Knowledge Management Practices in Academic Libraries in Ghana

Florence Odarkor Entsua-Mensah
Department of Information Studies
University of Ghana, Legon
FEntsua-Mensah@ug.edu.gh

T. B. Van Der Walt
Department of Information Science
University of South Africa, Pretoria

Abstract

Rationale of Study – This study investigated the extent and nature of knowledge management practices among Ghanaian academic libraries.

Methodology – To achieve the aims of the study, an exploratory survey research design was employed. The study was mainly qualitative, with data collected from thirty-one (31) head librarians of the selected academic libraries using interviews. Data collected were analysed using the thematic approach.

Findings – Findings showed that the extent and nature of KM by academic libraries were bifurcated, given that the academic libraries had to deal with knowledge from two streams. One is knowledge gained through professional library practices and the second deals with knowledge from the academic community, including both student and faculty research. The findings also showed that with regards to the knowledge management practices employed by libraries to manage knowledge in academic libraries, mentorship, coaching, peer assistance, refresher courses, open access, conferences, orientation programmes and brainstorming were some of the KMP used in the academic libraries of Ghana.

Implications – The way forward for academic libraries to fully embrace KM is for academic institutions to properly equip their libraries with modern technologies.

Originality – This is one of the few studies exploring KM practices in academic libraries in sub-Saharan Africa.

Keywords

Knowledge management; knowledge management systems; academic libraries; Ghana

1 Introduction

In today's economic setup, business organisations have predominantly focused on the knowledge management (KM) process (Madhl & Nassar 2021). This is especially because of the proliferation of information technology (IT) and the changing nature of organisational forms. Perhaps this paradigm shift to a knowledge-based economy is what has stimulated most of the studies in KM from different parts of the world. KM has mainly been defined as a systematic and purposeful process of creating, storing, sharing and re-using organisational knowledge (know-how) to enable an organisation to achieve its goals and objectives (Iyoha & Igbinedion, 2022). This suggests that KM is more concerned with an environment that encourages the creation and sharing of knowledge, where knowledge sharing is power as opposed to the old adage knowledge is power.

Mainstream literature on KM indicates that the application of KM practices and systems contributes to an improvement in organisational performance, economic success in the marketplace, organisational creativity, operational effectiveness, quality of products and services, as well as economic sustainability (Husain & Nazim, 2013; Tasmin et al., 2012; de Bem Machado et al., 2022; Khan et al., 2021). The advantages of KM practices have been noted as aiding organisations to refocus on using their already existing knowledge; creating the environment for innovation rather than limiting themselves to best practice solutions only; enabling convergence towards knowledge portals rather than separate silos of knowledge; and promoting interconnectedness among departments, employees and systems in an organisation. There is a preponderance of research (studies) documenting the significant role of KM in the survival of the modern organisation in the knowledge economy (Husain & Nazim, 2013; Tasmin et al., 2012; Alrawi, 2008) and the academic libraries in Ghana are no exception.

Despite the recognised essence of KM in all organisations including academic libraries, there seems to be a void in the existing of knowledge on KM and libraries. Ponti (2008, p. 266) and Sarrafzadeh et al. (2010, p. 198) argue that there is a gap in research and work on KM and libraries. In line with these assertions, some key issues remain under-researched, if not totally ignored. One of these issues is the the extent and nature of KM in academic libraries in sub-Saharan Africa and the seemingly little effort on the part of academic libraries to adopt KM (Iyoha & Igbinedion, 2022). The literature further stresses that in Africa, in particular, the available literature on KM and libraries are skewed away from the sub-Saharan region (Shury & Jardine, 2022) of which Ghana is a

part. Therefore, the purpose of this study was to investigate the nature (how) and the extent to which academic libraries in Ghana practise KM and the challenges they face.

2 Literature Review

This literature review is based on the key themes of the objectives of the study. These are the extent of knowledge management practices in academic libraries; nature of knowledge management practices in academic libraries; and the challenges of knowledge management practices in academic libraries.

The extent of KM practices in academic libraries

The literature on KM and academic libraries mainly highlight the role of academic libraries in managing knowledge generated by its faculty with little focus on how the knowledge of library staff can be managed. What this means is that the studies that explain KM implications in academic libraries (Koloniari & Fassoulis, 2017; Daland, 2016; Parker, 2012) provide explanations from two broad perspectives. The first perspective focuses on the roles or responsibilities that academic libraries should assume in the management of knowledge for their clients (Asadi et al., 2019; Jain, 2013; Tandale, 2011; Daneshgar & Bosanquet, 2011). The second perspective is concerned with how academic libraries can manage knowledge to enhance service delivery (Fullwood et al., 2019; Manafu, 2016; Agarwal & Islam, 2015; Plockey & Amuda, 2010; Aswath & Gupta, 2009). These studies focused on one perspective at a time, and not both. Using separate approaches does not help to provide a coherent explanation of the lack of KM application in academic libraries, as it leads to scattered views on KM implications to LIS, particularly in academic libraries. Indeed, Daland (2016) argued that there is limited literature on KM for librarians as knowledge workers. According to him, a focus on library staff's knowledge and skills and the management of this would be a fruitful way to face future library challenges. That notwithstanding, libraries still have a primary role to organise knowledge for their clients – hence, the need for a KM framework that manages knowledge from the two streams: that is, library staff's knowledge and knowledge captured in library's collection. Knowledge management is currently a discussion point in diverse organisations. Academic libraries are one of the organisations, being regarded as centres of knowledge (Jain, 2007). Jain (2009) asserts that the management of knowledge attempts to engage all the processes like identification sharing and creation of knowledge. To achieve the goals of organisations, there is a need to exploit and develop knowledge. Hence, Jain (2009) defined KM as a focussed management process to capture, exploit,

share and apply both implicit and explicit knowledge for the benefit of the employees, organisation and its customers. She maintains that information professionals in academic libraries also capture, store, exploit, share and apply both implicit and explicit knowledge to assist in the curriculum. KM is consequently utilised through innovative ways facilitated by Information and Communication Technology (ICT) (Jain, 2009). It can be said that knowledge requirement, acquisition and transfer are all important sub-processes of KM (Savvas & Bassiliades, 2009).

Proponents of KM theories postulate that KM aims to "continuously improve organisations performance through the improvement and sharing of organisational knowledge throughout the organisation" (Agrawal, 2010, p. 453). The emphasis here is the sharing of knowledge. In other words, knowledge sharing is an intrinsic element in KM, which needs to be acknowledged in an attempt to conceptualise KM. Some of the ways through which knowledge can be shared include mentoring, storytelling, and coaching, among others. Some researchers observed that most organisations are not in the habit of sharing knowledge. For instance, Plunkett (2001) argued that most organisations have not been structured to favour the sharing of knowledge. Citing the example of the unwillingness to share knowledge in most organisations, Nnandozie et al. (2014) observed that most LIS professionals are unwilling to share knowledge. This unwillingness to share knowledge is explained by some authors as a sheer lack of understanding of KM and its benefits (Nnandozie et al., 2014). In another study, Zhou et al. (2014, p. 611) indicated that even though individuals may be open to the idea of sharing knowledge, issues such as a lack of trust concerning other people's knowledge, a lack of motivation to support knowledge sharing initiatives, and a lack of proper organisational guidelines on sharing can inhibit knowledge-sharing initiatives. Yet, some researchers explain that the lack of knowledge sharing in organisations may be attributed to, among other things, the notion that knowledge is power. However, Dalkir (2005) condemns the foregoing position by stating and echoing the views of other authors that knowledge itself is not power, but its usage makes it powerful. Dalkir also affirmed that when knowledge is shared, it is not lost.

Nature of Knowledge Management practices in academic libraries

Knowledge is an important aspect of wealth creation and a sustainable competitive advantage (Pillania, 2005). Knowledge is one of the unique characteristics of a knowledge economy. Just like resources such as land, capital and others, once knowledge is shared it becomes a public good. The non-exclusive and non-rivalry nature of public good caused

knowledge creators to reorganise and strategise knowledge sharing and hoarding decisions (Cheng, Ho & Lau, 2009). According to Pillania (2005), even though a lot of benefits can be derived from KM, there are also a lot of problems associated with it. Particularly, the culture of knowledge hoarding and lack of KM. As it is widely acknowledged that knowledge is power, holding knowledge similarly means holding the competitive power of the new economy. The predicament of sharing and hoarding knowledge occurs in most organisations. It is noted that knowledge hoarding is more prevalent in academic institutions (Cheng et al., 2009). Knowledge hoarding, according to Hargadon and Sutton (2007), occurs due to the notion of knowledge is power syndrome in most organisations. Hoarding of knowledge occurs in functional storage and this mostly takes place in competitive environments of organisations and business units (Hargadon & Sutton, 2007, cited in Du Plessis, 2005). This can be intensified in organisations and units that operate in a competitive environment. This can, however, be overcome through KM and the sharing of knowledge. When there is no effective or better platform for sharing knowledge, people turn to hoarding knowledge. Protecting competence, reluctance to spend time and avoiding exposure are some of the instances of knowledge hoarding (Lee, Woo & Hackney, 2011). Knowledge sharing is very important to organisational success since it contributes to efficient KM processes. The effective sharing of knowledge created by employees is beneficial to organisations.

According to Andolšek (2011), most employees in organisations are reluctant to share knowledge for many reasons. One reason is that employees do not want to accept inferior exchange standards. Knowledge exchange must relate to favourable exchange outcomes. Even though businesses and organisational units expect benefits from KM, there are seemingly a lot of obstacles in implementing knowledge due to a lack of awareness of knowledge and knowledge hoarding. It is therefore advised to invest and leverage knowledge resources for a competing environment (Pillania, 2015; Pillania, 2005). In summary, Ford (2008) notes that there is a general belief that disengagement from knowledge and hoarding exist. Here again, most people do not want to share their knowledge at a point in time; this is not intentional as other research seems to suggest. KM systems provide specified knowledge for administrative procedures and also informs the opportunity to identify a particular problem and the reasoning to address such a problem (Savvas & Bassiliades, 2009). Allee (1997) noted that a KM system is an integrated framework of organisational elements in culture, information technology infrastructure and the store of individual and collective experiences, learning, visions,

ethics and many more. Contemporary processes and systems of managing information and knowledge have enabled a new way of sharing organisational knowledge. Various scholarly works and experts have shifted attention to KM systems as a new means of sharing knowledge in organisations. KM systems are designed to capture knowledge from an individual in order to disseminate it for the benefit of an entire organisation. KM systems focus on capturing and disseminating knowledge so that individuals do not keep such knowledge. It is often presumed in organisational culture that knowledge is power. Collective knowledge stresses how employees who have useful knowledge that is shared through knowledge management systems should be motivated and supported in an organisation.

It is acknowledged that supervisory control should serve as a factor that impacts an individual's willingness to share his or her knowledge through a KM system. This serves as an effort by management to increase the likelihood that individuals will act in ways that will result in the achievement of organisational objectives. A KM system increases organisational learning by capturing internal knowledge and making such knowledge available to employees for reuse. In the use of such a system, it maintains corporate experience, expertise and history of long-term employees. Knowledge from these individuals is then incorporated into the system that helps them and their successors to run the organisation. KM systems widely appreciate a broad range of complex organisational, social and behavioural factors. However, modern technology serves as a critical facilitator with increasing interest in the knowledge management concept (Money & Turner, 2004).

According to Lee and Hong (2002), theoretical frameworks for the adaptation of KM systems require, and are built on, information technology. This provides a valuable reference point for the adaptation of KM. For the successful implementation of KM systems for different applications, Lee and Hong (2002) concluded in their work that benchmark strategy and knowledge structure; organisational culture; information technology; employee involvement and training; leadership and commitment of senior management; a learning environment and resource control and the evaluation of professional training and teamwork are the critical factors that affect the successful adaptation of KMS in an organisation and enhance an organisation's competitiveness. Modern organisations design their information systems to facilitate the sharing and integration of knowledge. This system is mostly referred to as a KM system. It is also

proven that the success of KM systems is more related to organisational culture than to organisational structure (Al Saifi, 2015). This helps knowledge sharing by making it more acceptable to organisations. In implementing a KM system in an organisation, it is always important to use a knowledge management framework which serves as a guide to avoid errors and gain the benefit of time and effort. Most researchers have proposed that KM systems must be built on the following pillars: a broad understanding of knowledge creation and the manifestation, use, and transfer of knowledge (Abdullah, Selamat, Sahibudin & Alias, 2005). Gandhi (2004) argues that KM systems can help reference librarians to systematically collect, organise, and record explicit and tacit knowledge; increase efficiency in locating answers to frequently asked questions; improve decisions regarding sources to consult; improve knowledge sharing; acquire more in-depth knowledge of the library and its resources; better understand the types of questions asked at the reference desk; improve collection development; and improve patron access to information.

Challenges of knowledge management practices in academic libraries

KM is an important resource in managing academic libraries. Over the years, academic libraries have felt reluctant to be proactive. Through KM, library users can, for instance, know if a book or resource is available. Thus, KM could capture and use all the available information. Institutional affiliation can be used to protect both sensitive information as well as help build alliances. Since KM is based on strategic planning, timely information and cross-functional teams, librarians must function in these key issues (Jain, 2009). If librarians seek the security of a stable organisation, there is need for librarians to be more independent and gain a self-directed approach to working in a knowledge organisation (Townley, 2001). KM presents several useful professional options to librarians. Aside from budget constraints, academic libraries are faced with several challenges which can affect managing knowledge in the library system. These, as noted earlier, include intellectual and cultural as well as technological challenges. In the area of technology, some of the KM problems that information professionals face in academic libraries include content development in digital format, education and training programmes and financial management to develop infrastructure resources. There is also a problem with intellectual capital management (Jain, 2009). Managing knowledge in academic libraries in the information age provides librarians and information professionals with several challenges (Jain, 2007). These include intellectual challenges in managing tacit knowledge; developing the right culture and environment in creating and sharing knowledge;

explicitly managing a knowledge repository; equipment and technological expertise; repackaging information for cost accessibility and time effectiveness; managing knowledge assets and updating information and the challenge to collaborate with teaching and development ability to cope with change management (Jain, 2007).

3 Methodology

This study adopted a qualitative approach. The choice of the qualitative approach was informed by the study's aim which was to explore the extent and nature of KM among academic librarians in Ghana. The use of a qualitative approach was considered apt to investigate the implications of knowledge management practices (KMPs) in academic libraries because the study aimed to gather data from a small sample size, mainly head librarians. In this case, in-depth interviews were used for data collection to provide in-depth knowledge of the phenomenon under study. The study population comprised thirty-one head librarians from academic libraries in public and private tertiary institutions in Ghana as shown in Table 1. The head librarians were selected because they were the managers or directors of the library and were considered to be in a better position to provide information on KM in the library as a whole. Data from the interviews were analysed using thematic content analysis in line with Miles and Huberman (1994). Respondents' consent was sought before data collection. The respondents were free to opt out of the study at any time without any consequences to them. Permission was also sought from the participating institutions.

To gain an in-depth understanding of the extent, nature and challenges of KM practices in academic libraries in Ghana, face-to-face interviews were conducted with the respondents in selected academic libraries. The qualitative data was analysed based on Miles and Huberman's (1994) qualitative analysis technique. They defined analysis as consisting of three concurrent flows of activities: data display, data reduction and conclusion drawing and/or verification. According to O'Leary (2017), qualitative content analysis includes identifying biases/noting overall impressions; reducing and coding data into themes; searching for patterns and interconnections; mapping and building themes; building and verifying theories and drawing conclusions. Accordingly, all these activities were undertaken in the analysis of the data collected from the interviews. The findings of the study are presented below.

Table 1: Population for the study

Study Setting	Respondents
Public universities	7
Professional public universities	5
Private universities	15
Polytechnics	4
Total	**31**

4 Results

The findings of the study are presented hereunder according to the objectives of the study:

The extent of KM practices in academic libraries in Ghana

This section identifies the structures that have been put in place to learn from experienced library staff, how knowledge is organised for future use and strategies for identifying the knowledge needs of the institutions. It further looks at knowledge retention policies, how knowledge is built on retained knowledge and how obsolete knowledge is managed. Respondents identified ways by which knowledge is managed in academic libraries.

The respondents were asked how librarians identified the knowledge and capacity needs of their staff by looking at the deficiencies of the staff and identifying ways of curbing that. Two respondents mentioned that they evaluated the job description and responsibilities of workers to assess their actual job performance and to identify the knowledge needs of librarians in providing services for users of the academic library.

> *We have just finished an exercise to look at staff evaluation; which is on my desk. It has an outline of every staff rank to its job description and responsibilities and how that translates into activity (UniDPu3).*

> *Through designed appraisal forms from the HR department that is given at the beginning of every year, there is an assigned job description in a contract which is matched with the actual job performance at the end of the year. This helps them to meet their targets at the end of the year (UniEPu4).*

Further, on training, the respondents (n=2) identified training sessions for library staff in the quest to improve their capacity in meeting the knowledge needs of the users of the library. They noted this:

> *Some time ago the institution realised some of the library staff who deal with the users lack certain skills in dealing with library users, so they organised training on customer service at the British Council for librarians (UniFPu5).*

> *So that if you don't have the capacity, we look for an expert either from inside or outside to organise training for them to make sure that that deficiency is overcome (UniEPu4).*

Respondents were further asked about training sessions for staff. Responses (n=7) here revealed that the institution provides training sessions through orientation programmes and refresher courses for library staff. Below are some of their statements in that regard. Some of the respondents said:

> *They offer training to mostly the e-resource librarians and librarians in general. For example, early this year we had a training session with them at CSIR on e-resource (UniCPu2).*

One respondent indeed argued that they do take capacity building very seriously and try as much as possible to build the knowledge and skills of librarians.

> *Obviously, we do take capacity building very seriously and therefore we make every effort to build the knowledge and skills of our librarians through training interventions (UniDPu3).*

Yet another respondent mentioned that the training usually targets the non-professionals and professionals who need to put into use what has been taught in school when they notice that there is a variation between what was taught in school and what actually exists on the ground.

> *So, the training (sic) usually targets the non-professionals and professionals who need to update or replenish what they have learned from school. Sometimes too what we are taught in school may be very different from what is on the ground (UniEPu4).*

Another respondent mentioned the following:

> *There are certain sections that need constant training because things change very fast in those sections. E.g. Those at reader services have regular training from the head and sometimes we even invite people from outside, (like the Business School) to teach them things like customer service, and that happens about two to three times a year (UniAPu1).*

Additionally, the respondents (n=2) identified that one way of building one's capacity concerning knowledge deficiency is meeting the knowledge needs of the users of the library through further education. One head librarian mentioned that he encourages his staff to further their education by citing himself as an example and that most of the people working under him had their master's degrees and that others were even doing their PhDs. He noted this:

> *I usually encourage them to further their education and always use myself as an example to them. For instance, I came to the University(sic) with a diploma and sponsored myself. I make them understand that they don't need to wait for the School(sic) to do it for them, but they can sponsor themselves. Through that, most of them have their Masters(sic) now and some are even doing their PhDs (UniBPr1).*

In the performance evaluation process, a respondent stated that the organisation assessed the competence of staff through the performance evaluation processes and then further organised training based on the knowledge gaps that were identified.

> *The strategic objectives of the organisation are to assess the competence of the staff through performance evaluation processes then we organise training around it based on the gaps in their knowledge (UniDPu3).*

The respondents (n=6) of the study also noted that they encouraged and allowed new ideas. They also expressed the view that staff were required to share knowledge with other colleagues when they were given the opportunity to attend conferences and workshops.

> *When you are sponsored to attend a particular workshop, you are supposed to share the knowledge with other colleagues (UniCPu2).*

Another respondent said:

> *Those that get opportunities to attend workshops and seminars are tasked to make presentations of what they learned at the workshop to the entire staff so that others can also benefit (UniEPu4).*

Others also mentioned that they had adopted the 'sitting with Nelly' approach of learning where inexperienced staff sit with an expert or experienced staff to transfer knowledge and in the long run build the capacity of the staff. This was well captured by a respondent when she mentioned that:

We have adopted the 'sitting with Nelly' approach to learning which means sitting with somebody more knowledgeable than you are, and then they transfer their knowledge to you. E.g. the ICT officer here is a professional and on occasions, he shows colleagues how to do things which they do not know – which is a form of capacity building by senior professionals/members to the younger ones (UniDPu3).

In finding out how knowledge is transferred among librarians in the library. Respondents identified ways by which knowledge is shared among librarians and how they gain from the expertise and experience of more experienced staff of the library. Key among them were collaboration, mentorship, understudying,

One respondent for instance mentioned noted this:

We draw on the expertise of other members of the university to deliver some of the training we are doing in the library so that we don't do it exclusively. We have made efforts to collaborate with the Department of Communication Design to do a course on Poster Design at this university (UniDPu3).

Some respondents (n=3) also mentioned that there is an informal mentorship system in the library but there are no laid down procedures for transferring knowledge from experienced staff to less experienced ones.

What we do is the informal mentorship system as formerly mentioned but there are no laid down procedures to follow (UniEPu4).

Another respondent mentioned that:

There is a formalised process and it comes from the Head. So, when someone is leaving the organisation, he/she has to train someone else in his/her stead (UniIPu8).

Another respondent mentioned that

There is a system of rotation where library staff rotate among different departments in the library setting, to share knowledge (UniAPu1).

The respondents as part of how knowledge is transferred among librarians in the library explained that senior members are understudied by junior members though this process is not formally captured in the database.

All the senior members are being understudied so there is no problem, but there is no formalised way of capturing such knowledge in a database. But you must also know that in the normal

helm of affairs, it will be very difficult to replicate one's skills exactly in another person (UniEPu4).

When asked What is done when the library finds someone who has a particular skill that others will need, the respondents indicated the following:

Usually, we ask people to understudy others (UniIPu8).

So those who have been already there have to gradually train those who have just come. For example, the person who used to do cataloguing is very old and had to train the new people till they know what he knows. He did that till he left the system (UniGPu6).

We shuffle in the various sections. For instance, we have categorised our roles in four sections, so, we reshuffle staff around them. So, when you are taken to a new place you must understudy (UniAPu1).

We normally have manuals for each section so if you want to know what they do there, you would have to just read the manual (UniAPu1).

After one is employed, there is in-service training then the individual is referred to the manual (UniAPu1)

Relative to recording training sessions and documenting best practices, one respondent explained:

One of the things we are hoping to do in the future is that our training programmes should not only be face-to-face but recorded and made available online. We should find ways of promoting best practices and documenting them so that people would have access to it (UniDPu3).

The respondents also mentioned some of the ways in which more experienced staff transfer their experience to younger staff members. Two of the respondents identified that membership in the Consortium of Academic and Research Libraries in Ghana (CARLIGH) affords them the opportunity to learn about their experiences. They noted the following:

Yes, we have benefited a lot from CARLIGH as an academic institution because we were among the first (pioneers) of the consortium in terms of training from old librarians such as Prof Alemna and Dr Asamoah Hassan (UniEPu4).

Experienced people in an area of practice organise training. At times you wouldn't get all staff members to be interested in the training but indirectly staff knowledge is imparted to others' (UniEPu4).

One respondent mentioned:

> *A programme known as 'Building Stronger Universities' supports staff in building their knowledge in various areas of academic life. It is a Danish government initiative for organising programmes with agencies through collaboration with different departments in promoting research. There is also a programme going on now known as building stronger universities (sic) sponsored by the Danish government and the library is part of that project aimed at supporting staff and building their knowledge in various areas of academic life (UniDPu3).*

Another respondent also said:

> *Training programmes, working with various agencies. For instance, in (sic) the area of research, we are working with the research and grants office of our institution to see how we can promote research (UniDPu3).*

On the availability of a knowledge management policy, the responses from the librarians seem to indicate the absence of any policies on KM practices in the libraries. One respondent explained that though he had not seen any document, staff are aware of the institutional policy for study leave. He also mentioned that he was once on a promotions committee of some staff and the conclusion was for them to further their studies.

> *I haven't seen any document, but the workers are aware of the institutional policy for study leave- general institutional policy(sic). We are working on having a policy document on it. I have sat on the promotion committees of two of our staff and after we agreed for them to go for further studies (UniCPu2).*

Another respondent also said:

> *We don't have a system in place specifically for knowledge retention (UniDPu3).*

Finally, when asked about ways by which the library manages knowledge the library by making use of ideas shared by staff and how certain issues and challenges in the academic library are dealt with. The respondents (n=7) mentioned a few strategies for accommodating new ideas. The respondents explained that most top management members in the library are experienced and know how important embracing new ideas are to library services:

> *The top management are all people who are experienced, and they know how essential library services are; so, they embrace new ideas (UniCPu2).*

I made one of my assistants go for a workshop on the institutional repository and after we are considering having one based on the ideas they came up with. So, I can say they embrace new ideas (UniCPu2).

One respondent noted that:

When new ideas are operational, they are put into practice. We always encourage new ideas and if operational, carry on with them (UniDPu3).

Yet another respondent identified that when they go for staff meetings, staff are made to design strategies for addressing challenges and a lot of fantastic innovations have emerged.

Yes, very much. What we do here is that, when we go for a library staff meeting which is organised twice every semester when there are no emergencies, we ask them to identify challenges they are facing. After they identify them, I throw it back to them to design a solution and through that, they have done a lot of fantastic and innovative jobs (UniEPu4)

Other respondents explained that during workshops, there are opportunities for brainstorming to come up with innovative ideas. These have been captured as follows:

It usually depends on the person handling the training. During workshops, we give them the opportunity to brainstorm to bring out new ideas (UniHPu7).

In the middle of the semester, we usually have sectional meetings and we ask the heads of the sections to bring any new ideas they have to (sic) change anything, and we discuss them (UniJPr2).

We have monthly meetings where people are allowed to suggest new ways of doing things and we discuss them and if they are good, we take them to the librarian and implement them (UniGPu6).

I think some managers just say they are encouraging people to bring new ideas, but they don't usually practice it. I think it only takes place among high-level managers (UniIPu8).

Nature of KM practices in academic libraries in Ghana

This section highlights the nature of KM practices in academic libraries. This includes efforts made by selected academic libraries in managing the knowledge generated by various faculties in their parent institutions. It further looks at the systems in place to benefit from the works of faculty and the student body in their parent institutions; identifying the knowledge needs of the university community; ensuring that the

universities benefit from the teaching experiences of faculty members and retention policies available to retain knowledge created via research by the university community. It also looks at how the knowledge that is no longer useful in the library is handled and lastly the benefits that being a member of CARLIGH affords them.

The respondents identified needs assessment and feedback from users as key KM practices. A respondent, for instance, said:

> *We also use observations when they (faculty) come to ask us about certain things they need. We also use the same observation approach for the students (UniJPr2).*

Another respondent also indicated:

> *We also look through the publishers (sic) list and also assume that the faculty would like and send them to them through email for them to recommend the ones they would need (sic) (UniIPu8).*

A respondent also noted:

> *We used to do some surveys about 4 years ago but because the faculty started doing their own surveys to publish, we stopped (sic). Because it is the same data, so we pick the information from them after their surveys (UniJPr2).*

On feedback from users the respondents mentioned that when they usually interact with the students, they get feedback and confirm with faculty members to ascertain whether they need the materials suggested by the students.

> *Sometimes we just use our intuitions to think for them. But when we interact with them, they are quick to give us feedback. We then confirm with the lecturers to find out whether these are the things they need and surprisingly they say yes, they do. So, the feedback from the students has really helped us (UniGPu6).*

Other respondents highlighted that feedback from users aids them in doing a demand-driven acquisition. Therefore, they only buy the materials that faculty and students need. They also mentioned that their collections are tailored towards courses that are run in the institution at any given point in time.

> *It enables us to do what we call Demand-Driven Acquisition (sic). It helps us to only buy the things that our users need (UniHPu7).*

> *First, we get the courses that would run from the school's office. So, our collection is tailored towards that (UniIPu8).*

There were a few complaints from the users. They complained to those in charge of the sections and they conveyed the message to the authorities (UniFPu5).

We have an annual survey for final years called 'exit survey' to complete (sic). We also administer forms for users to complete so we collect feedback on how we can improve the quality of service we offer to them (UniDPu3).

I sit in meetings and when library-related issues come up, I get informed of staff and student needs, workshops, training, college library committee meetings, university library committee with policies (made up of representatives of all colleges) and so the research and learning needs of the university are made known (the head librarian (UniDPu3).

One of the interviewees explained that there is a student system where seminars are organised for students. The interviewee further indicated that the seminars make it possible for the (knowledge) needs of students to be made known. It also helps the students to know how to effectively search for literature and how to properly cite references.

We have also started a student system where the library goes to have various seminars with the faculty and students. We do this on a yearly basis. We meet them per level because they might have different needs. When they get to levels 300 and 400, our focus is on how to effectively search for literature and cite references (UniGPu6).

On the organisation of orientation programmes, the respondents (n=2) indicated that they organise orientation programmes for new students and a library tour where they are introduced to several departments of the library so that know where to go when they are in need of information.

Yes, we do a library tour and proper library orientation (UniHPu7).

For students, every time they have fresh students, we are part of the orientation process (UniGPu6).

Further, the respondents also indicated that in seeking needed information for enhanced decision making, they ask faculty and students to fill in search forms and, based on what they indicated, they provide them with the needed information. The responses were as follows:

We usually have what we call the search form for them to fill (sic) and based on that we provide them with the information they need (UniBPr1).

Two of the respondents also explained that they usually liaise with faculty to request material that will help them.

> *Firstly, we liaise with faculty to make a request for resources (like books) that will help them (UniCPu2).*

Another comment was in sync with the above.

> *We liaise with the faculty and ask them to provide us with their information needs in terms of textbooks and journals (UniEPu4).*

Two other respondents agreed and explained that every semester they send out memos to heads of departments and deans to provide the reading list so they can submit them for procurement.

> *Semester by semester we send out memos and emails requesting heads of departments) and deans to submit their list of reading materials and we compile them (sic) and submit them for procurement (sic) (UniCPu2).*

> *At the beginning of every academic year, we send letters to all Heads (sic) of departments to give us the list of materials they will need. I am in charge of the acquisition of books, so I do that (UniHPu7).*

Another respondent hinted that some of the library's efforts to acquire relevant materials to augment the library's collection or body of knowledge are by consulting publishers of knowledge resources in the form of books, for example. These publishers submit copies of their [explicit] knowledge resources to the library. The library in turn hands them over to faculty members to assess their relevance before purchasing or acquisition. This is reflected in the following extract from the interview:

> *Sometimes too, individual publishers or booksellers can walk in to find out if we will buy a particular book. We then send copies to the various faculties or HODs to check if they are relevant and we procure them if they approve (UniCPu2).*

Lastly, one of them mentioned that in his institution there are library representatives on the faculty board so they contact them to ascertain which materials they may need.

> *With faculty members, we have library representation on all faculty boards. So that is where we contact them. We find out what materials they need. After (sic), they write formally to us with the new materials they need (UniGPu6).*

When asked how the library ensures that the user community benefits from the knowledge created by its members Via research, long essays, theses, and research publications for example', respondents (n=3) identified an institutional repository policy as one of the ways that the library ensures that users benefit from the knowledge created by its members:

> *Yes, we have developed an institutional repository policy. We also have institutional repositories holding the published works of the faculty, depending on the copyright issues of the publishers. There is also a policy for students to submit copies of their theses from departments to the repositories as well (UniAPu1).*

Other respondents (n=2) mentioned that in ensuring that the university benefits from the experiences of faculty members, which are inherent in past questions, the library has repositories of past examination questions for the various courses which they collect at the end of every semester.

> *We, for instance, have the past [examination] questions of the various courses. We organise them per the programmes, levels and years. But for now, the collation is done manually (UniBPr1).*

> *Every semester we collect and bind past questions. We are even planning to digitise them and make them available on the institutional repository (UniEPu4).*

Furthermore, there was evidence that some of the academic libraries in Ghana are either making provisions or already have systems in place to digitise some of its collection for posterity. One respondent indicated this. A respondent well captured this when he noted:

> *It is currently not under the direct control of the library, but I know the various colleges have it. As mentioned earlier we are working with the registry to have an archival system to digitise some of this knowledge for the future (UniDPu3).*

These efforts made to archive some of the library's resources demonstrate some of the practices of KM in the academic libraries as far as sustaining existing knowledge is concerned. With these digitisation systems, however, libraries can only sustain explicit knowledge, that is, the knowledge that has already been codified. Two respondents also mentioned that they are taking up roles in archival services to provide digitisation services and research data management in the near future.

> *We are also looking at taking up roles in archival services to provide digitisation services. There are areas like research data management also coming up (UniDPu3).*

Challenges associated with KM practices in the academic libraries

The respondents identified several challenges associated with KM in the selected academic libraries. They are classified under organisational, technological and environmental challenges.

Organisational Challenges

This section focuses on organisational challenges to KM in the selected libraries.

Lack of library courses in the institution

One respondent (n=1) mentioned that the unavailability of library courses in his institution makes it difficult for them to upgrade in the institution and they may have to move to other institutions where relevant library courses are run. They also had to do this at their own expense.

> *We have spoken about it. Aside from the library course, there are other ones that run in the school. When you are four years in the school and you want to do any of the programmes, it is free. Meaning, the school sponsors you, but we don't run library courses in our University (sic), so we have to go to Legon or any other institution that runs the course and the school is not ready to sponsor us (UniBPr1).*

Understaffing or logistic problems

Another respondent mentioned that they are faced with the challenge of being understaffed and under-supplied. This hinders the proper management of knowledge in his institution.

> *The challenges we experience include being understaffed, and under-resourced (in terms of human resources, so it's the same as being understaffed) (UniCPu2).*

Low financial resources

One respondent also mentioned that in terms of the budget, very little is given to the library. This makes it difficult for them to create innovative ideas. The respondent expatiated that employees must be seen coming up with innovative ideas before they may be supported.

> *In terms of budget, very little is given to the library, but the point is: give you money for what (sic)? You should be seen to be coming up with new and innovative ideas that need support (UniDPu3).*

Bureaucracy

Respondents (n=2) noted that there were a lot of financial difficulties as a result of bureaucracy in the system stemming from the new procurement law. This, they mentioned, causes delay and difficulty to get resources on time.

> *There are a lot of financial challenges because of the new procurement law that creates a lot of bureaucracy in the system. This makes it difficult to get resources faster (UniCPu2).*

Book theft

One respondent pointed out book theft as one of the challenges they are facing. This makes it difficult to provide faculty and students with the information needed.

> *We also have book theft. We buy a lot, but you go around and you realise they are stolen (UniHPu7).*
>
> *Apathy and non-interest in knowledge sharing*

Respondents (n=2) hinted that people are not serious about workshops organised by their colleagues when compared to experts from outside.

> *Apathy. The people we live with don't show an attitude of seriousness when we organise workshops for them. They don't believe their own colleagues but appreciate those from outside because they feel they are experts because they charge huge money (UniEPu4).*

Another informant mentioned that although the majority are willing to share information, some are not interested in sharing knowledge with others.

> *Mostly, (sic) majority of people are willing to share their knowledge but as humans, not everybody is interested in sharing knowledge with others (UniFPu5).*

No formal policy

Respondents (n=2) also mentioned that another challenge that hinders proper KM has to do with the fact that there are existing policies pertaining to KM:

> *For now, I think it is because there is no laid down or formal policy (UniGPu6).*
>
> *The bigger challenge is about policies, but we are working on it now (UniHPu7).*

Technological Challenges

This section focuses on some of the technological hitches that impede the development of good KM for library practices. Respondents mentioned some of the technological challenges that frustrate good KM.

Internet problems

Respondents (n=5) mentioned internet problems as a technological challenge that impedes proper KM in their institutions.

> *Internet connection also goes on and off (UniDPu3).*

> *Unstable internet facility (UniEPu4). I remember a few months ago we had a problem with our internet connectivity (UniFPu5).*

Bandwidth challenges

One respondent also mentioned bandwidth as a technological challenge facing his institution.

> *Challenges with bandwidth could also be a problem (UniGPu6).*

Minimum IT support

Two respondents indicated that the space they have on the server is not big enough. This limits their space for uploading documents online.

> *With respect to technology, one of the problems that come up is the fact that the space on the server is small. Moving the documents from manual to online is said to require a lot of space. So, basically, we have minimum support from IT (UniBPr1).*

Environmental Challenges

Respondents identified some external factors that hinder better KM in academic libraries with regards to providing the knowledge needs of faculty and students. They include the following.

Lack of resources

One respondent mentioned that they lack resources with regards to meeting the knowledge needs of users of the library.

> *We lack a lot of resources, and when you request money for presentation materials it is difficult to get (UniEPu4).*

Procurement problems

Another respondent mentioned that the kind of procurement policy in place prolongs modes of payments to those who supply the academic materials in the library and in the long run they may not be willing to supply more materials.

> *Let us start with the issue of procurement and the process that come (sic) with it. It usually prolongs the mode of payment. When that happens, those who sell to you are not willing to do so (UniHPu7).*

Bad infrastructure

Respondents (n=2) mentioned that the infrastructure is not well enough and this in turn affects the library in the process of KM. One respondent mentioned that there are a misconception people that the internet gives access to all information needed. This 'unlimited' access to information, according to the respondent, sometimes makes it difficult to distinguish between scholarly and non-scholarly information materials online.

> *There is the misconception that the internet is available with every (sic) information you need. This makes it difficult for academic staff to distinguish between curated resources and popular resources, especially for the 'untrained eye' (UniDPu3).*

5 Discussion

In an attempt to ascertain the extent of KM adoption in academic libraries in Ghana, a survey was conducted at some selected academic libraries in Ghana. it was realised that the majority of the academic libraries are in the willingness stage followed by persuasion, implementation, decision and knowledge stages respectively. Respondents agreed with knowledge sharing and that knowledge can be tacit or explicit. They were also familiar with ways of capturing knowledge and knew of measures taken by some libraries to manage knowledge. They were also conversant with most of the concepts in KM. Respondents also believed in mentorship; believed that KM activities were compatible with the demands of their job; that KM initiatives can easily be integrated into their professional activities; believed in the sharing of their experiences and KM initiatives. Respondents are convinced that KM practices would help advance their professions; that KM initiatives will help transform the library positively; that KM activities are something of interest; that it is very important for academic libraries to invest in KM initiatives and that they believe in networking. Respondents were mostly in accordance that knowledge must be actively collected in their organisations based on the clients' needs; that they mostly tap into the experiences of their predecessors when delivering services to clientele; that they put into practice what they know about KM; that their organisation is in a good position to implement an organisation-wide KM system; that they mostly help others to learn new ways of delivering library services; that they made use of what had been done before towards a more effective library service; and that they made an effort

to recognise and make use of available expertise at their libraries. They also agreed with the practice to act as mentors for their colleagues. Very little effort was made by libraries to document the skills of experts. They indicated the intention of sharing their experiences with others; recommended KM initiatives to others; found innovative ways of solving problems; they were in a habit of keeping records of the success factors for activities; and preferred teamwork.

This theme's objective was to investigate the nature of KM practices and strategies in the selected academic libraries in Ghana. It was found that the nature of KM in academic libraries had a unique form, which stems from the sources of knowledge that they manage. Unlike other organisations, the academic libraries managed knowledge from two streams, e.g. managing knowledge related to the library profession and managing knowledge for the academic community. A summary of the findings for these is presented according to the subsections below. The study further identified the challenges associated with managing knowledge from each of the aforementioned streams.

6 Conclusion

Overall, these results indicate that there is strong evidence of KMPs in academic libraries in Ghana, although it is not properly coordinated. That notwithstanding, it became clear that some of the KMP evident in the academic libraries include brainstorming meetings, mentorship, employee appraisal, staff training and co-tutorship. Among the KM tools that were elicited from the analysis are intranet and internet technologies, as well as the use of social media platforms as tools to carry out various KM activities such as knowledge sharing.

7 Recommendations

Librarians have excellent skills in organising and codifying information sources and making them accessible to others. To manage knowledge fully, academic libraries need to adopt a holistic approach to KM and equip themselves with multidisciplinary skills to provide greater value to their customers. The way forward for academic libraries to fully embrace KM is for academic institutions to properly equip their libraries with modern technologies. The academic libraries must also make conscious efforts to establish strong partnerships, internally, regionally and globally. Another important recommendation is for academic libraries to draft policy-driven strategic plans that endorse KMP.

8 Limitations and future research directions

First, the study focused on academic libraries in Ghana, hence, it did not cover the libraries in other parts of Africa. Africa, particularly the western part, has a unique contextual setting and a future study covering West African countries will be insightful. Also, in terms of data, the current study is limited to data collected from academic librarians. Since libraries of higher education institutions also employ other paraprofessionals and non-librarians who also contribute in their way to the performance of the academic library, it is only appropriate that future studies of the same phenomenon should include such staff.

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