

CHAPTER ONE

INTRODUCTION

Background to the Study

University libraries all over the world are experiencing an exponential increase in data and information in unprecedented proportions. The environment in which they operate in keeps on changing so, the need to respond accordingly to the information needs of the academic community is by practicing knowledge management.

Knowledge is a strategic asset in the 21st century. Whether tacit or explicit, the management of this asset is now a necessity for organizations, haven realized that the new economy is based on knowledge which birthed the term 'knowledge economy'. The creation of knowledge and application of accumulated stock of knowledge have had an increasingly significant contribution to the growth process of any organization. Nwokocha, Unagha, Igwe and Ewa- Otu (2015), observed that knowledge management has gained momentum in recent years due to globalization of economies, rapid growth in Information and Communication Technologies (ICTs), increase in knowledge-based enterprises as well as opportunities and competitive pressure among organizations.

According to Igwe, Nnadozie and Unagha (2015), knowledge refers to skills or abilities (know-how) that someone possesses as a result of a blend in intuition and contextual information in relation to the environment or task at hand. Knowledge is the resultant expertise that accumulates and builds up as a person continue to interact, use, practice and experiment with information. Knowledge may be explicit or tacit. Explicit knowledge is formalized and codified, collected, stored

and disseminated. As a result, it is sometimes referred to as know-what. Explicit knowledge is documented and publicly shared; structured, fixed-content, externalized and conscious. It is what can be captured and shared through information technology. Tacit knowledge is the personal and context-specific knowledge of a person that resides in the human mind, behaviour and perception. It evolves from people's interactions and requires skill and practice. It is highly personal, subjective, difficult to formalize, articulate and communicate fully, experience-based, job-specific, transferred through conversation or narrative and not captured by formal education or training. It is imperative for organizations to have constructive attitude towards the management of both explicit and tacit knowledge of employees for sustainable and competitive advantage.

Knowledge management (KM) is about building organizational intelligence by enabling people to improve the way they work in capturing, sharing and using knowledge. It involves using the ideas and experience of people and process to improve the organization's performance. KM is at the heart of any organizational performance and enables the organizations to realize the value of human capital. Nwokocha, et al, (2015) posited that KM is a combination of values, experiences, information, individual's insight and understanding, and is not just what is present in the written or documented from within the organization but also in the practices, routines and processes as well as in the workforce of the organization.

Knowledge management involves the organization and harnessing of the knowledge assets in order to achieve individual and corporate goals. Knowledge assets, according to Igwe, Nnadozie and Unagha (2015), are the physical or tangible manifestations of various knowledge forms. It is the knowledge possessed by an organization and its workforce in the form of information, ideas, learning, understanding, memory, insights, cognitive and technical skills and capabilities.

These assets reside in many different places such as databases, knowledge bases, filing cabinets and peoples' heads and are distributed right across the organization. Librarians as intermediaries of information need to know what the organization's corporate knowledge assets are and how to manage and make use of these assets to get maximum return.

In Library and Information Science (LIS) KM is the process of acquisition, refinement, storage, retrieval, distribution, preservation and re-use of information (Evans, Dalkir & Bidian, 2014). However, Onyancha and Ocholla (2009) averred that KM could be defined in terms of institutions that adopt it, activities or processes, management functions and people engaged in it. Onyancha and Ocholla concluded that library and information scholars should see KM as the management of information resources, services, systems and technologies through activities performed by librarians in different libraries. KM is a viable means by which academic libraries could improve their services in the present knowledge era.

The traditional time-honoured methods of cataloguing and classification are barely adequate to handle the finite number of books, journals and documents, but are inadequate to deal with the almost infinite amount of digital information in an electronic database and on the internet. New methods such as data mining, content management, search engines and spidering programs have been a part of recent developments in knowledge management system. In addition, a tremendous increase in the size and complex nature of university libraries has made it necessary to manage knowledge more effectively and efficiently. A KM initiative in libraries becomes imperative in order to harness the wealth, wisdom, expertise and experiences embedded in the heads of employees before they leave the library. Consequently, knowledge management has become a management strategy of choice for these institutions.

There are many information providers currently competing with general and university libraries in the information provision enterprise. According to Ugwu and Onyancha (2017), this competitive information environment is forcing university libraries to begin to explore avenues for innovative services to satisfy the dynamic needs of their users. Application of KM in university libraries could be an innovation that may help improve services and strengthen the relationship between university libraries and their users. This can be achieved through brainstorming, open discussions and provision of fertile ground for creativity, sharing of ideas, organizing workshops, conferences, mentoring, web archiving, digitization and identification as well as collectively addressing problems and finding solutions. Cherusuli, Tsamin and Takala (2012) noted that the application of KM in university libraries offers the opportunity to improve effectiveness and help to achieve the goals of the library. Application of KM in university libraries will aid in perfecting the ability of the libraries to learn, identify and use knowledge of internal and external resources in their processes and activities. There are two levels of KM: personal and organizational knowledge management.

Personal knowledge management (PKM) is the collection of processes that individuals use to gather, classify, store, search, retrieve and share knowledge in their daily activities and how the processes support their work activities (Pauleen, 2009). Jain (2011) also viewed, PKM as managing and maintaining personal knowledge which a person already has to enrich an individual knowledge database. It will enable the individual to retrieve knowledge time-effectively so as to use, re-use and mobilize it for personal benefit or benefit of the organization or the community. PKM is a tool which can equip knowledge workers with the necessary skills to manage their knowledge. In the current knowledge environment, it has

become essential for individuals to maintain, develop and market their skills to gain a competitive advantage in the job market in both the short and long term.

PKM plays a vital role in the KM process both for the individual and the organization. PKM is about self-effectiveness and making people more valuable to the organization that they are working in and consequently, creating more value for individual employees. Individuals are the leading knowledge creators in organizations and managing their knowledge can create value for both individuals and organizations. PKM is essential for all people and organizations, enhancing their productivity to keep abreast with the latest information literacy skills and compete in the global arena. Jain (2011) observed that PKM could make individuals recognize their value and make better decisions for self-development. At the organization level, PKM enhances internal knowledge dissemination as well as external information awareness. PKM means being aware of the nature of knowledge an individual possesses?|, how it can be organized, mobilized and used to accomplish goals and continue to create knowledge. PKM focuses on personal knowledge. It is an ongoing activity and the foundation for organizational knowledge management (OKM).

Organizational knowledge management (OKM) is a deliberate and systematic coordination of people, technology, processes and organizational structure to add value through re-use and innovation (Nwokocha et al. 2015). This is achieved through creating, sharing and applying knowledge as well as feeding valuable lessons learned and best practices into corporate memory in order to foster continued organizational learning. OKM is the management of the organization's knowledge through a systematically and organizationally specified process for acquiring, organizing, sustaining, applying, sharing and renewing both the tacit and

explicit knowledge of employees to enhance organizational performance and create value.

According to Efimova (2006), OKM means developing an environment where knowledge is created, shared and used as well as implementing specific interventions that support these processes. In this case, the organization serves as a knowledge integrating institution by integrating the knowledge of many different individuals and groups in the process of producing goods and services. Knowledge integration may occur in organizations through organizational routines, direction or processes involving the sharing of explicit and tacit knowledge.

The aim of OKM is to facilitate access to and retrieval of content with special emphasis on the accessibility of knowledge for all members of the organization. It can, therefore, reside in individuals and groups or exist at the organizational level. OKM has become a mainstream priority for organizations of all sizes as it enhances existing organizational business processes, introduces more efficient and effective business processes and removes redundant processes. Organizations that learn to manage their knowledge effectively make better decisions, reduce managerial training costs, and retain managerial expertise that might otherwise be lost as workers come and go. It also provides more uniform and effective policies and procedures that improve productivity and performance within the organization. OKM is a process involving several activities such as creating, acquiring, capturing, managing, sharing, using and re-using knowledge effectively. Organizations need to take full advantage of the value of knowledge.

The ultimate goal of managing knowledge is to increase profit by improving the efficiency of operations, increasing the quantity of innovation and enhancing competitiveness. Individual members of the organization are the social enablers of

KM because they are the main factor of knowledge creation and dissemination. According to MIT Press (2015), organizational knowledge is not intended to replace individual knowledge but to complement it by making it stronger, more coherent and more broadly applied within the organization. KM emerged in the business sector but is being practised in non-profit organizations, including university libraries.

According to Ogola (2012), universities are unique institutions defined by their underlying mission to generate and disseminate knowledge in all spheres. They are perhaps the only institutions that bring together scientists, artists, writers and many others to carry out their work themselves and transmit the values and tools of their fields to the next generation. Enormous amounts of new data and information are currently available presented in very complex forms that make it more difficult to access. Ogola posited that more does not always mean better it is, therefore, the duty of librarians to sort out, make sense of and present coherent information to their library users.

University libraries are libraries that belong to universities. The mission of university libraries is to support the educational and research activities of their parent institution through the provision of collections, services and user education. Providing support for teaching, learning and research is the focus of university libraries. University libraries embrace vast amounts of knowledge in various areas, and its management is considered necessary for providing quality information services, making effective decisions, improving their overall performance and becoming more relevant to their parent institutions. Libraries are central in managing the knowledge of their parent institutions. This means that libraries that are stuck to their conventional functions may not be in a position to support the vision and mission of their parent institutions. The success of university libraries,

therefore, depends on their ability to utilize information and knowledge of their staff who are academic librarians to serve the needs of the academic community better.

Academic librarians are a crop of professionals that are trained to carry out core duties of a library, beyond the day- to- day routines of library officers and library attendants (Ezeani, Eke & Ugwu, 2012). Academic librarians are therefore employed with the primary responsibility of supporting the goals and objectives of the parent institution. They are trained to ensure that all members of the institutions know what information resources are available to them and how they can facilitate access to them, within the physical walls of the library or elsewhere. There are several approaches that academic librarians should follow and harvest the tacit and explicit knowledge of workers to the full advantage of the library. These include acquisition of modern tools, updating skills and standardization, knowledge creation, knowledge capturing, knowledge sharing, and skills in ICT. Academic librarians differ in their work experience. The number of years in service determines how experienced or less experienced the academic librarian is in the performance of his/her duties. It is assumed that from one to ten years are regarded as being less experienced while those above ten years are categorized as experienced.

Libraries as service-oriented entities have the primary objective to provide the right information to the right user at the right time and in the right format. In the past, the information needs of the academic community are met by the library but, information landscape is changing, and the use of library services and the librarian's role has continued to evolve too. Libraries are, therefore, required to expand their access to knowledge through knowledge management for better quality services. Over the years, university libraries have generated increasing

amounts of information about their operations. Yet libraries rarely use this operational information to create or apply organizational knowledge. Instead, they excuse themselves by saying that they are so committed to providing services that there is no time to use this growing body of information to increase organizational effectiveness. Libraries do not consider organizational knowledge as a resource in its own right as they do personnel, collections or facilities. Academic librarians do not manage knowledge about their organizations as they manage their other resources. Awareness and application of knowledge management offer university libraries the opportunity to organize and interpret the vast arrays of information about their operations to improve effectiveness. Academic librarians as a result of their training and work experiences and changes in their work environment are expected to be aware of PKM and OKM and be able to apply the same in the performance of their duties.

There is an increasing interest in KM by the library and information science community because of its benefits in library operations and in satisfying the information needs of the users. It becomes imperative, therefore, to study the level of awareness and application of knowledge management by academic librarians in university libraries in South-East Nigeria.

Statement of the Problem

Application of knowledge management in university libraries is to ensure an all-round improvement of the library staff's capacity; promotion of relationships between libraries and library users. Knowledge management practices help to increase library's operational efficiency and cater to the ever increasing needs of the clientele. It also injects new blood into the library culture which results in mutual trust, open exchange, studying, sharing and developing the knowledge

operations mechanisms of libraries. Knowledge management seeks to extend the role of the librarians to manage all types of knowledge both explicit and tacit for the benefit of the library.

University libraries where knowledge management is not applied may not be able to organize and provide access to intangible resources that help librarians and administrators to carry out their tasks. Libraries that are stuck to their conventional functions may not be in a position to support the vision and mission of their parent institutions and may experience decline in usage. They may not be able to communicate effectively among library personnel and users, between top management and staff and cannot promote a culture of knowledge sharing.

Knowledge management is generally understood to mean the sharing of knowledge inside or outside an organization. This sharing of knowledge seems to be taken for granted in university libraries in South-East Nigeria. Most times, knowledge that is held by individuals leaves when they resign or retire from the organization.

Most staff of university libraries in South-East is frequently sponsored by their university to be trained in workshops or conferences but on their return will not transfer the knowledge to the organization. Knowledge that is acquired outside the organization frequently remains with the individual because it is not transferred to other employees. Librarians do not typically pass on knowledge from trainings they participate in or document the new knowledge they gain from conference presentation for dissemination to their colleagues. Acquired knowledge should ideally be shared in meetings or through special seminars, discussions or documented.

Again, in university libraries in South-East Nigeria, academic librarians and other library staff have specific duties and ways of performing them. In a number of

cases, there is vital knowledge resting with one individual and little is done to tap this knowledge and make it more accessible. In case of retirement, resignation or death of such individual, knowledge in performing certain duties are lost.

Moreover, in university libraries in SE Nigeria, PKM of academic librarians seem not to be getting much attention, irrespective of their years of experience. This may likely lead to lack of job satisfaction, which affects job performance. This might be the reason many of the experienced ones prefer to move to Library and Information Science (LIS) schools thereby creating knowledge gap in university libraries. These negative trends could be due to the level of awareness and application of knowledge management by the librarians in these universities which is not clearly known. It is, therefore, imperative to conduct this study to determine the level of awareness and application of knowledge management among academic librarians in SE university

Purpose of the Study

The main purpose of the study is to determine the level of awareness and application of knowledge management by academic librarians in South- East university libraries. Specifically, the study determined the:

1. Level of awareness of personal knowledge management among academic librarians in South-East university libraries;
2. Level of awareness of organizational knowledge management among academic librarians in South-East university libraries;
3. Level of application of personal knowledge management by academic librarians in South-East university libraries;
4. Level of application of organizational knowledge management by academic librarians in South-East university libraries;

5. Challenges associated with application of personal knowledge management by academic librarians in South-East university libraries;
6. Challenges associated with application of organizational knowledge management by academic librarians in South-East university libraries;

Significance of the Study

The findings of this study will be beneficial to librarians, university libraries, university management and future researchers.

The findings of this study will help librarians by increasing their level of awareness and application of personal and organizational knowledge management. The findings will help to equip librarians on how to manage their knowledge for professional excellence and organizational effectiveness. It will also encourage librarians to seek and share knowledge to enhance their knowledge base freely.

The findings of this study will help the management of university libraries to be aware of the level of awareness and application of personal and organizational knowledge management of librarians working in their libraries. It will also highlight the need to coordinate knowledge from all sources and deploy such knowledge appropriately to those who require them for the improvement of library services. Such improvement in services will also help to increase patronage. It will also create awareness on the need to equip librarians with necessary tools and techniques to support their PKM needs.

The university management will benefit from the findings of the study as the result of the study will highlight the need to apply personal and organizational knowledge management in the provision of effective services. Application of personal and organizational knowledge management in the libraries will also

enable the library management to provide more uniform and effective policies and procedures that improve productivity and performance within the libraries under study.

The findings will help to provide valuable information to future researchers who may wish to carry out further studies on personal and organizational knowledge management. Finally, the findings will complement and add to the existing body of knowledge, literature and numerous works done in the field of personal and organizational knowledge management.

Scope of the Study

This study determined the level of awareness and application of knowledge management (KM) by 175 academic librarians in university libraries in South-East Nigeria. The scope is delimited to personal knowledge (PKM) and Organizational knowledge management (OKM) as well as the challenges academic librarians face in applying them. Respondent variable that could influence their level of awareness and application of KM is delimited to years of experience.

Research Questions

The following research questions guided the study:

1. What is the level of awareness of personal knowledge management by academic librarians in university libraries in South-East Nigeria?
2. What is the level of awareness of organizational knowledge management by academic librarians in university libraries in South-East Nigeria?
3. What is the level of application of personal knowledge management by the academic librarians in SE university libraries?

4. What is the level of application of organizational knowledge management by the academic librarians in SE university libraries?
5. What are the challenges associated with application of personal knowledge management by academic librarians in SE university libraries?
6. What are the challenges associated with application of organizational knowledge management by academic librarians in SE university libraries?

Hypotheses

The following null hypotheses were tested at 0.05 level of significant:

- HO1. Academic librarians' do not differ significantly in their level of awareness of personal knowledge management as a result of years of experience.
- HO2. Academic librarians' do not differ significantly in their level of awareness of organizational knowledge management as a result of years of experience.
- HO3. There is no significant difference in the application of personal knowledge management by experienced and less experienced academic librarians.
- HO4. There is no significant difference in the application of organizational knowledge management by experienced and less experienced academic librarians.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The review of related literature is discussed under the following subheadings:

Conceptual Framework

Awareness

Application of Knowledge

Knowledge management

Academic Librarians

University Library

Theoretical Framework

Nonaka- Takeuchi's knowledge conversion theory by Ikujiro Nonaka 1991

Raimer- Haries' dynamic awareness theory by Reimer and Hanies 2008

Organizational learning theory by Cyert and March 1963

Theoretical Studies

Awareness of Personal Knowledge management by academic librarians

Awareness of OKM by academic librarians

Application of Personal Knowledge management

Application of Organizational Knowledge management

Challenges of application of Personal Knowledge management

Challenges of application of Organizational Knowledge management

Empirical Studies

Awareness of Personal Knowledge management

Awareness Organizational Knowledge management

Application of Personal Knowledge management

Application Organizational Knowledge management

Summary of Review of Related Literature

Conceptual Framework

Relevant concepts in the title of the study are reviewed in this section as follows:

Awareness

According to Pearsall (2008), awareness is having knowledge or perception of a situation or fact. It is being concerned or well informed about a particular situation or development. Awareness implies vigilance in observing or alertness in drawing inferences from what one experiences. It is the ability of people to understand or realize that something exists. Awareness can also be defined as an individual's knowledge or understanding of a particular subject or situation (Webster 2008).

Oluwabamide and Akpan (2016) referred awareness to public common knowledge or understanding about social, scientific or political issues. Okoh (2016) defined awareness as the state of having knowledge or cognizance of something. It is the knowledge of existence and relevance of any information. However, Okoh posited that awareness of any information or system goes with the activities of others which play an important role in enabling effective collaboration among them.

Jullian (2010) averred that awareness as raising consciousness and knowledge about certain information and its personal and social benefits. According to Heath, Vom, Hindmarsh, Svensson, Sanchez and Luff (2012) awareness is as a feature of political action which is systematically accomplished within developing course of everyday activities. Heath et al. added that awareness is a social activity in which people take cues from those around that can influence our knowledge and lead to greater shared awareness, and that awareness can be achieved in collaboration with others.

Omotoso (2010) defined awareness as a state or ability to perceive, to feel or to be conscious of events, object or sensory patterns. It means ones understanding of what is happening around one's environment, which is what enables an individual to make the required decision concerning an existing situation. Ejiogu (2012), observed that people lack awareness of various issues at a particular moment. Moreover, one's states of awareness changes, awareness (or lack of it) is an important property of people's epistemic states at a particular moment with significant consequences for the decisions they make, their actions and their behaviour in a situation of interaction.

According to Riemer and Haines (2008), awareness is generally seen as an understanding of the activities of others, which provides a context for one's activity. It involves knowing who is around, what activities are occurring, who is talking with whom; it provides a view of one another in the daily work environments. They also highlighted that awareness is something within individuals that may build up slowly rather than being instantly created. Different aspects of awareness about one's environment do not develop at the same time; rather, certain aspects of awareness are sought first and once attained, lead one to seek awareness about other aspects. This indicates that different level of awareness exists and such awareness depreciates when not actively applied.

In the context of this study, awareness is seen as something within individuals that build up slowly rather than being created instantly. It means an individual's understanding of what is happening in the environment which facilitates making required decisions concerning an existing situation.

Application of Knowledge

Knowledge like information is of no value to anyone unless applied to decisions that result in competitive action (Ogola 2012). Knowledge must be internalized to be functional; it must co-exist with human aptitude to make intelligent decisions. Successful knowledge internalization should result in actions that reflect a change in human behaviour. According to Pearsall (2008), application is the act of putting something to a special use or purpose. A method of applying or using: a specific use, the capacity of being usable or relevance.

According to Cheong (2011), applying knowledge comprises the application and usage of knowledge in actual situations such as in decision making or solving a problem. It is to create capability by integrating knowledge. It is to realize the value of knowledge and for an organization to create commercial values for customers. It involves the integration of knowledge into an organization's business processes and key application. Application of knowledge is a goal-oriented process and knowledge must be applied in the context of specific purposes and to construct meanings of higher values and to support the learning processes.

Nnadozie, Nwosu, Ononogbo and Nnadozie (2015) viewed application of knowledge as the last phase in knowledge management. It is concerned with the use of knowledge for personal or organizational purposes. Knowledge is meant for application. Such application is only possible after knowledge has been organized, retrieved, distributed and found for the purpose it is being applied. Application of knowledge means making knowledge more active, valuable and relevant to specific and broad needs of the organization.

Ogola (2012), referred the application of knowledge as a complex issue that is determined by corporate culture, reward schemes, structure, skills management

style and the design of processes for knowledge work. The continuous conversion of knowledge into information and information into knowledge is a crucial element of what organizations must do to develop and apply knowledge successfully. While Becerra- Fernande and Sabherwal (2010), pointed out that application of knowledge is when available knowledge is used to make decisions and performs tasks through directions and routines. Directions, here refers to the process through which the individual possessing the knowledge directs the action of another individual without transferring to that individual the knowledge underlying the direction. Routines involve the utilization of knowledge embedded in procedures, rules, norms and processes that guide future behaviour. Both direction and routines apply to either tacit or explicit knowledge.

In the context of this study, application of knowledge involves making use of both tacit and explicit knowledge in decision making and in performing tasks through directions and routines.

Knowledge Management (KM)

The key idea driving knowledge management (KM) is that knowledge is a strategic asset that must be managed. It should be managed as an asset or resource just like land, capital and labour. In the present information and knowledge era, knowledge as an intangible asset has taken precedence over traditional organizational resources such as capital and labour. KM has attracted a series of definitions, explanations and conceptualizations due to its interdisciplinary nature. However, it can be inferred that any attempt to define and conceptualize KM must take into account the two major types of knowledge (explicit and tacit) and the circumstances that led to the development of KM (Omotayo 2015, Igwe, Nnadozie &Unagha 2015).

Nnadozie et al. (2015), defined KM as the identification and harnessing of various categories of useful recorded information and allied knowledge-based resources to achieve specific organizational goals. It is a process that helps classify and share the vital expertise that constitutes the institutional memory residing within organizations in an unstructured manner. KM is built on the premise that the stock of knowledge in the society should be organized, circulated and exploited by the right people at the right time through the right media and in the right context.

Furthermore, Townley (2011), defined KM as the set of processes that create and share knowledge across an organization to optimize the use of judgment in the attainment of mission and goals. It involves capturing an organization's goal-related knowledge as well as knowledge of its products, customers, competition, and processes, and then sharing that knowledge with the appropriate people throughout the organization.

King (2009), viewed KM as the planning, organizing, motivating, and controlling of people, processes and systems in the organization to ensure that its knowledge-related assets are improved and effectively employed. Knowledge-related assets include knowledge in the form of printed documents such as patents and manuals, knowledge stored in electronic repositories such as best practices, database, employees' knowledge about the best way to do their jobs, knowledge that is held by teams who have been working on focused problems and knowledge that is embedded in the organization's products, processes and relationships. According to Ogola (2012), KM is about getting knowledge from those who have it to those who need it to improve organizational effectiveness. It is about storing and sharing the wisdom, understanding and expertise accumulated in an organization about its processes, techniques and operations.

Omotayo (2015), described KM as a process, where many activities are formed to carry out critical elements of an organization's KM strategy and operations. For instance, an organization must first identify and capture knowledge and then organize it to bring knowledge within the organizational boundaries. Knowledge is also transferred and shared throughout the members of the organization using both human and technological means. Through this transfer, the members of the organization can apply the new knowledge to their tasks/work activities, which can include the use of KM systems. Sood and Chaubey (2011), stressed that KM is about people. It is directly linked to what people know and how what they know can support organizational objectives. It draws on human competency, intuition, ideas and motivations. It is not a technology-based concept, although technology can support a knowledge management effort.

According to Nnadozie, et al. (2015), KM involves a complex network of individual activities that have a direct bearing on the collection, processing, preservation of various knowledge assets and dissemination of information. The sum of these activities, when discharged effectively, results in the attainment of personal and organizational objectives. These activities are broken up into various units and handled at multiple stages or layers, generally referred to as phases. KM phases are knowledge creation, validation, presentation, organization, retrieval, distribution and application. After knowledge has been created, the originality and usefulness need to be confirmed. It is only after the knowledge created has been certified (validated) that such knowledge is packaged for public circulation, which is what knowledge presentation means. Since knowledge sources or information carriers eventually end up in a receptacle of sort such as library, archive or record office, the need for knowledge organization becomes a consequence. When knowledge has been adequately organized, its retrieval becomes easy. And it is

when knowledge is accessed or retrieved that its distribution (circulation or dissemination) and application (use) can be possible.

Omotayo (2015), viewed KM as a strategic management tool which requires managing the collective information expertise of the employees. An organization needs to build systems for capturing and transferring internal knowledge and best practices. Omotayo believed that the underlying premise of KM strategy is that best practices of yesterday may not be taken for granted as best practices of today or tomorrow. In other words, Km strategy is necessary for organizations because what worked yesterday may or may not work for tomorrow. Hence, learning and relearning processes need to be designed into the organizational processes.

In libraries KM, according to Madge (2010), is a process aimed at creating, identifying, sharing and using knowledge at the level of an organization. KM aims primarily to provide good quality information services and tailored to each user's needs to improve knowledge communication, application and generation. KM covers activities such as collecting new materials, developing collections on specific topics, capturing knowledge from projects, gray literature, and case studies and many others. Moraes, Coelho and Coelho (2013) observed that KM in libraries has two levels; the first level deals with the conversion of a large amount of knowledge locked inside the minds of employees, the idea is to turn them into explicit knowledge and make them visible, facilitating access and use of codified knowledge throughout the library. The second level refers to the collection, preservation and access to records of human knowledge (traditional library resources). At this level, KM includes the collection and distribution of library resources, such as acquisitions, cataloguing, circulation, scanning, interlibrary loan and dissemination of library resources.

Knowledge in organizations resides within individuals as well as working processes so that it can be personal and organizational, and these are two levels of knowledge management (Obadiya 2017). The personal knowledge approach to KM derives from the fundamental assumptions that knowledge is essentially personal in nature and that knowledge is, therefore, difficult to extract from the minds of individuals.

Pauleen (2009) defined personal knowledge management (PKM) as a collection of processes that a person uses to gather, classify, store, search, retrieve and share knowledge in their daily activities and how these processes support work activities. Pauleen also viewed PKM as a tool which equips knowledge workers with the necessary skills to manage their knowledge. It is a response to the idea that knowledge workers need to be responsible for their growth and learning. Individuals need to know how to decide on and seek out, new and relevant information, knowledge, experiences and learning.

Jain (2011) asserted that PKM is knowledge which is already in a person's possession, and PKM means managing and maintaining that personal knowledge to enrich an individual knowledge database to retrieve knowledge effectively so as to use, re-use and mobilize it for the benefit of the person, the organization and the community. PKM is being aware of what knowledge an individual has and how she can organize it, mobilize it and use it to accomplish her goals and how she can continue to create knowledge.

Gorman and Pauleen (2010) observed that PKM focuses on helping individuals become more effective in the personal, organizational and social environment. PKM is a means of increasing individual effectiveness in work environments such as teams and organizations. The core focus of PKM is personal enquiry: the quest

to find, connect, learn and explore. All individuals require processes and tools by which they can evaluate what they know in a given situation, seeks ways to fill the gaps when needed. According to Mitchell (2004) PKM involves a range of relatively simple and inexpensive techniques and tools that anyone can use to acquire, create and share knowledge, extend personal networks and collaborate with colleagues without having to rely on the technical or financial resources of the employer.

The second level of knowledge management is organizational. Each organization has its knowledge assets that are unique to its operations. Knowledge learned by one department within an organization is not immediately available to those outside that unit. This collective knowledge, according to Ogola (2012), cannot be traded, but it has value in the services that it can render to insiders. Once this collective know-how has been learned and properly mastered, it can be reused at no extra cost. The more this know-how is used, the stronger it grows. Ekeke (2011) noted that for the various dimensions and typology of knowledge to be beneficial, they have to interact in a social setting and this setting is within or outside the organization. Organizational knowledge can be tacit or explicit in nature or both; it is internally generated within personal domains of intuitions and understanding involving relationships between technologies, techniques and people. Tsoukas and Vladimirou (2001) stated that organizational knowledge is the capabilities which members of an organization have developed to draw distinctions in the process of carrying out their work in a particular concrete context, by enacting sets of generalizations whose application depends on historical evolved collective understanding.

To Bollinger and Smith cited in Bello, Ugwuogu and Adedeji (2015) organizational knowledge is a strategic asset. This is because it sums up the know-

how, know-what, and know-why of the individual employee. Thereby making the experience of the present and past employees to be pulled together, resulting in organizational knowledge. To enhance organizational knowledge, KM must, therefore, be involved across the entire knowledge spectrum. OKM is based on the premise that just as human beings are unable to draw on the full potential of their brains, organizations are generally not able to fully utilize the knowledge that they possess. Obadiya (2017) believed that through OKM, organizations seek to acquire or create potentially useful knowledge and make available to those who can use it at a time and place that is appropriate for them to achieve maximum, effective usage to influence organizational performance positively.

Mruthyunjaya (2011) described OKM as that knowledge which is basic to all its productive activities together with the knowledge that is basic to other activities associated with prime productive activities. No organization can work without some knowledge to drive its activities. Each organization would be managing the knowledge specific to its activities, in its way, to meet its goals and objectives. Similarly, each activity area within the organization would be governed by certain facts of knowledge specific to the activity and all organizations manage them to align those activities in line with organizational goals.

Gorman and Pauleen (2010) observed that OKM is centred on enabling the organization to be more effective by recording and making available what its people know. The emphasis in KM has remained on how to prise knowledge out of people, either by making it explicit and entering it into an information system or possibly more realistically, encouraging employees as communicative individuals to share knowledge in social and professional situations such as communities of practice. The central idea is that OKM efforts, work to create, codify and share knowledge valuable to the organization. OKM shifts the focus from process to

practice, using communication and collaboration to improve how people do their practices.

Omotaya (2015) posited that to manage organizational knowledge effectively, attention must be paid to four key components: Knowledge, People, Processes and Technology. Without having organizational knowledge to manage, there would be no OKM. When group knowledge from several subunits or groups in an organization is combined and used to create new knowledge, the resulting tacit and explicit knowledge can be called organizational knowledge. The sum of the critical intellectual capital residing within an organization, it is an embedded knowledge which is found primarily in specialized relationships among individuals and groups and in particular norms, attitudes, information flows and ways of making decisions that shape their dealings with each other.

The second component of OKM, according to Omotaya (2015), is people. People are the source of knowledge. The ability of humans to think creatively and uniquely, coupled with experiences and talents, make humans valuable sources of knowledge. People are the creators and consumers of knowledge because individuals consume knowledge from various sources on a daily basis, in addition to creating knowledge. Jain (2011) stressed that OKM begins, revolves around, and ends with people.

In contrast to the PKM approach, the OKM approach according to Obadiya (2017) assumed that knowledge is something that can be made explicit, i.e. it can be articulated and explained by individuals who have the knowledge. As a result, the organizational knowledge of individuals that is useful to an organization can be articulated and thereby made explicit and available to others. Working from this premise, the OKM approach generally advocates the creation and use of formal

organizational processes to encourage and help individuals articulate the vital knowledge they have, and thereby create organizational knowledge assets.

Baloh et al. (2011) defined processes, which is another OKM component, as mechanical and logical artifacts that guide how work is conducted in organizations. Processes govern work in organizations and so are critical to the functioning of the organization. Processes might be made of, and executed by, humans, machines, or a combination of the two. Along with the assumption that knowledge can be made explicit and managed explicitly, goes the belief that new knowledge can be created through definable, manageable learning processes. A critical requirement for OKM, according to Ekeke (2011), is to be able to understand the work process and how to map them. By so doing, inputs, outputs, personnel, resources and work being conducted in a given process can be easily described. Mapping of processes helps to depict what is really going on in the organization and how tasks are being accomplished. Knowledge needed to accomplish tasks can then be articulated, and requisite technology or human intervention can be deployed to meet these needs with the goal of increasing effectiveness and efficiency in the organization.

The last component of OKM is technology. Technology is a critical enabler and foundational elements of OKM plan. ICTs facilitate collaboration between people and teams which are geographically dispersed. Omotayo (2015) noted that ICTs also facilitate OKM activities through the codification of knowledge as well as rich and interactive forms of communication through the Internet. Information systems are seen as providing a critical means to disseminate organizational knowledge assets over company intranets or between organizations via the internet. While technology is essential and can significantly enable OKM, it is pertinent to state that it is not a solution in and of itself. Technology does not make an organization share knowledge, but if people want to share it, technology can increase the reach

and scope of such exchanges. Sun and Scott (2005) posited that putting an ICT-based OKM system in place is not in and of itself going to make people utilize it, but the success of OKM initiatives involves taking account of the socio-cultural factors which inhibit peoples' willingness to share knowledge.

In the context of this study, KM can be seen as the process of creating, acquiring, sharing and applying both tacit and explicit knowledge of both the personal knowledge of the individuals working in the organization as well as the organizational knowledge for the benefit of the organization. PKM may be viewed as the provision of a framework for individual knowledge workers to manage new information, integrate it and enrich each individual knowledge database in an effective manner while OKM is the ability of the organization to create, codify and share knowledge valuable to the organization. OKM shifts the focus from process to practice, using communication and collaboration to improve how people do their practices.

Academic Librarian

Librarianship is generally considered to be concerned with the principle and practice of selecting, acquiring, organizing, disseminating and providing access to information in accordance with specific needs of groups of people or an individual (Chenong, 2008). Chenong went further to explain that librarianship is the discipline and profession concerned with helping individuals obtain reliable information to increase their knowledge in all spheres of their lives from the cumulated information store of mankind. Rawat and Kumar (2002) and Swaminathan (2006), referred librarianship as the application of knowledge of books and other principles, theories and techniques to the establishment, preservation, organization and use of collections of books and other materials in

libraries and the extension of library services. Reitz (2004), defined librarianship as the profession devoted to applying theory and technology to the creation, selection, organization, management, preservation, dissemination and utilization of collections of information in all formats. A person formally trained or certified to perform such services is a librarian. Librarians Registration Council of Nigeria (LRCN), defined a librarian as a graduate of Library and Information Science registered and inducted by the council. Librarians are a crop of professionals that are trained to carry out the core duties of a library, beyond the day-to-day routines of library officers and library attendants (Ezeani, Eke & Ugwu, 2012).

Academic librarianship, according to Moran and Leonard (2010), is the profession practised by those working in libraries associated with institutions of higher education of various types or tertiary educational institutions, including universities. The primary responsibility of academic librarians is to support the teaching, learning, and research efforts of the parent institution's faculty and students. They fulfil this mission by working with faculty, staff, and students in finding the information they need and by selecting, acquiring, organizing, providing access to and preserving the library's collection. Also, academic librarians in the university libraries offer limited services to individuals not formally affiliated with the institution. Individuals who work in university libraries are usually classified into two broad categories: Academic librarians are those librarians who have Master's degree in Library and Information Science (M.L.I.S) while employees without that credential are considered to be paraprofessional or support staff.

Academic librarians lend out materials to individuals or provide databases for them to get the information to increase their knowledge and perform their work effectively or help in their personal development. Reference librarians help to

answer questions from individuals and guide them in finding information. Therefore all the work that librarians do leads to the satisfaction of the needs of individuals. This supports Aina (2004) that library process revolves around users. The user is the focal point of all libraries and information services. The library primarily exists to satisfy the user.

Moran and Leonard (2010) stressed that academic librarianship today demands much more thought and effort on connecting with users and maintaining their engagement. Maponya (2004) observed that in this age of significant change in information formats, delivery models and technologies academic librarian can no longer meet the information needs of the users through the traditional avenue of merely adding to their library collections. Academic librarians should extend their information management roles and enhance their management competencies. These changes demand new competencies in academic librarians, as a result, academic librarians had to know the interrelationship between characteristics of knowledge and process of knowledge and knowledge management in the academic library.

In the context of this study, academic librarians are those librarians working in university libraries and who have a master's degree in Library and Information Science.

University Library

Mary (2016) defined university library as a type of library created and located within a university. It is funded by public funds, variety of donors and some forms of philanthropy with vital and relevant student books, literature, internet access, music, art, computer access, space rooms, photocopy service, information stand and various other vital university or educational services. Mary averred that

university library is inspired to deliver and provide for all students and members of the community where appropriate with accessible opening hours and access to the building.

According to Reitz (2004) university library is a library or library system established, administered and funded by university to meet the information, research and curriculum needs of its students, faculty and staff. While Ashikuzzaman (2013) viewed university library as a part of a university set up. That exists to serve the objectives of its parent organization. Every library programme must support all the university's programmes. The university library should aim to advance the function of that university. The universally recognized basic functions performed by university libraries according to Ashikuzzaman include;

- 1) Procurement of comprehensive range of documents including books, manuscripts, journals, magazines newspaper and many others on various subjects.
- 2) In order to organize huge collection of documents it keeps them in different sections on the basic of their categorization like text book section, reference section, journal section and thesis section.
- 3) A modern university library interacts with different information networks to give easy access to e-sources to more users so that they could access the desired information networks from their workplace.
- 4) It provides reference services through reference section to establish a contact between the right reader and the right document in a personal way to attract more users.

Kingyens (2018) viewed university library as an integral part of the university. For many libraries, they offer quiet places to study as well as computer access. The primary function is research. Students and staff alike use libraries to research their topics for papers, thesis, books, journals and many others. Not all information can be located online, and not for free. According to Kingyens, many students may not realize that some sources they access online are not appropriate resources, open access or factual.

Ogbonna (2009) described university library as an integral part of the institution in which they are located. The library is the academic soul of the institution. The primary responsibility of the library is to aid the parent institution in carrying out its academic programme. It functions to satisfy the institutional teaching, study and research objectives. It strives to meet the academic need of the students and teachers. The excellence of the university is determined by the extent to which it supports its institution's objectives. The university library goes at length to provide all forms of human records in all fields of knowledge needed by members of the academic community for the successful pursuit of academic programme such as teaching, study and research.

Kumar (2008) observed that, at one time a university library was regarded as a mere store house of reading material collected for the purpose of preservation. Their role in the educational process was marginal. However, significant changes have taken place in the outlook of university administrators, research scholars, teachers and students. They have started realizing the role of a university library as an active force in teaching and research. It is being considered as an integral part of the university. It is beginning to be recognized as an important component of a university set up. Librarians are being considered as essential members of the academic community.

University libraries are libraries that belong to universities. The mission of university libraries according to Ogola (2012) is to support the educational and research activities of their parent institution through the provision of collections, services and user education. Providing support for teaching, learning and research is the focus of university libraries. University libraries embrace vast amounts of knowledge in various areas, and its management is considered necessary for providing quality information services, making effective decisions, improving their overall performance and becoming more relevant to their parent institutions. Libraries are central in managing the knowledge of their parent institutions.

In the context of this study, university library is a library established, maintained and administered by a university to support the curriculum and research needs of students and members of the academic community.

Theoretical Framework

Theories on which this study is based are the Nonaka-Takeuchi knowledge conversions theory, the Reimer-Haries' Dynamic Awareness theory and Organizational learning theory. These are reviewed in this section as follows:

Nonaka-Takeuchi Knowledge Conversions Theory (1991)

Nonaka-Takeuchi's model of knowledge creation and conversion is also known as Socialization- Externalization- Combination- Internalization (SECI) process. SECI process was propounded by Ikujiro Nonaka in 1991 and was refined and expanded for a broader audience in 1995. The theory explains the phenomenon of organizational knowledge creation. It holds that individuals initially create knowledge and that knowledge created by individuals becomes organizational knowledge through "knowledge conversion" processes of socialization,

externalization, combination and internalization. Thus as knowledge is socialized and shared, it passes through the four different modes of knowledge conversion, as shown in figure 1:

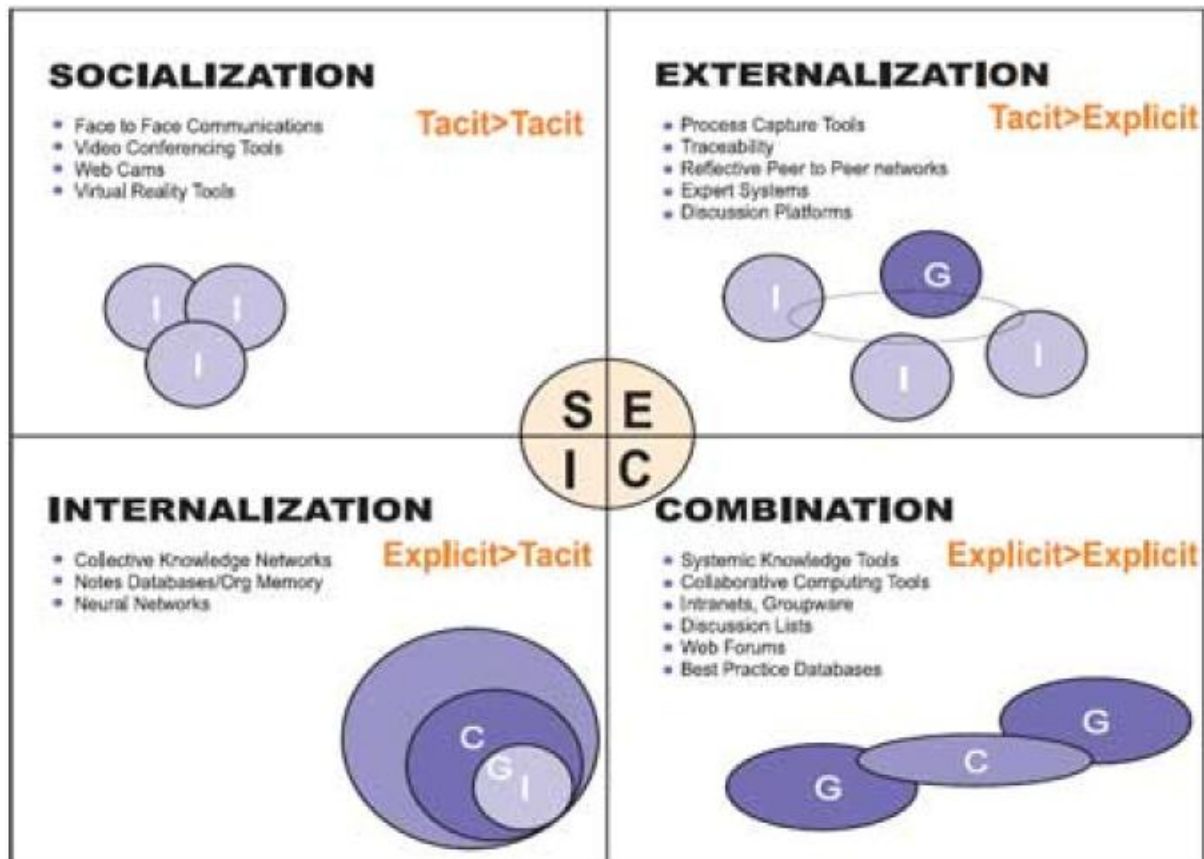


Figure 1: Knowledge creation/conversion in Nonaka-Takeuchi Theory

Source: Ceptureanu and Ceptureanu (2010)

The four modes of knowledge conversion in the diagram are:

- Tacit- to tacit (socialization)- where individuals acquire new knowledge directly from others.
- Tacit-to-explicit (externalization)- the articulation of knowledge into tangible form through dialogue.

- Explicit-to- explicit (combination)- combining different forms of explicit knowledge, such as that in documents and databases.
- Explicit-to-tacit (internalization) - such as learning by doing, where individuals internalize knowledge from documents into their own body of experience.

In these four modes, the flow of knowledge moves from tacit to explicit to tacit once again, through the spiral of knowledge creation. This interaction between the two main types of knowledge brings about what is called the four modes of knowledge conversion. The process of knowledge creation is based on a double spiral movement between tacit and explicit knowledge.

Socialization is a process of creating common tacit knowledge through shared experiences. In socialization, a field of interaction is built where individuals share experiences and space at the same time. Through this process, common unarticulated beliefs and embodied skills are created and developed. In socialization, the tacit knowledge of one person is shared and transmitted to another person, and it becomes part of the other person's tacit knowledge.

Externalization is a process of articulating tacit knowledge into such explicit knowledge as concepts and or diagrams. The process often uses metaphors, analogies, and or sketches. The mode is triggered by a dialogue intended to create concepts from tacit knowledge. A good example of externalization, according to Igwe, et al. (2015), is the process of creating or developing a new production process. Here, the tacit knowledge in the brains of experts are articulated and expressed as concepts or drawings, thus becoming explicit knowledge that can be further studied and refined.

Combination is a process of assembling new and existing explicit knowledge into a systemic knowledge. For example, an engineer can combine available drawings

and design specifications to produce a new process design or equipment (Igwe, et al. 2015). What commonly occurs is the combination of a newly created concept with existing knowledge to produce something tangible.

Internalization is a process of embodying explicit knowledge into tacit knowledge or an individual's know-how or operational knowledge. That is learning by doing. Explicit knowledge that is available as text, sound, or video facilitates the internalization process. The use of operating manuals for various machines is an example of explicit knowledge that is used for internalization. The instructions are learned and become part of the person's tacit knowledge. Organizational knowledge is created by the interactions among these four conversion processes, and through the transfer of tacit and explicit knowledge from individual to group to organizational levels.

Knowledge creation starts with socialization. This interaction facilitates the sharing of member's experiences and perspectives. Then, externalization is triggered by successive rounds of meaningful dialogue. Through this dialogue, entities articulate their formerly tacit knowledge to each other. The knowledge that is created through externalization can be combined with existing knowledge to refine further and extend the knowledge base. This process is repeated, with knowledge increasingly taking concrete form. Through this experimentation of learning by doing, internalization takes place.

This theory is related to the present study because it explains the processes of knowledge creation and conversion, which usually occur in university libraries. Academic librarians are involved in learning and managing their competencies. At this stage, Knowledge is largely disjointed, uncoordinated and unharvested as they keep their skills and competencies to themselves as opposed to making them

available to those who need them (users and colleagues). This results in low productivity, competitive disadvantage and unsatisfactory service. Moreover, organizational knowledge in the form of the experience and expertise accumulated by employees is lost when the staff no longer works in the organization. However, the SECI model theorises that knowledge keeps on changing from one form to another, and this necessitates the creation of new knowledge. For example, knowledge shared during meetings, brainstorming sessions, workshops, conferences are basically tacit knowledge (Mutula & Mooka, 2008). This knowledge is then converted to minutes of meeting and conference proceedings which are referred to as implicit knowledge. Such knowledge is used to improve the performance of the organization, secure and sustain a competitive advantage or viability. The tacit knowledge of individuals is continuously converted to implicit knowledge of the organization as a result of the interactions in the conversion processes that ultimately lead to an improvement in product and services.

It is the view of the researcher that the conversion of tacit to implicit knowledge and vice-versa is not taking place at a rate that could lead to improvement of services in university libraries. Hence this study is embarked upon to enhance the awareness and application of personal and organizational knowledge in university libraries of South-East.

Reimer-Hanies' Dynamic Awareness Theory (2008)

The Dynamic Awareness Theory (DAT) was developed in 2008 by Reimer and Hanies. The theory suggests that a person's awareness is not in a static state which can be arbitrarily turned on or off rather, it is based on a slow buildup of information about the surrounding. DAT, therefore, holds that awareness develops gradually over time, implying that there are different levels of awareness and that

such awareness may depreciate when relevant information is not provided. The theory is, therefore founded on the premise that awareness depends on a person's tendency to engage in communication habits and familiarity with communication technology. By communicating intensely with mediated means, DAT holds that one gathers enough information about other people's environment. Although technology plays an important role in the process of awareness creation, however, technology cannot create awareness by itself. Instead, technology features must be embedded into personal practices.

The adoption of personal and organizational KM by academic librarians requires the awareness of the librarians as they are supposed to use personal and organizational KM to improve services being offered. This awareness builds up over time. Dynamic Awareness Theory is relevant to this study in that the level of awareness determines the extent of application of personal and organizational KM in university libraries. It will equally affect the extent of the effectiveness of services provided.

Organizational Learning Theory (1963)

Organizational learning theory (OLT) was propounded in 1963 by Cyert and March. The theory explains the process of organizational learning for an organization to be competitive in a changing environment, it must change its goals and actions to reach those goals. For learning to occur, the organization must make a conscious decision to change actions in response to a change in circumstance and must consciously link action to outcome. According to the theory, initial learning in the organization takes place at the individual level. However, it does not become organizational learning until the information is shared, stored in organizational

memory in such a way that it may be transmitted and accessed and used for organizational goals.

The first part of the learning process involves data acquisition. An organization acquires a memory of valid action-outcome links, the environmental conditions under which they are valid, the probabilities of the outcomes, and the uncertainty around that probability. The links are continually updated over time. The critical point is that an organization's actions will and must change in response to changes in the environment, as each action-outcome link must be specified in terms of applicable conditions. The second part of the learning process is interpretation. Organizations continually compare actual to expected results to update or add to their memory. Unexpected results must be assessed for causation, actions adapted or new action-outcome links specified if necessary, and learning increased.

The third and final stage is the adaptation/action. This is when the organization takes the interpreted knowledge and uses it to select new action-outcome links appropriate to the new environmental conditions. The main point here is that this is a process of continual adaptation to environmental conditions (internal, external, competitors, state of technology etc.) and will be affected to a large extent by the complexity and dynamism the organization experiences. Once adaptation has occurred, the organization's knowledge base is updated to include the new action-outcome link, probabilities, uncertainty and applicable conditions and the process continues.

This theory is related to the present study because it explains an essential aspect of knowledge management which is initial learning taking place at an individual level, but it does not become organizational learning until the information is shared. And it emphasizes knowledge sharing, which is the main focus of

knowledge management. KM involves the individual combining his or her experience, skills, intuition, ideas, judgments context, motivations and interpretation. According to Ogola (2012), learning is the way we create new knowledge and improve ourselves and our services. Ogola also pointed out that individuals in an organization must understand how to create the ideal organizational learning environment, should be aware of how and why something has been learned.

Theoretical Studies

Theoretical studies that are related to this study are reviewed in this section as follows:

Level of Awareness of Personal Knowledge Management

In this global economy, economic activities have shifted from people working with their hands to people working with their heads, from tangible resources like steel to intangible resources like knowledge (Boom & Pimentel, 2009). Maponya (2004), posited that knowledge is essential in any organization. The organization internalizes that only a part of knowledge, the other is internalized by individuals that work in the organization. These individual members of the organization should be aware on how to manage and maintain their knowledge to enable them to retrieve them effectively so as to use, re-use and mobilize it for the benefit of the person and the organization.

Jain (2011), observed that PKM has been in the background since the early days of KM. However, in the past two years, people have begun to recognize the importance of PKM, and there are several activities around PKM: blogs, workshops, conferences, e-book and online surveys. All these are indications of growing awareness and recognition of PKM. Verma (2009), believed that a great deal of organizational knowledge resides in the individual employees' heads and

individual databases. KM research emphasizes extracting knowledge from people instead of encouraging them to manage their knowledge. Jain (2011) posited that knowledge workers spend much time looking for valuable information which is already in their possession, and this lowers their productivity. They do these because they are not aware of PKM.

From some research findings, it was observed that knowledge workers spend much time sifting through irrelevant information to find what they need. These indicate a lack of awareness of PKM and its benefits to the workers. Most of them wished that they could spend less time organizing information and more time using the information that comes their way (Anklam 2009, Business Wire 2008). Jain (2011), posited that these are indications of how PK, time management and productivity are tied up in PKM. Jain further stated that organizations should realize that employees waste much of their time in tracing useful information that it would be better if they create awareness on PKM that could lead to greater organizational success.

According to Jefferson (2006), there is a need to create awareness of the PKM in academic libraries to enable academic librarians to deal with the end-user and technology revolution which resulted in the problem of information overload. Verma (2009) also observed that creating awareness of PKM in academic libraries is very important in that knowledge workers increasingly need to be responsible for their growth and learning. Therefore, PKM is important for all people and organizations, especially academic librarians, to enhance their productivity, to keep abreast with the latest information literacy skills and compete in the global village.

Cheong and Tsui (2010), asserted that awareness of PKM could provide the following benefits to an individual worker:

- place value on individuals and encourage them to engage in self- development;
- address the information overload problem;
- better equip the individual to work and be more productive;
- enable knowledge-based and informed decision making;
- help to motivate employees' with PKM tools and methods which make life easier; make people innovative and think critically;
- help to identify the personal knowledge and skill gaps and build on capacities and
- help to manage personal human capital for professional excellence.

Michailova and Nielsen (2009) averred that awareness of PK assumed to be the key asset, the effective exploitation of which determines success for the organization. Knowledge is of limited organizational value if it is not shared. The ability to collect, integrate and apply specialized knowledge of an organization's members are therefore fundamental to an organization's ability to create and sustain competitive advantage. Specifically, Nwokocha et al. (2015) posited that the awareness of PKM by academic librarians would enable them to identify how much knowledge and information they possess, how they can access the things they know, strategies they can apply in acquiring new knowledge, strategies for accessing new knowledge and ability to understand oneself.

From the discussions on PKM, it is evident that for an academic librarian to discharge her duties efficiently and effectively, she must be aware of PK and be able to utilize the PK inherent in her. This is because PK is fundamental to the successful utilization of OK in achieving an organization's goals.

Awareness of Organizational Knowledge Management

Organizational knowledge management can be achieved with serious consideration of the culture and management style of the individuals, groups and organizations. Every organization owns information and records it creates and receives in the course of the daily business transactions. A crucial element of any KM programme is information management in the organization (Walczak 2005). It is, therefore, necessary for the organization to identify its information and knowledge assets, their recording and storing, sharing and protecting, which constitute the heart of the knowledge management system. Knowledge management, therefore, affects all parts of the organizational development and its awareness needs to be led top-down in the management infrastructure.

Krishnamurthy and Balasubramani (2012), observed that every institution has to spend large costs to build library collections and librarian should be aware of the value of the knowledge to act as an association between the source and the user community. So it is essential that librarians should be aware of the interrelationship between characteristics of knowledge and process of knowledge management in academic library. Krishnamurthy and Balasubramani also noted that the awareness of OKM process in university libraries among academic librarians are varied while the librarians on managerial level show a high level of awareness than others that are not in managerial level. This may be as a result of their professional education and experience. They suggested that most academic librarians need to gain additional skills to work in KM environment.

Furthermore, Obadiya (2017) observed that an effective OKM system needs not only enthusiasm but also the commitment of the leadership. Organizational knowledge management initiatives can support a change in organizational culture.

It also improves internal and external communication; it makes the organization focus on the core business, improves organization efficiency and worker independence. Additional knowledge needs to be shared across the organization by the staff that should also work collaboratively and build a common knowledge management system.

Koloniari and Fassoulis (2016), discovered that the level of awareness of personnel working in Greek academic libraries about KM is high. Most of the respondents indicated that they came to know about it during their studies, suggesting that KM has become part of their LIS curricula. Some others learnt about it from conferences, workshops, and seminars while from work experience was the least popular response. On the contrast, Valaei and Aziz (2012) found out that the level of awareness of KM by companies in Iran is low. To align organizational priorities and KM opportunities, Valaei and Aziz suggested that management should consider learning about KM activities; top managers should be positive; consent to be a learning organization and creating an enabling atmosphere for practising KM within an organization.

Nnadozie et al. (2015) posited that OKM is based on the premise that just as human beings are unable to draw on the full potential of their brains, organizations are generally not able to fully utilize the knowledge that they possess. As a result, there is a need to create awareness on the importance of OKM in organizations. Obadiya (2017) believed that through KM, organizations seek to acquire or create potentially useful knowledge and make available to those who can use it at a time and place that is appropriate for them to achieve maximum, effective usage to influence organizational performance and productivity positively.

Similarly, Evans, Dalkir and Bidian (2014), found out that the importance of knowledge management is understood by employees and management of Sasol R&D, but the employees are not aware of the duties of the identified knowledge management champions within the organization. It is also established that although management regards knowledge management as necessary, their commitment to knowledge management initiatives is not necessarily evident for employees.

From the foregoing, it is deduced that OKM awareness is emerging because of the need to create knowledge organizations. There is low awareness in some organizations while it is high in others. University libraries need to create awareness of organizational knowledge management concepts and process.

Application of Personal Knowledge Management in University Libraries

PKM is about moving beyond finding information to being able to organize and construct meaning from the vast amount of resources available. Application of PKM, according to Avery et al. (2010), entails sharing both intelligent practices that guide the use of tools as well as intelligent and efficient use of the tools themselves. In that PKM is based on a set of problem-solving skills that have both a logical as well as a hands-on component. PKM environments integrate individual work environments and infrastructures to support joint creation, distribution, sharing and application of knowledge.

Cheong and Tsui (2010), posited that for one to apply PKM, the individual need to:

- Clarify the information needs for each situation
- Plan your information acquisition strategy
- Develop a sourcing strategy for your ongoing information needs
- Identify push verse pull” information

- Adopting naming conventions and stick to them
- File single copies of information
- Set criteria for what you want to save or delete
- Work out how and when to process information.

PKM, according to Razmerita, Kirchner and Sudzina (2009), can be applied in university libraries using Web 2.0 tools. This is achieved by a set of tools that allow people to create, codify, organize and share knowledge, but also to socialize, extend personal networks, collaborate on organizing knowledge and create new knowledge. Web 2.0 foster personal knowledge processes and satisfaction, allowing people to be more effective and supporting knowledge sharing and virtual interaction through easy-to-use, collaborative tools. These tools according to Razmerita, Kirchner and Sudzina are not aimed at crystallizing and distributing knowledge, but rather at providing the conditions in which knowledge is shared and new knowledge is created or exchanged in social networks. Application of Web 2.0 also involves formal and informal communication, collaboration and social networking tools. And this facilitates interaction, collaboration and knowledge exchanges on the web and in organizations (Li, Hsieh & Shyu, 2009).

In PKM application, Mohammad and Nazim (2011), posited that the librarian must be able to integrate the personal know-how with the organizational processes in achieving the organization's goals and objectives. Obadiya (2017) affirmed that for knowledge to have been applied means that it has been put to use in solving a problem(s) effectively and efficiently. Omotayo (2014), noted that as information managers in the universities, academic librarians need to coordinate their technical know-how systematically the technologies in place, the processes, and organizational structure to achieve improved productivity.

Daland (2016), stressed that as knowledge is emerging as the most important "product", it is vital that employee knowledge can be applied to other employees so that the organization can benefit from the collective knowledge available. To do so, different strategies and approaches can be applied. Personal channels, such as apprenticeships or personnel transfers, may be more effective for distributing highly context-specific knowledge whereas impersonal channels, such as knowledge repositories, may be most effective for knowledge that can be readily generalized to other contexts.

Porumbeanu (2010), suggested the use of the following technique for PKM: after-action reviews like discussion of a project or an activity that enables the individuals involved to learn for themselves what happened, why it happened, what went well, what needs improvement and what lessons can be learned from the experience; peer assists that is a process whereby a team of people who are working on a project or activity call a meeting or workshop to seek knowledge and insight from people in other teams; identifying and sharing best practices that are sharing the most effective way of achieving a specific objective; and storytelling that is the use of stories to share knowledge, otherwise known as "the grapevine".

Moraes and Coelho (2013), posited that mentoring programme could be used to apply PKM in academic libraries. Staff employed newly in the library can be paired with an experienced staff. Informal seminars should be scheduled at regular intervals and at convenient times where staff can interact and exchange "lessons learned", "best practices and other specific experience and knowledge. The creation of yellow pages which classifies individuals by different areas of expertise into logical whole and internal cross-training and exchange with other organizations are also recommended for application of PKM in university libraries.

Personal knowledge management can also be applied through the transfer of knowledge from one section of the library to the other. For example, the tacit knowledge held by a reference librarian about users could be shared with systems personnel to create an environment supporting this kind of knowledge, meaningful contacts among the staff must be generated and resources and incentives provided (Mruthyunjaya 2011). While Evans, Dalkir and Bidian (2014), proposed that a great amount of expert knowledge possessed by library staff and users, be inventoried, indexed, and updated regularly. Such expertise should be made searchable and accessible through electronic databases created and maintained by libraries.

According to Avery, Brooks, Brown, Dorsey and O'Conner (2010), PKM assumes that individuals have developed self-awareness of their limits and abilities- that is what they know and what they can do. This personal self-awareness is an understanding of how much they know, how to access the things they know, strategies for acquiring new knowledge and strategies for accessing new information as needed. In the vast amount of information available and many means of acquiring new information, individuals have each mapped out their areas of expertise and their methods for additional learning. Avery et al. further posited that there is increased confidence in one's knowledge and in one's knowledge building capabilities that result from this personal self-understanding. Each individual in an organization acquires confidence in their ability to know or to access or to build the knowledge they need. Whether this acquired knowledge is stored in the form of computer files, filing cabinets, books cases, or in memory, each person acquires and manages her knowledge. The information and knowledge is rarely something that can be owned by the individual, but the organization of information and methods of accessing information is almost and always on a

personal basis. The value of the knowledge and the personal management of that knowledge are evident as it is put to use in the organization.

From the foregoing discussions, PKM can be applied in virtually all the areas of the library. However, the main issue in the application of PKM is that the individual should be able to manage knowledge processes and interaction and collaboration with others.

Application of Organizational Knowledge Management in University Libraries

The success of university libraries depends on the ability to utilize information and knowledge of their staff to serve the needs of the academic community better. In that, according to Igolo (2012), knowledge is of no value to anyone unless applied to decisions that result in competitive action. However, Islam, Siddike, Nowrin and Naznin (2015), observed that the application of OKM in university libraries is considered as one of the most useful solutions for improved services as well as the library being relevant to their parent institutions in this present digital, competitive and challenging environment. Jain (2014) observed that often, organizations do not know what knowledge they have and spend a considerable amount of money on training and development to gain knowledge that they already have. The practice of KM will make such hidden organizational knowledge becomes visible and usable. In the application of KM in libraries Singer and Hurley (2005), stressed that KM seeks to make the best use of the knowledge that is available to the library while creating new knowledge in the process. KM is about exploiting and realizing knowledge of the employees and building a culture where knowledge sharing can thrive.

Application of OKM in university libraries will enable libraries to organize and provide access to intangible resources that help librarians to carry out their tasks. Hislop (2013) believed that OKM injects new blood into the library culture, which results in mutual trust, open exchange, studying, sharing and developing the knowledge operation mechanisms of libraries. Hislop noted that if OKM is applied in libraries, personal knowledge may be turned into corporate knowledge that can be widely shared throughout the library and applied as necessary.

Igolo (2012), posited that application of OKM is a crucial notion for academic libraries involved in the efficient and effective collection, organization, access and dissemination of tacit or intangible knowledge. While corporations may be concerned with utilizing their intellectual capital to maximize profits, academic libraries should aim at meeting the needs of their users in the best possible way. In applying OKM in libraries, there is considerable opportunity for librarians to use their traditional skills to assume a new function of managing knowledge within the library and which would complement the traditional library service function. Kurmar (2010), observed that, in serving diverse user groups, academic libraries continually face the challenge of trying to bridge the gap separating users from the information they seek, a pursuit that has become more complicated and chaotic with the exponential growth of Web resources.

Islam et al. (2015) reaffirmed that customers are paramount in all types of organizations and libraries are essentially user-oriented organizations. Their main objective is to provide the right information in the right format at the right time to the right library customers (Jain, 2013). The application of OKM in university libraries will help to drastically change their approaches and service delivery abilities at both ends, among the internal employee communities and also towards external stakeholders. Jain also, described the reason for the application of KM in

academic libraries to include improved library services and productivity, produce more with less due to financial constraints, leverage the existing knowledge, make informed decisions, manage rapid knowledge decay, and avoid duplication of efforts.

Similarly, Roknuzzaman and Umemoto (2009), averred that the major drivers of KM are increased value of knowledge in the knowledge economy, the library itself as a knowledge-based organization, the dynamic of technological advancement, and opportunities for improved library practices. They also noted that a well-planned and visionary KM project could promote decent library practices in a digital environment. In addition, Islam et al. (2015), observed that the application of KM in libraries supports improved access to information resources and services, enriched professional knowledge of information professionals, enhanced environment and culture of knowledge sharing and changed work behaviour of information professionals.

Also, Moraes de Bem and Coelho (2013) noted that application of KM in libraries would lead to the generation of new knowledge, development of new procedures and practices to improve the integration and sharing of knowledge within organizations. Ogendi (2017), averred that the application of KM in libraries involves creating, acquiring, sharing and applying both tacit and explicit knowledge for the benefit of the university library and the entire user community through the provision of the right information to the right user in the right format and at the right time in order to accomplish the institution's goals and objectives. A KM programme tailored specifically to libraries can reduce costs, increase revenue and staff efficiency, improve the activities, products and services, improving library performance and guaranteeing a position in the knowledge market.

Krishnamurthy and Arali (2015), noted that KM is being used to improve library operations in the university libraries. Like in the acquisition section of the library: acquisition of knowledge through the identification of existing resources, creation of new knowledge, conversion of knowledge from traditional to digital format, and gathering resources from the web. In the technical section: classification of knowledge building by converting tacit knowledge to explicit knowledge in a usable form, and providing means of codifying, categorizing, indexing and accessing explicit knowledge. In the circulation section: dissemination of knowledge using different approaches and services that facilitate practising, sharing, applying, utilizing, and using knowledge in libraries. Reference services: Question Point which is a virtual reference service which according to Lynette and Timothy (2009), is supported by a global network of cooperating libraries worldwide and comprised of the following features, Chats, Email, Reporting tools, that can help the librarian manage both online and in-person reference transactions.

In the view of Ugwu and Onyancha (2017), KM applications in a library may be defined in terms of the KM processes that must be implemented to enable the library to achieve its goals. Generally, the ultimate purpose of KM is to increase the effectiveness and sustainability of an organization. KM is applied in a library to enhance the use of resources and for providing dynamic and effective services to library users. While Daland (2016), maintained that KM methods could and should be applied in order to manage and develop academic libraries and their staff.

Continuing education through professional training courses or workshops plays a significant role in the implementation of knowledge management in all contemporary organizations (Pauleen, 2009). Libraries are no exception, especially as in their case, the pace and the volume of changes which they have to deal with are doubled by the complexity which satisfying the information needs and requests

of users through up to date products and services (Octavia- Luciana & Porumbeanu, 2010). In support of training and education, Kumar (2010) suggested that libraries should attach importance to vocational training and lifelong education of librarians to raise their scientific knowledge level and ability to acquire and innovative knowledge.

A community of practice was described by Goswami (2008), as a group of professionals within a corporation who are informally bound to one another through their exposure to a common class of problems and the common pursuit of solutions. Members within the community of practice freely exchange knowledge which creates an even greater resource base of knowledge. Goswami strongly believes that knowledge management can best be applied to academic libraries through the support of the community of practices. Moraes and Coelho (2013), posited that community of practice can be used for various purposes such as task forces, committees, study groups always with the goal of incorporating the benefits of collective wisdom.

Some strategies that can be used in the application of OKM in university libraries include: push strategy or codification approach which encourages individuals to encode their knowledge into a database explicitly and to retrieve the knowledge that they need from other individuals which have been provided in the database. Social Network Analysis is a strategy that can be used to map and measure relationships and flows between people, groups, organizations, computers or other knowledge processing entities (Du Brun, 2005; Krebs, 2008).

The utmost goal of knowledge management is to provide users with a variety of quality services which are tailored to the interest and needs of each user. Information about each user can be obtained by analyzing the records of user

registration, surveys, circulation and interlibrary loans, frequently asked reference questions and the use of e-journal and digital resources. The findings should be used for the planning and redesigning of library services. In the same vein Ogendi (2017), believed that the main aim of KM in university libraries is to provide the clientele with a variety of value-added services in order to improve communication, use, and creation of new knowledge. Alternatively, by improving knowledge access through the web-OPAC, and applying new technology to disseminate information via hyperlinks, university libraries contribute immensely towards universal access, re-use and creation of new knowledge.

From the preceding, it could be said that the application of OKM in university libraries can leverage the available knowledge that may help librarians to carry out their tasks more efficiently and effectively and can be beneficial to both the library and the institution. In addition, it offers the opportunity to expand the role of libraries in the parent organization, thereby improving effectiveness.

Challenges associated with Application of PKM in University Libraries

The knowledge of human beings is pervasive and scattered in different areas and levels. PKM is therefore faced with many challenges. According to Krebs (2008), negative influences from people, procedures and competitors may occur in the process of knowledge sharing. Raja et al. (2009), mentioned some factors that constitute barriers to seeking, sharing and using knowledge to include lack of trust, fear of loss of power, lack of social network, fear of someone receiving credit for one's knowledge, and rigidity in the way of doing things. Jain (2011), identified lack of facilities, lack of time, lack of awareness of PKM tools and technology and lack of time management as some of the challenges of implementing PKM in university libraries. He was of the view that people cannot perform to their

optimum potential if they are not well- equipped with adequate facilities, including new technology.

Ramirez (2006), posited that knowledge is power as being a knowledge sharing obstacle. It is believed that people do not like to share their best ideas because doing so diminishes their standing in the organization. Employees are also unwilling to share knowledge for fear of lay-offs. They may not want to share positive knowledge, as they believe that their job security is linked to their personal knowledge and expertise. According to Ash (2009), unwillingness to share knowledge is traceable to fear of layoffs- reluctance to share information about mistakes; competition among professionals and the difficulty of assigning credit to intellectual contributions; reluctance to share positive knowledge, believing that employee's value and as a result, job security was tied to their expertise.

Roknuzzaman and Umemoto (2009) attributed the failure of PKM to lack of collaboration and partnership within and outside the library. On an internal basis, collaboration is required between senior and junior staff human resource and IT staff units. External collaboration is strong partnerships with other libraries or allied corporate organizations. Often such collaborations are lacking, and this becomes an obstacle to PKM success. He observed that the junior workers are generally reluctant to share their knowledge and ideas with their seniors because they feel that there is no benefit for it. This position is supported by Ogola (2012), who posit that organizations rely on the collaboration and goodwill of their members to stimulate and enhance the knowledge context.

According to Ogola (2012), unstructured information accounts for the failure of PKM. Essential information is always hidden in the unstructured data, such as

documents, e-mail and web page. If large and unstructured information cannot be classified, indexed and managed, then it is difficult for an individual to keep a smart insight into sharing information and using it to create more value. Omotayo (2014), observed that the people aspect of KM tend to be such a challenge for most organizations because organizational cultures get in the way by giving rise to, and reinforcing behaviours that inhibit knowledge sharing. Ash (2009), identified the challenge of developing one's tacit sources which include tacit technical knowledge, tacit knowledge about locating information and tacit know about people. The challenge with tacit knowledge is that very little of it is written down as it is made up of experiences and interactions which are hard to categorize and transfer. It is difficult to use language and figures to express tacit knowledge to some extent of exclusivity, and it is difficult to exchange and share.

From the foregoing, it can be deduced that challenges of PKM are mainly a consequence of negligence and poor knowledge sharing culture and lack of skills and competencies.

Challenges associated with Application of OKM in University Libraries

KM is considered as an essential and necessary component for organizations, especially libraries, to survive and maintain competitive keenness. In a knowledge-based economy, KM is increasingly viewed as critical to organizational effectiveness and performance (Bosua and Venkitachalem, 2013). Although KM is a useful tool, there are several challenges to implementation of OKM in university libraries.

Moraes de Bem and Coelho (2013), citing Jain (2007), pointed out that academic librarians have to face the following challenges when working with KM: a) the intellectual challenge of managing tacit knowledge and capturing relevant

information from the overflowing reservoir of information; b) the culture challenge of developing the right culture to provide an environment of knowledge creation and sharing; c) the challenge of managing central repositories of knowledge to the main organization, through the compilation of explicit knowledge documented; d) the challenge of being well equipped in technological know-how to work effectively and efficiently, as well as working collaboratively with IT experts; e) the challenge of editing knowledge by refining and repackaging information in innovative ways with affordable cost and time effectively; f) the challenge of being knowledge keepers, as experts in the matter; g) the challenge of digitizing the library collection for easy access; h) the challenge of KM as an asset; i) the challenge of updating knowledge available regularly in order to remove the obsolete information and engage the most updated information; j) the challenge of time management, proactive attitude and confidence to provide quality services to library users; k) the challenge of cooperating with teachers and students; l) the challenge of developing the ability to deal with change management.

Jain (2011) posited that incentives and training are the biggest motivators in KM practice. According to him, the absence of proper incentive plans makes librarians reluctant towards KM activities. Jain (2014) identified lack of incentive as a critical issue and challenge for the application of KM in libraries. Rewards are good motivators to KM adoption and building organizational trust among librarians. Research indicates that the more staff received rewards, the more they trust the organization and ready to collaborate, and they had a more positive attitude towards KM. Singer and Hurley (2013), suggested that an incentive programme can be developed to encourage employees to buy into the system. The ultimate goal is that employees will realize that KM will make their jobs more comfortable and more enjoyable.

Bosua and Venkitachalam (2013), noted that the attitude of staff is another obstacle to the implementation of KM in university libraries. Most workers are resistance to change. All organizations experience some degree of resistance to changes in daily operations. There is a resistance of most employees to incorporating KM technology. Bosua and Venkitachalam also observed that reluctance to embrace organizational change is due to misunderstanding or misconception about the purpose of the change. When new technologies drive organizational changes, resistance may be caused by ignorance of function and scope of the capability of the technology.

Jain (2014) identified the major challenges in practicing KM as; constant budget decline, inadequate staff training, lack of clearly defined guidelines on KM implementation, insufficient technology, limited KM expertise and lack of knowledge sharing culture. The budget has an impact on everything, including inadequate tools and technologies, a lack of reward system, inadequate training plans and lack of expertise in KM. Jain noted that with a stagnant or dwindling library budget, academic libraries have to increase their operational efficiency in order to meet this challenge. Indeed, when libraries face tight budgets or budget reductions, it is only too natural for library administration to hesitate to invest in such KM system. In the same view, Nazim and Mukherjee (2011), identified the challenges as a misunderstanding of KM concept, lack of knowledge sharing culture, top management commitment, incentives and rewards, financial resources and IT infrastructure.

Lack of awareness about KM, communication gap, lack of government policies and appropriate budget, lack of central strategy and lack of professionally dedicated staff are some of the challenges identified by Islam et al. (2015). Reducing communication gap and improved knowledge sharing is essential in the

application of KM in university libraries. Librarians should improve internal communication that will assist in making the decision process easier for sharing of knowledge among them.

The discussion so far shows that many factors are militating against OKM. These challenges could arise from a collaborative challenge, technology or financial challenge. This study seeks to establish the nature of the challenges confronting university libraries in south-East Nigeria.

Empirical Studies

Empirical studies that are related to the present study are reviewed as follows:

Awareness of Personal Knowledge Management

Jain (2011) conducted a study on PKM: the foundation of OKM in the university of Botswana. The objectives of the study were on how people perceived PKM and awareness of the concept of PKM, among others. The researcher adopted the survey design, and questionnaire was the instrument used for data collection. The target population was 98 staff members of the Faculty of Humanities at the University of Botswana. No sampling technique was used because the population was small. Only 55 members of staff participated in the survey. Simple frequency count and cross-tabulation did data analysis. The findings from the study showed that majority of the respondents are not aware of PKM, but they attest to the importance of KM. The findings also showed that PKM is a management tool to improve personal effectiveness which has a direct bearing on an organization's effectiveness and productivity. PKM should be at the heart of each employee development program. The study recommended the creation of awareness about PKM through seminars, workshops and training. Harmonizing personal and

organizational goals through the provision of conducive environment; organizations should focus on the need to renew staff knowledge constantly; adequate incentives should be provided to encourage the adoption of PKM fully; and there should be a proper training plan and facilities to equip staff with all the necessary skills.

The study of Jain (2011) is related to the present study in objectives, design and instrument for data collection. However, the two studies differ in the analytical tool as the present study adopted percentage and arithmetic mean for data analysis, while Jain's study used frequency counts and cross-tabulation. Their scope and area of study also differ. While the former study was on academic faculty in Botswana, the present study is on academic librarians in university libraries of South-East Nigeria.

Obadiya (2017) conducted a study on the level of awareness of personal knowledge management by special librarians in South-West Nigeria. One of the purposes of the study was to ascertain the level of awareness of personal knowledge among experienced and less experienced special librarians in South West. Seven research questions and four hypotheses guided the study. The study adopted the survey research design, and questionnaire was the instrument used for data collection. The population of the study was 54 librarians working in special libraries in South-West Nigeria. The entire population was studied. Data were analyzed using arithmetic mean and t-test. The study found out among others that the level of awareness of personal knowledge management is high. The study recommended that library and Information science educators should ensure that new concepts such as personal knowledge management are included in the librarianship curriculum as they evolve.

The study of Obadiya (2017) is related to the present study in objectives, design, instrument and analytical tool. However, the two studies differ in their scope and area of study. While Obadiya's study was on special librarians in South-West Nigeria, the present study is on academic librarians in university libraries of Southeast Nigeria.

Awareness of Organizational Knowledge Management

Maponya (2004) investigated knowledge management awareness, practices and applications in libraries of the University of Natal, Pietermaritzburg. Four research questions guided the study. The study employed a descriptive survey research design. Twenty (20) academic librarians in the University of Natal Pietermaritzburg made up the population of the study. The study sample comprised of 10 academic librarians which include the deputy librarians of the institution. Structured questionnaire and interview were used as instruments for data collection. The study data were analyzed using frequencies and percentages for the questionnaire data and qualitatively for the interview data. Results of the study showed that 73.9% of respondents said that the library had used partnership with other libraries to acquire knowledge. The result also showed that the respondents indicated that they shared knowledge informally with the library (87.0%), prepare written documents such as newsletter (82.6%), and embark on collaborative work by teams (52.2%). Furthermore, the study recorded that 47.8% of the respondents believed that knowledge sharing in the library was on average, 21.7% said that knowledge sharing among librarians was good, 17.4% said that it was poor while 13.0% indicated that it was unsatisfactory.

The study of Maponya (2004) is related and relevant to this study because it explored both the awareness and application of KM by academic libraries which

are some of the objectives of the present study. However, it did not present empirical evidence to show that the librarians in the University of Natal are aware of and can apply the personal and organizational knowledge management fundamental in ensuring effective management of a modern library. Also, the study was carried out with a limited sample, and outside the area of the present study and as such, its findings cannot be generalized to studies involving personal and organizational knowledge management by academic librarians.

Potgieter, Dube and Rensleigh (2013) carried out a study on awareness of knowledge management in a research and development facility in South Africa. The purposes of the study included understanding employee perception of knowledge management and to assess the attitude of management towards knowledge management. The population of the study was about five hundred (500) post-graduate employees of a petrochemical facility, and a sample of two hundred employees was drawn through non-probability convenience sampling. The sample was made up of 150 employees. Questionnaire was the instrument used for data collection. Data analysis was done using tables, percentages and frequencies. The research design was a case study. The findings of the study were that the employees are aware of knowledge management concepts, but the management's commitment to the knowledge management initiatives is not evident to employees and lack of organizational knowledge sharing culture due to lack of support. The study recommended that employees should be made to be aware of the duties of knowledge management experts in order to take advantages of the services relating to knowledge management that the experts can offer.

The study Potgieter, Dube and Rensleigh (2013) is related to the present study in content, and the findings of the former study will also aid in the present study as objectives of both studies are aimed at creating knowledge management awareness.

However, the two studies differ in scope and area of study. While the study of Potgieter, Dube and Rensleigh (2013) was on research and development facility, the present study is focused on university libraries of South-East Nigeria.

Furthermore, Krishnamurthy (2015) carried out a study on the perception of knowledge management among librarians of engineering colleges in Coimbatore, India. The purpose of the study was to ascertain the awareness of knowledge management concepts and practices among librarians. The study adopted the survey research design, and questionnaire was the instrument used for data collection. Data from the questionnaires were analyzed using SWOT technique. The study found that the librarians' awareness of knowledge management concepts are varying and it is based on an individual's education and experience. The librarians and supporting library staff that are knowledgeable, service-oriented, flexible and co-operate with each other in performing their duties are considered as strengths of the knowledge management application in the libraries.

The study of Krishnamurthy (2015) is related to the present study as one of the objectives of the present study is to ascertain the level of awareness of knowledge management in university libraries which was also one of the objectives of the former study. The design and method of data collection are also appropriate in the present study. The two studies differ in the area of study, scope and method of data analysis. While the study Krishnamurthy (2015) was carried out in Coimbatore, India and studied librarians and library support staff, but the present study is carried out in South-East Nigeria and focused only on academic librarians. The former study also made use of SWOT for data analysis, while the present study used descriptive and inferential statistics.

Koloniari and Fassoulis (2016) carried out a study on KM perceptions in Academic libraries. The purpose was to examine how Greek academic library employees' perceive KM; assess the potential implication, applications benefits and opportunities offered by KM to library operations; as well as identify the KM tools and techniques adopted by libraries. The population of the study was 590 personnel working in Greek academic libraries. It was a survey study and questionnaire was the instrument used for data collection. The study made use of percentages for the analysis of data. The findings of the study indicated among others that, the level of awareness of KM is high; KM can be applied in reference and information services; methods of applying KM in libraries can be through the provision of training and learning opportunities to employees. The findings further indicated that although academic libraries take steps towards capturing the knowledge of their users and internal explicit knowledge, little effort is made at capturing and sharing internal tacit knowledge. The study recommended that it is essential that libraries should consciously put into practice the systematic application of initiatives related to the management of their internal and external tacit knowledge. Again, academic librarians should change their traditional mindset and acquire new skills to reshape the existing library environment by fostering a knowledge-sharing culture.

The study of Koloniari and Fassoulis (2016) is related to the present study in objective and design. However, the two studies differ in the analytical tool, area of study and scope. The present study applied percentage and arithmetic mean while Koloniari and Fassoulis study used only frequency count and simple percentage and was on all personnel working in Greek academic libraries. While the present study focused only on academic librarians in university libraries in South-East Nigeria.

Application of Personal Knowledge Management

Rehman, Mahmood, Sugathan, and Amin (2010) carried out a study on the application of personal knowledge management (PKM) in small and medium enterprises in Malaysia and Pakistan. The purposes of the study were to find out: ways to help small and medium enterprises in the application of PKM, discover reasons for not applying personal knowledge management in small and medium enterprises and benefits which they can get by applying PKM. The population of the study was 100 small and medium enterprises in Malaysia and Pakistan. Questionnaire was the instrument used for data collection, and data analysis was done using weighted average and linear regression methods. The findings of the study showed that the benefits of applying personal knowledge management include: better learning opportunities, better management of process and activities as well as improved responsiveness to customers. The study also established that unwillingness to apply personal knowledge management is caused by lack of awareness about PKM, lack of awareness about the benefits of PKM and less commitment from top management.

The study of Rehman, Mahmood, Sugathan, and Amin (2010) is related to the present study in instrument for data collection and sampling method. The two studies differ in the area of study, scope and analytical tool. The present study focuses on academic librarians in university libraries of South-East, Nigeria and used percentage and arithmetic mean for data analysis. While Rehman, Mahmood, Sugathan, and Amin's study was on small and medium scale enterprises in Malaysia and Pakistan and adopted a weighted average and linear regression method.

Almashari, Zairi and Alathari (n.d) carried out a study on the impact of personal knowledge management (PKM) on organizational performance in Kuwait. The objective of the study included investigating the PKM system in Kuwaiti organizations, in particular, the existence of the system, knowledge sources, impact and difficulties. Five research questions guided the study. The population of the study were 77 companies, 40 government-based and 37 from private sectors. The researchers adopted the survey design, and questionnaire was the instrument for data collection. Data analysis was done using tables, percentages and frequencies. The findings of the study were that 82% of the employees see their knowledge as something private; 78% of the respondents see knowledge as power, while only 23% are willing to share their knowledge; most of the captured knowledge in Kuwaiti organizations came from external sources, and the respondents considered employees and organization knowledge a critical source for their knowledge management system. The study recommended among others that; the management of Kuwaiti organizations should encourage the exchange of information between departments that have similar goals and needs and that knowledge management should not be limited to one source either internal or external it should embrace vendors, suppliers, customers, public interest groups and government.

The study of Almashari, Zairi and Alathari (n.d) is related to the present study in design and instrument for data collection. However, the two studies differ in scope, area of study and analytical tool. The present study focused on academic librarians in university libraries of South-East, Nigeria, while Almashari, Zairi and Alathari's study was on employees of both government and private Kuwaiti organizations. The present study adopted percentage and arithmetic mean for data analysis; the former study used frequency counts and cross-tabulation.

Obadiya (2017) conducted a study on the level of awareness and application of personal knowledge management by special librarians in south-west Nigeria. One of the purposes of the study was to ascertain the level of application of personal knowledge management in special libraries in South-West Nigeria. The study adopted the survey research design, and questionnaire was the instrument used for data collection. The population of the study was 54 librarians working in special libraries in south-west Nigeria. The entire population was studied. Data were analyzed using arithmetic mean and t-test. The study found out among others that the level of application of personal knowledge management is low. The study recommended that the special librarians' tacit knowledge should be harnessed for sharing through the application of personal knowledge management.

The study is related to the present study as one of his objectives is similar to the objectives of the present study. The two studies are also related in the method as the previous study adopted survey design which the present study also employed. The method of data collection is also similar to the questionnaire was used for the present study. However, the two studies differ in their scope and area of study. While the previous study was on special librarians in South-West Nigeria, the present study is on academic librarians in university libraries of South-East Nigeria.

Application of Organizational Knowledge Management

Jain (2006) carried out a study on knowledge management in academic libraries in East and Southern Africa. The purpose of the study, among others was to explore the application of KM in academic libraries in East and Southern Africa. The study adopted the survey research design, and questionnaire was the instrument used for data collection. The study population was 17 East and Southern African countries

consisted of university library directors and librarians. A total of 22 university library directors were contacted, of which 20 (90 per cent) responded. The sample represented nine African countries, and this stands for 53% of the East and Southern African countries. Simple frequency count and percentage were employed in analyzing data collected. The study found that most of the participating libraries possessed only one or more KM elements and most academic libraries understudy are still trying to understand the concept of KM; only 50% acknowledged that their library staff had a strong culture of knowledge sharing; 35% of participants had some system of capturing their staff's tacit knowledge others did not have such mechanism; only 25% of participants stated that their libraries had identified the expertise in their libraries and 75% had not; 55% of participants indicated that they updated their relevant documents regularly while 45% said they did not and only 15% of the participating libraries conducted knowledge gap exercises while 85% did not; only 35% of participants indicated they had a central knowledge repository in their organization; 40% of participants asserted that their libraries were well equipped with the knowledge enabling technologies while 60% did not have this facility.

The study of Jain (2006) is related to the present study in objective, design and instrument. However, the two studies differ in scope and analytical tool. While Jain's study used academic libraries in East and Southern Africa, the present study focused only on university libraries in South-East Nigeria, Jain's study used only simple frequency count and percentage. While percentage, arithmetic mean, standard deviation and t-test were used for data analysis in the present study.

Ugwu and Ezema (2010) examined the competencies perceived essential for knowledge management application in Nigeria academic libraries. Five research questions guided the study. The descriptive survey research design was adopted for

the study. The population of the study consisted of 100 librarians that participated at the 47th Annual Conference of the Nigerian Library Association (NLA) held in Ibadan in July 2009. The population was used as sample. A structured questionnaire was used for data collection. Descriptive statistics of mean and standard deviation were used for data analysis. Findings of the study revealed that; librarians require skills such as quantitative metric skills for the application and measurement of knowledge management and skills for mapping out processes. The finding also revealed that skills for creating openness and trust are essential skills required by librarians in the development of knowledge management culture. The finding equally revealed that librarians need PKM skills, individual decision-making skills, skills to develop a social network or community of practice and skills for the development and application of the promotion system to achievement. Based on the findings, it was recommended that academic libraries should embark on the training and retraining of librarians to acquire knowledge management skills for the proper repositioning of academic librarians to face the challenges of the present-day realities.

Ugwu and Ezema (2010) study is related to the present study in objectives, design, the instrument for data collection and in analytical tool used. However, the two studies differ in scope and area of study. While Ugwu and Ezema study was on librarians in all academic libraries in Nigeria, the present study is only on academic librarians in university libraries of South-East, Nigeria.

Mohammad, Mukherjee and Banaras (2011) explored library professionals' perception of knowledge management concepts, its applications and their perceived challenges to incorporate it into academic library practices in India. Three research questions guided the study. The study adopted a web-based questionnaire survey method for the study. A questionnaire consisting of open and

closed-ended questions/items was used for data collection. All the library professionals working in libraries of central Universities, Indian Institutes of Technology (IIT) and Indian Institute of Management (IIM) constitute the population of the study. Sample of the study comprised 125 library professionals of IIT and IIM. Descriptive statistics involving the use of frequencies and percentages were used to analyze the data for the study. The study results showed that 96.7% of the respondents are aware of knowledge management; 41.8% indicated that they came to know about knowledge management through reading about it in the literature, attending conferences, seminars and workshops (31.08%), discussing with colleagues (16.21%) and from practical work (10.81%). The result further showed that 67% of the respondents also agreed that knowledge management could best be applied to academic libraries through the support of community of practices and developing a culture of sharing knowledge and expertise among employees.

Mohammad et al. (2011) study is related to the present study in objectives, design and instrument for data collection. The two studies differ in the method of data collection, scope, area of study and analytical tool as the study of Mohammad et al. adopted a web-based method for data collection, focused only on all the librarians working in IIT and IIM in India and used frequencies and percentages to analyze the data. While the present study used direct contact to administer the questionnaire, studied academic librarians in university libraries in South-East Nigeria and adopted percentage, arithmetic mean and standard deviation for data analysis.

Che-Rusuli, Tasmin, Takala, Norazlin, K-Phusavat, Walsh and Raja (2013) investigated the relationship between knowledge management practices and library users' satisfaction in Malaysian University libraries. Three research questions

guided the study. A survey research design was used for the study. The study population comprised of Malaysian fifteen (15) University libraries. In it, a sample size of 35 PhD candidates who are prescribed as the main users in Malaysian libraries were used for the study. Structured questionnaire instrument was used as an instrument for data collection. Frequencies and percentages were used for data analysis. Results of the study showed that on the type of knowledge processes, knowledge acquisition (KA) is the most significantly rated by the respondents; and the library is regarded as a treasure house that attracted countless individuals for realizing their learning and knowledge acquisition. Knowledge recording (KR) and knowledge preserving (KP) were rated significantly crucial by the respondents as a contributing variable to new processes in KM practices at university libraries.

Che-Rusuli et al. (2013) study is related to the present in objectives, design and instrument for data collection. However, the two studies differ in scope, area of the study and analytical tool. The present study used academic librarians, while the former used postgraduate students. The former study was in Malaysia universities while the present was in university libraries in South-East Nigeria. Che-Rusuli et al. 's study used frequencies and percentages for data analysis, while the present study used arithmetic mean and standard deviation.

Ugwu (2016) examined the implications of the perceived factors for knowledge management implementation in federal university libraries in Nigeria. Three research questions guided the study. The descriptive survey research design was used for the study. The study population comprised of 450 professional librarians in all the federal university libraries in Nigeria. A structured questionnaire was used for data collection. Descriptive statistics of mean and standard deviation were used for data analysis. Findings of the study revealed that providing a statement of the vision of the library, welcoming contribution from staff, emphasizing the

importance of KM and aligning or integrating KM with the vision of the library are top leadership roles played by management as it concerns knowledge management. In addition, the study recorded that having human resource policy such as rotation of staff on the job, formal training of staff, staff retention, sponsoring staff to conferences/workshops, allowing staff to attend short courses related to KM and promoting the right people, are practices in the university library that encourage librarians to be efficient in knowledge management. In line with the findings, it was recommended that any university librarian wishing to implement KM must pay attention or be committed to formulating KM vision and goals, building trust among staff, developing human resource policy, motivating staff and fostering collaboration among staff.

Ugwu (2016) study is related to the present study in objectives, design, instrument for data collection and analytical tool. However, the two studies differ in scope and area of the study. Ugwu's study focused on all librarians, and the study was carried out in all the federal university libraries in Nigeria, but the present study focused only on academic librarians in federal and state university libraries in South-East Nigeria.

Challenges associated with Application of personal knowledge management

Jain (2011) conducted a study on PKM: the foundation of OKM in Botswana. The objectives of the study included on how PKM can impact on OKM and productivity. The researcher adopted the survey design, and questionnaire was the instrument used for data collection. The target population was 98 staff members of the Faculty of Humanities at the University of Botswana. No sampling technique was used because the population was small. Only 55 members of staff participated in the survey. Simple frequency count and cross-tabulation did data analysis. The

findings from the study showed that majority of the respondents are not aware of KM, but they attest to the importance of KM. The findings also showed that PKM is a management tool to improve personal effectiveness which has a direct bearing on an organization's effectiveness and productivity. Challenges identified by the study include lack of facilities, time, awareness of PKM tools and technology and time management skills. The study recommended the creation of awareness about PKM through seminars, workshops, training; harmonizing personal and organizational goals through the provision of conducive environment; employees' individual preferences and working styles should be incorporated into corporate knowledge management infrastructure; organizations should focus on the need to renew staff knowledge continually; adequate incentives should be provided to encourage the adoption of PKM fully; and there should be a proper training plan and facilities to equip staff with all the necessary skills.

The study of Jain (2011) is related to the present study in objective, design and instrument for data collection. However, the two studies differ in the analytical tool, scope and area of study. The present study adopted percentage and arithmetic mean while Jain's study used simple frequency count and cross-tabulation. While the former study was on academic faculty in Botswana, the present study is on academic librarians in university libraries of South-East Nigeria.

Obadiya (2017) conducted a study on the level of awareness and application of personal knowledge management by special librarians in south-west Nigeria. One of the purposes of the study was to ascertain the challenges of personal knowledge management faced by special librarians in South-West Nigeria. The study adopted the survey research design, and questionnaire was the instrument used for data collection. The population of the study was 54 librarians working in special libraries in South-west Nigeria. The entire population was studied. Data were

analyzed using arithmetic mean and t-test. The study found out among others that fear of loss of power, unfavourable organizational culture, and lack of social network were some of the challenges. The study recommended that the management of special libraries should provide enough emotional motivation for the application of personal knowledge management.

The study of Obadiya (2017) is related to the present study in objectives, method, design and instrument. However, the two studies differ in their scope and area of study. While the former study was on special librarians in South-West Nigeria, the present study is on academic librarians in university libraries of South-East Nigeria.

Challenges associated with application of organizational knowledge management

Chandra and Raman (2009) conducted a study on awareness and problems in implementing knowledge management systems in medium-sized business organizations in Malaysia. The objectives of the study included identifying the problems of knowledge management at the implementation level among medium-sized manufacturing firms in Malaysia and highlighting the benefits of knowledge management to these organizations. The population of the study consisted of 308 medium-sized firms in Kuala Lumpur, Pulau, Pinang and Johor in Malaysia. Random sampling was used to identify 95 respondents that are employees from managerial to operational levels. Questionnaire was the instrument adopted for the study and data collected are analyzed using Statistical Package for Social Sciences (SPSS). The findings of the study show that the respondents were aware of the importance and benefits of knowledge management. The challenges in implementing knowledge management identified by the respondents included the

difficulty of distributing the right knowledge to the right person at the right time, difficulties in knowledge sharing. The study recommends that employees who access and contribute to the knowledge management system should be monitored and rewarded, and relevant training should be provided.

The study of Chandra and Raman (2009) is related to the present study in objective and instrument for data collection. The two studies differ in the analytical tool as the present study applied arithmetic mean while Chandra and Raman's used Statistical Package for Social Sciences. Their scope and areas of study also differ as the previous study was on medium-scale firms in Malaysia while the present study focused on the academic librarian in South-East Nigeria.

Jain (2014) carried out a study on knowledge management in academic libraries in developing countries a case of Southern Africa. The purpose of the study, among others was to explore the challenges associated with knowledge management practice. The study adopted the survey research design, and questionnaire was the instrument used for data collection. The study population was 50 libraries in the Southern Africa Development Community (SADC), which has 15 countries as members. A total of 50 questionnaires were delivered electronically, of which only 25 were returned (50% response rate). Purposive sampling was used. Simple frequency counts and cross-tabulation did data analysis. The study identified some of the challenges as; constant budget decline, inadequate staff training, lack of incentives, limited expertise in knowledge management, lack of knowledge sharing culture, insufficient technology, among others. The study made some recommendations which include training of staff, the establishment of principles for knowledge management implementation and university should develop a specific unit to coordinate and market a shared understanding of knowledge management and its implementation.

The study of Jain (2014) is related to the present study in objective, design and instrument for data collection. However, the two studies differ in scope, method of data collection and analytical tools. While the former used university libraries in 15 different countries that made up the Southern African Development Community, the present study focused only on university libraries in South-East Nigeria. The previous study sent questionnaires electronically while the present study administered the questionnaire to the institutions with the help of research assistants. Jain's study used simple frequency counts and cross-tabulation while percentage, arithmetic mean, standard deviation and t-test were employed for data analysis in the present study.

Islam, Siddike and Nowrin (2015) explored the use and application of knowledge management for improving library and Information services in Bangladesh. The purpose of study, among others was to explore the difficulties being faced by librarians in applying knowledge management in libraries in Bangladesh. The population of the study was twenty-two (22) information professionals working in two public and three private university libraries. Interview and semi-structured questionnaire were the instruments used for data collection. The data collected were analyzed using tables, frequency, percentages and standard deviation. The findings of the study were that there is a communication gap between staffs and information seekers and lack of knowledge sharing among staff: lack of skilled workforce in the libraries: lack of technological infrastructure: lack of central strategy for the application of knowledge management in the libraries and lack of government policies and adequate budget. The study recommended that libraries should be equipped with the appropriately trained and skilled workforce so that they could use and apply KM in the libraries properly. Librarians should improve internal communication that will assist in making the decision process easier for

the sharing of information among information professions. Training and workshop for the information professionals should be arranged with a regular interval.

The study of Islam, Siddike and Nowrin (2015) is related to the present study in an objective and analytical tool. However, the two studies differ in scope and area of study. While the former study is on both public and private university libraries in Bangladesh, the present study is focused only on public university libraries in South-East Nigeria.

Summary of Review of Related Literature

Related literature to this study was reviewed under conceptual framework, theoretical framework, theoretical studies and empirical studies. Under the conceptual framework, key concepts in the title of the study were reviewed from the views of different authors to highlight their importance and finally defined operationally in the context of the study.

Nonaka-Takauchi knowledge conversion, Reimer-Haries dynamic awareness and organization learning theories were reviewed and their relatedness to the study clearly indicated. Theoretical studies were reviewed under several relevant headings to further highlight the need for the study.

Finally, several empirical studies related to the study were reviewed under subheadings covered in the objectives. None of the empirical studies reviewed centred on the level of awareness and application of knowledge management in university libraries in South-East Nigeria, nor is there any study that sought to establish the level of awareness and application of knowledge management by academic librarians in South-East university libraries. To the best of the researcher's knowledge, no work of such nature has been carried out in this area.

This necessitated this study because a gap in knowledge exists that needs to be filled. The present study, therefore, sets out to fill this gap by empirically ascertaining the level of awareness and application of knowledge management by academic librarians in federal and state universities in South-East Nigeria.

CHAPTER THREE

METHOD

This chapter describes the method that was used for this study: research design, area of the study, population of the study, sample and sampling technique, instrument for data collection, validation of the instrument, reliability of the instrument, method of data collection and method of data analysis.

Research Design

The descriptive survey research design was adopted for this study. According to Nworgu (2015), a descriptive survey is a study which aims at collecting data on and describing in a systematic manner, the characteristics, features or facts about a given population. Such study is only interested in describing certain variables in relation to the population. This design is considered appropriate for this study because it collected data with the use of questionnaire from a sample considered representative of a population and analyzed them to determine the stand of the entire population on issues considered important.

Area of the Study

The study was conducted in South-East, Nigeria. South East Nigeria consists of five states, namely; Abia, Anambra, Ebonyi, Enugu and Imo. South-East Nigeria is located on the east of River Niger and has boundaries with the South-South, and North Central zones of Nigeria and the inhabitants of the area are predominantly of the Igbo ethnic group and are involved in various occupations such as civil service, farming, business and trading. The people of the area are very hardworking and industrious in their different types of occupations. The choice of South- East for the study was informed by the people's high regard for quality education which is

evidenced by the establishment of several universities and university libraries and their substantial investment in their children's education at various levels. This necessitates this study to ascertain the level of awareness and application of knowledge management by academic librarians in satisfying the needs of users of libraries in the universities.

Population of the Study

The population of this study consisted of 175 academic librarians in all 10 public university libraries in South-East Nigeria. The population distribution by institutions is shown as Appendix A on page 113.

Sample and Sampling Technique

The population size is small and as such it was studied in entirety without sampling.

Instrument for Data Collection

A structured questionnaire titled “**Level of Awareness and Application of Knowledge Management Questionnaire (AAKMQ)**” was used to collect data for the study. The questionnaire was developed by the researcher based on the insight gained from review of literature in line with the objectives of the study. The instrument contained 76 items in two sections of A and B. Section A, contained items on demographic data of the respondents. While Section B was divided into six clusters of B1 to B6 according to the research questions with 20, 20, 10, 11, 7 and 8 items respectively.

Sections B1 and B2 contained two options of True or False, while B3 to B6 were structured on a 4-point rating scale of Very Highly Level (VHL), High Level (HL)

Low Level (LL), and Very Low Level (VLL) and Strongly Agree (SA) Agree (A), Disagree (D), and Strongly Disagree (SD) The sample of the instrument is enclosed as Appendix D on page 116.

Validation of the Instrument

The instrument went through face and content validity. Three experts validated the instrument, one in educational measurement and evaluation from the Department of Educational Foundations and two lecturers in the Department of Library and Information Science, all in the Faculty of Education, Nnamdi Azikiwe University, Awka. Copies of the draft instrument together with the research title, the purpose of the study, research questions and hypotheses were presented to the experts who were requested to examine the instrument relative to clarity, coverage and relevance of the items to the purpose of study, appropriateness of language and correctness of the instructions. Following their critical and constructive corrections, the instrument was finally redrafted, incorporating the correction into final form. The suggestions and corrections of the three experts were incorporated in the final version of the instrument used for the study. The instrument is attached in Appendix F pages 127-132

Reliability of the Instrument

The instrument was pilot tested in the university of Benin library. Copies of the instrument for the study were administered to 20 librarians in the university of Benin library who were not part of the population of the study. As recommended by Nworgu (2006) Kuder Richardson 21(KR-21) was used for sections B1 and B2 since they are dichotomous in nature while test-retest was used for sections B3 to B6 since they have multiple ratings. Both of these involved single administration of instruments. Reliability coefficient values of .76 and .82 were obtained for

sections B1 and B2 while .89, .78, .78 and .85 were obtained for sections B3 to B6. Detailed reliability computation is enclosed as appendix E on, pages 124-126.

Method of Data Collection

The copies of the instrument were distributed to the respondents in their offices with the help of 10 research assistants from each university library. The assistants were duly briefed on the method of administration. The researcher used telephone calls and text messages to follow-up on the instrument. The exercise lasted for two weeks because some of the respondents were re-visited more than once in order to facilitate a high response rate. Out of 175 copies of questionnaire distributed, the researcher could only recover 165 copies. The loss of questionnaire recorded is considered insignificant to distort the data.

Method of Data Analysis

Data obtained from the study were analyzed using descriptive and inferential statistics. The aggregate score was used to analyze data for research questions 1 and 2, while the arithmetic mean was used for research questions, 3-6. The scores for sections B1 and B2 ranged from 0-20 were awarded five (5) marks to each question with the correct answer and the scores were converted to percentages. The decision rule for research questions 1 and 2 was as follows:

Very High Level	80- 100%
High Level	70- 79%
Moderate	50-69%
Low Level	40-49%
Very Low Level	0-39%

The decision rule for research questions 3-6 was based on the cluster mean relative to the real limits of numbers shown below:

	Points	Limits of Nos
Very High Level (VHL)/ Strongly Agree (SA)	4	3.50- 4.00
High Level (HL)/ Agree (A)	3	2.50-3.49
Low Level (LL)/Disagree (D)	2	1.50-2.49
Very Low Level (VLL) /Strongly Disagree (SD)	1	0.50-1.49

The null hypotheses were tested using t-test at 0.05significance level because interval data was involved, and only two groups were compared. Conversely, a Null Hypothesis (Ho) was not accepted where the calculated t- value was less than the table value. A null hypothesis was rejected where the calculated t- value was equal to or greater than the table value.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

This chapter presents the analysis of data collected for this study based on the research questions and hypotheses as follows:

Research Question 1 What is the level of awareness of PKM by academic librarians in university libraries in South-East Nigeria?

Analysis of data in respect of research question 1 is shown in Table 1:

Table 1: Respondents' Mean Ratings on the Level of Awareness of Personal Knowledge Management by academic librarians in university libraries in South-East, Nigeria.

N=165

	N	Mean	Sd	Remarks
Level of Awareness of Personal Knowledge Management	165	68.94	11.62	Moderate

Table 1 shows the mean score of 68.94, indicating that the level of awareness of personal knowledge management by academic librarians in university libraries in South-East Nigeria is moderate. The standard deviation of 11.62 shows that the respondents were heterogeneous in their views.

Research Question 2 What is the level of awareness of OKM by academic librarians in university libraries in South-East Nigeria?

Analysis of data in respect of research question 2 is shown in Table 2

Table 2: Respondents' Mean Ratings on Level of Awareness of Organizational Knowledge Management by academic librarians in university libraries in South-East Nigeria
N=165

	N	Mean	SD	Remarks
Level of Awareness of Organizational Knowledge Management	165	74.03	9.72	High Level

As shown in Table 2, the mean score of 74.03 shows that the level of awareness of organizational knowledge management by academic librarians in university libraries in South-East Nigeria is high. The standard deviation of 9.72 is high showing that the respondents were wide apart in their mean ratings.

Research Question 3 What is the level of application of PKM by academic librarians in university libraries in South-East Nigeria?

Analysis of data in respect of research question 3 is shown in Table 3

Table 3: Respondents' Mean Ratings on Level of Application of Personal Knowledge Management by academic librarians in university libraries in South-East Nigeria

N=165

S/N	ITEMS	Mean	SD	Remarks
1.	Using meetings or workshops to seek knowledge and insight from one another	3.24	.61	High Level
2.	Making knowledge request of experts associated with a particular subject	3.07	.72	High Level
3.	Sharing one's knowledge effectively in meetings, seminars and conferences	3.04	.71	High Level
4.	Mobilizing one's knowledge for organizational success	2.98	.73	High Level
5.	Identifying and share best practices	2.78	.62	High Level
6.	Scheduling informal seminars where staff can interact and exchange "lessons learned", "best practices" and other specific experience and knowledge	2.32	.72	Low Level
7.	Reviewing projects or activities to enable them to learn what happened, why it happened and what lessons can be learned (after action review)	2.28	.70	Low Level
8.	Keeping inventory and index of expert knowledge possessed by members of staff	2.15	.73	Low Level
9.	Creating a network of people who share a common interest and are willing to develop and share that knowledge (community of practice)	1.83	.72	Low Level
10.	Using stories to share knowledge (storytelling)	1.48	.57	Very Low Level
Cluster Mean		2.51		High Level

Table 3 shows that five of the ten items listed had mean scores ranging from 2.78 to 3.24, meaning that they are applied at a high level. One of the remaining five items had a mean score of 1.48 which means very low level while the rest had a mean score of 1.83 to 2.32, showing they are applied at a low level. The cluster mean score of 2.51 shows that academic librarians in university libraries in South-

East Nigeria apply Personal Knowledge Management at a high level. The standard deviations are within the same range showing that the respondents were homogeneous in their views.

Research Question 4. What is the level of application of OKM by academic librarians in university libraries in South-East Nigeria?

Analysis of data in respect of research question 4 is shown in Table 4:

Table 4: Respondents' Mean Ratings on Level of Application of Organizational Knowledge Management by academic librarians in university libraries in South-East Nigeria
N=165

S/N	ITEMS	Mean	SD	Remarks
1.	Providing professional education and training to facilitate employees understanding of knowledge management and its benefits	3.14	.68	High Level
2.	Connecting people through the use of collaborative tools such as e-mail, video conferencing, discussion boards etc	3.07	.69	High Level
3.	Encoding knowledge into a knowledge repository (Institutional repository)	2.73	.74	High Level
4.	Using knowledge directory to help people find the knowledge and expertise they need	2.65	.76	High Level
5.	Capturing and disseminating knowledge obtained from organizations like IFLA, NLA	2.56	.68	High Level
6.	Creating knowledge centre for collecting, organizing and disseminating knowledge	2.46	.80	Low Level
7.	Conducting exit interviews to capture knowledge from staff leaving the library	2.40	1.01	Low Level
8.	Encouraging experienced workers to communicate their knowledge to less-experienced workers	2.26	.59	Low Level
9.	Providing good quality information services tailored to each user's need in order to improve knowledge communication, application and generation.	2.15	.73	Low Level
10.	Analyzing records of users, and use the knowledge acquired from exercise for planning and redesigning of library services	2.11	.67	Low Level
11.	Harvesting and documenting the knowledge that is in the head of individual librarians (tacit knowledge)	1.31	.78	Very Low Level
Cluster Mean		2.44		Low Level

Table 4 shows that five out of the 11 items listed had mean scores ranging from 2.56 to 3.14, meaning that they are applied to a high level. One of the remaining six items had a mean score of 1.83 which means very low level while the rest had a mean score of 2.46 to 2.11, indicating that they are applied at a low level. The cluster mean score of 2.44 shows that academic librarians in university libraries in South-East Nigeria apply Organizational Knowledge Management at low level. The standard deviations are within the same range, indicating that the respondents were homogeneous in their views.

Research Question 5: What are the challenges associated with application of PKM by academic librarians in South East University libraries? Analysis of data in respect of research question 5 is shown in Table 5:

Table 5: Respondents' Mean Ratings on Challenges associated with Application Personal Knowledge Management by Academic Librarians in university libraries in South-East Nigeria
N=165

S/N	ITEMS	Mean	SD	Remark
1.	Reluctance to share information due to fear of exposing one's mistakes	3.30	.53	Agree
2.	Fear of someone else receiving credit for one's knowledge	3.28	.58	Agree
3.	Lack of awareness of PKM tools and technology	3.26	.58	Agree
4.	Lack of skills and competencies in personal knowledge management among librarians	3.11	.62	Agree
5.	Lack of trust among employees	3.07	.65	Agree
6.	Difficulty in expressing tacit knowledge contained in an individual's head	2.90	.77	Agree
7.	Lack of social network	2.57	.57	Agree
Cluster mean		3.07		Agree

Table 5 shows that the seven items listed had a mean score ranging from 2.57 to 3.30 and cluster mean of 3.07 which means that academic librarians in South- East University libraries agree with the seven items listed as challenges of applying Personal Knowledge Management.

Research Question 6. What are the challenges associated with application of OKM by academic librarians in South East University libraries?

Analysis of data in respect of research question 6 is shown in Table 6:

Table 6: Respondents' Mean Ratings on Challenges associated with application of Organizational Knowledge Management by Academic Librarians in University libraries in South-East Nigeria
N=165

S/N	ITEMS	Mean	SD	Remarks
1.	Unfavourable organizational culture that impedes knowledge sharing behaviour	3.28	.55	Agree
2.	Lack of relevant training	3.26	.56	Agree
3.	Lack of clearly defined guidelines on knowledge management implementation	3.24	.59	Agree
4.	Insufficient and inappropriate technological systems	3.18	.62	Agree
5.	Librarians lack of expertise in knowledge management	3.04	.76	Agree
6.	Lack of organizational leadership commitment	2.96	.82	Agree
7.	Lack of appropriate reward system and incentives	2.42	.53	Disagree
8.	Lack of awareness of knowledge management concepts	2.25	.88	Disagree
Cluster mean		2.95		Agree

Table 6 shows that six of the eight items listed had mean scores ranging from 2.95 to 3.28 indicating that they are some of the challenges of implementing

Organizational Knowledge Management by academic librarians in university libraries in South-East Nigeria. The remaining two items had mean scores of 2.25 and 2.42 indicating disagreement by the respondents with them as challenges of implementing organizational knowledge management by academic librarians in university libraries in South-East Nigeria. However, the cluster mean score of 2.95 shows the agreement of the respondents with items as challenges of implementing organizational knowledge management by academic librarians in university libraries in South-East Nigeria.

Hypothesis 1:

Academic librarians do not differ significantly in their level of awareness of personal knowledge management as a result of years of experience.

Table 7: Summary of t-test analysis of difference in respondents' mean ratings on the level of awareness of personal knowledge management by academic librarians in South-East university libraries based on years of experience

Source of variation	N	Mean	Sd	Df	t-cal	P-value	Decision
Experienced	82	70.97	12.67	163	2.26	.025	Sig
Less Experienced	83	66.92	10.14				

Table 7 shows that at the 0.5 level of significant and 163df the calculated t of 2.26 with a p-value of 0.025, which is less than 0.05, the null hypothesis was rejected.

This means that there is significant difference in respondent's level of PKM awareness based on experience.

Hypothesis 2:

Academic librarians do not differ significantly in their level of awareness of organizational knowledge management as a result of years of experience

Table 8: Summary of t-test analysis of difference in respondents' mean ratings on the level of awareness of organizational knowledge management by academic librarians in South-East university libraries based on years of experience.

Source of variation	N	Mean	Sd	df	t-cal	P-value	Decision
Experienced	82	75.73	9.94	163	2.24	.026	Sig
Less Experienced	83	72.34	9.38				

Table 8 shows that at 0.05 level of significant and 163 df the calculated t of 2.24 with a p-value of 0.26, which is less than 0.05. The null hypothesis was rejected. This means that there is significant difference in respondents' level of OKM awareness based on experience.

Hypothesis 3:

There is no significant difference in the application of personal knowledge management by experienced and less experienced academic librarians.

Table 9: Summary of t-test analysis of difference in respondents' mean ratings on the level of application of personal knowledge management by academic librarians in South-East university libraries based on years of experience

Source of variation	N	Mean	Sd	Df	t-cal	P-value	Decision
Experienced	82	3.10	0.53	163	-.23	.816	Not-Sig
Less Experienced	83	3.11	0.46				

Table 9 shows that at 0.05 level of significance and df of 163 the calculated t of -23 with a p-value of 0.816, which is greater than 0.05, the null hypothesis was not rejected. This means that there is no significant difference in respondent's level of PKM application based on experience.

Hypothesis 4: There is no significant difference in the application of OKM by experienced and less experienced academic librarians.

Table 10: Summary of t-test analysis of difference in respondents' mean ratings on the level of application of organizational knowledge management by academic librarians in South-East university libraries based on years of experience

Source of variation	N	Mean	Sd	df	t-cal	P-value	Decision
Experienced	82	3.08	0.47	163	0.48	0.627	Not-Sig
Less Experienced	83	3.04	0.47				

Table 10 shows that at the 0.05 level of significance and 163 of df the calculated t of 0.48 with a p-value of 0.623, which is greater than 0.05, the null hypothesis was not rejected. This means that there is no significant difference in respondent's level of application of OKM based on experience.

Summary of Major Findings

Findings of this study are summarized as follows:

1. The level of awareness of personal knowledge management by academic librarians in university libraries in South-East Nigeria is moderate.
2. The level of awareness of organizational knowledge management by academic librarians in university libraries in South-East Nigeria is high.

3. The level of application of personal knowledge management by academic librarians in university libraries in South-East Nigeria is high.
4. The level of application of organizational knowledge management by academic librarians in university libraries in South-East Nigeria is low.
5. Challenges associated with the application of personal knowledge management by academic librarians in university libraries in South-East Nigeria are; reluctance to share information due to fear of exposing one's mistakes, fear of someone else receiving credit for one's knowledge, lack of trust among employees (emotional) and lack of skills and competencies in PKM among librarians, lack of social network (environmental) in nature.
6. Challenges associated with the application of organizational knowledge management by academic librarians in university libraries in South-East Nigeria are; lack of clearly defined guidelines on KM implementation, lack of organizational leadership commitment (managerial), unfavourable organizational culture that impedes knowledge sharing behaviour (environmental) and insufficient and inappropriate technological systems (technological) in nature.
7. Experience has a significant influence on the level of awareness of personal knowledge management and organizational knowledge management by academic librarians in university libraries in South-East Nigeria.
8. Experience has no significant influence on the level of application of personal knowledge management and organizational knowledge management by academic librarians in university libraries in South-East Nigeria.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This chapter presents the discussion of results of the study, conclusion, implications of the findings, recommendations and suggestion for further research.

Discussion of results

Results of the study are discussed as follows:

Level of awareness of personal knowledge management by academic librarians

The study revealed that the level of awareness of personal knowledge management by academic librarians in South-East Nigeria is moderate. This implies that academic librarians have basic understanding of the concept of personal knowledge management. This finding is in line with the observation of Nwokocha et al. (2015) that the level of awareness of PKM by academic librarians will enable the individuals to identify how much knowledge and information they possess. How they can access the things they know, strategies they can adopt to acquire new knowledge and for accessing new knowledge and ability to understand oneself. They showed an understanding of the concept of personal knowledge management to the level that they were able to identify false and misleading information on the concept and respond appropriately, thus exhibiting a moderate level of awareness. The finding also supports Obadiya (2017), who reported that the level of awareness of personal knowledge management of special librarians in South West Nigeria was high. However, the finding does not agree with the report of Jain (2011) that the majority of staff in the faculty of humanities, University of Botswana were not aware of the concept. The finding of this study may differ from

that of Jain because it studied academic librarians while Jain studied faculty members of humanities who may not have been exposed to knowledge management strategies required of academic librarians.

The findings revealed that the respondents differed significantly in their level of awareness of personal knowledge management as a result of years of experience. This means that the experienced academic librarians have a higher level of awareness of PKM than the less experienced ones. This may be as a result of the experienced academic librarians having been exposed to the strategies of personal knowledge management without their knowing it longer than less experienced ones. According to Mitchell (2004), personal knowledge management involves a range of relatively simple and inexpensive techniques and tools that anyone can use to acquire, create and share knowledge and collaborate with colleagues without having to rely on the technical or financial resources of the employer. Thus, experience matter in the level of awareness of personal knowledge management of academic librarians in university libraries in South- East.

Level of awareness of organizational knowledge management by academic librarians

The study revealed that academic librarians in South-East university libraries have a high level of awareness of organizational knowledge management. This finding is in agreement with Frost (2014) who defined organizational knowledge management as the management of the organization's knowledge through a systematically and organizationally specified process for acquiring, organizing, sustaining, applying, sharing and renewing both the tactic and explicit knowledge of employees to enhance organizational performance and create value. The finding of this study also supports Koloniari and Fassoulis (2016), who reported that the awareness level of organizational knowledge management of all the personnel in

academic libraries in Greece are high. Chandra and Raman (2009) and Potgieter, Dube and Rensleigh (2013) also reported that employees were aware of organizational management are also in agreement with the finding of the present study.

The finding further revealed that the respondents differed significantly in their level of awareness of organizational knowledge management as a result of years of experience. This means that both the experienced and less experienced academic librarians are at different level of awareness as far as organizational knowledge management is concerned. While the experienced librarians are more aware, the less experienced are less aware. This could be as a result of the involvement of the experienced academic librarians in more professional education and work experiences, organizational policy formulation and other managerial exposures than the less experienced ones.

Level of application of personal knowledge management by academic librarians in university libraries in South- East, Nigeria

The study revealed that there is a high level of application of personal knowledge management by academic librarians. This implies that the academic librarians were able to integrate their know-how with the organizational processes in achieving the organization's goals and objectives. This finding is in agreement with Omotaya (2014) who noted that as information managers in the university, academic librarians need to systematically coordinate their technical know-how and technologies in place, the processes as well as an organizational structure to achieve to enhance their productivity. The result of this study, however, differs from the findings of Obadiya (2017) who found that there was a low level of application of personal knowledge management by special librarians in South-West Nigeria. The findings of the present study may, however, differ from that of

Obadiya because he studied special librarians while the present study is on academic librarians and the difference in the findings may be as a result of their training and practice. The academic librarians may have been exposed to personal knowledge management strategies than the special librarians.

The finding further revealed that the respondents did not differ significantly in their level of application of personal knowledge management as a result of years of experience. This means that both the experienced and less experienced academic librarians are at the same level of application of personal knowledge management. This may be as a result of the fact that personal knowledge management is an emerging concept. Therefore, experience does not matter because both the experienced and less experienced are equally interested in embracing the concept for professional excellence.

Level of application of organizational knowledge management by academic librarians in university libraries in South- East, Nigeria

The study revealed that there is a low level of application of organizational knowledge management by academic librarians in university libraries in South-East Nigeria. With this, it may be difficult for university libraries to make an appreciable impact on the services rendered. This is because according to Isalam, Siddike, Nowrin and Naznin (2015) the application of organizational knowledge management in university libraries is considered as one of the most useful solutions for improved services as well as the library being relevant to their parent institution in this present digital, competitive and challenging environment. The finding of this study is in line with the study of Jain (2006), who reported that most academic libraries in East and Southern Africa are not applying organizational knowledge management. When organizational knowledge management is applied

at a low level, it implies that the library is not making the best use of the knowledge of the staff and the processes in serving the user community.

The finding further revealed that the respondents did not differ significantly in their level of application of organizational knowledge management as a result of years of experience. This means that both the experienced and less experienced academic librarians are at the same level of application of organizational knowledge management. This could be as a result of a lack of knowledge sharing in the libraries studied.

Challenges associated with application of personal knowledge management by academic librarians

The finding revealed some challenges that hinder the application of personal knowledge management by academic librarians. These challenges range from: lack of social network, reluctance to share information due to fear of exposing one's mistakes, fear of someone else receiving credit for one's knowledge, difficulty in expressing tacit knowledge contained in an individual's head, lack of skills and competencies in personal knowledge management among librarians and lack of trust among employees. This supports Obadiya (2017) who reported that, special librarians in South West experience challenges such as: fear of loss of power, unfavourable organizational culture and lack of social network. The finding of this study is also in line with the report of Jain (2011) that faculty members of universities in Southern Africa experience challenges such as lack of facilities, time, awareness of PKM tools and technology and time management skills. The problems are enough to impede the implementation of personal knowledge management of academic librarians.

Challenges associated with application of organizational knowledge management by academic librarians

The study revealed many challenges affecting the application of organizational knowledge management by academic librarians in university libraries in South-East, Nigeria. These challenges include lack of relevant training, an unfavourable organizational culture that impedes knowledge sharing, lack of clearly defined guidelines of knowledge management implementations, insufficient and inappropriate technology systems, librarians lack skills and competencies in knowledge management and lack of organizational leadership commitment. The finding supports Islam, Siddike and Nowrin (2015) who reported that librarians in Bangladesh were experiencing challenges such as; lack of knowledge sharing among staff, lack of skilled manpower in the libraries, lack of technological infrastructure, lack of central strategy for the application of knowledge management in the libraries and lack of government policies and adequate budget. However, the present result differs from the findings of Jain (2014) who identified lack of appropriate reward system and incentives as challenges to the application of organizational knowledge management in Southern African Development Community university libraries.

Conclusions

Based on the findings of the study, it was concluded that academic librarians in university libraries in South-East Nigeria are not adequately aware knowledge of knowledge management concepts and this affects the of knowledge management application in university libraries. This might have resulted in the low application of organizational knowledge management in the university libraries in South-East, Nigeria.

Implications of the Study

The results of this study have some obvious educational and non-educational implications as follows:

1. The findings show that academic librarians have a moderate level of awareness of personal knowledge management and a high level of awareness of organizational knowledge management. This implies that they are conversant with the concepts and continuous education programme, professional training courses and workshops will help them to improve.
2. The study also revealed that academic librarians apply personal knowledge management at a high level and organizational knowledge management at a low level. This shows that although there is a transfer of knowledge from one section of the library to the other, the collective knowledge of the librarians are uncoordinated and knowledge sharing has not been institutionalized in the university libraries thus will affect the achievement of organizational goals.
3. The study further revealed among others that academic librarians in university libraries are faced with lack of trust among employees (emotional) and lack of social network (environmental) challenges in the application of personal knowledge management. This implies that there are emotional and environmental issues that require attention.
4. The study further revealed that academic librarians in the university libraries face lack of organizational leadership commitment (managerial), unfavourable organizational culture that impedes knowledge sharing behaviour (environmental) and insufficient and inappropriate technological systems (technological) challenges in the application of organizational knowledge management. Hence the application of organizational

knowledge management will be enhanced if a conscious effort is made to eliminate these challenges.

Recommendations

Based on the findings of the study, the conclusions and implications of the findings, the following recommendations were made:

1. Trainers of academic librarians should expose and equip them with knowledge and competencies to confidently and effectively apply knowledge management for improved service delivery.
2. The management of university libraries should formulate a knowledge management strategy based on the actual needs of library users.
3. University management should provide enough emotional and environmental motivation for the implementation of personal knowledge management by librarians.
4. The library and university management should provide social, managerial and technological support to strengthen the implementation of organizational knowledge management.
5. The Nigerian Library Association and other professional associations should continue to create awareness of evolving concepts and trends like organizational knowledge management through continuous education programmes, seminars and conferences.
6. Library and information science curriculum developers should integrate new concepts such as personal knowledge management in the curriculum as they evolve to increase the performance of library professionals.

Suggestions for Further Research

Based on the findings and limitations of the study, it is suggested that further research could be conducted on the following topics:

1. Level of awareness and application of knowledge management by academic librarians in university libraries in South-South and South-West, Nigeria.
2. Level of awareness and application of knowledge management by academic librarians in private university libraries in South-East Nigeria.

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APPENDIX A

Population Distribution by Institutions

INSTITUTIONS	LIBRARIANS
Michael Okpara Federal University of Agriculture, Umudike	15
Abia State University, Uturu	06
Nnamdi Azikwe University, Awka	16
Odimegwu Ojukwu University, Igbariam	15
Alex Ekwueme Federal University, Ndufu-Alike Ikwo	09
Ebonyi State University, Abakakili	06
University of Nigeria, Nsukka	60
Enugu State University of Science and Technology, Agbani	03
Federal University of Science and Technology, Owerri	35
Imo State university, Owerri	10
Total number of Librarians	175

APPENDIX B

Department of Library & Information Science,
Nnamdi Azikiwe University,
PMB 5025, Awka.
15th January, 2018.

Sir/Madam

REQUEST FOR VALIDATION OF QUESTIONNAIRE

I am a Postgraduate Student of the above named department. I am conducting a research on Level of Awareness and Application of Personal and Organizational Knowledge Management by Academic Librarians in University Libraries in South East Nigeria.

Please, you are requested to validate the instrument based on the item's clarity, relevance to the purpose of the study, appropriateness of language, including the correctness of the instructions to the respondents.

The purpose of the study, research questions and questionnaire are hereby attached to this letter for your perusal. I shall heartily accept any corrections you may come up with after going through the questionnaire.

Yours Faithfully,

Anike, Angela N.
(P. G. Student).

APPENDIX C

LETTER OF TRANSMITAL

Department of Library & Information Science,
Nnamdi Azikiwe University,
PMB 5025, Awka.
15th January, 2018.

Dear Respondent,

REQUEST TO COMPLETE QUESTIONNAIRE

I am a postgraduate student of the above named institution conducting a research entitled “Level of Awareness and Application Knowledge Management by Academic Librarians in University Libraries in South-East Nigeria”.

Please respond to the items on the questionnaire as you deem appropriate. Information supplied will be strictly confidential and used for the purpose of this study.

Thanks for your cooperation.

Yours truly,

Anike, Angela Njideka.
(Researcher)

APPENDIX D

Level of Awareness and Application of Knowledge Management Questionnaire (AAKMO)

SECTION A: RESPONDENTS PERSONAL DATA

Instruction: kindly fill the appropriate places and also tick \sqrt where appropriate for items 1 and 2 below.

Section A: Personal Data

Instruction: kindly fill the appropriate places and also tick \sqrt where appropriate.

1. Institution: _____

2. Years of Experience: 0- 10 () 11 and above ()

Section B1: Awareness of Personal Knowledge Management

Instruction: Kindly tick True { } or False { } to the questions below

1. PKM is being aware of the nature of knowledge one possess. True { } or False { }
2. PKM is being able to access the knowledge one possess. True { } or False { }
3. The core focus of PKM is not personal enquiry. True { } or False { }
4. PKM is ability to organize ones knowledge. True { } or False { }
5. PKM is about the way individuals collect, manage and share information at a personal level. True { } or False { }
6. PKM help to manage group of people's human capital for professional excellence. True { } or False { }

7. PKM produce strategies for acquiring new knowledge. True { } or False { }
8. PKM involve a range of relatively complex and expensive techniques. True { } or False { }
9. PKM produces skillfulness ¹¹² various technologies and tools to access relevant knowledge. True { } or False { }
10. PKM allows individuals to be better equipped for enhanced productivity. True { } or False { }
11. PKM allow group of people to map out their own areas of expertise. True { } or False { }
12. PKM is about making individuals recognize their own value and consequently strive for self-development. True { } or False { }
13. PKM enables one to work out how and when to process information. True { } or False { }
14. PKM is being able to develop a sourcing strategy for an individual's ongoing information needs. True { } or False { }
15. PKM is being able to set criteria for what an individual want to save or delete. True { } or False { }
16. PKM enables a diverse group of people to locate the right information quickly. True { } or False { }
17. PKM does not allow an individual to clarify her information needs for each situation. True { } or False { }
18. PKM enables an individual to stay abreast with business and technology trends. True { } or False { }
19. PKM makes an individual unsure of how much information he needs for an assignment. True { } or False { }

20. PKM is to provide a framework for individuals to integrate their personal information in order to enrich her knowledge database.

True { } or False { }

Section B2: Awareness of Organizational Knowledge Management

Instruction: Kindly tick True { } or False { } to the questions below

21. OKM enables management to deliver the right knowledge to the right people at the right time. True { } or False { }
22. OKM is about systematic organization of knowledge in an organization. True { } or False { }
23. OKM is not internally generated within personal domains of intuitions of people working in the organization. True { } or False { }
24. OKM applies the collective knowledge of the entire workforce to achieve specific organizational goals. True { } or False { }
25. OKM is about systematic capturing of knowledge. True { } or False { }
26. OKM is not centered on enabling the organization to be more effective by recording and making available what its people know. True { } or False { }
27. OKM improves organization's ability to sustain a competitive advantage. True { } or False { }
28. OKM does not involve developing an environment where knowledge is created, shared and used. True { } or False { }
29. OKM improves internal and external communication.
True { } or False { }
30. OKM is about systematic renewal of explicit knowledge.
True { } or False { }

31. OKM offers the opportunity to systematic management of knowledge within units inside and outside the organization. True { } or False { }
32. OKM aims only to draw out from people what they know. True { } or False { }
33. OKM is concerned with the cultivation of channels through which knowledge flows in an organization. True { } or False { }
34. OKM focuses on practice using communication and collaboration to improve how people do their practice. True { } or False { }
35. OKM occurs only when group knowledge from several subunits is combined used to create new knowledge. True { } or False { }
36. OKM advocates the creation and use of formal organizational processes to encourage the individuals to create new knowledge. True { } or False { }
37. OKM enables individuals in an organization to collectively acquire knowledge. True { } or False { }
38. Technology is the only enabler of OKM in organizations.
True { } or False { }
39. In OKM mapping of processes helps to depict what is really going on in the organization. True { } or False { }
40. In OKM information systems are critical means to disseminate organizational knowledge assets. True { } or False { }

Section B3: Level of application of Personal Knowledge Management

Instruction: kindly tick () the options for all items in this section to indicate the level of application of the following PKM strategies in your library. **Keys to the codes are: Highly Applied (HA), Applied (A), Moderately Applied (MA), and Not Applied (NA)**

S/N	STATEMENT	HA	A	MA	NA
1	Identifying and sharing best practices				
2	Using stories to share knowledge (story telling)				
3	Using meetings or workshops to seek knowledge and insight from one another				
4	Mobilizing one's knowledge for organizational success				
5	Creating a network of people who share a common interest and are willing to develop and share that knowledge (community of practice)				
6	Scheduling informal seminars where staff can interact and exchange "lessons learned", "best practices" and other specific experience and knowledge				
7	Keeping inventory and index of expert knowledge possessed by members of staff				
8	Reviewing projects or activities to enable them learn what happened, why it happened and what lessons can be learned (after action review)				
9	Sharing one's knowledge effectively in meetings, seminars and conferences.				
10	Evaluating and using information to produce knowledge				

Section B4: Level of application of Organizational Knowledge Management by academic librarians

Instruction: kindly tick () the options for all items in this section to indicate the level of application of the following PKM strategies in your library. **Keys to the codes are: Highly Applied (HA), Applied (A), Moderately Applied (MA), and Not Applied (NA)**

S/N	STATEMENT	HA	A	MA	NA
	My library:				
11	Creating knowledge centre for collecting, organizing and disseminating knowledge				
12	Encoding knowledge into a knowledge repository (Institutional repository)				
13	Conducting exit interviews to capture knowledge from staff leaving the library				
14	Using knowledge directory to help people find the knowledge and expertise they need				
15	Harvesting and documents the knowledge that is in the head of individual librarians (tacit knowledge)				
16	Connecting people through the use of collaborative tools such as e-mail, video conferencing, discussion boards etc.				
17	Providing good quality information services tailored to each user's need in order to improve knowledge communication, application and generation.				
18	Analysing records of users, and use the knowledge acquired from exercise for planning and redesigning of library services				
19	Providing professional education and training to facilitate employees understanding of knowledge management and its benefits				
20	Encouraging experienced workers to communicate their knowledge to less experienced workers				
21	Capturing and disseminates knowledge obtained from organizations like IFLA, NLA				

Section B5: Challenges of Personal Knowledge Management (PKM) Application in university Libraries

Instruction: please tick () in the options for all items in this section to your opinion with regards to the challenges of implementing PKM. **Key to the codes are: Strongly Agree (SA) Agree (A), Disagree (D), and Strongly Disagree (SD)**

S/N	STATEMENT	SA	A	D	SD
22	Lack of awareness of PKM tools and technology				
23	Reluctance to share information due to fear of exposing one's mistakes				
24	Fear of someone else receiving credit for one's knowledge				
25	Lack of social network				
26	Difficulty in expressing tacit knowledge contained in an individual's head				
27	Lack of skills and competencies in personal knowledge management among librarians				
28	Lack of trust among employees				

Section B6: Challenges of OKM Application in Academic Libraries

Instruction: please tick () in the options for all items in this section, kindly give your opinion with regards to the challenges of implementing OKM. **Key to the codes are: Strongly Agree (SA) Agree (A), Disagree (D), and Strongly Disagree (SD)**

S/N	STATEMENT	SA	A	D	SD
29	Unfavourable organizational culture that impede knowledge sharing behaviour				
30	Lack of appropriate reward system and incentives				
31	Lack of relevant training				
32	Lack of clearly defined guidelines on knowledge management implementations				
34	Librarians lack of skills and competencies in knowledge				

	management				
35	Lack of organizational leadership commitment				
36	Lack of awareness about knowledge management concepts				

APPENDIX E