% were neutral, 51.7% agreed, while 12.4% strongly agreed. The results had a mean of 3.38, and a standard deviation of 1.229. The respondents were asked whether the campus has knowledge managers who coordinate the task of knowledge management and implementation, 25.8% disagreed, 10.1% were neutral, 50.6% agreed, and 13.5% strongly agreed. The results had a mean of 3.52, and a standard deviation of 1.024.

When asked whether the university relies on its knowledge stewards that operate locally as knowledge champions and enablers, 25.8% disagreed, 61.8% agreed, and 12.4% strongly agreed. The results had a mean of 3.61, and a standard deviation of 1.007. When asked whether the campus has knowledge workers that are constantly involved in fostering the university's learning culture, 13.5% disagreed, 74.2% agreed, and 12.4% strongly agreed. The results had a mean of 3.85, and a standard deviation of 0.806. When asked whether the campus has knowledge workers that are constantly promoting knowledge sharing, 13.5% disagreed, 73.0% agreed, and 13.5% strongly agreed. The results had a mean of 3.87, and a standard deviation of 0.815.

4.3.7 Correlations for Social-Technical Elements

The researcher carried out a Pearson Correlation test to determine the significance of the various socio-economic elements. The results of the test have been presented in Table 4.4. The results shown in Table 4.4 indicate that there exists a significant correlation between infrastructure and knowledge management ($R=0.437$, $p<0.01$). The table also shows that there is a significant correlation between info-structure and knowledge management ($R=0.446$, $p<0.01$). The table also shows that there is a significant relationship between info-culture (the background knowledge embedded in social relations and work group process) and knowledge management ($R=0.410$, $p<0.01$). The table confirms a significant relationship

between institution having a chief knowledge officer who provides strategic leadership and knowledge management ($R=0.391$, $p<0.01$).

Table 4.4 Correlations for Social-Technical Elements

Social-Technical Elements	Correlations Results	N
Infrastructure that facilitate knowledge management	.437** .000	89
Info-structure (formal rules governing exchanges and sense making between people)	.446** .000	89
Info-culture (the background knowledge embedded in social relations and work group process)	.410** .000	89
The institution has a chief knowledge officer who provides strategic leadership for knowledge management	.391** .000	89
The institution has a chief knowledge officer who builds political alliances to promotes knowledge sponsorship	.335** .001	89
The university has knowledge analysts who identify knowledge practice and trends	.251* .018	89
The campus has knowledge engineers or knowledge technicians that support the knowledge management service and its use	.433** .000	89
The campus has knowledge managers who coordinate the task of knowledge management and implementation	.594** .000	89
The university relies on its knowledge stewards that operate locally as knowledge champions and enablers	.416** .000	89
The campus has knowledge workers that are constantly involved in fostering the university's learning culture	.692** .000	89
The campus has knowledge workers that are constantly promoting knowledge sharing	.692** .000	89

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

* Correlation is significant at the 0.05 level (2-tailed)

The results in the table shows that there exists a significant relationship between the institution having a chief knowledge officer who builds political alliances to promotes knowledge sponsorship and knowledge management ($R=0.335$, $p<0.01$). The table shows that there is a significant relationship between the university having knowledge analysts who identify knowledge practice and trends and knowledge management ($R=0.251$, $p<0.05$). The table also confirms a significant relationship between the campus having knowledge engineers or knowledge technicians that support the knowledge management service and its use ($R=0.433$, $p<0.01$). The table also shows that there is a significant relationship between the campus having knowledge managers who coordinate the task of knowledge management and implementation and knowledge management ($R=0.594$, $p<0.01$).

There exists a significant relationship between the university relying on its knowledge stewards that operate locally as knowledge champions and enablers and knowledge management ($R=0.416$, $p<0.01$). The table also shows that there exists a significant relationship between the campus having knowledge workers that are constantly involved in fostering the university's learning culture and knowledge management ($R=0.692$, $p<0.01$). The table also confirms a significant relationship existing between the campus having knowledge workers that are constantly promoting knowledge sharing and knowledge management ($R=0.692$, $p<0.01$).

4.4 Influence of Knowledge Management on Organization Performance

4.4.1 Influence of Knowledge Management on Academic Performance

The respondents were asked to rate the influence of knowledge management on academic performance using brief statements that were offered by means of the key (SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree). Their results were as shown in Table 4.5. The result Mean of >3.5 showed that knowledge management greatly influenced academic performance and the Standard Deviation of <1.0 indicated that the difference of responses was insignificant.

Table 4.5 Influence of Knowledge Management on Academic Performance

	SD	D	N	A	SA	MEAN	STD DEV
	%	%	%	%	%		
USIU-A views its students as customers	0.0	0.0	14.6	38.2	47.2	4.33	0.719
The stakeholders' demands are getting more and more complex	0.0	0.0	0.0	66.3	33.7	4.34	.0475
USIU-A has ensured that its students receive high-quality service	0.0	0.0	0.0	13.5	86.5	4.87	0.343
USIU-A has the responsibility to produce graduates that are able to accommodate challenges emerging in society	0.0	0.0	0.0	13.5	86.5	4.87	0.343
USIU-A is changing from a public service to a market-driven institution	0.0	12.4	14.6	39.3	33.7	3.94	0.993
USIU-A is faced with the need to improve many of its existing management practices and attitudes	0.0	0.0	0.0	25.8	74.2	4.74	0.440

Table 4.5 shows that USIU-A views its students as customers, 14.6% were neutral, 38.2% agreed, and 47.2% strongly agreed. The results had a mean of 4.33, and a standard deviation of 0.719. The table also shows that stakeholders' demands are getting more and more complex as agreed to by 66.3%, and strongly agreed to by 33.7%. These results had a mean of 4.34, and a standard deviation of 0.0475. The table shows that USIU-A has ensured that its students receive high-quality service as shown by 13.5% who agreed, and 86.5% strongly agreed. The results had a mean of 4.87, and a standard deviation of 0.343. The table also shows that USIU-A has the responsibility to produce graduates that are able to accommodate challenges emerging in society, 13.5% agreed while 86.5% strongly agreed. The results had a mean of 4.87, and a standard deviation of 0.343. When asked whether USIU-A was changing from a public service to a market-driven institution, 12.4% disagreed, 14.6% of the

respondents were neutral, 39.3% agreed, and 33.7% strongly agreed. The results had a mean of 3.94, and a standard deviation of 0.993. When asked whether USIU-A is faced with the need to improve many of its existing management practices and attitudes, 25.8% agreed while 74.2% strongly agreed. The results had a mean of 4.74, and a standard deviation of 0.440.

4.4.2 Correlations for Knowledge Management’s Influence on Academic Performance

The researcher carried out a Pearson Correlation test to determine the significance of knowledge management on academic performance and the results of the test were as shown in Table 4.6.

Table 4.6 Correlations for Knowledge Management and Academic Performance

Knowledge Management and Academic Performance	Correlations Results	N
USIU-A views its students as customers	.282** .008	89
The stakeholders’ demands are getting more and more complex	.273** .010	89
USIU-A has ensured that its students receive high-quality service	.180 .092	89
USIU-A has the responsibility to produce graduates that are able to accommodate challenges emerging in society	-.372** .000	89
USIU-A is changing from a public service to a market-driven institution	.710** .000	89
USIU-A is faced with the need to improve many of its existing management practices and attitudes	.269* .011	89

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

* Correlation is significant at the 0.05 level (2-tailed)

The results shown on Table 4.6 indicate that there exists a significant relationship between USIU-A viewing its students as customers and academic performance ($R=0.282$, $p<0.01$).

The table indicates a significant relationship between stakeholders' demands getting more and more complex and academic performance ($R=0.273$, $p=0.01$). The table shows that a significant relationship does not exist between USIU-A ensuring that its students receive high-quality service and academic performance ($R=0.180$, $p>0.05$). The table shows that there is a significant relationship between USIU-A's responsibility to produce graduates that are able to accommodate challenges emerging in society and academic performance ($R=-0.372$, $p<0.01$). The table also shows that a significant relationship exists between USIU-A changing from a public service to a market-driven institution ($R=0.710$, $p<0.01$). The table also indicates that there is a significant relationship between USIU-A being faced with the need to improve many of its existing management practices and attitudes and academic performance ($R=0.269$, $p<0.05$).

4.4.3 Influence of Knowledge Identification on Performance

The respondents were asked to rate the influence of knowledge identification on the performance of the university using brief statements that were offered by means of the key (SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree). Their results were as shown in Table 4.7. The result Mean of >4.0 showed that knowledge identification greatly influenced the university's performance and the Standard Deviation of <1.5 indicated that the difference of responses was insignificant.

When asked whether the institution is capable in discerning the location and value of knowledge, 25.8% of the respondents agreed while 74.2% strongly agreed. The results had a mean of 4.74, and a standard deviation of 0.194. When asked whether the institution can identify the restraints to knowledge flow, and opportunities to leverage the value of knowledge, 12.3% of the respondents were neutral, 51.7% agreed, and 36.0% strongly agreed. The results had a mean of 4.24, and a standard deviation of 0.432. On the question of whether knowledge within the institution can be identified by individual employees or the organization itself, 14.6% of the respondents were neutral, 23.6% agreed, and 61.8% strongly agreed. The results had a mean of 4.33, and a standard deviation of 1.109. When asked whether the institution has the ability to capture all that is related to determining core

competencies, recognize strategic capabilities, and assess the expertise level for each knowledge domain, 14.6% of the respondents were neutral, 62.9% agreed, and 22.5% strongly agreed. The results had a mean of 4.08, and a standard deviation of 0.369.

Table 4.7 Influence of Knowledge Identification on University Performance

	SD	D	N	A	SA	MEAN	STD DEV
	%	%	%	%	%		
The institution is capable in discerning the location and value of knowledge	0.0	0.0	0.0	25.8	74.2	4.74	0.194
The institution can identify the restraints to knowledge flow, and opportunities to leverage the value of knowledge	0.0	0.0	12.3	51.7	36.0	4.24	0.432
Knowledge within the institution can be identified by individual employees or the organization itself	0.0	0.0	14.6	23.6	61.8	4.33	1.109
The institution has the ability to capture all that is related to determining core competencies, recognize strategic capabilities, and assess the expertise level for each knowledge domain	0.0	0.0	14.6	62.9	22.5	4.08	0.369

4.4.4 Correlations for Knowledge Identification and University Performance

The researcher carried out a Pearson Correlation test to determine the significance of knowledge identification and the university's performance and the results of the test were as shown in Table 4.8. The results shown on Table 4.8 indicate that there exists a significant relationship between the institution capability in discerning the location and value of knowledge and performance ($R=0.522$, $P<0.01$). The table also shows that the institution's capability to identify the restraints to knowledge flow, and opportunities to leverage the value

of knowledge had a significant relationship with performance ($R=0.645$, $p<0.01$). The study showed that the ability of knowledge within the institution being identified by individual employees or the organization itself had a significant relationship with performance ($R=-0.380$, $p<0.01$). The table shows that there is no significant relationship between the institution's ability to capture all that is related to determining core competencies, recognize strategic capabilities, and assess the expertise level for each knowledge domain and performance ($R=0.077$, $p>0.05$).

Table 4.8 Correlations for Knowledge Identification and University Performance

Knowledge Identification	Correlations Results	N
The institution is capable in discerning the location and value of knowledge	.522** .000	89
The institution can identify the restraints to knowledge flow, and opportunities to leverage the value of knowledge	.645** .000	89
Knowledge within the institution can be identified by individual employees or the organization itself	-.380** .000	89
The institution has the ability to capture all that is related to determining core competencies, recognize strategic capabilities, and assess the expertise level for each knowledge domain	.077 .474	89

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

* Correlation is significant at the 0.05 level (2-tailed)

4.4.5 Influence of Knowledge Acquisition on Performance

The respondents were asked to rate the influence of knowledge acquisition on the performance of the university using brief statements that were offered by means of the key (SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree). Their results were as shown in Table 4.9. The resulting Mean of >4.0 showed that knowledge acquisition greatly influenced the university's performance and the Standard Deviation of <1.0 indicated that the difference of responses was insignificant.

Table 4.9 Influence of Knowledge Acquisition on University Performance

	SD	D	N	A	SA	MEAN	STD DEV
	%	%	%	%	%		
The university has the ability to acquire knowledge for utilization	0.0	0.0	0.0	51.7	48.3	4.48	0.503
The acquisition process in the institution is oriented to obtain the needed knowledge from both internal and external sources	0.0	0.0	0.0	40.4	59.6	4.60	0.494
The university has complete access to knowledge	0.0	0.0	0.0	64.0	36.0	4.36	0.483
The university has knowledge-based resources that facilitate the capturing of new knowledge, and exploiting of the available knowledge	0.0	0.0	0.0	38.2	61.8	4.62	0.489

When asked whether the university has the ability to acquire knowledge for utilization, 51.7% of the population agreed, while 48.3% strongly agreed. The results had a mean of 4.48, and a standard deviation of 0.503. When asked whether the acquisition process in the institution is oriented to obtain the needed knowledge from both internal and external sources, 40.4% agreed, while 59.6% strongly agreed. The results had a mean of 4.60, and a standard deviation of 0.494. When asked whether the university has complete access to knowledge, 64% of the respondents agreed, while 36% strongly agreed. The results had a mean of 4.36, and a standard deviation of 0.483. When asked whether the university has knowledge-based resources that facilitate the capturing of new knowledge, and exploiting of the available knowledge, 38.2% of the respondents agreed, while 61.8% strongly agreed. The results had a mean of 4.62, and a standard deviation of 0.489.

4.4.6 Correlations for Knowledge Acquisition and University Performance

The researcher carried out a Pearson Correlation test to determine the significance of knowledge acquisition and its influence on the university's performance and the results of the test were as shown in Table 4.10.

Table 4.10 Correlations for Knowledge Acquisition and University Performance

Knowledge Acquisition	Correlations Results	N
The university has the ability to acquire knowledge for utilization	.618** .000	89
The acquisition process in the institution is oriented to obtain the needed knowledge from both internal and external sources	.293** .005	89
The university has complete access to knowledge	.775** .000	89
The university has knowledge-based resources that facilitate the capturing of new knowledge, and exploiting of the available knowledge	.760** .000	89

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

Table 4.10 indicates that there exists a significant relationship between the university having the ability to acquire knowledge for utilization and performance ($R=0.618$, $p<0.01$). The table also shows a significant relationship between the acquisition process in the institution being oriented to obtain the needed knowledge from both internal and external sources and performance ($R=0.293$, $p<0.01$). There is a significant relationship between the university having complete access to knowledge and performance ($R=0.775$, $p<0.01$). The table also shows a significant relationship between the university having knowledge-based resources that facilitate the capturing of new knowledge, and exploiting of the available knowledge and performance ($R=0.760$, $p<0.01$).

4.4.7 Influence of Knowledge Storage on Performance

The respondents were asked to rate the influence of knowledge storage on the performance of the university using brief statements that were offered by means of the key (SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree). Their results were as shown in Table 4.11. The resulting Mean of >4.0 showed that knowledge storage greatly influenced the university's performance and the Standard Deviation of <1.0 indicated that the difference of responses was insignificant.

Table 4.11 Influence of Knowledge Storage on University Performance

	SD	D	N	A	SA	MEAN	STD DEV
	%	%	%	%	%		
The university codes and records its acquired knowledge for easy access	0.0	0.0	12.4	24.7	62.9	4.51	0.709
The institution stores its acquired knowledge using a 'Knowledge Base'	0.0	0.0	0.0	14.6	59.6	4.45	0.739
The university uses Machine-readable knowledge base	0.0	0.0	12.4	38.2	49.4	4.37	0.697
The university uses Manual knowledge base	0.0	0.0	25.8	14.6	59.6	4.34	0.865

When asked whether the university codes and records its acquired knowledge for easy access, 12.4% of the respondents were neutral, 24.7% agreed, and 62.9% strongly agreed. The results had a mean of 4.51, and a standard deviation of 0.709. When asked whether the institution stores its acquired knowledge using a 'Knowledge Base', 14.6% of the respondents agreed, and 59.6% strongly agreed. The results had a mean of 4.45, and a standard deviation of 0.739. When asked whether the university uses Machine-readable knowledge base, 12.4% were neutral, 38.2% agreed, and 49.4% strongly agreed. The results had a mean of 4.37, and a standard deviation of 0.697. When the researcher asked whether the university uses Manual knowledge base, 25.8% of the population were neutral, 14.6%

agreed, and 59.6% strongly agreed. The results had a mean of 4.34, and a standard deviation of 0.865.

4.4.8 Correlations for Knowledge Storage and University Performance

The researcher carried out a Pearson Correlation test to determine the significance of knowledge storage and its influence on the university's performance and the results of the test were as shown in Table 4.12.

Table 4.12 Correlations for Knowledge Storage and University Performance

Knowledge Storage	Correlations Results	N
The university codes and records its acquired knowledge for easy access	.644** .000	89
The institution stores its acquired knowledge using a 'Knowledge Base'	.039 .720	89
The university uses Machine-readable knowledge base	-.338** .001	89
The university uses Manual knowledge base	.515** .000	89

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

The table shows a significant relationship between the university coding and recording its acquired knowledge for easy access and performance ($R=0.644$, $p<0.01$). The table also shows that there is no significant relationship between the institution storing its acquired knowledge using a 'Knowledge Base' and performance ($R=0.039$, $p>0.01$). The table shows that there is a significant relationship between the university using Machine-readable knowledge base and performance ($R=-0.338$, $p<0.01$). The table also shows that there is a significant relationship between the university using Manual knowledge base and performance ($R=0.515$, $p<0.01$).

4.4.9 Influence of Knowledge Sharing and Performance

The respondents were asked to rate the influence of knowledge sharing and its influence on the performance of the university using brief statements that were offered by means of the key (SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree). Their results were as shown in Table 4.13. The resulting Mean of >4.0 showed that knowledge sharing greatly influenced the university's performance and the Standard Deviation of <1.0 indicated that the difference of responses was insignificant.

Table 4.13 Influence of Knowledge Sharing and University Performance

	SD	D	N	A	SA	MEAN	STD DEV
	%	%	%	%	%		
The institution has an effective processes of knowledge sharing	0.0	0.0	0.0	49.4	50.6	4.51	0.503
The university is conscious of the valuable knowledge it possess	0.0	0.0	0.0	38.2	61.8	4.62	0.489
The institution process of knowledge sharing facilitates the identification of hidden knowledge	0.0	0.0	0.0	50.6	49.4	4.49	0.503

When asked whether the institution has an effective processes of knowledge sharing, 49.4% of the respondents agreed, and another 50.6% strongly agreed. The results had a mean of 4.51, and a standard deviation of 0.503. When asked whether the university is conscious of the valuable knowledge it possess, 38.2 agreed, and 61.8% strongly agreed. The results had a mean of 4.62, and a standard deviation of 0.489. When asked whether the institution process of knowledge sharing facilitates the identification of hidden knowledge, 50.6% agreed and another 49.4% strongly agreed. The results had a mean of 4.49, and a standard deviation of 0.503.

4.4.10 Correlations for Knowledge Sharing and University Performance

The researcher carried out a Pearson Correlation test to determine the significance of knowledge sharing and its influence on the university's performance and the results of the test were as shown in Table 4.14.

Table 4.14 Correlations for Knowledge Sharing and University Performance

Knowledge Sharing	Correlations Results	N
The institution has an effective processes of knowledge sharing	.777** .000	89
The university is conscious of the valuable knowledge it possess	.194 .069	89
The institution process of knowledge sharing facilitates the identification of hidden knowledge	.438** .000	89

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

The table shows that there is a significant relationship between the institution having an effective processes of knowledge sharing and performance ($R=0.777$, $p<0.01$). The table shows there is no significant relationship between the university being conscious of the valuable knowledge it possess and performance ($R=0.194$, $p>0.01$). The table shows that there is a significant relationship between the institution process of knowledge sharing that facilitates the identification of hidden knowledge and performance ($R=0.438$, $p<0.01$).

4.4.11 Influence of Knowledge Application and Performance

The respondents were asked to rate the influence of knowledge application and its influence on the performance of the university using brief statements that were offered by means of the key (SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree). Their results were as shown in Table 4.15. The resulting Mean of >4.0 showed that knowledge sharing greatly influenced the university's performance and the Standard Deviation of <1.0 indicated that the difference of responses was insignificant.

Table 4.15 Influence of Knowledge Application and Performance

	SD	D	N	A	SA	MEAN	STD DEV
	%	%	%	%	%		
The university puts into use the knowledge that it has stored	0.0	0.0	12.4	23.6	64.0	4.52	0.709
The institution also acquires new knowledge and puts it into use	0.0	0.0	0.0	23.6	76.4	4.76	0.427
Knowledge application in USIU-A involves effective retrieval mechanisms that enable members of the university to access relevant knowledge	0.0	0.0	0.0	49.4	50.6	4.51	0.503

When asked whether the university puts into use the knowledge that it has stored, 12.4% of the respondents were neutral, 23.6% agreed, and 64.0% strongly agreed. The results had a mean of 4.52, and a standard deviation of 0.709. When asked whether the institution acquires new knowledge and puts it into use, 23.6% agreed and 76.4% strongly agreed. The results had a mean of 4.76, and a standard deviation of 0.427. When asked whether the knowledge application in USIU-A involves effective retrieval mechanisms that enable members of the university to access relevant knowledge, 49.4% agreed and 50.6% strongly agreed. The results had a mean of 4.51, and a standard deviation of 0.503.

4.4.12 Correlations for Knowledge Application and University Performance

The researcher carried out a Pearson Correlation test to determine the significance of knowledge application and its influence on the university's performance and the results of the test were as shown in Table 4.16.

The table shows that there is a significant relationship between the university putting into use the knowledge that it has stored and performance ($R=0.562$, $p<0.01$). The table shows that there is no significant relationship between the institution acquiring new knowledge and

putting it into use ($R=-0.043$, $p>0.01$). The table indicates a significant relationship between knowledge application in USIU-A involving effective retrieval mechanisms that enable members of the university to access relevant knowledge and performance ($R=0.311$, $p<0.01$).

Table 4.16 Correlations for Knowledge Application and University Performance

Knowledge Application	Correlations Results	N
The university puts into use the knowledge that it has stored	.562** .000	89
The institution also acquires new knowledge and puts it into use	-.043 .689	89
Knowledge application in USIU-A involves effective retrieval mechanisms that enable members of the university to access relevant knowledge	.311** .003	89

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

4.5 Strategies that Facilitate the Adoption of Knowledge Management in Universities

4.5.1 Knowledge Management Strategies

The researcher asked the respondents to suggest strategies the institution would adopt and improve knowledge management. The respondents indicated the university should: introduce a CARS database that generates reports; provide digital repositories, and improve on the existing handbooks; make use of meetings, seminars, workshops and symposiums to acquire new knowledge; create online access systems for both staff members and students; involve all stakeholders in knowledge management; make use of the research office; write publications; make use of online platforms; and consult both internal and external lecturers.

4.5.2 Knowledge Management Challenges

The researcher asked the respondents to list the various challenges the institution faced when applying knowledge management. The respondents indicated: absenteeism during knowledge dissemination, lack of email reading, complex access to knowledge management by employees; negative perception towards change and new ideas; and resistance to change.

4.5.3 Type of Knowledge Management in the University

The respondents were asked to rate the type(s) of knowledge management used in the university using brief statements that were offered by means of the key (SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree). Their results were as shown in Table 4.17. The resulting Mean of >3.0 showed that knowledge sharing greatly influenced the university's performance and the Standard Deviation of <1.5 indicated that the difference of responses was insignificant.

When asked if the university uses written documents as part of its knowledge management sharing strategy, 32.6% agreed and 67.4% strongly agreed. The results had a mean of 4.67, and a standard deviation of 0.471. When asked if the university to some extent has written document that are relic (contain out-of-date information), 28.1% disagreed, 22.5% were neutral, 36% agreed, and 13.5% strongly agreed. The results had a mean of 3.35, and a standard deviation of 1.035. When asked if the university uses spoken knowledge-sharing strategies in knowledge management, 64% agreed and 36% strongly agreed. The results had a mean of 4.36, and a standard deviation of 0.483. When asked if the spoken knowledge sharing used by the university, draw participants from larger geographic areas, 12.4% of the respondents were neutral, 41.6% agreed, and 46.1% strongly agreed. The results had a mean of 4.34, and a standard deviation of 0.690. When asked if the spoken knowledge sharing strategy used by the university supports intense participation, 53.9% agreed, and 46.1% strongly agreed. The results had a mean of 4.46, and a standard deviation of 0.501. When asked whether workshops used by USIU-A require active engagement from participants, 25.8% were neutral, 28.1% agreed, and 46.1% strongly agreed. The results had a mean of 4.20, and a standard deviation of 0.828. When asked if workshops used by USIU-A emphasize on problem solving and hands-on training, 13.5% were equally neutral and had agreed, and 73% strongly agreed. The results had a mean of 4.60, and a standard deviation of 0.719.

Table 4.17 Influence of Knowledge Application and Performance

	SD	D	N	A	SA	MEAN	STD DEV
	%	%	%	%	%		
The university uses written documents as part of its knowledge management sharing strategy	0.0	0.0	0.0	32.6	67.4	4.67	0.471
The university to some extent has written document that are relic (contain out-of-date information)	0.0	28.1	22.5	36.0	13.5	3.35	1.035
The university uses spoken knowledge-sharing strategies in knowledge management	0.0	0.0	0.0	64.0	36.0	4.36	0.483
The spoken knowledge sharing used by the university, draw participants from larger geographic areas	0.0	0.0	12.4	41.6	46.1	4.34	0.690
The spoken knowledge sharing strategy used by the university supports intense participation	0.0	0.0	0.0	53.9	46.1	4.46	0.501
Workshops used by USIU-A require active engagement from participants	0.0	0.0	25.8	28.1	46.1	4.20	0.828
Workshops used by USIU-A emphasize on problem solving and hands-on training	0.0	0.0	13.5	13.5	73.0	4.60	0.719

4.5.4 Correlations for Types of Knowledge Management in the University

The researcher carried out a Pearson Correlation test to determine the significance of the types of knowledge management used by the university and the results of the test were as shown in Table 4.18.

The tables shows a significant relationship between the university using written documents as part of its knowledge management sharing strategy and performance ($R=0.748$, $p<0.01$). It also shows that there is a significant relationship between the university to some extent having written document that are relic (contain out-of-date information) and performance ($R=-0.231$, $p<0.05$). The table shows a significant relationship between the university using spoken knowledge-sharing strategies in knowledge management and performance ($R=-0.478$, $p<0.01$). The table indicates that there is no significant relationship between the spoken knowledge sharing used by the university, drawing participants from larger geographic areas ($R=0.097$, $p>0.05$).

Table 4.18 Correlations for the Type of Knowledge Management in the University

Knowledge Management Type	Correlations Results	N
The university uses written documents as part of its knowledge management sharing strategy	.748** .000	89
The university to some extent has written document that are relic (contain out-of-date information)	-.231' .030	89
The university uses spoken knowledge-sharing strategies in knowledge management	-.478** .000	89
The spoken knowledge sharing used by the university, draw participants from larger geographic areas	.097 .366	89
The spoken knowledge sharing strategy used by the university supports intense participation	-.223 .036	89
Workshops used by USIU-A require active engagement from participants	-.673** .000	89
Workshops used by USIU-A emphasize on problem solving and hands-on training	-.394** .000	89

* Correlation is significant at the 0.05 level (2-tailed)

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

The table shows that there is a significant relationship that exists between spoken knowledge sharing strategy used by the university supporting intense participation ($R=-0.223$, $p<0.05$). The table shows that there exists a significant relationship between workshops used by USIU-A requiring active engagement from participants and performance ($R=-0.673$, $p<0.01$). The table shows that there exists a significant relationship between workshops used by USIU-A emphasizing on problem solving and hands-on training and performance ($R=-0.394$, $p<0.01$).

4.5.5 Suggestion for Recommendations

The respondents were asked to suggest the way USIU-A would improve on its knowledge management, and their suggestions were: the institution needs to create a conducive environment for the participants; they also need to inform the relevant participants during a workshop; and the institution needs to involve students and other stakeholders.

4.6 Chapter Summary

This chapter has presented the findings of the study by giving brief explanations on the figures presented. The findings have been presented in the form of figures and tables. Frequency analysis has been used to give percentages, descriptive analysis has been used to give the means and standard deviations, Pearson Correlation has also been used for analysis. The next chapter gives the study's discussion, conclusion and offers recommendations.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the study. The chapter gives the study summary and the discussions guided by the study objectives. The chapter gives the study conclusions that have been derived from the study findings. The chapter also offers recommendations for the study categorized by recommendations for improvement and those for further studies.

5.2 Summary

The main purpose of the study was to determine knowledge management and its effect on organizational performance. The study focused on the effect of knowledge management on United States International University-Africa (USIU-A). The study focused on determining the following: to examine knowledge management in universities; to determine the impact of knowledge management systems on organization performance; and to examine the strategies that facilitates the adoption of knowledge management in universities.

The study showed that the university had infrastructure, info-structure, and info-culture that facilitates knowledge management. The study also revealed that USIU-A had a chief knowledge officer who provides strategic leadership for knowledge management. The study showed that the institution built political alliances to promote knowledge sponsorship, placing the university at a better position in terms of knowledge management. The university had knowledge analysts who identified knowledge practices and trends, as well as knowledge engineers/ technicians who supported the knowledge management service and its use.

The study showed that the university had the ability to acquire knowledge for utilization and that the acquisition process had been oriented to obtain the needed knowledge from both internal and external sources. This implied that the university had complete access to knowledge acquisition and management. The study also showed that the university had proper storage and sharing processes in place that facilitated sharing with all stakeholders.

The study showed that the university used written documents as part of its knowledge management sharing strategy, however, some of this had become redundant due to their nature in becoming relics. The study showed that USIU-A made use of spoken knowledge-sharing strategies in their knowledge management process, to draw participants from larger geographic areas as well as supporting intense participation, increasing both the acquisition and sharing process of the university. The university also made use of workshops to facilitate active engagement from participants increasing the knowledge data for the university.

5.3 Discussions

5.3.1 Knowledge Management in Universities

When the respondents were asked whether the university has infrastructure that facilitates knowledge management, 23.6% agreed, and 76.4% strongly agreed. Mikulecky and Mikulecka (2009) observe that, by its nature, university environment is suitable for the application of knowledge management principles and methods because universities usually possess modern information infrastructure, knowledge sharing with others is natural for teachers and the desire of students is to acquire knowledge from accessible sources as fast as possible.

The respondents were also asked whether the university has info-structure (formal rules governing exchanges and sense making between people), and 25.8% were neutral, 47.2% agreed, and 27.0% strongly agreed. Pan and Scarborough (2009) suggest that knowledge needs to be seen as intrinsic in social interaction, rather than as a resource disseminated from one person to another. They further propose that these socio-technical components comprise info-structure - incorporates the formal rules governing exchanges and sense making between people.

For the question on whether the university has info-culture (the background knowledge embedded in social relations and work group process), 13.5% were neutral, 34.8% agreed, while 51.7% strongly agreed. Pan and Scarborough (2009) state that info-culture is the background knowledge embedded in social relations and work group process. The authors

state that, organizational knowledge is socially constructed and shaped by the reciprocal interaction between technological and organizational elements.

When asked whether the institution has a chief knowledge officer who provides strategic leadership for knowledge management, 12.4% strongly disagreed, 13.5% disagreed, 24.7% were neutral, 25.8% agreed, and 23.6% strongly agreed. Bergeron (2013) suggests that knowledge workers support knowledge management activities in five roles, which are: the chief knowledge officer provides strategic leadership for knowledge management.

When asked whether the institution has a chief knowledge officer who builds political alliances to promote knowledge sponsorship, 12.4% strongly disagreed, 13.5% disagreed, 34.8% were neutral, 27.0% agreed, while 12.4% strongly agreed. Bergeron (2013) suggests that chief knowledge officers build political alliances to promote knowledge sponsorship.

When probed on whether the university has knowledge analysts who identify knowledge practice and trends, 12.4% strongly disagreed, 13.5% disagreed, 74.2% agreed. Bergeron (2013) suggests that knowledge analysts identify knowledge practice and trends for institutions.

When asked whether the campus has knowledge engineers or knowledge technicians that support the knowledge management service and its use, 12.4% strongly disagreed, 13.5% disagreed, 10.1% were neutral, 51.7% agreed, while 12.4% strongly agreed. Bergeron (2013) suggests that knowledge engineers or knowledge technicians support the knowledge management service and its use in organizations.

The respondents were asked whether the campus has knowledge managers who coordinate the task of knowledge management and implementation, 25.8% disagreed, 10.1% were neutral, 50.6% agreed, and 13.5% strongly agreed. Bergeron (2013) suggests that knowledge managers coordinate the task of knowledge management implementation in institutions.

When asked whether the university relies on its knowledge stewards that operate locally as knowledge champions and enablers, 25.8% disagreed, 61.8% agreed, and 12.4% strongly agreed. Bergeron (2013) states that knowledge stewards operate locally as knowledge champions and enablers for institutions.

When asked whether the campus has knowledge workers that are constantly involved in fostering the university's learning culture, 13.5% disagreed, 74.2% agreed, and 12.4% strongly agreed. Rowley (2010) state that knowledge workers are constantly involved in fostering the university's learning culture.

When asked whether the campus has knowledge workers that are constantly promoting knowledge sharing, 13.5% disagreed, 73.0% agreed, and 13.5% strongly agreed. Rowley (2010) state that knowledge workers are constantly promoting knowledge sharing in universities.

5.3.2 Influence of Knowledge Management on Organization Performance

The study shows that USIU-A views its students as customers, 14.6% were neutral, 38.2% agreed, and 47.2% strongly agreed. Becerra-Fernandez and Sabherwal (2014) state that profound changes in competition have made universities, and high education institutions (HEIs) think like business to the extent that students are now being treated as customers.

The table also shows that stakeholders' demands are getting more and more complex as agreed to by 66.3%, and strongly agreed to by 33.7%. Becerra-Fernandez and Sabherwal (2014) state that in addition to competition, the stakeholders' demands are getting more and more complex, which must be attended to whether the educational organization must maintain its competitive advantage.

The study shows that USIU-A has ensured that its students receive high-quality service as shown by 13.5% who agreed, and 86.5% strongly agreed. Suryadi (2010) states that the high education institutions (HEIs) must ensure that the students receive high - quality service.

The study also shows that USIU-A has the responsibility to produce graduates that are able to accommodate challenges emerging in society, 13.5% agreed while 86.5% strongly agreed. Suryadi (2010) states HEIs have the responsibility to produce graduates that are able to accommodate challenges emerging in society, such as graduates producing high - quality profile and competence in their respective professions.

When asked whether USIU-A was changing from a public service to a market-driven institution, 12.4% disagreed, 14.6% of the respondents were neutral, 39.3% agreed, and 33.7% strongly agreed. When asked whether USIU-A is faced with the need to improve many of its existing management practices and attitudes, 25.8% agreed while 74.2% strongly agreed. Kebao and Junxun (2008) note that HEIs are changing from a public service to a market - driven one, and they now face pressing concerns such as international competition. For that reason, HEIs are faced with the need to improve many of their existing management practices and attitudes.

When asked whether the institution is capable in discerning the location and value of knowledge, 25.8% of the respondents agreed while 74.2% strongly agreed. When asked whether the institution can identify the restraints to knowledge flow, and opportunities to leverage the value of knowledge, 12.3% of the respondents were neutral, 51.7% agreed, and 36.0% strongly agreed. Liao and Wu (2009) state that, knowledge identification is an action of discerning the location and value of knowledge, restraints to knowledge flow, and opportunities to leverage the value of knowledge.

On the question of whether knowledge within the institution can be identified by individual employees or the organization itself, 14.6% of the respondents were neutral, 23.6% agreed, and 61.8% strongly agreed. Liao and Wu (2009) state that knowledge can be identified by individual employees or the organization. Therefore, knowledge identification is well known as the initial stage of managing knowledge.

When asked whether the university has the ability to acquire knowledge for utilization, 51.7% of the population agreed, while 48.3% strongly agreed. According to Mohammad, Hamden and Sabri (2010), once the needed knowledge is identified, it has to be acquired for utilization. Thus, acquisition process is then oriented to obtain the needed knowledge from both internal and external sources.

When asked whether the university has knowledge-based resources that facilitate the capturing of new knowledge, and exploiting of the available knowledge, 38.2% of the respondents agreed, while 61.8% strongly agreed. King (2009) notes that knowledge management requires one to have complete access to knowledge and having knowledge-based resources that facilitate the capturing of new knowledge, and exploiting the available knowledge.

When asked whether the university codes and records its acquired knowledge for easy access, 12.4% of the respondents were neutral, 24.7% agreed, and 62.9% strongly agreed. According to Kiessling *et al.* (2009), after obtaining the required knowledge, it is expected to be coded and recorded to enable easy access to such knowledge.

When asked whether the institution stores its acquired knowledge using a 'Knowledge Base', 14.6% of the respondents agreed, and 59.6% strongly agreed. Becerra-Fernandez and Sabherwal (2014) and Asoh *et al.* (2007) state that there is no way one can talk about knowledge storage without mentioning a special kind of database known as the 'Knowledge Base', which allows collection, organization and retrieval of knowledge to be carried out in a computerized manner.

When asked whether the institution has an effective processes of knowledge sharing, 49.4% of the respondents agreed, and another 50.6% strongly agreed. When asked whether the university is conscious of the valuable knowledge it possess, 38.2 agreed, and 61.8% strongly agreed. According to Chilton (2013), the success of any knowledge management processes in any organization relies on the effectiveness of the knowledge sharing. The general problem

in knowledge management is that most of the large organizations are not conscious of the valuable knowledge they possess (Kiessling *et al.*, 2009).

When asked whether the university puts into use the knowledge that it has stored, 12.4% of the respondents were neutral, 23.6% agreed, and 64.0% strongly agreed. When asked whether the institution acquires new knowledge and puts it into use, 23.6% agreed and 76.4% strongly agreed. Karadsheh *et al.* (2009) argued that the process of applying knowledge happens when new knowledge is acquired and put to use.

When asked whether the knowledge application in USIU-A involves effective retrieval mechanisms that enable members of the university to access relevant knowledge, 49.4% agreed and 50.6% strongly agreed. Lee and Lee (2010) described knowledge application as the effective retrieval mechanisms that facilitates access to knowledge. The authors further revealed that knowledge application is the actual process of knowledge retrieval and knowledge dissemination.

5.3.3 Strategies that Facilitate the Adoption of Knowledge Management in Universities

When asked if the university uses written documents as part of its knowledge management sharing strategy, 32.6% agreed and 67.4% strongly agreed. Shortland and Gregory (2011) state that writing creates permanent knowledge-sharing products. The biggest advantage of written documents is durability: a well-written article on a research project or body of research can be useful for years after it is written, even if the author has moved on to other things. Access to written documents is usually available to all interested parties, regardless of proximity to the author. Writing also allows for extensive planning and editing during the creation of documents, a “safe” way to communicate as writers can take time to compose their messages. For readers, written documents allow them reflect on their reading and return to previous sections of text to clarify understanding.

When asked if the university to some extent has written document that are relic (contain out-of-date information), 28.1% disagreed, 22.5% were neutral, 36% agreed, and 13.5% strongly

agreed. According to McDermott (2009), the permanence of written documents is also a potential weakness. Depending on the pace at which knowledge on a particular topic evolves, written documents may become relic-like, containing out-of-date information. If the pace of ideas and innovations is fast enough, a written document may become out-of-date before it even reaches intended audiences.

When asked if the university uses spoken knowledge-sharing strategies in knowledge management, 64% agreed and 36% strongly agreed. The Canadian Health Services Research Foundation (2012) notes that spoken knowledge-sharing strategies include conferences, lectures and presentations, workshops, conversation sessions, and meetings. Although scientific conferences have traditionally been events for researchers to present and discuss their work, increasingly researchers, policymakers, and service providers are networking at conferences on areas of shared interest.

When asked if the spoken knowledge sharing used by the university, draw participants from larger geographic areas, 12.4% of the respondents were neutral, 41.6% agreed, and 46.1% strongly agreed. According to the Canadian Health Services Research Foundation (2012), conferences often draw participants from larger geographic areas, one advantage is the opportunity to bring together individuals who would not have the chance to interact face-to-face with one another on a day-to-day basis.

When asked if the spoken knowledge sharing strategy used by the university supports intense participation, 53.9% agreed, and 46.1% strongly agreed. Canadian Health Services Research Foundation (2012) notes that conferences may support intense participation in knowledge sharing on one or several related topic areas.

When asked whether workshops used by USIU-A require active engagement from participants, 25.8% were neutral, 28.1% agreed, and 46.1% strongly agreed. McDermott (2009) states that workshops tend to require active engagement from participants with emphasis on problem solving and hands-on training. The interactivity of workshops places a

limit on the possible number of participants; however, break-out groups and other workshop strategies may be used to accommodate higher numbers of participants.

When asked if workshops used by USIU-A emphasize on problem solving and hands-on training, 13.5% were equally neutral and had agreed, and 73% strongly agreed. Shortland and Gregory (2011) workshops can have a variety of formats, but are essentially a group of people coming together to share problems, learn from each other, change practices, and find solutions. One source recommends that when organizing a workshop, five essential steps are needed: decide on an appropriate format for the workshop; choose a suitable venue; ensure the content is relevant to the group; after each content section and at the end of the workshop, make a list of outcomes/recommendations/steps for action to ensure that emerging ideas are summarized; and stay on schedule.

5.4 Conclusions

5.4.1 Knowledge Management in Universities

The study has shown that the university has infrastructure, info-structure, and info-culture that facilitates knowledge management. The study also revealed that USIU-A has a chief knowledge officer who provides strategic leadership for knowledge management, as well as builds political alliances to promote knowledge sponsorship, placing the university at a better position in terms of knowledge management. The university has knowledge analysts who identify knowledge practice and trends, as well as knowledge engineers/ technicians who support the knowledge management service and its use.

5.4.2 Influence of Knowledge Management on Organization Performance

The study concludes that the university has the ability to acquire knowledge for utilization and that the acquisition process has been oriented to obtain the needed knowledge from both internal and external sources. This means that the university has complete access to knowledge acquisition and management. The study also concludes that the university has proper storage and sharing processes in place that facilitate sharing with all stakeholders.

5.4.3 Strategies that Facilitate the Adoption of Knowledge Management in Universities

The study concludes that the university uses written documents as part of its knowledge management sharing strategy, however, some of this has become redundant due to their nature in becoming relic. The study concludes that USIU-A makes use of spoken knowledge-sharing strategies in their knowledge management process, to draw participants from larger geographic areas as well as supporting intense participation, increasing both the acquisition and sharing process of the university. The university also makes use of workshops to facilitate active engagement from participants increasing the knowledge data for the university.

5.5 Recommendations

5.5.1 Recommendations for Improvement

5.5.1.1 Knowledge Management in Universities

The study recommends the institution to introduce a CARS database that generates reports; provide digital repositories, and improve on the existing handbooks; make use of meetings, seminars, workshops and symposiums to acquire new knowledge; create online access systems for both staff members and students; involve all stakeholders in knowledge management; make use of the research office; write publications; make use of online platforms; and consult both internal and external lecturers, to ensure that their knowledge management is up-to-date, and servers all the university stakeholders.

5.5.1.2 Influence of Knowledge Management on Organization Performance

The university needs to come with motivational structures that will deter absenteeism during knowledge dissemination platforms, as well as encourage both staff and students to read their emails. The institution also needs to create simpler processes for accessing knowledge databases, as well as change the negative perception towards change and new ideas that have been formed in order to reduce the resistance to change.

5.5.1.3 Strategies that Facilitate the Adoption of Knowledge Management in Universities

The study recommends the university to update its sources of knowledge from time to time to ensure that they are updated. The university needs to create a policy on the knowledge data stored so as to ensure that they minimize the risk of using relic data. The knowledge stewards need to be trained on the proper processes of updating the knowledge stored with the university and the process of managing the relic data that may be useful.

5.5.2 Recommendations for Further Studies

This study has focused on the effect of knowledge management on university performance with a key focus on USIU-A. The study recommends that further studies be carried out that will focus on other areas that will facilitate improvement in both performance and knowledge management dissemination. This will build on the study and provide stakeholders with deeper insights on the impact of knowledge management on performance.

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APPENDICES

APPENDIX I: QUESTIONNAIRE

I am a student at the United States International University - Africa pursuing a Master's Degree in Business Administration. I am undertaking a research project on the effects of Knowledge Management in Universities as part of my requirement. I would be grateful if you accept to participate in this research. The information you give shall be treated with the utmost confidentiality and shall be used solely for this research study. A copy of the same shall be availed to you on request.

Bio Data

1. Gender

Male () Female ()

2. What is your marital status?

Single () Married () Divorced () Widowed ()

Other () Please Specify _____

3. Age Group

21-25 Yrs () 26-30 Yrs () 31-35 Yrs () 36-40 Yrs ()
41-45 Yrs () 46-50 Yrs () 51-55 Yrs () 56 and Above ()

4. How many years have you worked in USIU-A?

1-5 Yrs () 6-10 Yrs () 11-15 Yrs () 16-20 Yrs ()
21-25 Yrs () 26-30 Yrs () 31-35 Yrs () 36 and Above ()

5. Does the institution utilize knowledge management?

Yes () No () No Idea ()

Knowledge Management in Universities

6. List the various sources of knowledge you know exist within the institution.

7. Do you believe that experience and expertise is shared among staff and students within the university?

Yes () No () No Idea ()

8. Do you believe that this shared experience and expertise among staff and students within the university is done following specific rules and procedures?

Yes () No () No Idea ()

9. Do you believe that this shared experience and expertise among staff and students within the university is coordinated by designated professionals?

Yes () No () No Idea ()

10. Do you believe that this shared experience and expertise among staff and students within the university is done using the appropriate technologies?

Yes () No () No Idea ()

11. How would you agree and rate the following statement on the socio-technical elements of knowledge management systems in the university and its knowledge workers?

	SD	D	N	A	SA
The university has infrastructure that facilitate knowledge management					
The university has info-structure (formal rules governing exchanges and sense making between people)					
The university has info-culture (the background knowledge embedded in social relations and work group process)					

The institution has a chief knowledge officer who provides strategic leadership for knowledge management					
The institution has a chief knowledge officer who builds political alliances to promotes knowledge sponsorship					
The university has knowledge analysts who identify knowledge practice and trends					
The campus has knowledge engineers or knowledge technicians that support the knowledge management service and its use					
The campus has knowledge managers who coordinate the task of knowledge management and implementation					
The university relies on its knowledge stewards that operate locally as knowledge champions and enablers					
The campus has knowledge workers that are constantly involved in fostering the university’s learning culture					
The campus has knowledge workers that are constantly promoting knowledge sharing					
(KEY: SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree)					

Influence of Knowledge Management on Organization Performance

12. How would you rate the following statements when comparing the academic performance of the university in terms of knowledge management and learning?

	SD	D	N	A	SA
USIU-A views its students as customers					
The stakeholders’ demands are getting more and more complex					
USIU-A has ensured that its students receive high-quality service					
USIU-A has the responsibility to produce graduates that are able to accommodate challenges emerging in society					

USIU-A is changing from a public service to a market-driven institution					
USIU-A is faced with the need to improve many of its existing management practices and attitudes					
(KEY: SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree)					

13. How would you rate the link between Knowledge Identification (KID) and performance in the university, using the following statements?

	SD	D	N	A	SA
The institution is capable in discerning the location and value of knowledge					
The institution can identify the restraints to knowledge flow, and opportunities to leverage the value of knowledge					
Knowledge within the institution can be identified by individual employees or the organization itself					
The institution has the ability to capture all that is related to determining core competencies, recognize strategic capabilities, and assess the expertise level for each knowledge domain					
(KEY: SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree)					

14. How would you rate the link between Knowledge Acquisition (KAC) and performance in the university, using the following statements?

	SD	D	N	A	SA
The university has the ability to acquire knowledge for utilization					
The acquisition process in the institution is oriented to obtain the needed knowledge from both internal and external sources					
The university has complete access to knowledge					
The university has knowledge-based resources that facilitate					

the capturing of new knowledge, and exploiting of the available knowledge					
(KEY: SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree)					

15. How would you rate the link between Knowledge Storage (KST) and performance in the university, using the following statements?

	SD	D	N	A	SA
The university codes and records its acquired knowledge for easy access					
The institution stores its acquired knowledge using a 'Knowledge Base'					
The university uses Machine-readable knowledge base					
The university uses Manual knowledge base					
(KEY: SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree)					

16. How would you rate the link between Knowledge Sharing (KSH) and performance in the university, using the following statements?

	SD	D	N	A	SA
The institution has an effective processes of knowledge sharing					
The university is conscious of the valuable knowledge it possess					
The institution process of knowledge sharing facilitates the identification of hidden knowledge					
(KEY: SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree)					

17. How would you rate the link between Knowledge Application (KAP) and performance in the university, using the following statements?

	SD	D	N	A	SA
The university puts into use the knowledge that it has stored					

The institution also acquires new knowledge and puts it into use					
Knowledge application in USIU-A involves effective retrieval mechanisms that enable members of the university to access relevant knowledge					
(KEY: SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree)					

Strategies that Facilitate the Adoption of Knowledge Management in Universities

18. What strategies has the university put in place to adopt knowledge management?

19. What challenges are faced by the university’s strategies of knowledge management?

20. How would you rate the following statements about knowledge management in the university?

	SD	D	N	A	SA
The university uses written documents as part of its knowledge management sharing strategy					
The university to some extent has written document that are relic (contain out-of-date information)					
The university uses spoken knowledge-sharing strategies in knowledge management					
The spoken knowledge sharing used by the university, draw					

participants from larger geographic areas					
The spoken knowledge sharing strategy used by the university supports intense participation					
Workshops used by USIU-A require active engagement from participants					
Workshops used by USIU-A emphasize on problem solving and hands-on training					
(KEY: SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree)					

21. In your opinion, what should the university do, to ensure its knowledge management strategies are effective?

THANK YOU

APPENDIX II: POPULATION DISTRIBUTION

Department	Number
Admissions	12
Ahadi Project	16
Alumni Affairs	1
BMG Foundation	2
Cafeteria	29
CEED	2
Chandaria School of Business	41
Colorado State University	1
Counseling	5
Dean Student Affairs	4
DVC – Academic Affairs	3
DVC – Student Affairs	2
Finance	21
Goldman Sachs	1
Health Services	6
Hostels	18
Human Resources	3
Information and Technology	22
Institutional Research and Advancement	4
Internal Audit	2
Laundry	2
Library	27
Maintenance and Facilities	25
Placement and Career Services	3
Public Relations	2
Purchasing	3
Quality Assurance	4
Registrar’s Office	7
Research and Development	5
School of Arts and Sciences	52
School of Pharmacy and Health Services	8
School of Science and Technology	36
Security	5
Student Activities	6
SUNNY LDI and IDG-Kenya	10
Transport and Mechanic	14
Vice Chancellor’s Office	6
TOTAL	446

Source: (USIU-A Human Resource Office, 2015)