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## Knowledge Management Culture among Library Cataloguers: the University of Zambia Library Experience

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### Abstract

This paper assesses knowledge management processes and practices of the Cataloguing department of the University of Zambia Library; investigates factors that lead to poor working systems among Cataloguers; cause inconsistencies and data redundancy in the library's database. A case study approach was adopted, with the aim of getting detailed information and insights into the experienced problem of inconsistencies and duplication of the data. Structured questionnaires and interview guides were used to collect data. The results show that there is little knowledge sharing and transfer amongst the cataloguers; use of existing rules or standards such as Anglo American Cataloguing Rules and Library of Congress Cataloguing Schedules with its Subject Headings is compromised by the poor grounding of Cataloguers. The study indicates that there is no system in place to manage tacit knowledge; lack of proper training and skills in cataloguing and; not being able to seek help from colleagues; lack the ability of verifying the existence of materials in the database before working on them and simply human error. There is little systematic knowledge sharing and transfer of knowledge among cataloguers. Although there is use of existing standards; this is compromised by lack of knowledge of cataloguing. The study also identifies formulation of policies on the sharing of knowledge.

**Keywords** – Knowledge Management, Cataloguing, Cataloguers, Africa, Zambia, Academic Libraries.

### Introduction

Knowledge Management (KM) has been recognised as an essential component of a proactively managed organisation as it puts an organisation at a competitive advantage and may lead to enhanced decision-making processes. In the process, it may also lead to improved service delivery. According to Kumar (2010: 024), KM is a “form of expertise-centered management which draws out tacit knowledge making it accessible for specific purposes to improve the performance of organizations”. Similarly, Martin (200:13) defines KM as the “identification and management of processes for leveraging the intellectual capital of organisations over time and place. As such, it applies to every job function and process; and seeks to capture institutional learning and share best practices for the benefit of the entire firm and its clients”.

In an organisational setting such as a library, Knowledge Management entails a systematic approach to getting an organisation to make the best possible use of its knowledge resources; both tacit and explicit. For it is through the best use of its knowledge resources that the library will be able to meet its mission and not only gain a competitive advantage over others in a similar field; but also, can offer an effective service. On a personal level, applying one's knowledge in the day

to day work operations means that personal objectives and organisational objectives converge so that both of them benefit from the activities of the individual whilst the organisation will provide institutional support. Knowledge Management tools therefore can assist in that process for they make it easier for the organisation's knowledge resources to be managed in a manner that is efficient and accessible to everyone. It is for this reason that libraries have embraced KM in an enthusiastic manner. Libraries have adopted knowledge management practices and processes to improve their service delivery to their users. It is in this context of dwindling financial resources and low staffing levels, that this paper assesses the knowledge management processes and practices of the cataloguing department of the University of Zambia Library. It further investigates factors that lead to poor working systems among Cataloguers; causes of inconsistencies and data redundancy in the library's database. Finally, effective measures are identified and recommended.

### **The University of Zambia (UNZA) Library**

The UNZA Library objectives are to serve the learning, teaching and research needs of the institution and its research affiliates through the provision or relevant information. The library also serves the general public because of its designated national reference status. For the library to meet its set goals and objectives, it has departments that carry out key functions, among which is the Cataloguing and Classification department. The library system consists of three libraries, namely; the Main library, the Medical Library and the Veterinary Library. In 2010, it served a student population estimated at 14,901: divided into 6,252 (43%) females and 8,349 (57%) males (University of Zambia, 2010). In December 2009, the library had a total staff complement of 61 in 2009 (University of Zambia Library, 2010). In 2016, the total undergraduate students at the University of Zambia rose to 22,423 (University of Zambia, 2017; 19)

### **The UNZA Cataloguing Department**

The UNZA Cataloguing department deals with the cataloguing and classification of library books and ensures that there is appropriate access to these resources. This is made possible by giving right bibliographic data for easy retrieval whenever required by library users. The cataloguing department is quintessentially an important component of the library; the effectiveness of the library in terms of its service delivery depends on its input: i.e. easy retrieval and access to library information depends on how well they were processed in the cataloguing department. If the cataloguing department fails to meet its obligations, then the whole library would automatically fail to carry out its intended goals. Therefore, the idea that the cataloguing department directly contributes towards the achievement of UNZA Library goals and objectives cannot be over emphasized.

The University library like many other libraries in Africa has been faced with several challenges: shortage of staff, decline in funding, deteriorating infrastructure, and an increasing student population (Kanyengo, 2009). In addition, the high staff turnover has affected all departments and sections of the University including the UNZA Library Cataloguing department. Therefore, the challenge of shortage of staff and high turnover has consequences on library operations: constant change of personnel in the cataloguing department may result into inconsistencies and records duplication in the database. Employees on contract keep leaving the library as the University cannot remunerate them adequately. The Library has therefore found itself in a dilemma of having different Cataloguers all the time; usually with different levels of experiences and expertise in cataloguing. Sometimes the library rotates its members among its different departments, which

acts as a contributing factor to the experienced inconsistencies in the cataloguing department's output. Staff rotation can both be an advantage and disadvantage. It is an advantage in the sense that people can acquire skills that are needed in various departments of the library and a disadvantage when it emerges that the library ends up having people who are not subject experts in any of the departments of the library.

The high turnover of staff in the University of Zambia Cataloguing department has in certain instances led to different ways of cataloguing library materials; in terms of class mark allocation and subject indexing. In cataloguing, where the expertise required is highly technical, it can lead to several challenges such as; creation of more than one entry record for single titles, allocation of different call numbers to different copies of the same title and a compromised standard of cataloguing amongst cataloguers.

Therefore, these challenges call for an effective knowledge management system that ensures that knowledge generated through experiences and practices (tacit knowledge); by individuals working in the cataloguing department at any time is stored, accessed, shared and used by everyone for the benefit of the institution. However, if this tacit knowledge is not properly tapped, managed and shared in conformity with international standards, its consequences maybe damaging to the library. In addition, these inconsistencies may be noticed by some of the users of UNZA Library catalogue and therefore lead to users not trusting the information services delivered as users may find different books in different subject categories. In a sense, Cataloguers need not tell society that they are professionals but that society should be able to see their professionalism from their quality output; i.e. professional cataloguing of library materials; maintaining consistency and conforming to specific standards and conduct. In this vein, Muller (2007) points out that Librarians and Information Specialists have the potential to distinguish themselves as experts in the organisation of information mediated by technology. Therefore, their training, skills, knowledge and experience of cataloguing, classification and indexing make them the most skilled people for managing information, especially in a digital environment.

### **Literature Review**

KM can have many meanings depending on the perspective one takes. KM is the “process of creating (generating, capturing), storing (preserving, organizing, integrating), sharing (communicating), applying (implementing), and reusing (transforming) organisational knowledge to enable an organisation to achieve its goals and objectives” (IFLA, n.d). Aswath and Gupta (2004: 188) have argued that “knowledge and management of knowledge are regarded as increasingly important features of an organizational survival. Application of knowledge resources successfully helps the organization to deliver creative products and services. It involves “creating, securing, coordinating, combining, retrieving and distributing knowledge” (Lin, et al. 2006). Talet (2012; 62) citing McAdam and McCreedy (2000); Thompson and Walsham (2004) further argues that “efforts typically focus on organizational objectives such as improved performance, competitive advantage, innovation, the sharing of lessons learned, integration and continuous improvement of the organization. KM efforts overlap with organizational learning, and may be distinguished from that by a greater focus on the management of knowledge as a strategic asset and a focus on encouraging the sharing of knowledge. Additionally, Talet (2012; 62) says KM “efforts can help individuals and groups to share valuable organizational insights, to reduce redundant work, to avoid reinventing the wheel per se, to reduce training time for new employees,

to retain intellectual capital as employees' turnover in an organization, and to adapt to changing environments and market".

### **Importance of KM practices in library Cataloguing Departments (general)**

Muller (2005) argues that traditional information management principles, which include information organisation, retrieving, repackaging and utilisation, are important to achieve effective knowledge management applications. Librarians/Information specialists should therefore, play an important role in knowledge management based on their training and experience developed and used over years. He further reveals that librarians need to extend and renew information management principles and skills and link them with the processes and core operations of the Library in order to be successful in knowledge management activities. This implies that for librarians to keep advancing in knowledge and skills needed to perform in their profession, the gained knowledge, either through learning or experience should be properly captured, stored, used and shared among themselves. The culture of knowledge creation and sharing must be encouraged so that knowledge in the profession can grow, maintained and be utilised by professionals. In a related account, the Imperial College London (ICL) (2009), states that Library Cataloguers need to be corporate information literate. Cataloguers should can create, access, organise, store, share, use and understand library's knowledge and information and should be able to understand and use the available systems and tools. This, they argue will help them to evaluate captured information to build knowledge that will enhance the library's performance. Therefore, cataloguers should manage their corporate memory in which case the concept of corporate memory include collective tacit and explicit knowledge (processes and products) within the library, which are worth sharing and preserving for later re-use. Commenting on the same concept, Maponya (2004) argues that library cataloguers can achieve effective KM systems in libraries by facilitating knowledge creation and sharing through the creation of an environment that will prompt individual cataloguers' participation. Facilities such as making everyone understand the benefits of knowledge sharing, encouraging teamwork and establishing platforms to facilitate informal discussions and interactions among librarians i.e. developing communities of practice or groups of practitioners dealing with same topics but not on the same project, and regularly sharing ideas and experiences. To make this possible, Muller (2005) and Maponya (2004) argue that the library, in particular, Cataloguing Department should first of all identify information and knowledge needs and information flows of the Department and its external environment, analyse information gaps, duplications, inefficiencies and areas of over provision of information within the Department and then plan to manage, evaluate and filter knowledge contributions.

### **African context**

Omekwu, John-Okeke and Egberongbe (2007) realised the importance of the cataloguing department to the general library when they stated that in African libraries, cataloguing should be the first operation to apply Information Communications (ICTs). This reasoning is coupled with the consideration of the large amount of cataloguing data available in most African libraries, the repetitive nature of cataloguing and the desire by cataloguers to achieve consistence on catalogued materials in libraries. There is also need for the application of common cataloguing polices and rules in all libraries to provide greater uniformity in the provision of bibliographic description and access to information to library users. Stressing on this point, Byrum (2000) as quoted by Omekwu, John-Okeke and Egberongbe (2007) stated that African cataloguers should consider expanding applications of global bibliographic networks such as the Anglo-American Cataloguing Rules (AACR2), Library of Congress Subjects Heading (LCSH) and Sears Lists of Subject Headings in

order for them to achieve greater uniformity in the provision of bibliographic description and access to information in libraries they serve. Application and expansion of these international bibliographic systems would help African cataloguers to come up with common cataloguing polices and rules, which would lead to consistency in cataloguing and hence controlled redundancy in their databases. For example, John-Okeke and Egberongbe (2007) reveal that cataloguing activities among libraries in Nigeria in recent times clearly indicate that not much has been achieved in shared cataloguing in terms of sharing knowledge and experiences among cataloguers. So, there is need for promotion of common cataloguing polices and rules in African libraries in order to make a reasonable impact among African Librarians or Cataloguers. Reflecting on the same point, the Gauteng and Environs Library Consortium – South Africa (GAELIC), (2004) gives an example of how the University of Potchefstroom has fared in trying to achieve common policies and rules as a way of achieving consistency on catalogued materials. In 2003, the university conducted a workshop for library cataloguers focusing on authority control to ensure consistency for shared cataloguing and to promote search precision. The workshop presented knowledge access points such as identification, formulation and choice, governed by AACR2, LCSH and Dewy Decimal Classification (DDC) systems. Basically, this workshop was meant to skill new cataloguers in assigning access points to bibliographic descriptions for information resources and to ensure consistency for shared cataloguing. This would also promote precision searching of library materials reducing time spent on search by library users. GAELIC (2004) further reveals that a system of peer reviewing facilitated by the *Online Computer Library Center (OCLC)*'s Online Save File was investigated for the purposes of encouraging inexperienced cataloguers to do original cataloguing on the World Catalogue. The main aim was to assist these cataloguers to be able to create bibliographic records that comply with international standards. This implies that as long as there is an agreed working standard by librarians internationally, working standards in single libraries will not be an issue. In cases where such efforts are not made, the results are quite bad and even make the profession get criticised and questionable. There are so many situations where the working standards of librarians, especially cataloguers are compromised resulting into a lot of inconsistencies and duplication of their works in their databases. This also means that retrieval of documents by users becomes time consuming and cumbersome.

### **Zambian context**

Efforts to help librarians come together for the purposes of building, sharing and managing knowledge in libraries have been world-wide and well adopted by many individual countries like Zambia. In Zambia, there have been efforts by librarians to form/join networks and forums where knowledge creation and sharing is encouraged such as Zambia Library Association conferences, Zambia Library weeks and participating at Standing Conference of Eastern, Central and Southern Africa Library and Information Associations (SCECSAL). The main aim of networks and forums such as these are to build knowledge and establish standardized working systems among all librarians in the country. The main idea behind all this is to allow librarians share knowledge with one another and learn from other colleagues. For example, in 2008, Zambia hosted the 18th SCECSAL conference where Librarians from many parts of Africa presented papers (SCECSAL, 2008). This shows the importance and need for enhanced sharing of experiences and knowledge in the profession. The process of resource and knowledge sharing should however be governed by well laid down rules and regulations in order to achieve uniformity in their working styles. With such efforts made in the country, UNZA Library has not been left out by these developments since there has been many inconsistencies and duplication of materials in the database resulting from

poor culture of knowledge capturing and sharing. Though UNZA Library has facilitated workshops for its librarians and those in its affiliated institutions, there is still need for more specific forums and workshops which would facilitate skills and experience in acquisition, building and transfer among local Librarians, especially Cataloguers. Librarians should be able to manipulate available knowledge for their benefit and that of the libraries they serve. Commenting on this point, Muller (2005) suggests that Librarians need to combine both their existing and new skills to achieve knowledge building and consistency among themselves. There is also need to establish quality KM practices and processes in every unit of the library, hence the Cataloguing Department of UNZA Library should consider the application of these practices to avoid inconsistency and duplication of bibliographic records currently existing in the database. This will ultimately lead to improved performance levels, adding value to their profession.

### **Objectives of the Study**

This study was conducted to assess the knowledge management processes and practices of the cataloguing department of University of Zambia Library. The study further investigated factors that lead to poor working systems among Cataloguers; causes of inconsistencies and data redundancy in the library's database.

### **Methodology**

This study adopted a case study method, with the aim of getting detailed information and insights into the experienced problem of inconsistencies and duplication of the data in the University of Zambia library database. The study population included all the current Cataloguers in the Cataloguing department of UNZA Library; of which the total population is four (4) Cataloguers. The Cataloguing and Classification department was purposively selected as it is the main department of the library that deals with cataloguing and classification of all the library's information resources.

### **Research Instruments**

Structured questionnaires and interview guides were used to collect data from the Cataloguers. The interview guide was part of the questionnaire in that key questions from the questionnaire were selected to be used during the interview. The interviews were held to bring out valuable information from the respondents that would not have been revealed in the questionnaires.

### **Data Collection and Analysis**

All the respondents were first given the questionnaires to fill in and later interviewed on certain questions from the questionnaires that were deemed important in bringing out comprehensive and valuable results. Responses from the questionnaires were written within the questionnaires by the respondents while responses from the interview guides were written down on the questionnaire by the researchers for further analysis. The analysis of the data was done manually.

### **Findings and Discussions**

#### **The UNZA Cataloguing Module**

The UNZA Library uses an integrated library system (ILS) called Sirsi Unicorn WorkFlows. The cataloguing module is a module in workflows that cataloguers use for cataloguing purposes. It comprises five main wizards or main functions namely: Common tasks, Titles, Items, Authorities

and Special. Common tasks help cataloguers check item status, add brief titles or search and display items while titles wizard helps one to perform functions such as add, modify, duplicate and delete a title or titles. Under items, one is able to add, edit, and globally modify items; authorities' wizard enables one to display, add, duplicate, modify and delete authority and the special function enables one to transfer and review titles.

### **Characteristics of the Cataloguers**

The findings indicate that at the time of the research there were only 4 cataloguers, 3 males and one female. All the cataloguers held a first degree in Library and Information Studies (B.A. LIS) and all of them held positions of Assistant Librarians. The post of Assistant Librarian is an entry level position for a professional librarian in the University of Zambia library system. Librarians with a Master's degree have faculty status and enjoy academic conditions of service.

The cataloguers have different levels of working experiences in the department: i.e. two have been in the department for only nine (9) months; one has four years of experience and the last one, who is the longest serving and Heading of the Cataloguing department has worked as a Cataloguer in the department for nine (9) years (See Table 1).

**Table 1: Profile of the Cataloguers**

<b>Respondent</b>	<b>Sex</b>	<b>Level of Qualification</b>	<b>Employment Title/Level</b>	<b>Duration in the Department</b>
<b>1</b>	Male	First degree (B.A. LIS)	Assistant Librarian	4 years
<b>2</b>	Male	First degree (B.A. LIS)	Assistant Librarian	9 years
<b>3</b>	Female	First degree (B.A. LIS)	Assistant Librarian	9 Months
<b>4</b>	Male	First degree (B.A. LIS)	Assistant Librarian	9 Months

Generally, one expects that the Cataloguers that have been in the department for a longer period should be more experienced and knowledgeable and able to share required skills than new cataloguers. However the findings showed otherwise; that they all exhibited similar characteristics of not being keen to share and learn from each other. Another issue that came out clearly from the research is that there was no departmental initiative to organise and facilitate forums where Cataloguers can exercise sharing, refinement and transfer of knowledge. They looked elsewhere for someone else or department to come up with a system for knowledge sharing. To remedy the situation, the research revealed that library management has recognised the problem and were planning to host a training workshop where all the cataloguers together with the lecturers that teach the cataloguing and classification course in the Library and Information Studies department at the University of Zambia will meet to brainstorm. It is hoped that the outcome of the workshop would be a cataloguing manual that would be utilised in the Cataloguing and Classification department.

### **Existing Cataloguing and Classification Knowledge**

All the cataloguers indicated that there is knowledge existing in the department that is meant to help cataloguers to properly catalogue library materials. The identified existing knowledge



included cataloguing manuals for cataloguers on required fields, also known as descriptive metadata; the Anglo-American Cataloguing Rules (AACR2) rules and the Library of Congress Cataloguing Schedules (LCCS) with its Subject Headings and the United States National Library of Medicine Medical Subject Headings (MESH). The AACR2 provides information on descriptive cataloguing such as book title, main entry and added entries. It gives bibliographical data of an item. LCCS and its Subject Headings provides information based on subject identification and class marks of any library material, implying that cataloguers are expected to classify library materials according to already established subject headings. The identified subjects from the subject heading schedules would then lead cataloguers to a class mark.

Therefore, and quoting one respondent, “LC Subject Headings enables cataloguers to arrive at uniform headings and LCCS for class marks”. It also implies that, one cannot come up with a call number without the use of subject heading schedules, which are already established and universally recognised headings, allowing the cataloguers to promote consistency in their cataloguing. This is a critical factor in cataloguing as argued by (Omekwu, John-Okeke and Egberongbe, 2007) that “African cataloguers should consider applying or expanding applications of global bibliographic networks such as the Anglo-American Cataloguing Rules (AACR2), Library of Congress Subjects Heading (LCSH) and Sears Lists of Subjects Headings in order for them to achieve greater uniformity in the provision of bibliographic description and access to information in their libraries”.

Therefore, the use and application of this documented knowledge helps cataloguers achieve quality control in their work output. Quality control arises out of adopting internationally accepted and universally recognised standards. Now that it is established that cataloguers follow certain existing cataloguing standards, one can argue that the inconsistencies in the UNZA Library Cataloguing and Classification department are not due to lack of cataloguing standards but probably there are other variables at play.

### **Knowledge creation in the Cataloguing and Classification Department**

The majority of the cataloguers, three (3) felt that there was no knowledge creation in the department, one (1) respondent indicated that there was knowledge generation. Those that said that there was no knowledge creation and production in the department gave the following reasons: one of them said that maybe there were ways of generating knowledge, which the respondent was not aware of because the respondent was new (nine months) in the department; the other one indicated that there was no specific policy or person tasked with the responsibility of generating knowledge and the third one indicated that there was no system in place to guide cataloguers.

The findings show a lack of awareness on the role of the cataloguers themselves in the knowledge generation process of their department. As argued by Aswath and Gupta (2004) and Maponya (2004) library cataloguers can achieve effective KM systems in libraries by facilitating knowledge creation and sharing, through the creation of an environment that will prompt individual cataloguers’ participation. However these cataloguers believe that knowledge should be generated somewhere by someone else. It becomes clear that some cataloguers expect other people to put in place KM systems or that there should be specific individuals with the responsibility of creating knowledge. As long as there is no system in place or someone to generate that knowledge, they would do nothing about it.

In order to provide an effective and efficient KM system, library cataloguers should have the ability to create, access, organise, store, share, use and understand the library's knowledge and information. Cataloguers should also be proactive in ensuring that knowledge is generated, used and refined to suit needs or situations as they arise, thereby improving upon and generating more cataloguing knowledge. It is the responsibility of each individual cataloguer to ensure that proper knowledge management practices and processes exist so that consistency and professionalism is achieved and maintained in the institution regardless of whom and where work is done. As the respondent that indicated that there is knowledge generation in the department highlights; the generation of knowledge in the department is not formalised but through self-studies or readings on how to describe and catalogue records in Machine Readable Cataloguing (MARC) format.

### **Knowledge Sharing among Cataloguers in the Cataloguing and Classification Department**

Three (3) of the respondents stated that there is sharing of knowledge amongst themselves as cataloguers though not often, while one (1) said that as cataloguers, they do not share knowledge i.e. experiences, ideas and skills. The three cataloguers that said yes further explained that once in a while they shared knowledge such as experiences and skills on cataloguing with each other when there is need, which is usually done verbally. For example, they would consult each other and exchange ideas on how to approach certain problems encountered when cataloguing and classifying certain library materials. The findings echo Muller (2007) who suggested that: the culture of knowledge creation and sharing must be encouraged so that knowledge in the profession grows, maintained and utilised by professionals. As argued by Omekwu, John-Okeke and Egberongbe (2007), not much has been achieved in the area of shared cataloguing in terms of sharing knowledge and experiences among cataloguers in Nigeria; a trend that can be extended to the rest of the continent. So there is need for the promotion of common cataloguing policies and rules in African libraries in order to make reasonable impact among African Librarians or Cataloguers. Ideally, as cataloguers in the UNZA library system, they are supposed to share knowledge. However, because there is no system on how and when to do that, they do not. When probed further on how verbal sharing of knowledge is regarded, one respondent explained that such interactions are very rare, maybe one out of 100 and they could not remember the last time another Cataloguer approached them for consultations or problem brainstorming. The respondent further indicated that when people are deployed to the department, they are only given a brief induction (shown how to catalogue books), after which they are left to work on their own. They argued that this is a dangerous state of affairs as such members may continue making mistakes if they did not get a proper induction or master all issues concerning cataloguing. They further argued that this is very possible since cataloguing is a field that needs continued practice and learning for one to master important issues; even new knowledge that keeps evolving in the field. In the absence of sharing of cataloguing knowledge, it may eventually lead to compromised quality standards and that is why sharing of knowledge is critical.

### **Use of existing knowledge in the department by Cataloguers**

Existing knowledge is critical to the continual delivery of service for it ensures two things; one, it provides a yardstick upon which to base future knowledge; secondly it acts as a monitoring and evaluation mechanism. If existing knowledge is not utilised, it is very possible for Cataloguers to work in a haphazard manner and not even follow required standards in their field. It was found that indeed the Cataloguers at UNZA use knowledge existing within the cataloguing department.

For instance, they said that they use the existing knowledge to process information such as cataloguing and classification of books, which assists them in striving to achieve consistency and uniformity in their day-to-day work. They also use knowledge contained in the AACR2 rules and LCC Schedules with the Subject Heading Schedules. If Cataloguers use these available guides expeditiously, then inconsistencies and records duplication experienced in the library's database is not being caused by not using the existing knowledge, but by other factors such as inability to share and use knowledge among themselves as well as lack of skills.

### **Best Ways of managing Tacit and Explicit Knowledge**

When both tacit and explicit knowledge is well managed, sharing and use can easily be made possible for the cataloguers. This entails that, the knowledge is in a state that is within reach of cataloguers when they require such information. It also implies that people's experiences and wisdom are well preserved and used for the benefit of the cataloguing practices and processes within the library. The study revealed that in order for both tacit and explicit knowledge (experiences, skills and wisdom) of cataloguers to be managed effectively, it needs to be in a written (documented) form, existing either in electronic or printed form. However, documentation of such knowledge should be on condition that such knowledge is in line with universally accepted standards in the profession. The respondents further argued that it is possible for people to forget certain principles of cataloguing; therefore having knowledge documented and within reach whenever needed would help remind them of how to approach certain cataloguing problems when they arise. Having a guide for cataloguers was also deemed very important to all the respondents. One respondent further suggested that the existing knowledge (both tacit and explicit) should be regularly taught to cataloguers, so that they can keep abreast of the cataloguing knowledge and at the same time be reminded of what is required of them.

### **Best Practices in Knowledge Capturing, Sharing and Transfer in the Cataloguing Department**

Among the suggested ways of how the department can capture, share and transfer both tacit and explicit knowledge, was through organising training programmes on cataloguing, forming library consortia, having regular meetings and workshops; and have the proceedings of those meetings documented. It was further suggested that Cataloguers should be asked and encouraged to write papers on their work experiences so that their knowledge is captured. These papers should be kept by the department for use by others, especially new, young, inexperienced Cataloguers. This is also supported by Muller (2007) when he stated that librarians need to keep advancing in knowledge and skills needed to perform in their profession, the gained knowledge, either through learning or experience should be properly captured, stored, used and shared among themselves.

### **Barriers to Knowledge Transfer and Sharing among Cataloguers**

The respondents agreed that, there are barriers to knowledge transfer and sharing among cataloguers within the cataloguing department. The identified barriers were: no system or policy in place nor specific person with the mandate to collect existing knowledge to ensure that transfer and passing on of acquired knowledge (experiences and skills) from experienced cataloguers to the new, young generation of cataloguers is made possible. It is important that generated and acquired knowledge by Cataloguers within the department is managed and secured so that the department does not suffer from incompetence when experienced Cataloguers retire, get transferred to other departments, leave employment or die. Furthermore, other identified barriers

to knowledge sharing were lack of professional meetings resulting in less interaction amongst cataloguers and with external professionals. There were also indications that some cataloguers did not want to admit their inadequacies for the fear of being looked down upon by others, while others felt self-content and proud.

### **Factors that Cause Inconsistencies and Duplication of Records in UNZA Library database**

Despite the revelation from the study that there are international standards and laid down rules that are supposed to guide Cataloguers in their work; such as the LCC Rules with its subject headings and the AACR2, all the respondents acknowledged the fact that there are inconsistencies and duplication of records in the database. They revealed that some of the factors causing this can be attributable to: cataloguer's lack of proper grounding in terms of training and skills in cataloguing. This may lead to failure to identify correct subject headings and therefore resulting in the assigning of wrong call numbers on the library materials. Amongst the cataloguers, this problem was identified as the root cause of all the inconsistencies and duplication of records experienced in the library database.

Another factor identified was that cataloguers do not check new materials in the database system to find out if the title already exists or not before working on them. This exercise is very important and should be performed first before embarking on any cataloguing process. If this exercise is done, one would be able to tell if the title is already in the database in which case they would simply add that particular copy to other available copies. If that title is not in the database, then the cataloguer would proceed to catalogue that material. This would eventually resolve the problem of inconsistencies and duplication of records in the database. Other factors identified by the respondents were that some cataloguers misunderstood and misinterpreted the rules meant to guide them; and lastly, that the available rules and standards are not comprehensive enough in the sense that they do not cater for all existing subject headings best understood and accepted in various common fields of knowledge; especially as understood in the Zambian context.

### **Maintaining Consistency and avoiding Duplicates of Library Records in the Database**

The results suggests that inconsistencies and records duplication can be avoided by the Cataloguers committing themselves to checking their materials to ensure that they are rightly catalogued and are not duplicates. They further suggested that cataloguers should consult one another when cataloguing problematic items. A Peer Review mechanism should be encouraged amongst Cataloguers so as to uphold the standards of their profession and committing themselves to work by constantly updating their knowledge. There were also suggestions that Cataloguers should be encouraged to attend refresher courses in cataloguing and that the department should hold training workshops at least once or twice in a year in order for Cataloguers to share and brainstorm on issues of cataloguing; i.e. issues such as AACR2, data entry, etc. This would bring about consistency in the database and working culture among Cataloguers regardless of where and when the work was done. Training Workshops would help the departments to come up with a manual on cataloguing. These revelations support Muller's (2007) argument that Librarians/ Information specialists should therefore, play an important role in knowledge management based on their training and experience developed and gained over the years. He further reveals that librarians need to extend and renew information management principles and skills and link them with the processes and core operations of the library in order to be successful in knowledge management activities.

### **Information and knowledge needs of cataloguers**

Identifying the knowledge needs of cataloguers is necessary as it helps not only cataloguers to perform better and professionally thereby avoiding inconsistencies; but library management as well, for they would be able to plan for the needs of the cataloguing department. Several knowledge needs were identified: need for information and knowledge on information processing, retrieval and systems that would allow editing and deleting of unnecessary information; up-to-date information to equip cataloguers with current trends in cataloguing since information is dynamic and changing at a faster rate than what people can cope with; constant training and shared knowledge from workshops, with the explanation that workshops open up people's minds. It was further revealed that there were no forums where Cataloguers can have the opportunity to share skills and experiences apart from rare brief meetings within the department.

### **Effectiveness of the Existing Knowledge in the Cataloguing Department**

The study revealed that, the knowledge existing in the department is helping the library meet its goals and objectives of providing information to University students and faculty to support learning and research, despite the inadequacies experienced in terms of inconsistencies and duplicate records in the database. It was further explained that through the data input and processing done by the cataloguing department, the library is able to have its users easily access and retrieve information from the database. The Cataloguing and Classification department is likened to a factory for it processes all library materials to make it possible for users to easily retrieve and use these information materials when they need them. And the information resources can be used for various activities such as: assignments, lecturing and research. As a result of the work of the Cataloguing and Classification department, the information resources in the library are organised and arranged systematically for easy location, retrieval and use. This benefits library users who are able to access needed information. This is as a result of effective knowledge processing during cataloguing through the use of explicit knowledge such as AACR2, LCC Schedules with its Subject Headings and cataloguing manuals, which provides easy storage and retrieval systems. It is through these cataloguing and classification practices and processes that the department is supporting the library meet the overall motto of the university of 'Service and Excellence' in teaching and research.

### **Cataloguing and Classification in the African context**

The importance of a Cataloguing department to the general library operations has been emphasized by Omekwu, John-Okeke, and Egberongbe (2007). They stated that in African libraries, cataloguing should be the first operation to apply Information Technologies to their operations. This reasoning is coupled with the consideration of the large amount of cataloguing data available in most African libraries, the repetitive nature of cataloguing and the desire by cataloguers to achieve consistency on catalogued materials in libraries. There is also need for the application of common cataloguing policies and rules in all libraries to provide greater uniformity in the provision of bibliographic description and access to information to library users. Byrum (2000) stated that there is need to expand applications of global bibliographic networks such as the AACR2, Library of Congress Subject Headings (LCSH) and Sears Lists of Subject Headings in order for them to achieve greater uniformity in the provision of bibliographic description and access to information in the libraries they serve. Application and expansion of these international bibliographic systems would help African cataloguers to come up with common cataloguing policies and rules, which

would lead to consistency in cataloguing and hence controlled redundancy in their databases (Omekwu, John-Okeke, and Egberongbe, 2007).

The Gauteng and Environs Library Consortium (GAELIC, 2004), an academic consortium of higher education institutions in South Africa gives an example of how the University of Potchefstroom in South Africa (now renamed the University of the North-West) has performed in trying to achieve common policies and rules as a way of achieving consistency on catalogued materials. In 2003, the university conducted a workshop for library cataloguers; focusing on authority control to ensure consistency for shared cataloguing and to promote search precision. The workshop presented knowledge access points such as identification, formulation and choice, governed by AACR2, LCSH and Dewey Decimal Classification (DDC). This workshop was meant to skill new cataloguers in assigning access points to bibliographic descriptions for information resources and to ensure consistency for shared cataloguing. It was argued that this would promote precision searching of library materials, reduction in time spent doing a search by library users. The GAELIC further revealed that a system of peer reviewing facilitated by OCLC's (Online Computer Library Center) Online Save File was investigated for the purpose of encouraging inexperienced cataloguers to do original cataloguing on the World Catalogue (GAELIC, 2004). The aim was to assist cataloguers to be able to create bibliographic records that comply with international standards. This implies that as long as there is an agreed working standard by librarians internationally, working standards in single libraries will not be an issue. In cases where such efforts are not made, the results will impact on the profession. This is when working standards of librarians; especially cataloguers are compromised resulting into a lot of inconsistencies and duplicate records in their databases. This also means that retrieval of documents by users becomes time consuming and cumbersome; and eventually can lead to loss of trust in the service offered.

In Zambia, efforts to help librarians come together for the purposes of building, sharing and managing knowledge in their libraries have followed trends world-wide. These efforts by librarians have been in the form of networks and forums where knowledge creation and sharing is encouraged. The main aims of these networks and forums are to build knowledge and establish standardized working systems among all librarians and Cataloguers. This is the idea behind the organisation of conferences and workshops at both national and international levels to allow librarians to share, and learn or get ideas from their colleagues. For example, in 2008, Zambia hosted the 18th Standing Conference of Eastern and Southern African Librarians (SCECSAL) conference where Librarians from many parts of Africa and the rest of the world presented papers (SCECSAL, 2008). The conference allowed the participants to share experiences and knowledge of the profession both formally in the sessions of the conference and informally through discussions held around the conference.

The process of resource and knowledge sharing should however be governed by well laid down rules and regulations in order to achieve uniformity. Looking at the efforts that have been made in the country, UNZA Library has not been left out in these developments. Though UNZA Library has conducted training workshops for its librarians and those in its affiliated institutions, there is still need for more forums that would facilitate skills sharing amongst librarians. Librarians should be able to manipulate available knowledge for their benefit and that of the libraries they serve. Muller (2007) suggests that librarians need to combine both their existing and new skills to achieve

knowledge building and consistency among themselves. This will ultimately lead to their improved performance levels, and add to the value of their profession.

The study clearly shows that there is little knowledge sharing and transfer of knowledge among cataloguers, especially in terms of creation, capturing and refining of knowledge by cataloguers. It also reveals that there is an overwhelming verbal knowledge sharing culture amongst the cataloguers. The findings also reveal that the use of existing rules or standards such as AACR2 and LCC Schedules; with its Subject Headings is compromised by the poor grounding of cataloguers in cataloguing issues, hence the need for retraining of cataloguers through further learning and workshops. The study further indicates that there is no system put in place to manage tacit knowledge, which needs to be documented if it has to be effectively used and followed. This was identified as one of the factors causing inconsistencies and duplication of records in the database because implementing standards would prove difficult to achieve without knowledge that is documented. Other factors identified were lack of proper grounding in terms of training and skills (incompetence) in cataloguing by some cataloguers who were not able to seek help from colleagues. The other factors were the inability of Cataloguers to verify the existence of materials in the database before working on them while some inconsistencies and duplicates were simply blamed on human error.

### **Conclusion**

There is need to promote and encourage cataloguers to come up with effective KM practices and processes, which would lead to proper knowledge sharing, transfer and refining of both internal and external knowledge, resulting into knowledge growth. This can be achieved by creating policies and opportunities where cataloguers can exercise their knowledge base which could either be formal or informal in such spaces as; forums, meetings, email collaboration, workshops, social gatherings and casual interactions with other experts; in the field such as lecturers and other cataloguers from other libraries. These forums would allow cataloguers to interactively create, share, transfer, refine and exchange ideas, experiences, wisdom, expertise and knowledge with one another. The knowledge shared and generated from these forums should be documented, used and managed by and for the cataloguers and for the benefit of the library users. It is only by the service delivery that Cataloguers can tell society that they are professionals; as such, society should be able to see their professionalism from their quality output, i.e. professional cataloguing of library materials, maintaining consistency and conforming to internationally agreed standards of cataloguing and classification.

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