

## LIBRARIES DRIVING ACCESS TO KNOWLEDGE THERESA L. ADU

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### Abstract

*This paper discusses the role libraries play in driving access to knowledge in various sectors of society. As service organizations, Libraries have long been crowned as knowledge institutions where individuals, organizations, and societies are provided unhindered access to knowledge. The paper indicates that libraries have the infrastructure (within its environmental context) to acquire, process and make information (books/journals) available. This infrastructure includes relationships with other institutions that assist in the information acquisition process and provision of knowledge in education, business and other sectors of the society. However, in performing these roles, the library faces some challenges. The paper further goes on to suggest ways by which libraries can continue to drive access or indeed improve access to knowledge by repositioning themselves to take advantage of emerging technologies, networking, as well as mobilizing their skills and expertise to continue to sustain the confidence of their users.*

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**KEYWORDS:** LIBRARIES; ACCESS TO KNOWLEDGE; ACCESS TO INFORMATION; KNOWLEDGE SOCIETY.

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## **Introduction**

The theme for the Presidential term of the immediate past President (2009-2011) of the International Federation of Library Associations (IFLA), Ms. Ellen Tise which is: 'Libraries driving access to knowledge' captures precisely the fundamental role that access to knowledge plays in education and research and the creation of human capital upon which the development of societies depend and the role libraries play in making such knowledge accessible. This is especially true in the 21<sup>st</sup> century where economic progress depends on having a literate and educated population.

Knowledge has always been a component of growth and improvement in living standards, even more so in modern societies, where its role in growth and development is reflected in many ways, as seen in the growth of economic, political, social, occupational, cultural and other sectors. Knowledge is essential for so many human activities and values, including freedom, the exercise of political power, and economic, social and personal development. Tise (2009) in her acceptance speech delivered to the 75th IFLA Congress indicated that knowledge is foundational to all spheres of life and critical for the growth of society.

Information is a key input into the creation and maturation of knowledge and therefore, a significant criterion for growing a healthy society is access to information. The library, as a major source for information, serving a wide spectrum of information seekers, is not only critical but also central to the facilitation of knowledge generation (Tise, 2008). This paper discusses the role libraries play in driving access to knowledge in various sectors of society, the constraints to accessibility to knowledge, and how these constraints can be overcome by the library to ensure greater access in a knowledge-based society.

## **Libraries**

Libraries are service organizations where individuals, organizations, and societies are provided unhindered access to substantial quantities of information. Libraries are collections of books and other information resources gathered for purposes of reading, study, and reference (Encyclopedia Britannica, 1974; Aina, 2003; Onwubiko and Uzoigwe, 2004).

Until the 17th century, the basic function of libraries in reality had been to prevent ordinary people from getting access to books. Possession of knowledge was deemed to be potentially dangerous and was to be limited to the educated few

(Qvortrup, 2007). However, the situation is radically different today. The basic challenge in society is not to get access to as much information as possible, but to deal with a massive information overload. The fundamental function of the modern library therefore is not to give access to all information available, but to provide knowledge management (Qvortrup, 2007). This is the only way by which the current library plays its role as a central node in the knowledge society.

Today, libraries are associated with information collection, organization, retrieval, and dissemination which serve as a foundation for knowledge growth that will result in literacy. Libraries are catalysts for human progress as they aid the development and transmission of knowledge and culture, foster civic awareness in support of democracy, and provide the resources for the development of economic productivity and innovation in society (Amonoo & Azubiike, 2005).

### **Knowledge**

The meanings of “Knowledge” as given by the Random House Dictionary (RHD), and words synonymous with 'knowledge' are:

- Acquaintance with facts or principles, as from study or investigation; general erudition;
- Familiarity or conversance, as with a particular subject or branch of learning;
- Acquaintance or familiarity gained by sight, experience, or report; as for example knowledge of human nature;
- The fact or state of knowing, clear and certain perception of fact or truth;
- Awareness, as of a fact or circumstance;
- That which is or may be known; information; and
- The body of truths or facts accumulated by mankind in the course of time,

Harris (1996, as cited by Tise, 2009), however, draws a distinction between the concepts of data, information and knowledge. Data, he indicates, is the lowest form of information, which when accumulated and processed becomes information. While information has substance and purpose; on its own it does not have meaning. For information to acquire meaning and representation, it has to be combined with context and lived experience. It is through the injection of the human factor into information that this body of data becomes knowledge. Thus, knowledge is produced when information is absorbed, processed, and internalized by individuals. Access to information is therefore an imperative for the development and use of knowledge. Knowledge generation is essential to the process of development.

Knowledge is functional at many levels: it can alleviate poverty and deprivation; it serves as a springboard for innovation and change; and, it is a catalyst for national development and personal achievements (Tise, 2008). Knowledge, may thus be finally defined in the words of Daniel Bell, the Harvard University Professor of Sociology who while discussing 'knowledge' as the moving force of the Post-industrial Society, indicates that “Knowledge is an organized set of statements of facts or ideas, presenting a reasoned judgment or an experimental result, which is transmitted to others through some communication medium in some systematic form. Knowledge consists of new judgments (Research and Scholarship) or presentation of older judgments as exemplified in text books, teaching and learning and collected as library and archival material.”

It is important for librarians to adopt an uncomplicated definition of knowledge, especially librarians in developing countries, in favour of an examination of the role that the library plays in embracing or supporting access to data, information and knowledge (Tise, 2012).

### ***Types of Knowledge***

Knowledge is broadly divided into two groups, personal knowledge (private knowledge) and social knowledge (public knowledge). Personal knowledge is the knowledge of the individual and as such is available to others only if communicated. This type of knowledge is common-sense knowledge (Boisot, 1995). Social knowledge is the knowledge possessed collectively by a society. It is supposed to be available to all the members of the society freely and equally. Libraries and information centers provide this kind of knowledge. Social knowledge is an essential source of personal knowledge and it is from personal knowledge that most social knowledge is built.

Ziman (1974), the distinguished physicist, emphasizes the importance of the organization of public or social knowledge which has three aspects. These are:

- Organization by creating,
- Self-organization and
- Bibliographic organization.

Organization by creation is the result of the efforts of those that generate knowledge by means of experiments and other methods of investigation and record them in a form to be communicated.

Self organization refers to the references cited in any document to other documents, establishing a thought link between the citing and cited documents. When extended, it provides a very interesting intellectual organization of knowledge that can cut across the conventional classificatory norms known to librarians.

Bibliographic organization, on the other hand, refers to the organization of primary documents in bibliographies, indexing and abstracting journals and other various types of information products and services. All these are handled by libraries and information centers (<http://www.egyankosh.ac.in>).

### **Libraries driving access to knowledge**

The developments in technologies have facilitated the access and utilization of knowledge more effectively than before. The knowledge environment facilitates collaborative knowledge building and decision making (Varalakshmi, 2009). According to Wikipedia (cited by Varalakshmi, 2009) knowledge societies:

- are not constrained by geographic proximity; and
- offer more possibilities for sharing, archiving and retrieving knowledge.

Knowledge has become the most important capital in the present age, and hence the success of any society lies in harnessing it. Varalakshmi (2009) asserts that in a knowledge society, access is one of the most fundamental issues, and the National Knowledge Commission of India acknowledges that libraries are the best facilitators of access when they observed that:

- Library and information services are fundamental to the goals of creating, disseminating, optimally utilizing and preserving knowledge.
- Libraries are instrumental in transforming an unequal society into an egalitarian, progressive knowledge society.
- Developments in information communication technology (ICT) have enabled libraries to provide access to all, and also bridge the gap between the local, the national and the global knowledge.

Drake (1984, cited by Tise et al., 2008), indicates that defining access to information is a complex concept. This is because, when librarians talk about accessibility, they usually mean 'making information available by making books and documents available for the user to find the needed information. This definition has however evolved as more and more libraries are making information available to users through electronic formats and other related resources.

Libraries of all types are the starting point from which citizens can have access to information on an equal basis and in a trusted and neutral environment. Through their vast collections, they enable access for all members of the community to global knowledge resources, ideas and opinions thus fostering a creative and innovative society.

Cheong (2008) indicates that “librarianship is the discipline and profession that is concerned with helping individuals obtain reliable information to increase their knowledge in all spheres of their lives from the cumulated information store of mankind”. Considering this definition, librarianship is seen predominantly as performing an intermediary function. This role is effectively handled as the library understands the needs of the user on one hand and the knowledge and availability of relevant information resources on the other, thereby helping the user to obtain information that will increase their knowledge.

The library acquires knowledge in the form of books and other information resources as they anticipate the needs of their users. These are classified and catalogued with a lot of consideration of the appropriate access points so that they may readily be found. In special libraries for instance, the library drives access to information by providing complex literature searches in specific fields. At a higher level, the library may offer specialized information that has been consolidated and repackaged – this mostly involves an analysis, synthesis and evaluation of information and presenting it in a form that is required by the user. Today, libraries are driving access to knowledge by having moved from 'just-in-case' collection building and management to 'just-in-time' delivery of information (Fagbola, Uzoigwe & Ajegbomogun, 2011), thus making knowledge accessible in a timely manner.

Libraries have access to expertise – personnel have the training to retrieve information and to package that information in a format that is easily adopted by the information seeker. Further, libraries have the infrastructure (within its environmental context) to acquire, process and make information (books/journals) available. This infrastructure would include relationships with other institutions that will assist in the information acquisition process. It is clear that – in the land of scarcity of information or information overload, the one beacon of hope is the library (Tise, 2009).

### **Access to knowledge: the socio-economic world order**

It was the business world that first recognized the importance of knowledge in the “global economy” of the “knowledge age”. In the new knowledge economy, the possession of relevant and strategic knowledge and its unceasing renewal enables businesses to gain competitive advantage (Hwa-Wei, 2005). With this emergence, also came the concept of 'knowledge management'. “Knowledge Management”-- was started and popularized in the business world during the last decade of the 20th century. The management of information has, however, long been regarded as the preserve of librarians and libraries. Librarians and information professionals are trained to be experts in information searching, selecting, acquiring, organizing, preserving, repackaging, disseminating, and serving (Hwa-Wei, 2005). Snyman & Rooi (2005) in citing Choo (2000) indicate that librarians by nature of their training, focus and information backgrounds are the most suitable professionals to facilitate the management of knowledge in organizations. “Not only are they skilled at selecting and searching information sources, they also have the know-how to articulate and analyse information needs, evaluate the quality of information, extract and summarize important information, and relate and package the information found for a specific project or problem” (Snyman & Rooi, 2005). In Ghana, various special libraries in Government agencies are available to provide business related knowledge to stakeholders. For instance, knowledge of policies and regulations regarding the establishment and operation of businesses are essential to ensure the development of businesses. Thus, the National Enquiry Point on Technical Barriers to Trade, established with the Ghana Standards Board, now the Ghana Standards Authority is just one of such libraries which drive access to knowledge. Others include libraries in the various Institutions of The Council for Scientific & Industrial Research (CSIR) and the Ghana Atomic Energy Commission (GAEC), just to mention a few. In a similar vein, the public library in Ghana, championed by the Ghana Library Authority (GhLA) has embarked on a mobile library project, to give access to children in rural and remote areas in Atiwa and the Kwahu North districts in the Eastern Region (Ghana Library Authority, 2012).

### **Access to knowledge: The educational sector**

A society's socio-economic growth and development are entirely dependent on the quality of the educated class whose knowledge forms the intellectual capital. The educational sector can be categorized into two levels: the formal sector and the non-formal/lifelong learning educational sector. Formal education operates at both lower and higher levels: the primary and secondary levels as well as the tertiary levels.

Primary and secondary schools, for example, require access to adequate information resources (school libraries, teacher resource centres, and public libraries) for both the pupils and their teachers. Adequate access to information resources helps to ensure that learning is done in a way that is not dominated by rote learning but offers opportunities for genuine independent and creative learning.

In the case of tertiary education, Ryu (1998, cited by Mchombu, 2006) indicated that countries look towards advancements in technology and science as the source of a breakthrough towards a knowledge economy and in most cases look towards their universities to produce new knowledge through research and development as well as consultancy projects sponsored through both public and private funding. Apart from research and consultancy, universities are also active in teaching and curriculum delivery, as well as community service. Access to knowledge is vital for researchers and consultants in academic institutions to avoid “rediscovering the wheel” which happens when one has no access to the latest knowledge in their specialization. Indeed, researchers would need access to knowledge and information to keep up with the developments in their area of specialization, know the latest state-of-the-art technology and to gather information and data needed at the various levels of their research work.

The role of knowledge transfer for education to flourish can therefore not be underestimated. Libraries, together with education develop a public that is receptive, open, questioning and discriminating. Reformed education and libraries can and must play a major part in developing critical minds (Aman, 2006). Knowledge is necessary for the knowledge base required for countries to improve on the education process (Mchombu, 2006). Mchombu (2006) goes on to assert that although there are strong academic libraries in the sub region (i.e. Africa), we have to be concerned in that the state of school libraries and resource centres, and public libraries are not very strong in the delivery of educational information to the educational sector as this is a vital building block for improving the sector's performance and lifelong learning.

The public library, especially, is often referred to as the “people's university”. This is because anyone can make the most of the vast array of books, magazines, newspapers, and other materials, in their collection in the quest for knowledge and learning. It is a place where people are safe and free to explore all areas of human knowledge. Public libraries play the most important role worldwide in helping to bridge the information gap by providing free access to knowledge, information



and communication technologies, particularly the Internet. They are inclusive in that they build bridges between individuals at the local level and the global level of knowledge. Koneru (2008, cited by Tise, 2009) asserts that public libraries' role is one of “*information gateways* for uninterrupted and equitable access to information and knowledge resources *just-in-time*, fostering “Right to Information”; “Information for All (IFA)”; and “Information for Development”, which are vital for achieving the Millennium Development Goals in an accelerated pace” (Tise, 2009).

According to Tise (2009), Koneru (2008) took a cue from the IFLA/UNESCO Public Libraries Manifesto which states that “a public library is an organization established, supported and funded by the community, either through local, regional or national government or through some other form of community organization to provide access to knowledge, information and works of the imagination through a range of resources and services on the basis of *equality of access for all*, regardless of age, race, sex, religion, nationality, language or social status. Specific services and materials are provided for those users who cannot, for whatever reason, use the regular services and materials, for example linguistic minorities, people with disabilities or people in hospital or prison”

The whole process of education involves acquisition and transfer of knowledge from one source to another. UNESCO states that 'the goal of education for all involves among other things, the development of literate societies in the developing world, and this cannot be attained solely by providing quality learning materials to schools. If people are to stay literate, they must have access to a wide variety of written materials and continue the habit of reading in their adult lives' (UNESCO, 2012).

Singh (2003) observes that “most of the ongoing literacy programmes do not provide long-term support to neo-literates. Unless they are provided effective support through reading and learning materials, they may again fall in the category of illiterates. Here libraries play a vital role by providing reading and learning materials to them”.

The importance of books and libraries for educational achievement and acquisition of knowledge is unquestionable in highly literate societies. Today however, the role of libraries and professional librarians is changing worldwide. They are no longer passive keepers and preservers of books; rather, they have evolved to become facilitators of information and lifelong learning opportunities

with an emphasis on service, identifying user needs and communicating solutions. Modern libraries are unfolding the community's learning potential by providing information on community issues, such as health, employment, continuing education and local history. This equitable access to information is essential to enable educated and informed citizens to participate in a democratic global community (Krolak, 2005).

In recognition of the importance of libraries, the Economic Commission for Africa (ECA), for instance, introduced the promotion of effective libraries and information services under a programme dubbed *Harnessing Information for Development* to enhance accessibility in developing countries. Some of the strategies adopted included among others:

- Promoting knowledge networking and sharing on digital and virtual library services and networks, including the development of the African Virtual Library and Information Network (AVLIN);
- Developing, maintaining and providing access to online databases and digital content to enhance global accessibility of African development information;
- Promoting the application of relevant international standards and best practices;
- Advocating for broad-based information and knowledge policies and strategies;
- Establishing and maintaining strategic alliances and partnerships with regional and international development organizations promoting the role of libraries and similar information services in development (Amonoo & Azubuike, 2005).

### **Challenges to knowledge accessibility**

In developed countries, libraries accompany citizens through all stages of life, for example, “Bookstart for Babies” programmes in the local public library; “Help with Homework” clubs in the school library; as a student, logging into the university library from home for course-work material; as a professional, accessing the latest market research reports from the in-house company library on a desktop (Noronha & Malcolm, 2010). These confirm the fact that libraries are the home and access points for knowledge, and this is no more debatable. However, libraries are not immune to the societies to which they belong. This implies that the forces that are reshaping the society are shaping the library and its activities as well.

In spite of the successes elsewhere, there are still challenges to access to knowledge in almost all societies and most especially in developing countries. Tise, et. al. (2008) assert that even in technologically affluent societies, there are limitations to access to knowledge and these are manifested in different forms. Van Dijk and Hacker (2003, cited by Tise, et. al., 2008) have identified some of these challenges to information accessibility. These are:

- Lack of elementary digital experience caused by lack of interest, computer anxiety, and unattractiveness of new technology and inadequate education (or total illiteracy) and social support (“mental access”/ Illiteracy).
- Lack of computers and network connections as well as predominance of the manual systems of processing information (“material access”).
- Lack of significant usage opportunities (“usage access”)

### ***Mental Access/Illiteracy***

Access requires the provision of appropriate content, infrastructure, and bridging the 'knowledge divide' by all means possible. The issues of provision of technology, its use and sustainability are therefore crucial. According to UNESCO (Aguolu, 1997), about 70% of the people in developing countries are illiterate and cannot exploit the information stored in print and other media. These people are generally farmers, craftsmen and women who are unaware of the need for information and live their lives routinely, using whatever information they may stumble on, or is passed to them orally by relatives, friends, colleagues, community and religious workers. Indeed, in a study by Adu (2003) on business information and SMEs in Ghana, it was clear that most SMEs (60%) preferred informal or oral sources of information in the running of their businesses compared to formal or written sources. This is also as a result of the low literacy levels of such businessmen/women.

Internet access within libraries has become a major service that libraries increasingly provide and should provide because such access creates a window through which individuals can access virtual knowledge resources, and this window increases the libraries' capacity to offer more diversified information while encouraging the use of other sources and promoting interest in the library (Ocholla, 2008).

However, if the best infrastructure is put in place in libraries and potential users are marginalized as a result of illiteracy then there would be a lack of significant usage opportunities. Although information is transmitted orally and through modern audio-visual formats of discs, tapes, cassettes and facsimiles, radios, televisions,

the printed word in the form of books, journals, reprints, etc., remains a universal, cheap and convenient mode of recording and transmitting detailed, complex, statistical or modern technical information. Therefore people must know how to read to be able to exploit the vast store of relevant information buried in print (Aguolu, 1997).

### ***Material/Skills and Usage Access***

Omekwu (2006) indicates that librarians of developing economies seem to be neither prepared nor repositioned to make use of the current advances in information technology to chart new directions in the unfolding knowledge era. The application of technology, with the upsurge of Information and Communication Technologies (ICTs), has brought a lot of changes in the management of knowledge and how libraries are driving accessibility to it. The new information/knowledge society has brought about improved knowledge delivery, processing of information, precision, good time management and improved network system (Fagbola et al., 2011).

The impact of technology has also resulted in the proliferation of large-scale digital libraries, multimedia information systems and internet resources and services. This has in turn contributed to the phenomenal increase in the amount of information and knowledge available in any given discipline. The user is therefore confronted with the problem of locating, interpreting and digesting materials as readily as they are accumulated. In some instances, inhibited access to knowledge is technology itself.

### **The way forward**

#### ***Eradicating illiteracy and using technology***

Deriving from the above scenario, it is critically important for information professionals to begin to re-evaluate their roles in terms of how they contribute to the management and eradication of illiteracy, technology and knowledge in the knowledge age, in order to drive access to this knowledge effectively. Libraries and librarians must be in the forefront of all efforts to educate the masses, teaching them to read and write in both formal and informal settings.

Generated information or knowledge from whatever system or technology must have an environment that enhances retrieval of accurate, need-specific and problem-solution information. This is because it is against this background that the library drives access to knowledge. What is currently required is for libraries to understand the changing trends in librarianship and to reposition themselves for

strategic relevance in the knowledge society. The ability to manage and manipulate information technology and tools will ultimately distinguish between the strategically relevant and irrelevant information professional.

Paradoxically, the most immediate solution to issues of ICT barriers to accessibility is the use or application of ICT. Libraries can effectively drive access by employing advanced artificial intelligence tools to surf the Internet and to select, find, arrange, classify, and automatically deliver the needed information to each user based on his/her special interests and needs. This requires that the manual system of managing libraries and delivering services must be automated to enable effective access.

It must be noted that users now have an attractive alternative to the library, particularly, users from the new generation who are more at ease with the QWERTY keyboard than with chalk and blackboard (Cheong, 2008).

Today, there should be much more thinking and activities among librarians on getting the attention of users and bringing them back to the fold of the library. Besides possessing knowledge and expertise in information content and users' information seeking behavior, librarians now need to be able to thrive in the hustle and bustle of human-to-human relationships and have strong advocacy and marketing skills as well as encouraging information literacy among their users. Information literacy is a set of abilities requiring individuals to "recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (ALA, 2006). This includes the practical skills involved in effective use of information technology and print or electronic information resources. Indeed, access to information is everywhere, but if the library should drive effective and equitable access and usage, then librarians need to partner with social institutions, academia, and communities etc to ensure accessibility. The Academic Librarian is the 'in-house' expert for teaching both students and faculty colleagues how to find, evaluate and use knowledge effectively.

### ***The use of web 2.0 or Lib 2.0 technologies***

In addition to the above, libraries need to adopt and integrate new and emerging technologies and tools into their traditional setting in order to drive access to knowledge. This is especially necessary for academic libraries considering their clientele-base. These tools include Web 2.0 and more recently, Lib 2.0.

Web 2.0 is a loosely defined intersection of web application features that facilitate participatory information sharing, interoperability, user-centered design, and collaboration on the World Wide Web. A Web 2.0 site allows users to interact and collaborate with each other in a social media dialogue as creators (prosumers) of user-generated content in a virtual community, in contrast to websites where users (consumers) are limited to the passive viewing of content that was created for them. Examples of Web 2.0 include social networking sites (facebook, twitter, MySpace, LinkedIn etc), blogs, wikis, video sharing sites, hosted services, web applications, etc (Wikipedia, 2012)

Driving access to knowledge using web 2.0 tools is all about driving users to the web platform – making them aware of new tools which offer faster and reliable services in information seeking, and offering variety of technologies which aid in knowledge acquisition. The applications of web 2.0 tools to library services bring into the scene, 'Lib 2.0 or Library 2.0'. This simply is the application of web 2.0 tools to library services and includes online services like the use of online public access catalog (OPAC) systems.

Among academic librarians, for instance, hosting of blogs for selected courses of study and contributing to discussions when issues relating to information sources and access arise may be considered. By this librarians can help users set up their own virtual libraries to assist in the learning process. This approach would actually engage users with library expertise and hence increase accessibility to knowledge. Instances of these include the 'Academic Library Users' Group and LibraryThing - a social cataloging web application for storing and sharing book catalogs and various types of book metadata.

### ***Funding and sustainability***

A few years ago, libraries provided access to knowledge from their print or audio-visual collection. The Library was therefore in total control of the information they provided. Today however, we have a different scenario where libraries provide access to scholarly resources through licensing agreements with electronic journals, databases, and other digital resources. A large chunk of these resources have to be subscribed to and renewed at certain intervals. The problem with this is that in the event that the Library is unable to renew its subscription to some resources, users are immediately denied access to such knowledge.

The onus therefore lies on the Library to ensure sustainable accessibility to its users at all times. This may include lobbying managements of their institutions to fund information resources in a continuous and timely manner and ensuring the availability of ICT infrastructure to enable the use of electronic resources. Partnering with other libraries and consortia in the provision of information is also recommended. This may be termed as networking. Omeku (2004) observed that no single library can afford to acquire all the resources and in all the formats available. Networking affords participants the opportunity to acquire all that their funds could enable them to acquire and still have access to what their users need but which they could not afford. Libraries which are members of the Consortium of Academic and Research Libraries in Ghana (CARLIGH) for instance, can testify that they are able to provide more access to knowledge to their patrons and at lower costs.

### ***Institutional Repositories***

Libraries and librarians are fulcrums of academic productivity, with the potential to expand both the range and depth of creative work that faculty and students undertake in any discipline as well as creating accessibility to such knowledge (ACRL, 2006). The creation of Institutional Repositories (IRs) is one of the best ways by which scholarly output can be made accessible in an open and effective way.

Universities and research organizations are themselves knowledge reservoirs. These highly valued intellectual assets, regardless of whether they are explicit or tacit, should be inventoried, archived, indexed, frequently updated, and made accessible in digital form. According to Lynch (2003), while the technologies exist for scholars to manage their own digital content, faculty are typically best at creating, not preserving, new knowledge. As a result most faculty members host their digital objects on a personal website, compact discs, pen drives etc where their long-term preservation is not secure. In championing the creation of IRs “the library is responding to a variety of concerns: long term access, open access, and improved re-use of intellectual property” (John, 2005).

Open access to information and knowledge is an innovative mode of scholarly communication within the digital environment aimed at achievement of universal access to information and knowledge (Das, 2008). This means permanent, online access to full-text papers, free for all users and readily available. Papers may be read over the Internet, printed and distributed for non-commercial purposes. Open Access assumes two important dimensions: materials are made freely available

and the copyright holder agrees to unrestricted reading, downloading, copying, sharing, storing, printing, searching, linking and crawling (Abrahams, 2008).

Citing Suber, (2005), Schiltz et. al. (2005) reiterate that open access solves two problems at once for researchers in developing countries: making their own research more visible to researchers elsewhere, and making research elsewhere more accessible to them.

There is therefore the need for librarians to develop skills in handling Internet hardware and software to facilitate end-user access to online information. Librarians' responsibilities in managing information in an electronic environment include: setting standards for the overall information architecture, selecting and packaging information in a way that maximizes its usefulness (e.g. add index terms or cross-references), informing users about free, full-text online journals, providing training on how to conduct online research (best practices in Internet searching), constructing thesauri to classify and structure information, training staff to efficiently and cost-effectively use online databases, and publishing knowledge through the various available channels (Snyman & Rooi, 2005).

### ***Library Automation***

Technological advancements and its application in libraries have rendered the traditional ways of managing a library inefficient. Hence, automation is the most convenient way. Bannerman (2007) reiterates that some of the difficulties in accessing information are largely due to the fact that information is hidden as a result of the manual system in processing information. Automation focuses on delivering electronic content and documents via networks with the goal of providing timely and unimpeded access to a broad range of scholarly information. This will improve access to library resources and services.

### ***The Library Professional***

The issues discussed above, calls for professionals who see themselves as active contenders in the knowledge society who must distinguish themselves in a variety of ways to retain the confidence of their clientele. As such, information professionals constantly need to upgrade the variety and depth of their subject skills, as well as their professional competences by possessing a different mix of skills – computer and internet skills, communication skills, being a team player, among others to complement the requirements of their work.

Computer and Internet literacy for instance, are essential for the Librarian to function effectively. This is the only way by which they can obtain or access



information sources and share such knowledge with others. Moreover, considering the significance of time in our current society, the Librarian must devise strategies that will yield optimal retrieval results in less time, and that will provide access to other knowledge institutions as well as networked resources.

## **Conclusion**

In conclusion, this paper has examined the ways by which the library drives access to knowledge. The opportunity to drive access to knowledge lies within the library, its traditional roles and its current role. The paper has also highlighted the constraints of the library in driving access to knowledge and how such constraints may be overcome. Even though libraries are guardians of knowledge, it has become evident that many patrons may bypass processes and institutions that they perceive to be slow, unresponsive, unappealing and irrelevant in favor of a more direct approach to services offered by others that may meet their needs. Librarians are called to reposition themselves to drive access more forcefully and use more modern tools to reach out beyond their walls and institutions to patrons wherever they are located.

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