



Utilization of Knowledge Management Tools and Methods in University libraries in Nigeria: The case of Federal University of Agriculture Makurdi (FUAM)

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Abstract

The purpose of this study was to investigate Knowledge Management (KM) tools and methods in Nigeria university libraries. Knowledge management is not a new concept to humans as people have been managing knowledge, looking for ways of generating, storing, sharing and applying knowledge in their daily transactions with one another since creation. The paper discusses effective knowledge management to entail getting the right knowledge, in the right place, at the right time. The importance of knowledge management and components of KM were also discussed in the paper. The paper proceed to discuss knowledge management tools in libraries such as traditional card catalog, OPAC, electronic databases, barcodes, provision of virtual reference service via web chat, instant messaging, text messaging and e-mail etc. And further establish the extent of their utilization in FUAM library. Findings reveal that the users of the library under study are not satisfied with the KM methods and tools and that a number of factors are in the way of the library as one form of barrier or the other. And that this scenario is not peculiar to FUAM but a cross cultural phenomena in our Universities. Based on the findings, a number of recommendations are made to help improve the situation.

Keywords: Knowledge Management (KM), Methods, Nigeria, Tools, University libraries, Utilization.

1.0 Introduction

Knowledge management (KM) is a relative term under knowledge economy. It can be seen as the deliberate and systematic coordination of an organization's people, technology, processes, and organizational structure in order to add value through reuse and innovation. This value is achieved through the promotion of creating, sharing, and applying knowledge as well as through

the feeding of valuable lessons learned and best practices into corporate memory in order to foster continued organizational learning. Tandale, et al (2011) viewed KM as to create a process of valuing the organization's intangible assets in order to best leverage knowledge internally and externally. Knowledge management, therefore, deals with creating, securing, capturing, coordinating, combining, retrieving, and

distributing knowledge. Similarly Skyrme and Amidon (1997) posit KM with the “process or practice of creating, acquiring, capturing, sharing, and using knowledge, wherever it resides, to enhance learning and performance in organizations. KM is basically about creation of processes and behaviors that allow people transform information into organization create and share knowledge. This explains why Brendan (1999) defined KM to include acquisition, sharing and use of knowledge within organizations, including learning processes and Management Information Systems (MIS) or, more specifically, the explicit and systematic management of vital knowledge associated with processes of creating, gathering, organizing, diffusion, use and exploitation. This is further collaborated by White (2004) views KM as “a process of creating, storing, sharing and re-using organizational knowledge (know-how) to enable an organization to achieve its goals and objectives”.

The success of KM ultimately depend on sharing of knowledge. On the basis of this, Alzhoul (2013) Argued that the successful management of knowledge is that uses the available knowledge in a timely manner to solve problems. It also applies the KM methods and techniques. Alzhoul noted the factors which may influence the effectiveness of KM to include the role of employees, knowledge logistics, and integration into the work environment, changing the knowledge base, transfer of experience, organization memory, and organizational culture. Jain (2007) noted that KM can be characterized as below:

- KM core process of several activities; creating, acquiring, capturing, sharing, using and re-using it;
- It includes both explicit and tacit knowledge;
- It is an ongoing activity;

- Information is the building block of KM;
- It is action oriented or application based; and
- The main drive behind KM is to improve organizational performance.

In a nutshell, good knowledge management is all about getting the right knowledge, in the right place, at the right time. The right knowledge is the knowledge that you need in order to be able to do your job to the best of your ability, whether that means answering customers questions, providing customers with the right information resources, diagnosing a patient, making a decision, booking a referral, answering a patient's question, administering a treatment, training a new colleague, interpreting a piece of research, using a computer system, managing a project, dealing with suppliers etc. Information and knowledge can usually be found in a whole variety of places – research papers, reports and manuals, databases etc. Often it will be in people's heads – yours and other people's. The right place, however, is the point of action or decision which can be at the reference desk, circulation desk, in the meeting, the customer/patient helpline, and the hospital bedside, behind the reception desk and so on. The right time is when you (the person or the team doing the work) need it. Nowadays, technological innovation makes possible the emergence of new knowledge management systems that could be used to achieve an effective learning society.

1.1 Objectives of the Study

The purpose of the study was to investigate knowledge management techniques and tools utilization in Federal University of Agriculture, Makurdi. With a view to identify the available tool and methods and the level to which they are utilized. Other specific objectives of the

present study are as follows:

1. Identify KM Methods and Tools available in Federal university of Agriculture Makurdi library
2. To ascertain the level of utilization of KM Methods and Tools in Federal university of Agriculture Makurdi library.
3. Examine the relevance of KM Methods and tools in Federal university of Agriculture Makurdi library
4. Find out KM Methods and Tools for Sharing Knowledge in Federal university of Agriculture Makurdi library
5. To determine KM Methods and Tools for Applying Knowledge in Federal university of Agriculture Makurdi library
6. To study the satisfaction level of users while using KM Methods and Tool sin Federal university of Agriculture Makurdi library
7. To ascertain the barriers to use of KM Methods and tools in Federal university of Agriculture Makurdi library

2.0 Literature Review

2.1 Importance of knowledge management to organizations

Bakkanannanvar and Govindani (2008) asserted that, Knowledge management enables organizations to share best practices/processes, provide leadership and decision making, increase customer satisfaction, enable e-government, increase productivity, attract and retain human capital, create competitive advantage, foster innovations, foster collaborations, encourage and use learning, and create and use structural capital.

Knowledge management as it evolved in the business sector is slowly gaining acceptance in the academic sector. Oosterlink and Leuven (2002) pointed out that, "In our era of knowledge society and a knowledge economy, it is clear that universities have a

major role to play". In other words, universities are faced with a challenge to better create and disseminate knowledge to society. However, Reid (2000) argued "traditionally, universities have been the sites of knowledge production, storage, dissemination and authorization". Similarly, Ratcliffe-Martin, Coakes and Sugden (2000) postulated that universities traditionally focus on the acquisition of knowledge and learning. Knowledge management is not complete if in the end no efforts are made to ensure that stored and shared knowledge is used.

Components of Knowledge Management

One popular and widely-used approach is to think of knowledge management in terms of three components, namely people, processes and technology:

People: create, share and use knowledge.

Process: to acquire, create, organize, share and transfer knowledge.

Technology: the enabler and facilitator to store and create access to knowledge.

Thus KM can be visualized as a three wheel machine or legs stool where the machine or this stool will cease to function or perform if one or more of the wheels or legs are not developed or shaped. While technologies and processes are important to KM, it is people who determine its success.

Knowledge Management Tools and Techniques/methods

All organizations deal with knowledge in their daily operation. However, only a few have a systematic and formal way of dealing with knowledge. The majority of organizations rely on individuals and ad hoc processes. The consequence of this is that when people leave the organization, they take their knowledge with them resulting in the loss of valuable organizational assets and resources.

There are a number of factors that can motivate an organization (in this context a

library) to establish a formal and systematic management of knowledge. These include the desire or need to:

- (a) Get a better insight on how the organization (library) works;
- (b) Reduce the time and effort in searching for information and documents;
- (c) Avoid repetition of errors and unnecessary duplication of work;
- (d) Reduce the response time to questions that are asked frequently; and
- (e) Improve the quality and speed of making important decisions.

In order to fully implement a knowledge management system and derive the maximum benefits from, there is need to provide two elements:

- A. technological infrastructure composed of computers, networks and databases; and
- B. software applications installed in distributed environments.

These two elements are usually referred to as knowledge management tools. These tools are designed and built to enable easier and faster use of important functionalities, such as document management, collaborative online workshops, superior search engines and the like, that are essential for the management, safeguarding and harnessing of knowledge. The effective deployment of these tools within a knowledge management system can improve collaboration and working environment, enhance competitive advantage and responsiveness, and increase overall productivity.

Asian Productivity Organization (APO2010) provides a 'big picture' of the Knowledge Management (KM) methods and tools. It shows how they can directly map onto the Asian Productivity Organization (APO) Five-step KM process. This five-step KM process is concerned with five key steps:

1. Identifying the knowledge

2. Creating knowledge
3. Storing knowledge
4. Sharing knowledge
5. Applying knowledge

APO (2010) grouped knowledge methods and tools into non-Information Technology (IT) methods and tools and IT methods and tools as follows:

Non-IT Tools and techniques/Methods

1. Brainstorming
2. Learning and Idea Capture
3. Peer Assist
4. Learning Reviews
5. after Action Review
6. Storytelling
7. Collaborative Physical Workspace
8. Asian Production Organization APO Knowledge Management Assessment Tool
9. Knowledge Café
10. Community of Practice
11. Taxonomy

IT Methods and Tools

12. Document Libraries leading to a Document Management System
13. Knowledge Bases (Wikis, etc.)
14. Blogs
15. Social Network Services
16. Voice and Voice-over-Internet Protocol (VOIP)
17. Advanced Search Tools
18. Building Knowledge Clusters
19. Expert Locator
20. Collaborative Virtual Workspaces

Further list of six highly recommended Knowledge Management (KM) methods and tools that was compiled and agreed upon by the Asian Productivity Organization (APO) KM methods and tools team in Singapore in August 2009 include:

Non-IT Methods and Tools

21. Knowledge Worker Competency Plan

- 22. Knowledge Mapping
- 23. KM Maturity Model
- 24. Mentor / Mentee Scheme

IT Methods and Tools

- 25. Knowledge Portal
- 26. Video Sharing

According to APO (2009), the tools are grouped under the following headings as shown in the steps below:

- Step 1. KM Methods and Tools to Consider in Identifying the Knowledge,
- Step 2. KM Methods and Tools for Creating Knowledge
- Step 3. KM Methods and tools for Storing Knowledge
- Step 4. KM Methods and Tools for Sharing Knowledge
- Step 5. KM Methods and Tools for Applying Knowledge

APO (2009) asserted that there are a great variety of knowledge management tools available in the market comprising many different features that are suitable for a number of different applications. Some of the typical tools that are used in knowledge management solutions include:

- Document Management System;
- Enterprise Portal;
- Knowledge Map and Skills Management;
- Information Database and Lessons Learned System;
- Collaboration Tool and;
- Communities of Practice.

Roggles in Padmamma (2008) asserted that, knowledge management tools are the technologies broadly defined which enhances and enable knowledge generation, codification (know-how) and transfer while Ramasamy and Sivasekaran (2008) outlined that, knowledge management tools to include:

- Intranets/extranets: it allows users to

access the organizations information at any geographical boundary.

- Groupware: it provides a platform for intercommunication between the employees in an organization.
- Electronic Document Management: this Technology is meant for managing content documents electronically mainly online in the knowledge management system.
- Information Retrieval tools: information retrieval offers searching the required knowledge through free text search and search with advance algorithms so that all the related can be found out.
- Data Analysis: these are commonly used methods of data analysis. They are pattern recognition, classification and forecasting.
- Data Warehousing: data warehousing and Data mining are the technology where the structured knowledge can be stored.
- Metadata: this refers to information added to a document which makes it easy to be accessed otherwise known as “data about data”
- Help Desk Technologies: this is primarily concerned with routing requests for help from information gatherers to the right technical resolution person in an organization.

Numerous tools are presently available to facilitate KM and most organizations have implemented several of these. Bakkannavar (2008) identified such Key types of knowledge-related tools that are currently in the market place as:

Table 1: Knowledge Management Tools

Conferencing/chat	Document management
Workflow	Content resource management
Groupware	Data mining
Collaboration	Data warehousing
Web publishing	Imaging and optical character recognition
Portals	Knowledge mapping
Indexing	Knowledge auditing
Search and retrieval	Expertise networking
Category builders	Training
Taxonomy builders	Intelligent agents
Push	Capturing/codifying
Publish and subscribe	Extensible mark-up language (XML)

Tool box adopted from Bakannananavar (2008)

Géraud (2005) on the other hand categorized, the following “toolbox” as presenting some of the most common tools and techniques currently used in knowledge management programmes. Géraud stressed that the aim is to give an overview of what is involved, and to provide some pointers to further resources.

- After Action Reviews (AARs): A tool pioneered by the US army and now widely used in a range of organisations to capture lessons learned both during and after an activity or project.
- Communities of Practice: Widely regarded as “the killer of KM application”, communities of practice link people together to develop and share knowledge around specific themes.
- Conducting a knowledge audit: A systematic process of identifying an organisation's knowledge needs resources and flows, as a basis for understanding where and how better knowledge management can add value.
- Developing a knowledge management strategy: These are

Approaches to developing a formal knowledge management plan, which is closely aligned with an organisation's overall strategy and goals.

- Exit interviews: A tool used to capture the knowledge of departing employees.
- Identifying and sharing best practices: Approaches to capturing best practices discovered in one part of the organization and sharing them for the benefit of all.
- Knowledge centre's: Similar to libraries but with a broader remit to include connecting people with each other as well as with information in documents and databases.
- Knowledge harvesting: A tool used to capture the knowledge of “experts” and make it available to others.
- Peer assists: A tool developed at BP-Amoco used to learn from the experiences of others before embarking on an activity or project.
- Social network: Analysis mapping relationships between people, groups and organizations to understand how

these relationships either facilitate or impede knowledge flows.

- Story telling: Using the ancient art of storytelling to share knowledge in a more meaningful and interesting way.
- White pages: A step-up from the usual staff directory, this is an online resource that allows people to find colleagues with specific knowledge and expertise Functions or Importance of tools in knowledge management.

Tools make it easier to implement KM processes and functions but they do not take the place of them.

Tools help a knowledge manager to deliver the right information at the right time, but do not tell him what to collect, how to collect it or how to get people use it.

Tools can also be the catalysts help transform how people work by giving them new ways to collaborate or accessing content. But they are not substitute for the thinking, analysis or, management that drive and direct the change.

Knowledge Management Tools and Methods in Library

KM in the context of library can be defined as the process of gathering a library collective expertise, which might be stored in a database or people's heads, and distribute it in a way which can help produce the biggest payoffs (Blake, 1998).

From the above it can be deduced that KM is a combination of processes, tools and behaviors that participate in the formulation and performance of the library. Through acquisition, storage and distribution of knowledge to reflect on the business processes. The concept of KM aims to provide information and make it available to all employees in the organization. It is also for beneficiaries from the outside, which is based on the maximum utilization of available information in the organization, and individual experiences in the minds of

potential employees. Therefore, the most important feature of the application of this concept is the best investment of intellectual capital, and turns into a productive force contributing to the development of individual performance, and raises the efficiency of the library.

In library these technologies may include traditional card catalogue, online public access catalog, classification schemes, library websites, electronic databases, barcodes, provision of virtual reference service (via web chat, instant messaging, text messaging and e-mail) blog etc.

Mandalia (2008) asserted that, tools of knowledge management in libraries consist of 70%of services and 30% of Technologies. Librarians as knowledge managers provide these 70% services. This indicates the role of librarian as managers where their functions are:

- Providing service to user community
- Sharing of information and understanding of user needs
- Analyzing documents, classifying, and sorting them for easy retrieval
- Building the index

Based on APO's assertion, libraries can make use of the following knowledge management tools such as social networking services, blog, knowledge base (wikis), document libraries, etc in providing services to its users.

In libraries, Knowledge management tools are used to create, organize and share the knowledge that can be found, most of the time, in a thesis, dissertation, book, database, serials document, a project report, or a memo from one employee to another or head of library to subordinates and customers. There are a number of software applications that are able to create a web of repositories, search engines and virtual spaces where knowledge can be stored, retrieved and shared. An ideal knowledge management tool must include

such features like mobility that allows users to interact with the system from any place at any time. It is also important to maintain an updated compact disk (CD) that can be used offline whenever a network connection is not available.

For the end users, the usability of knowledge management tools is of great importance. Such tools must be readily available and user friendly, other-wise customers and employees will not use them. Since most users are already familiar with the Internet Web Browser, it is probably the most common in the market as a default presentation. Hidden from the view of the users are databases, mainly Oracle or SQL server, expert systems, integration with Enterprise Resource Planning (ERPs), such as SAP R/3, applications such as Lotus Notes and development products such as Microsoft or Sun for C, C++, Java and Visual Basic, among others.

2.3 Statement of the problem

There is no single organization that does not deal with knowledge in their daily operation. However, only a few have a systematic and formal way of dealing with knowledge. According to Uriarte (2008) majority of organizations rely on individuals and ad hoc processes. The consequence of this is that when people leave the organization, they take their knowledge with them resulting in the loss of valuable organizational assets and resources.

Uriarte (2008) listed a number of factors that can motivate an organization to establish a formal and systematic management of knowledge. These include the desire or need to: (a) get a better insight on how the organization works; (b) reduce the time and effort in searching for information and documents; (c) avoid repetition of errors and unnecessary duplication of work; (d) reduce the response time to questions that are

asked frequently; and (e) improve the quality and speed of making important decisions.

Knowledge management in organizations (in this case academic libraries) is a viable means in which academic libraries could improve their services in the knowledge economy. Despite an increased interest in KM, not enough empirical research has been conducted on KM Tools and techniques in librarianship generally, and particularly in Federal University of Agriculture Makurdi (FUAM) library. It is against this background that this study seek to investigate KM tools and techniques in FUAM with their utilization then establish how techniques and tools can facilitate improved organizational efficiency, innovation, flexibility, and learning.

3.0 Methodology

A descriptive survey design was used for the study. The study population included professional and paraprofessional staff of Federal University of Agriculture, Makurdi library. A questionnaire was designed to gather primary data which was distributed among 31 professional and 89 paraprofessional staff of Federal University of Agriculture Makurdi library. A total of 110 out of 120 respondents completed and returned the questionnaires giving overall, a response rate of 91.6 percent.

4.0 Analysis of Data

The questionnaires were distributed to the respondents and the responses received from them are presented in Tables below.

Section A

What cadre do you belong to?

Table 1 Cadre of Respondents:

S/N	Librarianship cadre	No of respts.	Pert. %
1.	Professionals	30	33
2.	Para-professionals	80	67
	TOTAL	110	100

Source: field survey

Table 1 above captured the cadre of the respondents in the study. It showed that out of the staff strength of 120 personnel's, 30 (33%) are professional librarians while 80(67%) are paraprofessionals.

Table 2 Gender of respondents.

S/NO	Gender wise	No of respts.	Pert %
1.	Male	45	49.5
2.	Female	65	50.5
	TOTAL	110	100

Source: field survey

Table 2 shows the gender structure of the respondents, with the male population of 45(49.5%) and a female population of 65(50.5%) respectively.

SECTION B

Research Question 1: What are the methods and tools in Identifying Knowledge in University of Agriculture, Makurdi library?

Table 3 Methods and Tools in Identifying Knowledge

S/NO	KM Methods and Tools for Identifying Knowledge	No of respts.	Pert. %
1.	Communities of Practice	5	4.54
2.	Advanced Search Tools	21	19.09
3.	Knowledge Clusters	43	39.09
4.	Expert Locator	7	6.36
5.	Collaborative Virtual Workspaces	30	27.27
6.	Knowledge Mapping	-	0
7.	KM Maturity Model	-	0
8.	Mentor/Mentee	4	3.6
	TOTAL	110	99.95

Source: field survey

From the table above, the study found that knowledge cluster is the most used method for identifying knowledge in the study. This is demonstrated by a response rate of 39.09%, it is closely followed by collaborative virtual workspace 27.27% and advanced search tools with a response rate of 19.09%. Knowledge mapping and KM Maturity Model are surprisingly not utilized in the study as no respondent mentioned them.

Research Question 2: What are the KM Methods and Tools for Creating Knowledge in University of Agriculture, Makurdi library?

Table 4 KM Methods and Tools for Creating Knowledge

S/NO	KM Methods and Tools for Creating Knowledge	No of resps.	Pert %
1.	Brainstorming	21	19.09
2.	Learning and Idea Capture	18	16.36
3.	Learning Reviews	17	15.45
4.	After Action Reviews	-	0
5.	Collaborative Physical Workspaces	21	19.09
6.	Knowledge Cafés	-	0
7.	Communities of Practice	13	11.81
8.	Knowledge Bases (Wikis, etc.)	11	10
9.	Blogs	-	0
10.	Voice and Voice -over-Internet Protocol (VOIP)	-	0
11.	Expert Locator	7	6.36
12.	Collaborative Virtual Workspaces	30	27.27
13.	Mentor/Mentee	4	3.6
14.	Knowledge Portal	-	0
15.	Video Sharing	7	6.36
16.	Advanced Search	15	13.63

Source: field survey

As is evident in table 4 above, the study population makes do with a lot of collaborative virtual workspace 30 (27.27%), followed by brainstorming and collaborative physical workspace with 21 (19.09%) each. The list exploited areas are Expert Locator and Video Sharing with 6.36% each and Mentor/Mentee with 3.6% and the areas not utilized at all are Knowledge Portal, Voice and Voice-over-Internet Protocol (VOIP), Blogs, Knowledge Cafés, and After Action Reviews. Research Question 3: What are the KM Methods and tools for Storing Knowledge in University of Agriculture, Makurdi library?

Table 5 KM Methods and tools for Storing Knowledge

S/NO	KM Methods and tools for Storing Knowledge	No of resps.	Pert %
1.	library websites,	0	0
2.	electronic databases	15	13.63
3.	After Action Reviews	0	0
4.	Knowledge Cafés	0	0
5.	Communities of Practice	13	11.81
6.	Taxonomy	0	0
7.	Document Libraries	30	27.27
8.	Knowledge Bases (Wikis, etc.)	11	10
9.	Blogs	0	0
10.	Voice and VOIP	0	0
11.	Knowledge Cluster	0	0
12.	Expert Locator	07	6.37
13.	Collaborative Virtual Workspaces	40	36.36
14.	Knowledge Portal	0	0
15.	Video Sharing	7	1.8

The study found out that the Federal university of Agriculture Makurdi library uses the following Methods and tools for Storing Knowledge computers,50(45.45%), Collaborative Virtual Workspaces. 40(36.36%),Document Libraries,30(27.27%)at the lower ebb of the findings is Video Shar ing and Expert Locator with 1.8% and 6.37% respectively. The other options are not in any way exploited in the study.

Research Question 4: What are the KM Methods and Tools for Sharing Knowledge in University of Agriculture, Makurdi library?

Table 6 KM Methods and Tools for Sharing Knowledge

S/NO	KM Methods and Tools for Sharing Knowledge	No of respts.	Percentage %
1.	Case study	0	0
2.	Blog	0	0
3.	e-mail	20	18.18
4.	text messaging	15	13.63
5.	Instant messaging	0	0
6.	via web chat	0	0
7.	Peer Assist	7	6.36
8.	Learning Reviews	0	0
9.	After Action Reviews	0	0
10.	Storytelling	0	0
11.	Collaborative Physical Workspaces	40	36.36
12.	Knowledge Cafés	0	0
13.	Communities of Practice	17	11.81
14.	Document Libraries	30	27.27
15.	knowledge bases (Wikis, etc)	11	10
16.	Social Networking Services	79	71.8
17.	Voice and VOIP	0	0
18.	Knowledge Clusters	0	0
19.	Collaborative Virtual Workspaces	40	36.36
20.	Mentor/Mentee	4	3.6
21.	Knowledge Portal	0	0
22.	Video Sharing	2	1.8
23.	Verbal discussion	13	11.81
24.	Seminar/Workshops	7	6.36
25.	Staff meeting	24	21.81
26.	Computers	50	45.45
27.	Expert Locator	7	6.36
29.	Rapid Evidence Review (RERs)	0	0

Source: field survey

The study again found that the Federal university of Agriculture Makurdi library uses the following Methods and tools for Storing Knowledge. Computers, 50(45.45%), Collaborative Virtual and physical Workspaces 40(36.36%) each, Document Libraries, 30(27.27%)at the lower ebb of the findings is Video Sharing and Expert Locator/peer assistance with 1.8% and 6.37% respectively. The other options are not in any way utilized in sharing knowledge in the study.

Table 7 KM Methods and Tools for Applying Knowledge

S/NO	KM Methods and Tools for Applying Knowledge	No of rests	Pert. %
1.	Peer Assist	2	1.8
2.	Collaborative Physical Workspaces	40	36.36
3.	Knowledge Cafés	0	0
4.	Communities of Practice	13	11.8
5.	Taxonomy	0	0
6.	Document Libraries	30	27.27
7.	Knowledge Bases (Wikis, etc.)	11	10
8.	Blogs	0	0
9.	Advanced Search	0	0
10.	Expert Locator	4	3.6
11.	Collaborative Virtual Workspaces	40	36.36
12.	Knowledge Worker Competency Plan	16	14.54
13.	Mentor/Mentee	4	3.6
14.	Knowledge Portal	0	0

Source: field survey

The study again found that the Federal university of Agriculture Makurdi library uses the following Methods and tools for applying Knowledge. Collaborative Virtual and physical Workspaces 40(36.36%) each. Document Libraries, 30(27.27%) at the lower ebb of the findings is peer assistant 1.8% , Mentor/Mentee and Expert Locator 3.6% each. Those not utilized at all are Knowledge Portal, Advanced Search, Blogs, Taxonomy and Knowledge Cafés

Research Question 6: What is the level of Satisfaction of users while using KM Methods and Tools in University of Agriculture, Makurdi library?

Table 8 level of Satisfaction of users.

S/NO	Satisfaction Level of users while using KM Methods and Tools	No of respts.	Pert. %
1.	Fully satisfied	7	6.36
2.	Satisfied	13	11.81
3.	Undecided	0	0
4.	Dissatisfied	39	35.45
5.	Very dissatisfied	51	46.36
	Total	110	99.98

Source: field survey

An interesting finding from the study is the fact that the FSI library, FUAM patrons are not satisfied with the KM Methods and Tools. This is clearly shown in the above table where 51 respondents (46.36%) and 39 (35.45%) responded as been very dissatisfied and dissatisfied respectively. Only 7 (6.36%) and 13 (11.81%) responded to be fully satisfied and satisfied.

Research Question 7: What are the Barriers to use of KM Methods and tools in University of Agriculture, Makurdi library?

Table 9 Barriers to use

S/NO	Barriers to use of KM Methods and tools	No of Respts	Pert %
1	No cooperation between senior and junior staff	8	7.27
2	In general, junior staff will not share their knowledge without getting the benefit such as increase in salary	10	9.09
3	Lack of sufficient budget / funds	50	45.45
4	Lack of staff training	40	36.36
5	Every library cannot participate in terms of modern technology and its management	41	37.2
6	Managing the know-how of organizational members	14	12.7
7.	Applying competencies used in managing information' to the broader picture of managing knowledge'	0	0
8.	University libraries need to offer user-friendly ICT oriented facilities	42	38
9.	Lack of communication skills	7	6.36
10.	Every library cannot participate because of Lack of modern tools and technologies and its management	32	29.09
11.	Changing staff roles	14	12.7
12.	Lack of Centralized policy for Library	47	42.7
13.	Changing people's behavior is a challenge	32	29.09
14.	Part of knowledge is internalized by the organization, while another is internalized by individuals	47	42.7
15.	Financial pressures	80	72.7
16.	Rapidly evolving technologies	27	24.5
17.	Make sense of information found on websites	4	3.6
18.	Fearing in asking questions	2	1.8

Source: field survey

Table 9 above reveal the barriers to use of KM Methods and tools in University of Agriculture, Makurdi library. Top on the list of the barriers is Financial pressures 80(72.7%), Lack of sufficient budget / funds 50 respondents (45.45%), Lack of Centralized policy for Library and Part of knowledge is internalized by the organization, while another is internalized by individuals 47 respondents (42.7%) each and that University libraries need to offer user-friendly ICT oriented facilities 42 respondents (38%). The least on list of barriers are reported to be Fearing in asking questions, make sense of information found on websites and Lack of

communication skills with 1.8 %, 3.6% and 6.36% respectively.

5.0 Discussion of Findings

The major findings in the study are discussed as follows:

That knowledge cluster is the most used method for identifying knowledge in the study. This is demonstrated by a response rate of 39.09%, it is closely followed by collaborative virtual workspace 27.27% and advanced search tools with a response rate of 19.09%. Knowledge mapping and KM Maturity Model are surprisingly not utilized in the study as no respondent mentioned them.

The study found that the FSI library, FUAM makes do with a lot of collaborative virtual workspace 30 (27.27%), followed by brainstorming and collaborative physical workspace with 21 (19.09%) each for creating knowledge. The least exploited areas are Expert Locator and Video Sharing with 6.36% each and Mentor/Mentee with 3.6% and the areas not utilized at all are Knowledge Portal, Voice and Voice-over-Internet Protocol (VOIP), Blogs, Knowledge Cafés, and After Action Reviews.

The study found that the Federal university of Agriculture Makurdi library uses the following Methods and tools for Storing Knowledge. Computers, 50(45.45%), Collaborative Virtual Workspaces. 40(36.36%), Document Libraries, 30(27.27%) at the lower ebb of the findings is Video Sharing and Expert Locator with 1.8% and 6.37% respectively. The other options are not in any way exploited in the study. This is also the case with the process of sharing the same knowledge.

Findings further show that the FSI Library FUAM utilizes the following for her knowledge sharing; Social networking services 79 respondents (71.8%), computers 50 respondents (45.45%), Collaborative Virtual and physical Workspaces 40 respondents (36.36%) each. Those less exploited, are Video Sharing and Mentor/Mentee with 2 respondents and 4 respondents respectively. The other options are not in any way exploited by the library under study as can be seen in table 6 above.

The Federal university of Agriculture Makurdi library uses the following Methods and tools for applying Knowledge. Collaborative Virtual and physical Workspaces 40(36.36%) each, Document Libraries, 30(27.27%) at the lower ebb of the findings is peer assistant 1.8%, Mentor/Mentee and Expert Locator 3.6% each. Those not utilized at all are Knowledge

Portal, Advanced Search, Blogs, Taxonomy and Knowledge Cafés.

That the FSI library, FUAM patrons are not satisfied with the KM Methods and Tools. This is clearly shown in the above table where 51 respondents (46.36%) and 39 (35.45%) responded as been very dissatisfied and dissatisfied respectively. Only 7 (6.36%) and 13 (11.81%) responded to be fully satisfied and satisfied.

Barriers to use of KM Methods and tools in University of Agriculture, Makurdi library. Top on the list of the barriers is Financial pressures 80(72.7%), Lack of sufficient budget / funds 50 respondents (45.45%), Lack of Centralized policy for Library and Part of knowledge is internalized by the organization, while another is internalized by individuals 47 respondents (42.7%) each and that University libraries need to offer user-friendly ICT oriented facilities 42 respondents (38%). The least on list of barriers are reported to be Fearing in asking questions, make sense of information found on websites and Lack of communication skills with 1.8 %, 3.6% and 6.36% respectively.

Conclusion

The paper discusses good knowledge management to entails getting the right knowledge, in the right place, at the right time. The right knowledge is the knowledge that you need in order to be able to do your job to the best of your ability. The importance of knowledge management and components of KM were also discussed in the paper. The paper further discusses tools and methods for identifying knowledge, creating knowledge, storing knowledge, sharing knowledge and applying knowledge in university Libraries using the FSI Library, FUAM. Importance of KM tools and techniques to KM were also discussed. The findings from the study show that the users of the library under study are not

satisfied with the KM methods and tools and that a number of factors are in the way of the library as one form of barrier or the other. And that this scenario is not peculiar to FUAM but a cross cultural phenomena in our Universities.

In line with the above findings the authors of this work make bold to call on all relevant stake holders especially parent institutions establishing libraries to improve their funding of libraries especially the area of ICT and library chores so as to ensure that there is efficacy in KM in our libraries in terms of tools and methods.

Recommendations

The study is opting to making two suggestions and recommendations to the university library, viz:

1. The library should mobilize skills and create awareness on knowledge mapping, blogs and knowledge portal as a means in identifying and creating knowledge.
2. Students should be educated on the use of library website, knowledge cluster, portals and blogs as KM methods for sharing knowledge in FUAM.

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