Journal of Knowledge Management Application and Practice
An International Journal

http://dx.doi.org/10.18576/jkmap/020201

Implementing Knowledge Management in Academic Libraries in Cameroon: A Librarian's Perception

Bawack Roseline[*]

Advanced School of Mass Communication (ASMAC), University of Yaoundé II, Cameroon.

Received: 25 Feb 2020, Revised: 19 April. 2020, Accepted: 28 Jun. 2020.
Published online: 1 Aug 2020.

Abstract: The emergence of knowledge management (KM) has offered academic libraries the opportunity to improve effectiveness, both for themselves and for their institutions. Despite the increasing interest in knowledge management by a wide range of library professionals, the acceptance, adoption, and implementation of KM is still very slow particularly in academic libraries of developing countries like Cameroon. To prove their relevance, value, and operational efficiency amidst institutional, financial and socio-cultural and political challenges, the implementation of knowledge management remains a viable means in which academic libraries in Cameroon can greatly valorize their services and operations.
This paper seeks to investigate the possible implementation of knowledge management in academic libraries in Cameroon. Through a quantitative method of data collection, this study explores librarians' familiarity with the concepts of knowledge management, current KM practices, tools used, and perceived challenges to incorporate KM into academic library practices in six out of eight public universities in Cameroon. The study design is based on a literature review and a structured questionnaire containing both open- and closed-ended questions. Findings indicate that the term "knowledge management" is not very familiar to most library professionals in Cameroon. Most of those who have heard about knowledge management could not define the term in their own words. Most librarians are not involved in KM practices. Those who are aware of KM appreciate its benefits through the use of explicit knowledge. Some KM tools used by librarians were identified. Lack of knowledge sharing culture, misunderstanding of the concept, lack of infrastructure, no policy, and no involvement of hierarchy, are the major challenges faced by librarians to incorporate and implement KM into academic library practices. Professional education and training programs, information technology, knowledge sharing, and communities of practices were identified as basic requirements needed for the implementation of KM. The study recommends and emphasizes the need to adopt and implement KM in academic libraries in Cameroon.

Keywords: Knowledge management, academic library, Cameroon, librarian, University.

1 Introduction

Since the dawn of the twenty-first century, the library and information sectors are experiencing great transformation caused by emerging technological advances. However, technological changes are not the only forces changing libraries and information professionals. According to Brophy (2001) [1], there are also massive socio-cultural, psychological, philosophical, and institutional forces causing change. In this current dispensation, knowledge has become a major resource, and knowledge management has become the strategy to harness organisational knowledge and enhance the capacity to drive relevance, performance, and productivity. Knowledge management practices can be very beneficial to academic libraries. Its contribution can be seen from three perspectives: a) Where academic libraries decide to adopt appropriate knowledge management applications; b) where they decide to create a conducive knowledge-sharing environment; and, c) where they decide to adopt a sustainable non-hierarchical organisational culture to facilitate communication as well as a vertically and horizontally knowledge sharing process [2].

Although it was from the late 90s that knowledge management became popular in literature, the concept of knowledge management may not necessarily be new to librarianship because librarians and information professionals have been

[*]rbawack.bcuyi@gmail.com:

practicing knowledge management for several years, and the traditional library role has always been one of identifying and organising information, sharing information resources, and connecting people to the information they need. In their paper Prusak and Davenport [3], who are one of the most cited knowledge management authors, call upon library and Information professionals to get out of their traditional functions as custodians of information and providers of centralised expertise and integrate their activities and goals to a new concept which is knowledge management.

Although knowledge management offers several benefits to academic libraries and librarians, its acceptance, adoption, and implementation is still slow within this sector [4]. Academic libraries are called upon to embrace this new concept. It is to their advantage and that of their parent institution. In today's society labelled as the knowledge society, the success of the academic library depends on its ability to capture, share, distribute, and utilize knowledge of library staff, technology, and other resources to effectively serve the needs of their patrons. Though several academic libraries in developing countries are affected by stagnant, reduced, and dwindling budgets [5], knowledge management can increase their operational efficiency to face challenges like the increasing and changing demand from library patrons [6,7]. This is especially true for a developing country like Cameroon with a rapidly developing economy striving to reach emergence by 2035.

2 The Concept of Knowledge Management

The concept of knowledge management started and was propagated in the business world during the last decade of the 21st century. The business world first recognized the importance of knowledge in the global economy, of the 'knowledge age'. In this new economy, the possession and demand of strategic knowledge and its increasing renewal for reuse enabled organizations to gain a competitive edge. The applications of knowledge management have now spread to other sectors both private and public including areas like academic institutions and the library and information professionals.

2.1 Data, Information & Knowledge

To comprehend knowledge management, it is important to start by understanding the concept of knowledge and its relation to data and information. The most common presentation of these three is that of a knowledge hierarchy that starts from data (facts and figures) to information (which is contextualized data), to knowledge (information with meaning), and to intelligence or wisdom (knowledge with insight). UNESCO defines data as facts, concepts, and instructions in a formalized manner suitable for communication, interpretation, or processes by human or automatic means. Data comprises discrete and objective facts and observations out of context that is not directly meaningful [8]. For data to become information it should be processed and contextualized. Information, on the other hand, is placing data within a meaningful context to make it useful for end users. Knowledge is more extensive than data and information and it requires understanding information. Knowledge can be seen as that which people believe and value based on the meaningful and organized accumulation of information through experiences and communication [9, 10].

Knowledge is defined as a justified personal belief that increases an individual's capability to take effective action [11]. Although 'information' and 'knowledge' are often used interchangeably by people, there is a clear difference between the two terms[12]. Knowledge is what an individual possesses after assimilating facts and experience, and putting them into a given context, while information is knowledge that has been shared through communication. Information by nature is passive while knowledge is dynamic and active, residing in the heads of people. According to McInerney (2002) [13], knowledge is highly valued because it is closer to action and decision making, while information on its own does not make decisions. Therefore, information is tangible and available to anyone who searches for it, while knowledge is intangible and perceived as a justified personal belief that increases the capability of an individual to take action effectively.

2.2 Tacit and Explicit Knowledge

Knowledge is generally distinguished in two main types, tacit and explicit. Tacit knowledge is defined as subjective and experience-based knowledge which cannot be expressed in words or numbers, therefore, it cannot be transmitted and shared easily [12]. It is highly personal, embedded in an individual's experience, and involving intangible factors as personal beliefs, perspectives, values, and instincts. It is personal knowledge which is in the human mind, difficult to formalize, and difficult to communicate [14].

Explicit knowledge, on the other hand, is formal and systematic knowledge that can be expressed in words or numbers and can be stored in databases as electronic records [15]. Explicit knowledge can be captured, stored, and transferred adequately with the help of electronic tools, while tacit knowledge is more difficult to capture, store, and disseminate.

This distinction between tacit and explicit knowledge was first elaborated in detail by Michael Polyans (1966) [16] and

later adopted by Nonaka (1991) [17]. Explicit knowledge, as defined by Nonaka, is formal and systematic: codified in the form of product specification, scientific formula, or a computer program, and which is stored in documents, textbooks, databases, and web pages [17]. Clarke (2004) [18]defines explicit knowledge as highly personal knowledge rooted in an individual's know-how involving intangible factors as personal beliefs, values, perspectives, and instincts. According to Clarke, it is essential to capture, share, transfer both tacit and explicit knowledge because "effective transformation of knowledge in an organisation reduces duplication, improves productivity, and cut costs".

With the help of electronic tools, explicit knowledge can be captured, stored, and adequately transferred, while tacit knowledge, even though it represents great value to an organisation, is far more difficult to capture and disseminate. This is why the most efficient way for an organisation to convey tacit knowledge within, is through face to face interaction and practices such as mentoring, apprenticeship, Communities of Practice, and network analysis [19].

2.3 Definitions of Knowledge Management

There are several definitions of knowledge management in literature from diverse perspectives. A few have been selected for this study. Knowledge management has been defined as a method used by management that oversees the creation and utilization of both tacit and explicit knowledge in organisations [20]. It has also been defined by Kim [21], White, (2004) [22] & Jain (2007) [23] as practices of creating, acquiring, storing, sharing, and re-using organisational knowledge (know-how) to improve performance and accomplish organizational goals and objectives. Knowledge management is a process, which deals with knowledge creation, acquisition, packaging, application, storage, and reuse of knowledge. Within the context of academic libraries, knowledge management can be defined as the capabilities by which librarians identify, capture and store the knowledge that is critical and relevant to them, continuously improve and update it, and make it accessible in a variety of formats and in the most effective manner to library patrons for exploitation to add value as a normal part of their work. According to IFLA, KM is "a process of creating (generating, capturing), storing (preserving, organising, integrating), sharing (communicating), applying (implementing), and reusing (transforming) organisational Knowledge to enable an organisation to achieve its goals and objectives [24].

3 Literature Review

3.1 Implementing Knowledge Management in Academic Libraries

Several studies have been produced by several writers on implementing knowledge management in academic libraries. There is no unanimity among scholars regarding the claim that knowledge management is a new field for academic libraries [25-29]. Knowledge management perceptions and definition varies with field of study, confirming that knowledge management is multidisciplinary and no universally accepted definition of it exists. This opacity has established an indispensable hurdle in the implementation of knowledge management[30]. Whatever standpoint one may take, the pressures for survival in the knowledge society have forced academic libraries to find new ways of operation. Academic libraries are looking beyond their professional boundaries for new and better insights, models, and benchmarks as guidelines.

Knowledge management has been viewed as a survival factor for academic libraries to overcome these challenges in the changing and competitive environment[31]. Shanhong (2000) [32] suggests that the objective of KM in libraries is to promote innovation, relationships in and between libraries and the library user to strengthen the internetworking of knowledge and to accelerate knowledge flow. In the academic library environment, it is acknowledged that the implementation of knowledge management improves the library's operational effectiveness, such as improved access to information online resources [33], and facilitates innovation in services and operations through the enhancement of knowledge sharing both internally and externally[34].

Results of research conducted by several authors show that knowledge management can contribute to an improvement in the prospects of libraries [35]. Libraries can develop their knowledge-based services for both internal and external users by creating a sustainable organisational culture of sharing knowledge and expertise within the library [36,37]. The International Federation of Libraries Associations and Institutions (IFLA) introduced Knowledge management in its 47th section of the activities to support the implementation of knowledge management culture in libraries and the information environment. Knowledge management courses are increasingly been introduced into undergraduate and postgraduate programmes in Africa as it is the case of the Advanced School of Mass Communication (ASMAC), University of Yaoundé II, in Cameroon. Others have gone further to offer undergraduate and Master's degrees in knowledge management e.g. Ghana University, South Africa, Dominican, Emporia, Oklahoma, Loughborough, London Metropolitan University, and Australian universities.

3.2 Perceptions by Academic Library Professionals

There is a divergent view among LIS scholars whether knowledge management is new or is just a fad. Some scholars have viewed knowledge management as an emerging threat for library professionals, to survive in the complex and competitive academic and professional environment. Other scholars believe knowledge management is an opportunity for librarians to improve performance and achieve organizational goals, while some believe that it is another form of knowledge management in a new label. Whatever the perception, academic librarians have always operated as viable intermediaries between scholars who have knowledge and those who know or need to acquire knowledge. This affection with knowledge is an indication that knowledge management is an integral part of the work of librarians, However, some critics are of the view that although librarians have been managing knowledge resources in their libraries, they have done little to use organizational information to create knowledge that can be used to improve the overall functionality of library processes [38]. Results of a survey conducted to investigate the perceptions of knowledge management by library and information science professionals in Australia revealed a considerable variation in levels of perception and awareness of the term knowledge management and a lack of understanding of knowledge management concepts among LIS professionals [39].

3.3 Roles of Librarians in Knowledge Management (KM)

To maximize the application of their skills in the knowledge society, and to take advantage of new opportunities, librarians need to be familiar with this new concept and context. This means that librarians not only need to be more creative, innovative, and imaginative in the application of their traditional skills, and able to make critical decisions but must also be capable of shifting to what is now known as a strategic mindset to become knowledge workers. This requires the ability to appreciate the broader environment in which their institutions operate, including the role of the academic library, its users, and the role of knowledge in achieving organizational success. Hence, the professional and technical skills of graduates of library and information sciences need to be applied within a way that reflects a mastery of context and that contributes to their institutional goals.

A survey conducted by Raja, et al. (2009) [41] concluded that the successful implementation of KM requires substantial contributions from librarians since they are information disseminators. Such contributions would require new skills, even though the traditional skills of librarians are still relevant to provide the vital elements needed for knowledge management [42]. Despite the paradigm shift in library operations, the unfamiliar vocabulary of the job specifications, skills and abilities sought by employers in the present knowledge society, academic librarians will soon see the necessity to possess both tangible and intangible skills [43]. Tangible skills would be required for online search, research, quick references, knowledge sources, collection development, and information technology; and intangible skills would be required for, customer services, communication & marketing, orientation, organizational understanding, interpersonal skills, and business knowledge [44]. This statement is supported by the results of a study conducted by Lai (2005) [45] which shows that 18.5% of all KM job postings asked for an advanced degree in library and information science.

A review of literature has shown that in recent years academic libraries are taking knowledge management seriously. Results from an empirical study from Canada shows that many information professionals involved in KM activities have acquired new skills and are playing key roles, such as the design of the information architecture, knowledge managers, the knowledge management officers, and content management officer for the organisation’s Intranet. Other librarians are playing more familiar roles, such as providing information for the Internet and Intranet, gathering and analysing information for competitive intelligence, and providing various research services as relevant to the organization and as requested by the management team [46].

A case study on elements of knowledge management within Oxford University Library Services (OULS) focused on the perceptions of library staff on knowledge management. The study revealed that library staff were willing to share knowledge [47]. A new tool has been developed by a team of reference librarians within the New Brunswick Campus Libraries of Rutgers University to capture and reuse the tacit and informal knowledge of reference librarians [48]. Similarly, Branin (2003) [49] describes a knowledge bank at Ohio State University in Nigeria as a Knowledge Management System (KMS). This knowledge bank is a digital institutional repository to capture intellectual assets of the university in a variety of formats, including those that are unpublished, unstructured, and unique.

Similarly, Clarke (2004) [18] believed that, for knowledge management to be successful in any organization, there must be a navigational tool. He shared his experience of a knowledge management system (KMS) developed for use throughout the main library at the University of the West Indies in Trinidad. This tool was developed because the records, files, policies and procedures of the library were not properly maintained or organized.

3.4 Research Problem

A lot of rich literature has been produced on knowledge management, its implications, benefits and implementation in academic libraries [6,18,22,38,50-53]. Most of the studies come from a Western perspective and very few from Africa particularly from Central Africa. According to the literature, KM initiatives and its implementation in academic libraries have a long way to go, with an incredible potential for improvement [28]. Therefore, all academic libraries should be encouraged to apply knowledge management. Despite widespread agreements on the benefits of implementing knowledge management in academic libraries, few studies have explained how to improve library operations through the implementation of knowledge management in Africa [54].

It is therefore important to conduct this study from the perspective of a developing country in Central Africa such as Cameroon. Even though Cameroon can showcase knowledge management practices from some private and public sectors, literature indicates that no research has been conducted on academic libraries. Specific concerns regarding the perceptions, acceptance, and adoption of knowledge management concepts by librarians, its applications, perceived challenges, and possible implementation have been absent in research in Cameroon. This study is, therefore, an attempt to fill this gap.

3.5 Objective of the Study

This study investigates the perceptions of librarians from six out of eight public universities in Cameroon concerning the concept of knowledge management and to analyse and establish the importance of knowledge management applications in academic libraries. To meet its aim, the objectives of the study are as follows:

- To investigate the librarians' level of awareness of the term and concept of knowledge management.
- To investigate KM activities and identify their level of application in academic libraries.
- To identify and examine the perceived challenges faced by academic librarians to incorporate knowledge management into library practices.

3.6 Significance of this Research

Although knowledge management is now a highly contemporary issue in both research and practice, there is much ambiguity concerning its nature and theoretical basis, particularly when it concerns academic libraries. Very few empirical studies have been conducted into the implementation of knowledge management by librarians in Africa. A major strength of this research is the fact that it is helping to break new ground in an area (in Cameroon) where no research has been conducted. The results of this empirical study could help advance understanding of knowledge management among librarians in Cameroon and, and provide significant input into encouraging its implementation in library operations.

4 Research Methodology

The study employed a descriptive research design utilising the case study approach. The methodology used is a combination of quantitative and qualitative methods. This falls largely within an interpretivist paradigm because it does not seek to identify or test variables, rather it seeks to draw meaning from social contexts, in this case from the perceptions of the librarians facing challenges as a consequence of the emergence of knowledge management. Questionnaires, interviews, observations, and a literature review were used to collect data. A structured questionnaire, containing both open and close-ended questions was designed and sent by postal mail to 67 respondents and some through the web to three chief librarians of the six selected public universities. All 67 questionnaires were completed and returned. This represents a response rate of 100% %. Participants for the study comprised of all academic librarians and non-librarians working or assisting in library services across all sections of the library. To obtain in-depth information about the current knowledge management practices in the Universities, two Chief librarians including two Deputy University librarians accepted to be interviewed Participants were requested to participate voluntarily in this study, about fifteen to twenty minutes was required to respond to the questions, return to the chief librarian who posted them back to this researcher.

5 Results and Discussion

The following section will present and discuss the research results of the study conducted at six state Universities of Cameroon.

5.1 Gender and Educational Background

The respondents of the study comprised of more female (79%) than male (21%). This depicts that academic libraries in Cameroon are female-dominated. In terms of educational background, more than half of library workers do not have a background in Library and Information Science (LIS).

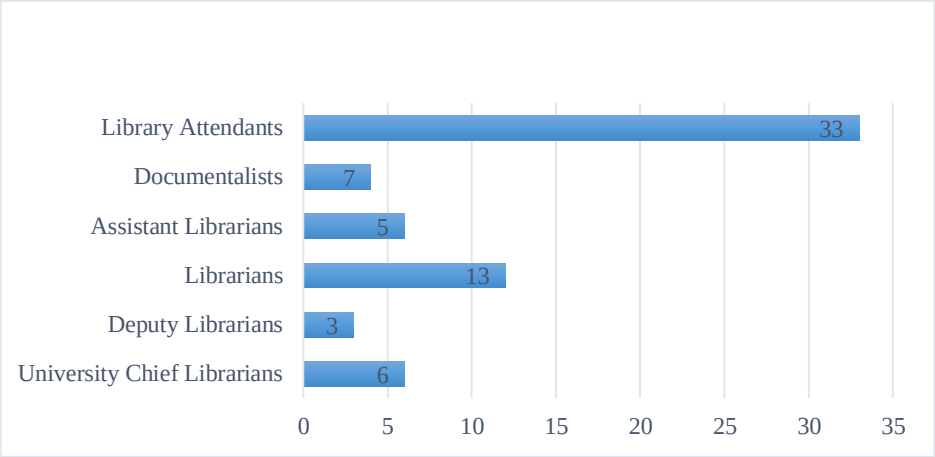

Fig. 1: Job positions.

Results indicate that there are six university chief librarians (or directors of the library), three deputy librarians, thirteen librarians, five assistant librarians, seven documentalists, and thirty-three library attendants and other professionals. The average reported working experience in the library and information sector was 12.7 years.

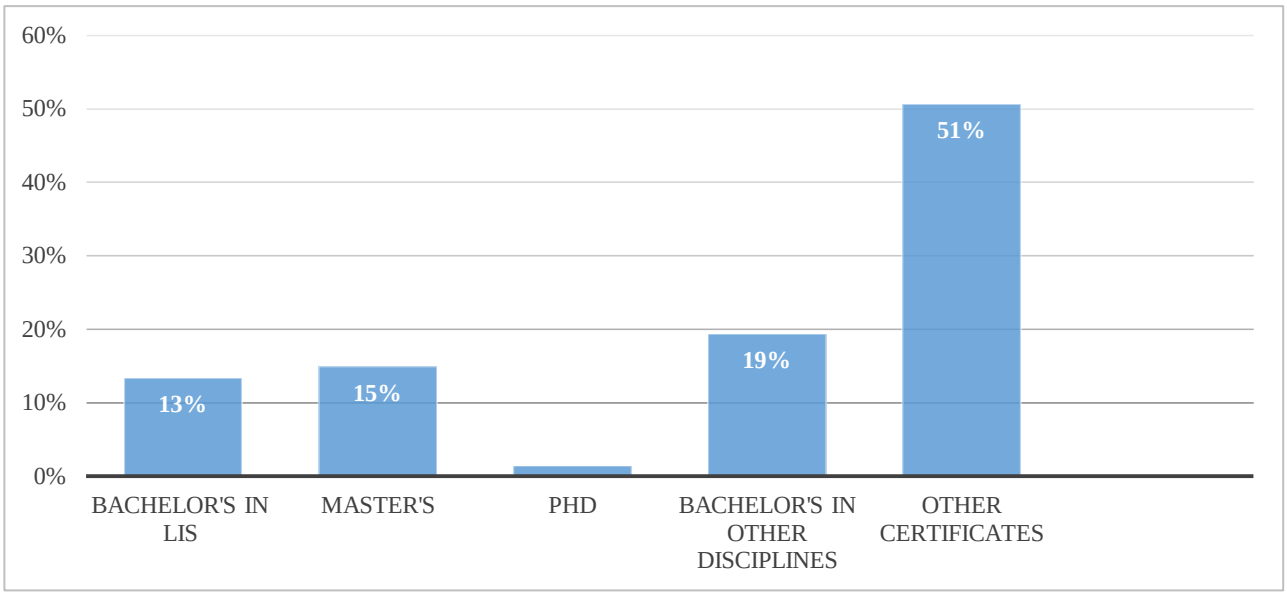

Fig. 2: Highest educational qualification.

In Figure 2, we show the academic qualifications of library staff in Cameroon. Findings indicate that 9 of the respondents hold a bachelor's degree in library and information science (13.43%), 10 have a master's degree (14.93%), 1 PhD. Degree (1.49%), 13 have Bachelor's degree in other disciplines (19.40%) and 34 others have in other certificates (50.75%). This shows a deficiency in terms of skills and keeping up to date with contemporary library demands. It also indicates that most librarians and library staff in academic libraries in Cameroon are not trained for the job based on their educational backgrounds.

5.2 Awareness and Perceptions of Knowledge Management Concepts

The respondents were first asked to know whether they are aware of the term 'knowledge management'. The result shows that most of the library professionals have heard the term knowledge management as 98.7% of the respondents

replied in affirmation. Further, they were asked about the different ways of knowing knowledge management. Our results (figure 3) indicate that library professionals came to know about knowledge management in diverse ways. However, most of the respondents (59.70%) indicated that they came to know from discussions with colleagues, (17.90%) said they have learned from their practical work, (16.21%) said from reading books and journals, and (14.93%), said by attending conferences, workshops, and seminars. This confirms that some librarians did not clearly understand the concept of knowledge management.

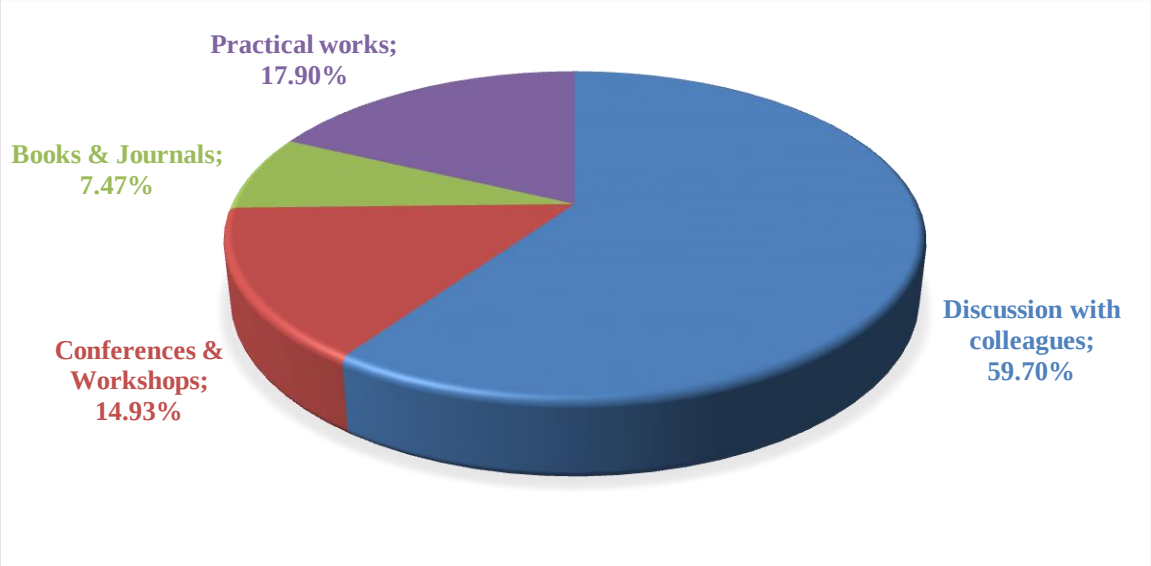

Fig. 3: Levels and modes of understanding of KM concepts among library staff

The concept of knowledge management is defined differently by different experts from different disciplines. There is no unanimous accepted definition of knowledge management [55] especially in the context of academic libraries [56]. Academic libraries need a definition of knowledge management that corresponds to the libraries' characteristics, performance, and expectations. Respondents were asked to define knowledge management in their own words. Only 60% of respondents provided definitions of knowledge management. Some of the definitions provided were not related to knowledge management concept in any way and has not been presented in this study. Others did not attempt to define knowledge management. This confirms that most academic librarians in Cameroon are not conversant with the concept of knowledge management. A direct consequence of this is the absence of a KM policy and strategy. This could be because most library workers do not have qualifications and training as librarians, they are merely engaged in routine assigned tasks and are not familiar with the epistemological dimensions of librarianship. Some of the acceptable definitions confirmed that the term knowledge management has varied connotations for different library professionals. They conceptualize knowledge management from different viewpoints which have been illustrated in Table 1 below.

Table 1: Various definitions of knowledge management by librarians Cameroon

"It is a systematic management of an organization's useful information and knowledge assets for the purpose of achieving organization's objectives"
"The process of creating, preserving, distributing the information resources of any institution to achieve its objectives"
"Knowledge management can be defined as the selection, organization, dissemination and preservation of knowledge and information in any media to increases the performance of the library".
"*Knowledge management is the way you organize, preserve and apply information in library practices".*
"*Knowledge management means the process of creating and sharing resources in the library".*
"*Knowledge management is the process of handling useful information or knowledge within the confines of an organization".*
"*Knowledge management means using some methods and techniques to help the organization identify, analyse, organise, and share knowledge in an organization for usage"*

The respondents were equally asked whether knowledge management is just another fad like information management (Table 2). Most of the respondents agreed or strongly agreed that knowledge management is a new term for what library professionals were already doing, This supports the research by Olembe (2012) [57] that an academic library is a knowledge-based organization where collection, storage, and maintenance of knowledge by librarians is an old practice in librarianship.

Respondents seemed aware of the opportunities knowledge management provides to them as most of them strongly agree that library and information science professionals have important roles to play in knowledge management projects and programs. Similarly, an overwhelming majority either agreed or strongly agreed that information management is just another aspect of knowledge management, which demonstrate the thinking of library professionals that information management involves the management of explicit knowledge (textbooks, documents, databases, web pages, etc), while knowledge management is a broader aspect involving management of both explicit and tacit knowledge [27].

Table 2: Is KM another fad like Information Management?

	Strongly disagree	**Disagree**	**Not sure**	**Agree**	**Strongly agree**
Knowledge management is just another fad similar to Information Management	10%	17%	3%	38%	32%
Knowledge management is a new term for what library and information professionals were already doing	5%	11%	18%	48%	18%
Library and librarians have important roles to play in KM projects and programmes	00%)	00%	2%	28%	70%

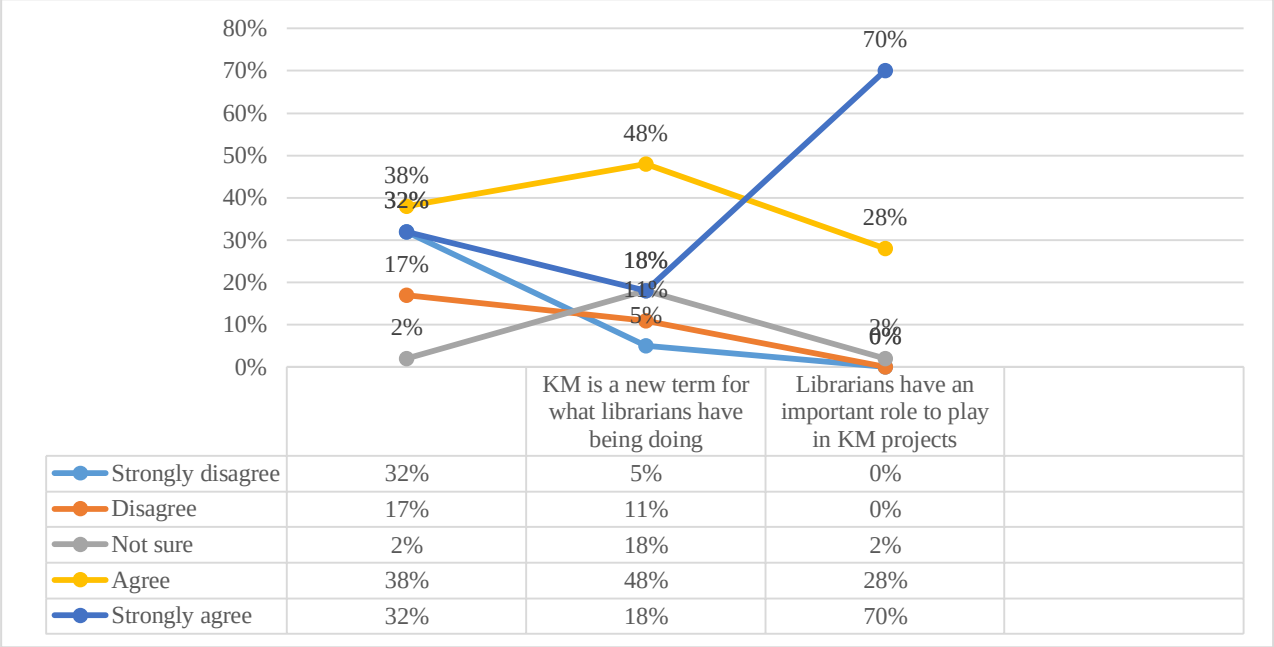

Fig. 4: Is KM another fad like Information Management?

5.3 Applying Knowledge Management in Academic Libraries

It was necessary to establish a baseline regarding the application of knowledge management in academic library services

and operations. There is no evidence of any academic library in Cameroon which has formally incorporated knowledge management in its strategic plan; however, findings reveal that there are some isolated cases, some libraries are practising knowledge management knowingly or unknowingly. In the search for evidence, respondents were asked to indicate if they were engaged in any formal or informal knowledge management practices in their libraries. Seventy-seven percent of respondents answered negative 'No'. Those who answered 'Yes' to this question (23%) were asked to specify the knowledge management activities of their library. Responses indicate that those who understand the concept of knowledge management have identified knowledge management practices in their libraries. Below is a summary of some of the comments in Table 3.

Table 3: KM practices in academic libraries

'O*ur library provides training to the staff''.*
'Our library has engaged in partnerships and collaboration with other libraries and organisations to acquire knowledge and resources'. (Leveraging and sharing knowledge is a key component of partnerships and collaborations).
'*We have moved from manual collections of books and journals to progressive digitization of our institution's dissertations and thesis'.*
'In the technical section by capturing resources from the internet, storing and making it accessible through the library's website to students and researchers'.
'*Our library provides resources in both print and electronic formats'.*
'We produce to our students, teachers & researchers orientation programs and explain to them how they can utilize and maximize library resources'
'We guide our postgraduate users on how to locate the most suitable, reliable, and authentic information from credible sources. We help then to evaluate information sources relevant in their field of study'.
'*Library automation by creating and managing our library website for availability of library information and resources on worldwide web'.*
'*Creating a database of thesis and dissertations – open access online database'.*
'*Building research articles and online database of periodicals subscribed in our library'.*

5.4 Knowledge Sharing Culture

People and culture are key for knowledge sharing activities in any organisation. This study also wanted to find out if the staff were encouraged to systematically share their skills, expertise, and experiences through various mechanisms. Respondents indicated that knowledge was shared informally within the library during staff meetings (51.0%), collaborative group work (29%), and circulation of written documentation such as newsletters, service notes, restitution meetings, feedbacks (20%).

Overall, 13.1% of the respondents said that knowledge sharing among staff was on average, 21.7% mentioned that it was good, 17.4% said it was poor and 47.8% indicated that it was unsatisfactory. It can be argued that though findings indicate that some libraries share knowledge to some extent, the level of sharing of knowledge among its library staff is insufficient. Many respondents indicated that information and knowledge were shared only among the selected staff. When asked for additional information to back their choice, it was revealed that some staff members are not aware when their colleagues travel to attend conferences/workshops, and they are not invited to attend restitution or get feedbacks from such conferences or workshops. This could be a demotivating factor to implement KM in academic libraries in Cameroon. More emphasis should be placed on formalising knowledge sharing activities and encouraging an indiscriminate knowledge sharing culture.

5.5 Knowledge Management Tools and Techniques in Academic Libraries

Respondents were asked to suggest better ways to apply knowledge management in academic libraries using tools and techniques. According to results shown in table 4 below, an overwhelming majority (92%) of respondents either agreed

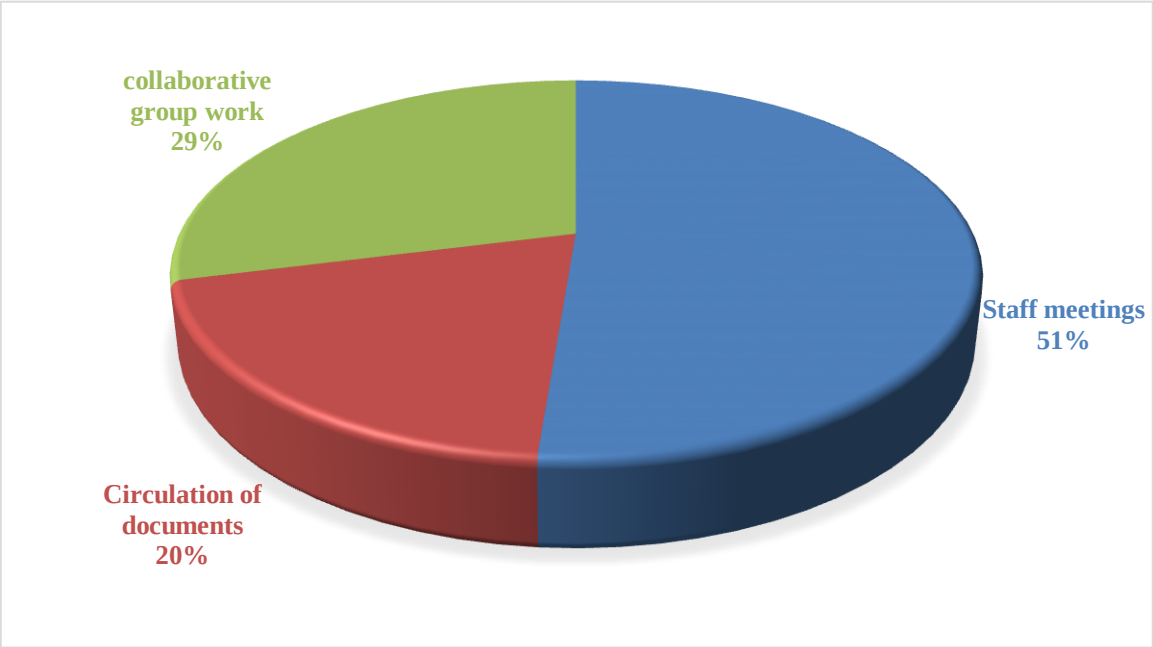

Fig. 5: Knowledge sharing culture statistics.

or strongly agreed that knowledge management can be applied in academic libraries by providing training and education to employees. (71%) of respondents agreed or strongly agreed that knowledge management can be implemented in academic libraries through the support of Community of Practices. Other respondents 13% were not sure or (16% disagreed), meaning probably that these respondents did not understand what 'Communities of Practice' meant in the context of knowledge management, therefore, did not know its function. Information technology serves as a powerful enabler to KM practises and processes. IT has dramatically transformed academic library operations and changed the roles of librarians by providing effective and efficient tools needed for knowledge management processes like knowledge acquisition, capturing, storing, sharing, and application. Responding to the question on the role of IT in knowledge management in academic libraries, an overwhelming majority of the respondents (82%) considered it as one of the key drivers for knowledge management in their libraries.

5.6 Basic Knowledge Management Practices Not Being Practiced in Academic Libraries

Leadership: Following the interviews conducted, two deputy librarians indicated that if the library has to implement knowledge management, they need the support of their hierarchy and that the Chief Librarian should play the leading role

Knowledge capturing and acquisition: The study was interested to find out if the library staff had captured and acquired tacit knowledge of its internal staff. Overall, 97.0% of respondents indicated that there was no capturing and acquisition of knowledge from the internal staff. The results show that either the library has not recognised the capacity of its staff or does not master the techniques of capturing their tacit knowledge. Interviews conducted with senior librarians indicated that colleagues did not master the techniques of capturing knowledge. The chief librarians complained of low staff turnover with inadequate skills. It was revealed that the knowledge and expertise of retired library staff had not been captured, and those who had been trained left for better-paid jobs. Academic libraries need to develop ways to capture the expertise and know-how of experts else they will often suffer permanent loss of valuable knowledge through retirement, dismissals, resignations for better jobs, and death'[58].

Policies and strategies: The study wanted to know if academic libraries had separate policies or strategic planning activities related to KM. The two separate interviews indicate that knowledge management is not yet an integral part of the strategic plan of academic libraries. KM has not been adopted as an activity on its own to have a policy. KM practises are informally institutionalized. This revelation is an indication that there is obviously an awareness issue on knowledge management in academic libraries in Cameroon.

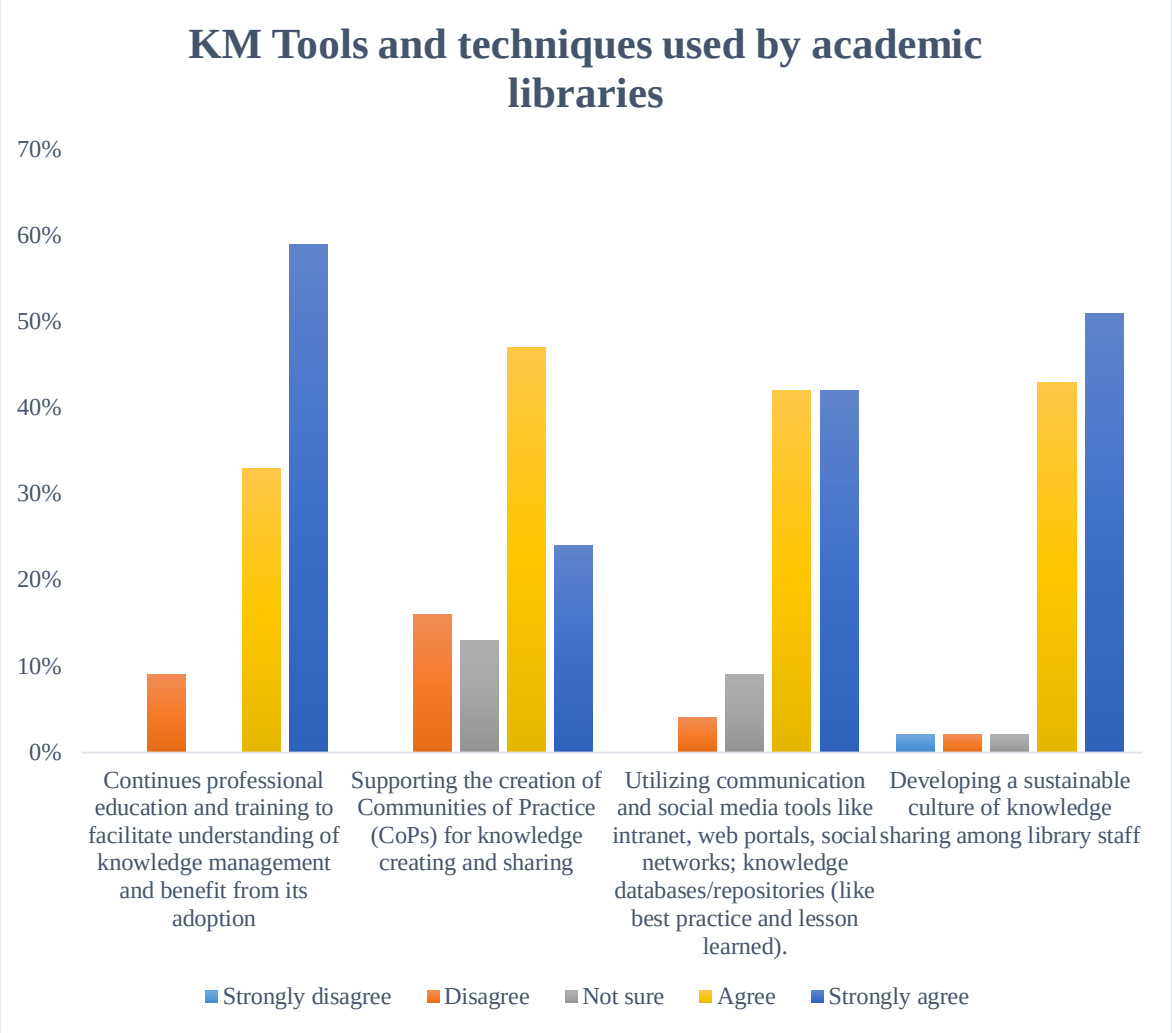

Fig. 6: KM Tools and techniques used by academic libraries.

5.7 Perceived Challenges for Implementing Knowledge Management

Findings indicate that academic library professionals perceived several challenges to incorporate knowledge management into library practises. These results are illustrated in table 4 below. KM is perceived differently by librarians and misinterpreted by others as information management. This becomes difficult for KM to be incorporated into the academic library environment due to its misunderstanding of the concept (88%) as indicated by respondents. These findings are aligned with that of Roknuzzaman & Umemoto (2009) [4] which reveals that knowledge management is misinterpreted as information management or content management activities of a library. Lack of knowledge sharing culture and commitment from hierarchy were identified as second and third most challenges, 81%, and 73% respectively. The results of the study validate previous findings of a study which revealed that the present library environment and mechanism do not support and appreciate staff to share and utilize expertise' tacit knowledge [4]. Benbya (2008) [59] suggested that the impact of hierarchy, top management, and leadership support is very vital for successful knowledge management as an emerging discipline and employees may need the total commitment from library leaders and top management to serve as incentives and motivational factors (55%) as indicated by respondents. Top management support also influences other factors critical to the success of knowledge management, such as organizational culture, Lack of financial resources and IT infrastructure (69%) and difficulties to capture tacit knowledge and manage it (59%) were also identified as challenges. This could partly be because librarians do not master the tools and techniques to capture tacit knowledge, or do not have the skills needed. Scepticism and reluctance of librarians to accept change (35%) were the least challenges identified. Scepticism could be due to cultural factors, lack of trust, and the misinterpretation of concepts.

Table 4: Perceived challenges for implementing KM in academic libraries as perceived by respondents.

Challenges	**%**
Difficult to identify and capture tacit knowledge and manage it	59%
Understanding or Misunderstanding of the concept of KM	88%
Lack of knowledge capturing and knowledge sharing culture	81%
Lack of incentives and motivations	55%
Lack of commitment from hierarchy to effectively incorporate KM practises in the library.	73%
Lack of financial resources and IT infrastructure	69%
Scepticism and reluctance of librarians to accept the change	35%

5.8 Benefits of Implementing Knowledge Management

Table 5 shows the benefits of knowledge management

Table 5. Benefits of knowledge management

	Strongly Agree	Agree	Don't know	Disagree	Strongly Disagree
Improves job performance and productivity	87.7%	12.3%	0%	0%	0
Creates new knowledge	45%	33%	10%	12%	0%
Enables knowledge sharing and transfer	44%	44%	4%	6%	2%
Enables me to accomplish tasks quickly	48%	41%	11%	2%	0%
Achieve library goals effectively	85.4%	9.6%	0	0%	0%
Useful in my overall daily tasks	90.4%	52%	9%	0%	2%
Enables me to quickly identify and react to change	17%	48%	2%	5%	2%
Facilitates individual and collective decision making	39%	17%	29%	29%	7%
Promotes institutional and collective work environment	40%	34%	18%	7%	2%

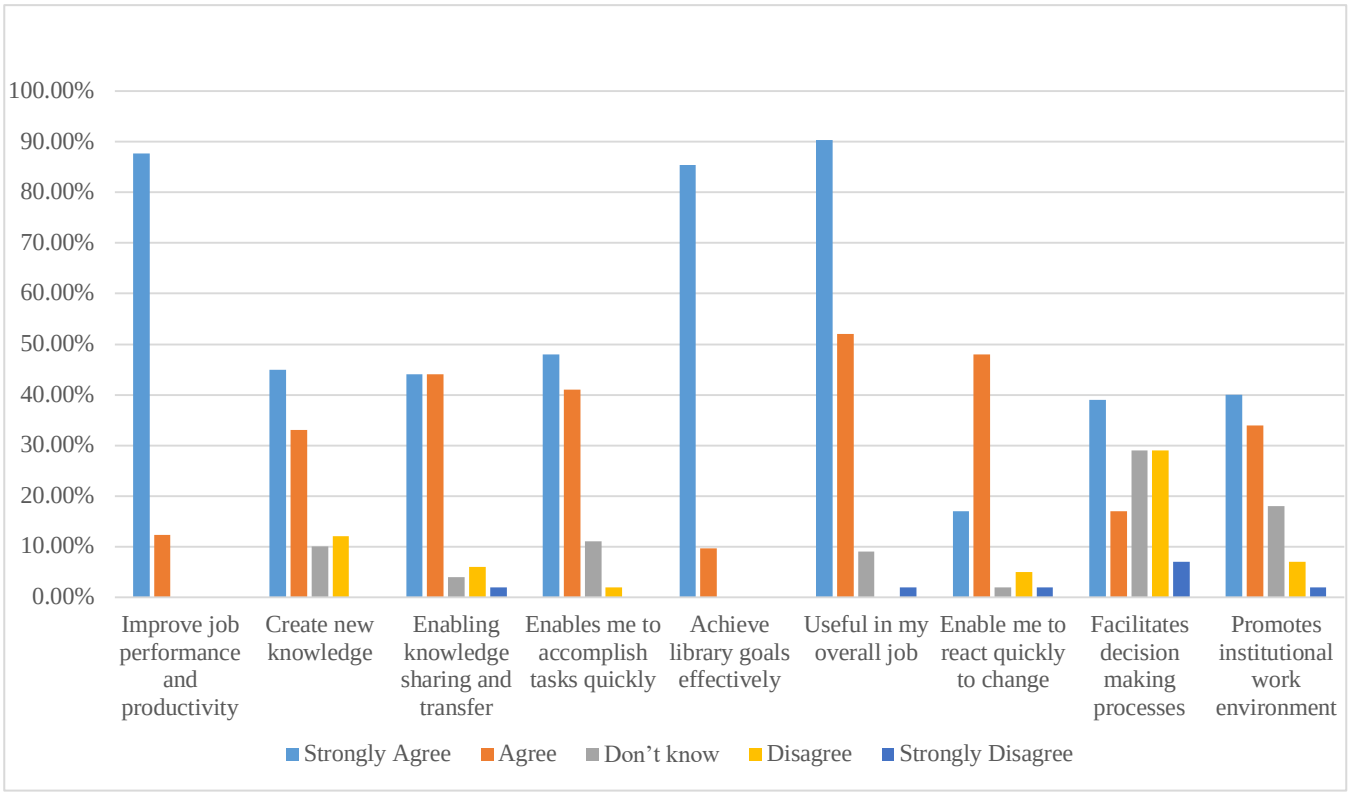

Fig. 7: Benefits of implementing knowledge management

6 Discussions and Conclusions

From the results of the study, it is obvious that knowledge management is not well known to academic library professionals in six public universities in Cameroon and the levels of their understanding of the concepts are varied. Their perceptions of knowledge management concepts are limited and focused primarily on the management of explicit knowledge which they have been practising for a long time. KM can be implimented in academic libraries but it is not formally adopted in Cameroon academic libraries. Although some librarians are informally involved in knowledge management practices, their roles are perceived as basic information management activities. Library professionals believe that continuous learning, changing mindset, professional education and training programs, community of practices (CoP), information technology, and knowledge sharing are the important tools and aspects of knowledge management that need to be addressed in academic libraries. Lack of support from management, absence of knowledge sharing culture, poor incentives and rewards, insufficient financial and human resources, and IT infrastructure are the major constraints for the implementation of knowledge management in academic libraries in Cameroon. The findings of this research may not be generalised in other contexts. First, the study was restricted to academic libraries in six public universities in Cameroon. Due to their special structure, the results may differ from private sector libraries. Therefore, the research may be expanded to academic libraries of the private sector.

7 Recommendations

The study recommends a need for adopting and implementing knowledge management activities and processes in academic libraries in Cameroon. It recommends a need for directors of academic libraries to incorporate KM activities in their strategic planning and get top management (Rectors, Ministers, etc.) to support their efforts in applying knowledge management. Aspects of knowledge management practices should be incorporated in annul evaluation forms of library staff. This would trigger library professionals to engage in knowledge management practices. More professionals should be recruited to work in libraries. These newly recruited staff should be schooled and trained on the concept, relevance, and adoption of knowledge management practices in library operations.

References

[1] Brophy, P., Assessing the performance of electronic library services: the EQUINOX project. New Review of Academic Librarianship., **7(1)**, 3–17(2001).

[2] Asogwa, B.E., Knowledge management in academic libraries: librarians in the 21st century. Journal of knowledge management practice., **13(2)**, 1–11(2012).

[3] Davenport, T.H. and L. Prusak, Working knowledge: Managing what your organisation knows. Harvard Business School Press, Boston, MA., 210(1998).

[4] Roknuzzaman, M. and K. Umemoto, How library practitioners view knowledge management in libraries: A qualitative study. Library Management., **30(8–9)**, 643–656(2009).

[5] Bawack, R., Academic Libraries in Cameroon: Achieving Agenda 2030 Goals. International Information & Library Review., **50(1)** 63–66(2018).

[6] Wen, S., Implementing knowledge management in academic libraries: a pragmatic approach. Ann Arbor., **1001**, 48109-1205(2005).

[7] Thanuskodi, S., Journal of Social Sciences: a bibliometric study. Journal of Social Sciences., **24(2)**, 77–80(2010).

[8] Zack, M., Developing a knowledge strategy', California Management Review., **41**, I25-145(1999).

[9] Dretske, F., Knowledge and the Flow of Information. 1981.

[10] Blacker, F., Knowledge, Work and Organ Overview and Interpretation. Organization Studies., **16(6)**, (1995).

[11] Nonaka, I., A dynamic theory of organizational knowledge creation. Organization science., **5(1)**, 14–37(1994).

[12] Nonaka, I. and H. Takeuchi, The knowledge-creating company: How Japanese companies create the dynamics of innovation. 1995: Oxford university press.

[13] McInerney, C., Knowledge management and the dynamic nature of knowledge. Journal of the American society for Information Science and Technology., **53(12)**, 1009–1018(2002).

[14] Rajurkar, M., Knowledge management in academic libraries. International Journal of Parallel and Distributed Systems., 1(1), 05–08(2011).

[15] Aurum, A., F. Daneshgar, and J. Ward, Investigating Knowledge Management practices in software development organisations – An Australian experience. Information and Software Technology., **50(6)**, 511–533(2008).

[16] Jha, S.R., the polanyi – wigner dialog on tacit knowing1. The periodical of the michael polanyi liberal philosophical association: p. 5.

[17] Nonaka, I., Models of knowledge management in the West and Japan. 1991.

[18] Clarke, R., Knowledge management in the main library, the University of the West Indies, Trinidad. Information Development., 20(1), 30–35(2004).

[19] Nelson, E., Knowledge management for libraries. Library Leadership & Management,. 22(3): 135.

[20] Nazim, M. and B. Mukherje, Implementing knowledge management in Indian academic libraries. Journal of Knowledge Management Practice., **12(3)**, (2011)

[21] Kim, S., The Roles of Knowledge Professionals for Knowledge Management., 1999.

[22] White, T. Knowledge management in an academic library: based on the case study KM within OULS. in 70th IFLA General Conference and Council, Buenos Aires, August., 2004.

[23] Jain, P., An empirical study of knowledge management in academic libraries in East and Southern Africa. Library review., 2007.

[24] Musoke, M.G. and M. Naluwooza, Users' Perceptions of Makerere University Library Services. Qualitative and Quantitative Methods in Libraries., **2(4)**, 403–410(2017).

[25] Townley, C.T., Knowledge management and academic libraries. College & research libraries., **62(1)**, 44–55(2001).

[26] Blair, D.C., Knowledge management: hype, hope, or help? Journal of the American Society for Information Science and Technology., **53(12)**, 1019–1028(2001).

[27] Ajiferuke, I., Role of information professionals in knowledge management programs: empirical evidence from Canada. Informing Science., **(6)**, 247–257(2001).

[28] Gandhi, S., Knowledge management and reference services. The journal of academic librarianship., **30(5)**, 368–381(2004).

[29] Schlögl, C., Information and knowledge management: dimensions and approaches. Information Research: An International Electronic Journal., **10(4)**, n4(2004).

[30] Kebede, G., Knowledge management: An information science perspective. International Journal of Information Management., **30(5)**, 416–424(2010).

[31] Sinotte, M., Exploration of the field of knowledge management for the library and information professional. Libri., **54(3)**, 190–198(2004).

[32] Shanhong, T., Knowledge management in libraries in the 21st century., 2000.

[33] Islam, M.S., et al., Usage and applications of knowledge management for improving library and information services in Bangladesh. Journal of Information & Knowledge Management., **14(03)**,1550026 (2004).

[34] Islam, M.A., N.K.K. Agarwal, and M. Ikeda, Knowledge management for service innovation in academic libraries: A qualitative study. Library Management., 2015.

[35] Sarrafzadeh, M., B. Martin, and A. Hazeri, Knowledge management and its potential applicability for libraries. Library Management., 2010.

[36] Husain, S. and M. Nazim, Concepts of knowledge management among library & information science professionals. International Journal of Information Dissemination and Technology., **3(4)**, 263–269(2013).

[37] Azmee, N.N., et al., Dimensions of Knowledge Management Maturity: Top Management Support and Leadership, People, and Information Technology. Dimensions., **7(2)**, 1-7(2017).

[38] Koloniari, M. and K. Fassoulis, Knowledge management perceptions in academic libraries. The journal of academic librarianship., **43(2)**, 135–142(2017).

[39] Todd, R.J. and G. Southon, Educating for a knowledge management future: perceptions of library and information professionals. The Australian Library Journal., **50(4)**, 313–326 (2001).

[40] Ondari-Okemwa, E. and M.K. Minishi-Majanja, Knowledge management education in the departments of library/information science in South Africa. South African Journal of Libraries and Information Science., **73(2)**, 136–146 (2007).

[41] Raja, W., Z. Ahmad, and A.K. Sinha. Knowledge management and academic libraries in IT era: problems and positions. in Poster paper at international conference on academic libraries at University of Delhi., 2009.

[42] Nazim, M., Examining the gap between skills needed for Knowledge Management and provision of its education in Library and Information Science courses in India., 2017.

[43] Emanuel, J., Digital native academic librarians, technology skills, and their relationship with technology. Information technology and libraries., **32(3)**, 20–33(2013).

[44] Hill, S. Knowledge Management: A new career path for the information professional. in online information-international meeting – . 1998. Learned information ltd.

[45] Lai, L.-L., Educating knowledge professionals in library and information science schools. **教育資料與圖書館學**., 42(3), 347–362(2005).

[46] Tanloet, P. and K. Tuamsuk, Core competencies for information professionals of Thai academic libraries in the next decade (AD 2010–2019). The International Information & Library Review., **43(3)**, 122–129 (2011).

[47] Sapon-White, R., V. King, and A. Christie, Supporting a culture of scholarship for academic librarians. portal: Libraries and the Academy., **4(3)**, 407–421(2004).

[48] Jantz, R., Knowledge management in academic libraries: special tools and processes to support information professionals. Reference Services Review., 2001.

[49] Branin, J.J., Knowledge management in academic libraries: building the knowledge bank at the Ohio State University. Journal of library administration., 39(4), 41–56 (2003).

[50] Mphidi, H. and R. Snyman, The utilisation of an intranet as a knowledge management tool in academic libraries. The electronic library., 2004.

[51] Yeh, Y.-c., Y.-l. Yeh, and Y.-H. Chen, From knowledge sharing to knowledge creation: A blended knowledge-management model for improving university students' creativity. Thinking Skills and Creativity., **7(3)**., 245–257(2012).

[52] Parirokh, M., F. Daneshgar, and R. Fattahi, A theoretical framework for development of a customer knowledge management system for academic libraries. Spanish Journal of Agricultural Research., 1–16(2009).

[53] Porumbeanu, O.-L., Implementing knowledge management in Romanian academic libraries: Identifying the elements that characterize their organizational culture. The Journal of Academic Librarianship., **36(6)**, 549–552(2010).

[54] Suraj, O.A. and I. Ajiferuke, Knowledge management practices in the Nigerian telecommunications industry. Knowledge and Process Management., **20(1)**, 30–39(2004).

[55] Koenig, M.E., Knowledge Management, User Education, and Librarianship., 2001.

[56] Yi, Z., Knowledge management for library strategic planning. Library management., 2008.

[57] Olembe, E. and E. Mbede, Le Knowledge Management et le partage des savoirs scientifiques en Afrique à l'épreuve du terrain des institutions universitaires: une expérience de recherche dans les universités publiques du Cameroun. Management de l'information: défis et tendances 8-9 juin 2011., 8(2011).

[58] Probst, G., S. Raub, and K. Romhardt, Managing knowledge: Building blocks for success.John Wiley & Sons Chichester., **360**, (2000).

[59] Benbya, H. and M.W. Van Alstyne. Eliciting and validating knowledge in knowledge management systems. in Proceedings of the 41st Annual Hawaii International Conference on System Sciences (HICSS 2008). 2008. IEEE.

Roseline Bawack, who is completing her PhD in Library and Information Sciences at the University of Yaoundé, II, Soa, Cameroon, is an associate lecturer at the Advanced School of Mass Communication (ASMAC) in the same university. Her research focuses on understanding the dynamics of innovation in academic libraries in Africa, especially using contemporary information technologies. Her work has appeared in leading journals in the field of library and information sciences like Library Philosophy and Practice, and International Information & Library Review.
She holds a Master's degree in information and documentation sciences from ASMAC and has over 30 years of experience working both in academic libraries and in leading information and communication roles in international organizations worldwide. She is the training coordinator for the African Digital Library Support Network (ADLSN) and the Registration Coordinator for INASP Cameroon. For the past eight years, she has been teaching courses related to information management, communication, and knowledge management in both public and private universities in Cameroon.