# An empirical study of knowledge management in academic libraries in East and Southern Africa

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#### Abstract

Purpose – The purpose of this paper is to distinguish between information management (IM) and knowledge management (KM) and present the findings of small-scale research conducted to investigate KM practices in academic libraries in East and Southern Africa, and discussing the importance of KM and suggest the way forward.

Design/me thodology/approach — This research was undertaken in 20 university libraries in Africa using a questionnaire survey to investigate the current practices in university libraries in Africa to discover whether these libraries are practising KM or IM.

Findings – This survey results seem to suggest that currently most participating libraries are practising IM. A majority of 65 per cent of the participants considered themselves information managers.

Research limitations/implications — This survey have had some limitations: one, all the participants were University librarians; two, due to the unavailability of contact addresses, the survey could cover only eight African countries. Future research should include a broader spectrum of participants to have an in-depth knowledge related to KM.

Practical implications – This paper has practical implications for those who are not fully aware of the importance of KM, how KM can be used to gain a competitive advantage; to break financial and technological constraints; and to satisfy escalating user needs.

Originality/value – Not much has been done in Africa to explore KM practices in University libraries, this paper contributes towards filling that gap and adds to KM literature in general and offers empirical support to KM concept. This paper discusses the benefits of KM and offers several recommendations to facilitate KM practices in university libraries in East and Southern Africa.

Keywords Knowledge management, Information management, Academic libraries, Africa Paper type Research paper

#### Introduction

Today knowledge management (KM) is the winning word in all types of organisations whether service oriented or business oriented, government or private. Libraries are not lagging behind in this race. Increasingly, library and information professionals are being referred to as knowledge managers and libraries and information centres as knowledge centres. The question of whether libraries deal with KM or information management (IM) is often asked. It can be due to lack of a deeper understanding of various dimensions of KM.

Generally, available literature defines IM and KM from a business perspective and this has made it difficult for librarians to establish whether they are information managers or knowledge managers. On one hand there is no common agreement on the definition of the concept of KM and on the other hand there has been a problem of using IM and KM interchangeably.

It is appropriate to understand the meaning of KM in the context of specific organisations, in the case of this paper the academic library environment. To understand the theory of KM, this paper looks at the definitions of data, information and knowledge, and establishes a working definition of KM.

#### Data, information and knowledge?

Data are defined as "facts events, transaction, etc. which have been recorded. They are usually regarded as input or raw material from which information is produced' (O'brein, 1993). So, data are raw materials which have no meaning unless they are converted into information by analysis, interpretation and by putting them into context.

Information is 'the result of organizing, processing, and interpreting data, thus transforming the findings into facts that are useful to decision makers' (Ojeda, 1994). Thus, information is organised, processed, interpreted and transformed data, which can enhance decision making. IM is "the management of an organisation's information resources in order to improve the performance of the organisation" (Knowledge Management Glossary, 2005). IM underpins KM, as knowledge derives from information.

Knowledge has been defined and debated diversely by different authors, academics and practitioners. Collins English Dictionary defines knowledge as "the facts, feelings or experiences known by a person or group of people" (Collins English Dictionary, 1991, p. 86)). According to Leonard and Sensiper knowledge is "information that is relevant, actionable, and based at least partially on experience" (Leonard and Sensiper, 1998). Knowledge is more personal, human resource based and usually acquired through experience and/or observation.

Thus, knowledge transformation is a three-step process, where data is transformed into information, and information is transformed into knowledge while data is simply raw materials. The very first stage is data, which converts into information, and finally into knowledge, which is what must be managed. In other words, knowledge is refined information and information is refined data, whilst data is simply raw facts or observations.

KM is defined as a "process or practice of creating, acquiring, capturing, sharing, and using knowledge, wherever it resides, to enhance learning and performance in organizations" (Skyrme's, 1997). Skyrme sees KM as an ongoing process of creating, acquiring, capturing, sharing and using knowledge, which is acquired through personal experience or aims to improve organisational performance and embraces both implicit and explicit knowledge. On a similar note, White (2004) defines KM as "a process of creating, storing, sharing and re-using organisational knowledge (knowhow) to enable an organisation to achieve its goals and objectives". KM's main purpose if to facilitate achieving organisational goals, its sharing aspect emphasises on team work, partnership and interpersonal relationships.

For the purpose of this paper, KM is defined as "a purposeful management process to create, capture, store, exploit, share and apply both implicit and explicit knowledge for the benefit of the employees, organisation and its customers. With its visionary approach KM emphasises turning internal and external knowledge into actionable framework". In this definition, "purposeful" refers to organisational goals and highlights that KM benefits everybody – employees, organisation and its customers.

Having defined KM, it is appropriate to look at some of the other activities KM is associated with. KM is an ongoing process, which comprises various steps and processes. Townley (2001, p. 54) discusses four KM processes; create knowledge repository, improve knowledge access, enhanced knowledge environment and manage knowledge as an asset and he maintains, "knowledge management is based on assumptions of strategic planning". Zack (1998) and White (2004) hold similar opinions and view knowledge as a strategic resource.

Wiig (1993) believes, 'the first important step is to identify knowledge which can be considered as an asset'. This calls for mapping knowledge or knowledge gap exercise. Knowledge mapping can identify organisational knowledge assets as well as knowledge gaps. Based on his working experience, Zack (1998) argues that all companies have classified their strategic or competitive knowledge that is in some ways unique. Along the same line, Maponya (2004) argues that 'much knowledge is stored in the heads of the people and it is often listed if not captured elsewhere. The surest way to avoid loss of organisational memory is to identify the expertise and the skills of staff and capture it". This would include human expertise. Mahmood (2003) contributes to the debate arguing changing environment of academic life demands new competencies in academic librarians, so this expertise should be considered valuable asset to KM practice. For any organisation aspiring to practise KM, it is important to be a learning organisation, as KM calls for a paradigm shift from traditional librarians to modern information professionals.

With the advent of information technology (IT) tools the old inefficient methods of managing knowledge have been challenged. Technology can be used as a mechanism to help people create, capture, store, exploit, share and apply knowledge. "A good IT infrastructure is not a sufficient condition for the success of KM but a necessary condition for it" (Arora, 2002). Technology can guarantee the accurate and timely expression and delivery of knowledge, in a more efficient way than can be done by people.

For any project or plan to be successful, it is important to have a policy document. This document describes purpose, scope, ownership and responsibilities. The same applies to KM. The KM policy is the road map to answer questions such as what, why how and who? Policies can be useful only if they are regularly updated to guide the stafffor operational efficiency.

From the above we can assume certain things regarding KM:

- The main purpose is to achieve organisational goals efficiently.
- It is based on personal experience.
- It focuses on creativity and innovativeness.
- · It is action oriented.
- It requires a system to capture staff tacit knowledge.
- Organisations needs a KM policy.
- It facilitates calls for updating knowledge and important documents.
- There is an emphasis on identification of expertise.
- It is founded on a strong culture of knowledge sharing.

- It involves conducting a knowledge mapping exercise.
- · It requires IT facilities.
- Is about working with people.
- · Is a positive way to achieve organisational goals.
- Is based on a strategic plan.
- Sees organisational knowledge holistically, so lays emphasis on having a central knowledge repository.
- Is related to change management, so success depends on a learning environment;
- It embraces both tacit and explicit knowledge.

The objectives/questions of this study were based on the above understanding of KM.

#### Study purpose and objectives

The main purpose of the study was to explore the KM practices in academic libraries in East and Southern Africa. To understand the concept of KM, the author attempted to distinguish IM and KM. To accomplish the main purpose, the following objectives were formulated:

- To explore whether the participating libraries had any written KM strategy/ policy or not?
- To determine if they had a strong partnership with other libraries.
- To identify if they had a strong culture of knowledge sharing.
- To note if they had any system in place to capture internal/tacit knowledge of their staff.
- To learn whether their important documents were updated regularly or not.
- To make out if they had ever identified the expertise in your library.
- To discover if they ever conducted a knowledge gap exercise.
- To observe if they ever identified what work-related knowledge their staff required in coming five years.
- · To see if they had central knowledge repository for the whole university.
- To find out if their libraries were well equipped with all knowledge enabling technologies.
- To know how many librarians considered themselves as learning organisation.
- To reveal how many preferred to be called a knowledge manager, an information manager or both.
- To suggest a way forward.

A lct has been written and researched on KM in libraries in last two decades, still there is a scarcity of KM literature in Africa, and this paper makes a move towards bridging that gap.

#### Literature review

According to literature, KM is a more holistic and wider form of IM, but this issue has been heavily debated and is still being debated. Some of the elements of KM such as: acquisition, creation, renewal, archival, organisation and dissemination of information are long present in libraries. Owing to this reason, many librarians still believe that "KM is simply managing information and explicit or documented knowledge, which is what they have been doing for many years" (Koina, 2003). On the other hand, literature strongly demarks information and knowledge. Chase (1998) firmly argues that "KM is not managing or organising books or journals, searching the Internet for clients or arranging the circulation material". He goes beyond that stating that, KM is about "enhancing the use of organisational knowledge through sound practices of knowledge management and organisational learning".

Grey (1998) distinguishes the two according to working patterns: "working with objects (data or information) is Information Management and working with people is Knowledge Management". IM deals exclusively with explicit representations and ensures access, security, delivery and storage. Here efficiency, timeliness, accuracy, veracity, speed, cost, storage space and retrieval are the main concerns. On the other hand, "KM recognizes value in originality, innovation, agility, adaptability, intelligence and learning" (Grey, 1998). Accordingly, KM is people focused and concerns with critical thinking, innovation, relationships, exposure to ideas, patterns, competencies and encourages learning and sharing of experiences.

Meadow et al. (2000, p. 35) point out the difference by notifying that "information has no universally accepted meaning, but generally it carries the connotation of evaluated, validated and useful data", while knowledge involves "a higher degree of certainty or validity than information and has the characteristic of information shared and agreed upon within a community".

Wiig (1999) views information as "facts and data organised to characterize a particular situation" and knowledge as 'a tool set of truths and beliefs, perspectives and concepts, judgments and expectations, methodologies and beliefs".

According to Nonaka and Takeuchi (1995, p. 58), "information is a flow of messages, while knowledge is created by that very flow of information anchored in the beliefs and comments of its holder". In KM we group the relevant information from the reservoir of information and in IM information is put into the context and interpreted. So, information could be considered as the construction wedge of knowledge while knowledge is linked with organisational values, beliefs and action.

Bouthiller and Shearer (2002) contribute to the foregoing issue by arguing that KM focuses on the sharing of knowledge not distribution or dissemination of knowledge and the completion and success of KM depends on the use of stored and shared knowledge whereas, the success of IM is accomplished when the preservation and the retrieval of information is guaranteed.

Knowledge is predictive and future oriented, which guides for future planning and actions, while information is only organised data in a meaningful milieu. Knowledge is a form of information, which can exist only within an individual's mind and KM captures this tacit knowledge that people hold with them. It, being subjective, cannot be directly transferred or communicated from one person to another and needs to be converted into information first. Information can then be regarded as the objective and therefore communicable and recordable form of knowledge.

Thus, knowledge is different from information and the difference between the two can be summarised as follows:

- IM is working with objects, while KM is working with people.
- Information has no universally accepted meaning, while KM depends on a higher degree of certainly and validity.
- Information is a flow of information and knowledge is formed by this flow.
- Information is structure brick of knowledge, whereas, knowledge embraces organisational values, beliefs and action.
- KM success depends on the use of knowledge whilst IM achieves its success on the preservation and retrieval of information.
- Knowledge is extrapolative and future oriented and information is organised data
- Both involve the human element, but at different levels. IM sees information as a
  resource and lays emphasis on human involvement in terms of information
  audit, store and retrieve whilst KM emphasises people management in order to
  take into custody the hidden knowledge from their heads.
- IM targets at acquiring, storing, retrieving and disseminating information but KM focuses on sharing, creating, learning and enhancing information for organisational improvement.
- KM targets both explicit and tacit knowledge, while IM focuses mainly on documented explicit knowledge.

Indeed knowledge is derived from information, but it is a cut above information. IM can only be considered a building block of KM. From here we look at how KM can bring academia and library together.

#### KM, academia and library

Academia needs KM desperately and this KM activity could provide us an opportunity to see ourselves not just service oriented, but mostly 'value-oriented" (White, 2004). For instance, generally academics do not have time to disseminate knowledge, what they create. Librarians can find innovative ways to publish academia's wealth of knowledge to those, who are in desperate need of that knowledge. Also, librarians can repackage information according to their customers' information needs and level of understanding, and give it a new look. Librarians can publicise new knowledge created by academia worldwide. They can also facilitate student research projects and academic research work by literature review and assist them in publishing. Hayes (2004) noticed increasingly that "librarians are seeing their roles as working with faculty and students, technologists and learning and teaching specialists to create new service models and new ways of all working in a knowledge management environment – a role, which we are eminently qualified to fulfil".

Academic libraries and their associated institutions can work in close relationship to collaborate, share and disseminate knowledge. Similarly, librarians can liaise with their customers to select appropriate information resources and organise them in most accessible way to make them readily available when required. These information resources are instruments to satisfy customer knowledge craving. This partnership of librarians and academia will transform librarians' status from service oriented to value oriented.

This paper is based on a questionnaire survey designed to elicit the opinions of East and Southern Africa's university librarians on KM practices in their respective work places.

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#### Study population

A list of East and Southern African countries was used to construct the sampling frame. Southern African countries included Angola, The Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Zambia and Zimbabwe. East African countries comprised Kenya, Tanzania and Uganda. The study population of the 17 East and Southern African countries consisted of university library directors/librarians or their representatives.

#### Data collection

Some participants were interviewed at the Standing Conference of East, Central and Southern African Libraries (SCECSAL XVII) held in Dar es Salaam, Tanzania, while others were followed up by electronic questionnaire. Questionnaire survey was sent to all those university directors whose e-mail addresses were available. A total of 22 university directors were contacted of which 20 (91 per cent) responded to the survey. The sample represented nine African countries and this stands for a 53 per cent of the East and Southern African countries.

## Presentation and discussion of the findings of the study

Tables I-III present the findings of the study.

#### Discussion

The objectives of the study were accomplished. This section discusses the major findings. According to KM literature, KM practicing libraries or any other organisations should have certain characteristics to be considered as KM practising organisations. KM is not just about implementing "bits and pieces", it is a complex process to achieve the main intended aim of benefiting the organisation. One cannot claim that KM was implemented in an organisation, based only on fact of the existence of one or more KM elements (White, 2004). This study revealed that most of the participating libraries possessed only some of the above qualities of KM. Participants were asked to define KM, of 20 participants, 55 per cent (Table III) attempted to define

	Participating countries
1 2	Botswana Kenya
3 4	Namibia SA
5	Swaziland Tanzania
7 8	Uganda Zambia
9	Zimbabwe

Table I. List of participating countries

LR 56,5		Definition
50,5	1	KM is the management of knowledge available in various formats, such as hard copies, as well as digital formats
	2	Management of information resources as opposed to management of documents
	3	KM refers to the processes of creating, storing, sharing and re-using organisational knowledge or know-how to enable an organisation to achieve its goals and objectives
384	4	Effective and efficient acquisition, storage and retrieval of information and dissemination of such information to those, who need it, and when and where it is needed
	5	Process of capturing, storing and sharing knowledge
	6	The set of processes that involve gathering information on skills and knowledge of employees and applying it for organisational improvement
	7	It is what we do to achieve our goals quicker and more effectively by delivering the right knowledge to the right person at the right time
	8	KM is the creation, integration and utilisation of knowledge in all activities of an organisation in order to bring about change
	9	It is the act of harnessing ICT, infrastructure and practices for the processing of information, i.e. identify, organise, distribute or disseminate knowledge for learning and effective management of change within an organisation
	10	KM involves capturing, organising and storing knowledge and experiences of individual workers and groups within an organisation and making this information
Table II. Definition of KM: by the participants	11	available to others in the organisation KM is about creating, capturing, organising, retrieving, disseminating sharing/transferring and re-using knowledge for the benefit of organisations

KM and only 20 per cent had a KM policy. This seems to suggest perhaps academic libraries in East and Southern Africa are still trying to understand the concept of KM.

	Ansv	vers
Question - does your institution have?	Yes	No
Written KM policy	20 (4)	80 (16)
Strong partnership with other libraries	65 (13)	35 (7)
Strong culture of knowledge sharing	50 (10)	50 (10)
System to capture internal knowledge	35 (7)	65 (13)
Regular review of policies and procedures	55 (11)	45 (9)
Identification of expertise	25 (5)	75 (15)
Knowledge gap exercise	15 (3)	85 (17)
Identify knowledge required in next five years	40 (8)	60 (12)
Knowledge repository	35 (7)	65 (13)
Availability of knowledge enabling technology	40 (8)	60 (12)
Learning organization	100 (20)	
Your status: IM/KM/knowledge custodian?	, ,	
Knowledge mangers	20 (	4)
Information managers	65 (	
KM and IM both	19 Č	2)
Librarian	5 (	1)

Table III. Findings

Note: The first number shown is the percentage and the number of respondents is shown in parentheses

The main objective of KM in libraries is to promote knowledge innovation and to develop a relationship in and between libraries, between the library and its users, to strengthen knowledge internet working and to quicken knowledge flow (Shanhong, 2000). Sharing knowledge reflects the human factor side of KM. Libraries often do not have the culture of knowledge sharing, which is sustained by this survey's findings. Only 50 per cent acknowledged that their library staff had a strong culture of knowledge sharing. Knowledge sharing is the most important requisite for KM. What people know can become organisational knowledge, only after they share it. Librarians are professionals with high level of skills and expertise they utilise to undertake research and data analysis. They generally know more than anyone else how to organise information into a sensible and accessible format and this is what leads many of us into the assumption that we are knowledge managers. KM goes further than this; it is more towards operational knowledge. Librarians need to share their intellectual and operational knowledge within and outside the library.

Unfortunately, "librarians' traditional reluctance to move beyond the information container towards analysis and interpretation of its contents has resulted in organisations overlooking their potential contribution, even in areas where their competence should be obvious" (Corrall, 1999). Through professional discussions and other exchange programs they can share their knowledge and experience internally, regionally and globally to improve delivery of services to their customers. KM sharing requires the right climate as embarked by Townley (2001, p. 46), "only the right organizational climate can persuade people to share it". KM processes are the activities you put in place to facilitate the creation, sharing and use of knowledge for the benefit of an organisation. White (2004) believes, 'KM programmes generally fail if there is no knowledge-sharing culture in place". KM sharing is really vital. Once a person leaves the organisation all knowledge goes with the person. Knowledge can be shared via e-mails, intranets, meetings and the like. How we create a knowledge sharing culture, is another issue to be considered. The author would agree with Murty (2002) when he recommends that we should, "realign incentive and reward programs and HR to be seen as the catalyst for culture change".

Strong partnership with other libraries is an external form of sharing and exchanging information and knowledge. A majority (65 per cent) of the libraries expressed that they had strong partnerships with other libraries, but only a few mentioned the type of partnership. This would perhaps mean that libraries appreciate the idea of strong partnership, but perhaps are reluctant to extend themselves for such partnership. The most common type of partnership was consortium, a few mentioned Listserves and only two said they were using Gauteng and Environs Library Consortium (GAELIC). A strong partnership is very important in order to allow the exchange of knowledge required to build a knowledge base, academic libraries need to spread out their partnership to other fellow libraries regionally and globally.

#### Capturing tacit/internal knowledge of the staff

KM embraces both tacit and explicit knowledge. In any organisation a large portion of knowledge is tacit knowledge, which is "deeply embedded within individual experience, judgment and intuition" (Wen, 2005, p. 6). It is essential to preserve this knowledge by capturing it. Research has shown that only 35 per cent (Table III) of participants had some system of capturing their staff's tacit/internal knowledge, others did not have any such mechanism. This would appear to suggest that libraries do not

appreciate the fact that, due to the high turnover of staff, lots of knowledge is lost with the leaving person. The author would agree with Wen (2005) who suggested, "Library human resources and staff development should be charged to work closely with managers at all levels to identify staff with valuable tact knowledge and take every measure to retain such staff".

#### Procedures and policies

A few participants recognised the types of policies and procedures in place as: cataloguing; inter-library loans; acquisition: photocopying; library usage, computer usage, circulation policy; library strategic plan, external borrowers policy, personal development policy. Fifty-five per cent of participants indicated that they updated their important documents regularly while 45 per cent said they did not. This perhaps indicates that some of the librarians did not consider library procedures and policies as important. Procedures and policies are considered the explicit knowledge of an organisation and they are the guidelines for the staff members to perform their tasks effectively and efficiently. In the absence of such a system in place, it would not be possible for the library staff to work procedurally and efficiently. KM refers to manage both implicit and explicit knowledge for the benefit of the employees, organisation and its customers. Without the explicit KM no organisation can claim to be practising KM. To practice KM procedures and policies need to be in place and managed properly by regular update.

#### Identification of expertise

"Expertise exists in people, and much of this kind of knowledge is tacit rather than explicit" (Branin, 2003). In any organisation a large portion of knowledge is tacit knowledge, it needs to be managed. According to the results of this survey only 25 per cent of participants stated that their libraries had identified the expertise in their libraries and 75 per cent not. This may mean that staff may not be allocated in various sections and divisions according to their best potential and consequently they may not be performing up to their optimum competence. That would mean libraries are not utilising their staff members' abilities and skills fully. This may also imply that libraries may not be able to retain their most potential employees in the absence of identification and recognition of expertise in various work-related areas. This is an important activity to facilitate KM. Some organisations audit their intellectual resources internally each year, while libraries tend to simply list their physical holdings and easily quantifiable activities, assuming that each item or activity measured is equally valuable and goal related (Townley, 2001). Libraries need to move out of these traditional and routine practices in order to adopt KM and obtain maximum benefits from their staff members' potential and retain the most suitable staff in the library and consequently, gain a competitive edge in the global professional world.

#### Knowiedge gap exercise

Only 15 per cent of the participating libraries conducted knowledge gap exercises while 85 per cent did not. This would perhaps mean that most of the academic libraries were not yet conversant with the concept of KM. Identifying knowledge gaps in an organisation is a very critical factor for KM practice. Knowledge mapping is conducted in order to establish a library's knowledge needs, the gaps in the knowledge, the flow of the knowledge, the sources of information and the accessibility of those sources to the library users. All of this information can provide a unique opportunity to understand

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the library resources and identify the categories of knowledge to be managed to support a library's organisation-wide strategies and also spot library challenges towards KM. In any type of organisation that wishes to introduce KM, "the first step is to identify knowledge which can be considered as an asset" (Wiig, 1993). To establish knowledge assets in an organisation, one needs to conduct a knowledge gap exercise. This is how an organisation's knowledge needs, knowledge gaps and knowledge expertise are identified.

#### Knowiedze required in five years

Since KM is visionary and adopts a strategic approach, this research explored whether participating libraries had identified knowledge required in coming years. Forty per cent of participants established work-related knowledge required by their staff in the coming five years. This would seem to suggest that most participating libraries did not have a visionary plan in place to recruit and retain most competent and committed staff members for their libraries. KM cannot be practised without having a strategic plan. Hence, it is very important to establish work-related knowledge required by the staff in order to attract, recruit and retain most suitable staff.

An identification of expertise, knowledge mapping and knowledge required for the next five years compliment each other. An identification of expertise facilitates retaining the best qualified staff in the coming five years. Knowledge mapping supports recruiting and retaining the best staff according to library needs.

#### Central repository Often:

Information which resides in the organisation has up till now always been treated in discrete sections, or "silos" rather than as a whole. For example, librarians have focused on the acquisition or distribution of information acquired externally to the organisation, while records managers focus on documents internal or integral to its management. In such a scenario no one group appears to have an understanding of overall information needs (Keina, 2003).

This survey seems to support Koina's observation; only 35 per cent of participants indicated they had a central knowledge repository in their organisation. A central repository is another essential feature of KM. KM is based on a holistic approach, it sees knowledge broadly in terms of organisational improvement and excellence, not the library in isolation. Hence, it is important to have a central knowledge repository in order to adopt KM.

#### Knowiedge enabling technologies

Forty per cent of participants asserted that their libraries were well equipped with all the knowledge enabling technologies while 60 per cent did not have this facility. Information technology is an important tool to facilitate KM, without it KM cannot be adopted fully. IT can support KM in two ways: by providing the means to organise, store, retrieve, disseminate and share explicit knowledge and information rapidly around the organisation and around the world; and by connecting people with people through collaborative tools to capture and share tacit knowledge.

At the same time it is always important to take into account that technology is not an end in itself but the means to an end. That is why Yahya and Goh (2002, p. 460) strongly maintain that \*TT has its intended usage in the context of KM; human's motive and willingness are the underlying factors that dictate the actual IT usage' (Yahya and Goh, 2002, p. 460). A well-equipped library is vital for KM but not an indication of KM success. The findings of this study seems to concur with the above opinion; eight libraries claimed to be technologically well equipped, but did not practise KM. "IT has the potential to change culture by cutting through traditional structures, inspiring an informal style and fostering the social networks which underpin knowledge-sharing" (Corrall, 1999). Still, a lack of technology cannot be used as an excuse. For instance, updating important documents in an organisation is basically a human activity, which is not dependent on technology. "To say that knowing is a human act is to highlight the fact that knowledge involves humans who do the knowing" (Lang, 2001, p. 44). This highlights that technology is important to facilitate the KM process, but knowledge is a somewhat intrinsic resource, and therefore people are the only true source of knowledge, they should be the centre of the KM process. Hence, knowledge enabling technology and staff capacity building, commitment and incentives are equally crucial; IT alone cannot bring a revolution in libraries.

#### Learning organisation

The survey's results show that all the participants anonymously considered themselves learning organisations and this is one of the important features of KM. This would appear to put forward a message that all of the participating libraries understand the importance of learning and want to move forward and gain and sustain a competitive edge in the global competition.

Out of 20 participants 65 per cent considered themselves information managers; 20 per cent knowledge managers; 10 per cent both and 5 per cent preferred to be called a librarian. Based on the research findings and the foregoing discussion, it would seem that at present most academic libraries in East and Southern Africa practise IM, not KM.

It is vital to practise KM in academic libraries:

- due to rapid knowledge decay and consequently need to create new knowledge;
- high staff turnover and loss of knowledge;
- dwindling library budgets;
- needs of operational efficiency to address increased demands from faculty and students;
- need to establish best practices;
- need to manage e-evolution;
- need to leverage the available knowledge;
- necessity to survive and sustain competitive edge in the global community of profession;
- and finally, seeing KM as a great opportunity to spread out the role of librarians to the academic community.

The core skills of library and information professionals are both relevant and essential to effective KM, but they are often under-utilised and under-valued. Hence, it is our job to put this right (Corrall, 1999). Librarians can only apply KM in their libraries, if they

are willing to refurbish themselves. This calls for a paradigm swing in academic libraries.

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#### How to practice KM in libraries

Before moving to this issue, it will be appropriate to have a look at the (Table IV) 'check list' for an effective knowledge manager by Koina (2003). This list will stimulate us for self-review where we are today and where we should be aspiring to be in order to practise KM.

There may be some skills that librarians currently are lacking. Agreeing with Koina (2003), the author firmly believes that we need to think honestly about the future of librarians and information professionals. Today's librarians and information professionals need to transform themselves into value-adding knowledge professionals. This necessitates a sweeping change in how librarians and information professionals view their roles and jobs within knowledge-based organisations. They need to visualise a world of rapid change, instantaneous communications and the transformation of organisations from those based on identifiable boundaries to networks of business relationships, limited to books and journals (Chase, 1998).

#### Challenges of KM

This information age provides librarians and information professionals with the following challenges:

- Intellectual challenge to manage tacit knowledge and pull the relevant information from the overflowing reservoir of information.
- Cultural challenge to develop the right culture and environment of sharing and creating knowledge.
- Challenge of managing central knowledge repositories for the parent organisation by compiling documented explicit knowledge.
- Challenge of being well equipped in technological know-how to work effectively and efficiently, as well as work collaboratively with IT experts.
- Challenge of knowledge editing by refining and re-packaging information in most innovative ways to make it accessible cost and time effectively.
- Challenge of being excellent knowledge janitors as subject experts.

Skills we may have:	What we may not
Flexibility, team skills, People skills; Communication skills; Ability to assess and evaluate information; Create, record and store information effectively; Use information tools effectively; Train/educate our clients; Client service oriented	Lateral thinking; Ability to think enterprise wide; Power to persuade; Capacity to manage, not endure; Strategic planning ability; Marketing capacity; Analyse our roles and identify areas for improvement; Project management capacity

Source: Koina (2003)

Table IV. What skills are needed by an effective knowledge manager?

- Challenge of digitising library resources for an easy access.
- Challenge of managing of knowledge as an asset.
- Challenge of updating available knowledge regularly in order to remove obsolete information and avail the most updated information.
- Challenge of time management, proactive attitude and self-confidence to provide quality services to the library patrons.
- Challenge of collaboration with teaching faculty and students.
- Challenge of developing ability to cope with change management.

#### Way forward

Librarians have excellent skills in organising and codifying information sources and making them reachable to others. To manage knowledge fully, they need to understand the holistic approach of KM and equip themselves with multi-disciplinary skills to provide grater value to their customers. The way forward can be recapitulated as follows:

- Well-equipped libraries with modern technologies.
- Re-building of a new type of library culture (sharing and creativity).
- Holistic thinking to build partnerships across the organisation.
- Development of KM policies and strategic plans.
- To revitalise the library undertakings, proactive, self-confident, self-promoting, well-trained and well-prepared library staff.
- · Strong partnerships, internally, regionally and globally.
- Conductive environment for KM practice including all the resources and incentives.

#### Conclusion

To begin to practise full fledged and purposeful KM, librarians and information professionals have no choice but to transform; to become new knowledge pilots. The paper concludes with Branin's (2003) statement, who has rightly noted "If we as librarians are to extend our expertise in selecting, organizing, and preserving information to new forms of less formal, unpublished material, we must be willing to get outside the routines and the walls of the traditional library and work more directly with technologists, faculty, and students".

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