

Knowledge Management and Academic Libraries in Digital Era: Problems and Positions

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DOI: <https://doi.org/10.51244/IJRSI.2025.120800042>

Received: 23 July 2025; Accepted: 28 July 2025; Published: 02 September 2025

ABSTRACT

The development of Knowledge Management in recent years has become a great concern for librarians and libraries. Modern Libraries contribute to business more significantly than traditional libraries. Modern libraries attract users by providing contents in digital form to save their time. This study examine impact of growing congestion in the knowledge resources. The way the knowledge information is being passed to users, traditional libraries are changing into digital libraries. Institutional repositories are being converted into digital forms. The academic libraries are now focusing to deliver the information in the digital form through web, online public access catalogue via internet. That is the way of modern libraries are now called the knowledge libraries or the knowledge stores.

Key Words: Knowledge Management, Web, OPAC, Academic Libraries

INTRODUCTION

Knowledge management (KM) has rapidly moved beyond the stage of a trend and has established itself as a key part of many libraries' knowledge strategy. The concept of knowledge-based economy has generated tremendous interest now-a-days. A library's status is no longer defined by the collection it housed; it is extended to include online and seamless access to information resources. The right amount of information at the right time has long since been an important factor for all kinds of libraries. Successful application of knowledge management practices involves understanding and constructively utilizing information for organizational learning. Social science institutions, government and non- government organizations, etc. are knowledge intensive and the use of advanced technology may transform these institutions and organizations in the future.

Librarians and information professionals are trained to be experts in information searching, selecting, acquiring, organizing, preserving, repackaging, disseminating and serving. However, professionals in information technology and systems have also regarded information management as their domain because of the recent advances in information technology and systems which drive and underpin information management. One of the clearest evidences of this is that the positions of "Chief Information Officer" (CIO) in many organizations are generally held by information technologists instead of librarians. In fact, most of the work of CIOs has to do with developing and managing the IT infrastructure and systems, not the managing of information.

Knowledge is invisible, closely related to action and decision, different in thought after processing, spiritual product, identified with existing environment, transferable through learning and not duplicate. Knowledge is an intellectual capital when people out of creation, add value to information. It is generated. Knowledge is classified and modified. It may be indexing. It is shared. Sharing of knowledge is a core element of knowledge management. According to Davenport and Prusak, "Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experience and information. Librarian must select material according to his user requirement. Librarian must possess reasonable knowledge of electronic resources and adequate grinding in the techniques of their

evaluation and selection. Today more and more information is being stored digitally and disseminated electronically and all types of materials are available CD-ROM and online. The librarian should have knowledge of electronic sources of information, knowledge of users' needs.

Knowledge Management:

Knowledge Management is a process, which deals with knowledge creation, acquisition, packaging and application or reuse of knowledge. It is basically consists of the following four steps: 1.

Knowledge Collection

2. Organization

3. Data protection and presentation

4. Dissemination of Knowledge Information

The knowledge becomes electronically preserved entity in the digital form. The technology gives the library a modern outlook by automation of the documents available in the library, and thus becoming customer-friendly. The objective of knowledge management in libraries is to promote knowledge innovation. Knowledge innovation is the core of the knowledge economy society. As foundation for collection, processing, storage and distribution of knowledge and information, libraries represent an indispensable link in the scientific system chain, an important link in the knowledge innovation. Secondly, libraries take part in scientific research process directly. The library work is a component of knowledge innovation. Thirdly, libraries must pay attention to diffusion and conversion of knowledge. They act as bridges for turning the results of knowledge innovation into realistic productive forces.

The aim of knowledge management in libraries is to promote relationship in and between libraries; between library and the user; to strengthen knowledge internetworking and to quicken the knowledge flow. In the knowledge economy era, libraries are entrusted with an important job of carrying out researches on development and application of information resources, construction of virtual libraries, protection of intellectual property rights in the electronic era, etc., and paving the way for knowledge innovation. Information and Communication Technologies in a library, are applied to the following activities, viz. Library Automation, (acquisitions, cataloguing, circulation and OPAC) Digital Library, (CDs, DVDs, Microfilm, E-Books, E-Journals, Databases, etc.) Library Co-Operation and Resource Sharing, (Inter- Library loan) Networked digital information resource sharing, (web OPAC, SDI, CAS, Article alert service), Ready Reference Services, E-Reference Services. All documents preserved in the library in the book form are changing in to digital form by scanning the materials and converted into CD/DVD devise.

The Social impact and influence of digitization has increased rapidly in the fast moving world. The internet and on-line learning are currently in sharp public focus and define today's popular perceptions of educational technology, E-learning, E-book etc. It is a searchable version in the computer that enhances the knowledge management tasks in the digital era. The librarians today recognize their role more as a custodian of knowledge. Library expectations might not match realities of day to day work or existing values and norms. Specialized libraries are focusing on preserving the decades of information, photographs/ Image style / costumes/ seasons of information in the digital form for easy access by the users anywhere in the world. In academic libraries, the reports / dissertation projects/publications are digitized and they can be viewed online by using the web OPAC software, which is commonly used by students/researchers/scholars.

Principles of Knowledge Management

Thomas H Davenport has formulated ten principles of knowledge management as listed below:

1. Knowledge Management is expensive
2. Effective management of knowledge requires hybrid solutions of people and technology

3. Knowledge Management is highly political
4. Knowledge Management requires knowledge managers
5. Knowledge Management benefits more from maps than model, more from markets than from hierarchies
6. Sharing and using knowledge are often unnatural acts
7. Knowledge Management means improving knowledge process
8. Knowledge access is only the beginning
9. Knowledge Management never ends
10. Knowledge Management requires a knowledge contract

Objectives of Knowledge Management in Academic Libraries

The main objective of Knowledge management is to ensure that the right information is delivered to the right person just in time, in order to take the most appropriate decision. The objectives are as follows:

- To promote collection, processing, storage and distribution of knowledge
- To promote scientific research
- To promote relationship between library and users
- To protect the intellectual property right, in information technology era
- To create knowledge repositories and manage knowledge as an asset
- To organize the value of knowledge and improve effective research

Knowledge Management in Academic Libraries

Davenport explains that Knowledge Management as a process is about acquisition, creation, packaging and application of reuse of knowledge. In any organization, the libraries are the backbone of information dissemination and the different services offered by the libraries are mainly designed to fulfill the goals/missions of the organization. The main aim of library is to provide right information to the right user at the right time.

Librarians deserve a central role in the development of processes and policies that harness an organization's knowledge base. As keepers and disseminators of information within organization, librarians make substantial contributions to the successful implementation of knowledge management projects. Academic libraries are information centers established in support of the mission of their parent institutions to generate knowledge, and people equipped with knowledge in order to serve the society and advance the well-being of mankind. In the digital age, academic libraries face challenges from both within (academia) and without (the business sector). Implementation of knowledge management enhances the traditional functions of academic library. Academic departments, or even faculty and students, may purchase or build their own portals to meet their academic and/or research needs.

Academic libraries are under pressure from two sides: reduced budget and increased demand from faculty and students. The implementation of Knowledge Management in academic libraries is mainly driven by its mission rather than by the competition from Internet-based reference services or electronic books. As a learning organization, libraries should provide a strong leadership in knowledge management. Libraries should improve their knowledge management in all of the key areas of library services. To cope with the exponential growth in

human knowledge, libraries need to develop their resources, access and sharing strategies from printed to electronic and digital resources. Limited by funding, technology, staff and space, libraries must carefully analyze the needs of their users and seek to develop cooperative acquisition plans to meet the needs of users. Libraries should be developed and maintained an integrated online public access catalogue (OPAC) with both internal and external resources as well as printed and other formats of knowledge. Useful websites and knowledge sources should be regularly searched and selected from the internet and included in OPACs. In the current digital and networked knowledge age, the size of information sources on the web is growing exponentially. No one really knows exactly how many web pages are on the internet, because new web pages are added every second. Universities and research organizations are knowledge reservoirs.

Blair (2002) states that successful KM requires both the ability to access stored information and the knowledge among workers to “evaluate the validity and reliability of information obtained from unfamiliar sources”; this may be an opportunity for LIS professionals to implement their expertise in information literacy instruction. Other familiar territory for LIS professionals exists in the KM field as well; this includes a continuing need for expertise in information management and high levels of support for teams engaged in innovative pursuits (Cheng, 2001; Clair, 2001). Additionally, LIS professionals bring to KM a client-focused viewpoint, where technology is important but not dominant. Koenig (2002) points out that the truly remarkable part of the story is not that librarians were useful and critical staff for project success, but that the presenters chose not to mention it in the formal presentation. The LIS profession has a responsibility to market its skills to those who could make good use of them.

Knowledge management and digital libraries:

Digital revolution has transformed the intellectual function of traditional libraries. Digital libraries are providing the base for a set of distributed activities. It is also providing a one stop solution for speedy delivery in a reliable fashion. Libraries are being digitized and patrons demand is growing the concept of content management has been adapted to the library world. More libraries are providing virtual references via the web. The greatest challenge for the information manager today is to create an organization that can share knowledge. Quality library services are imperative in knowledge society as it inspires the knowledge workers to be innovative, viz. think globally and design locally. Today, information professionals have more opportunities to expand from their traditional role to organize the digital content, especially of getting and filtering available information which the Information professionals are expected to be elevated from managing the corporate information centre to managing corporate knowledge and become chief information officers (CIO) and with greater responsibilities. These aspirations arising out of a belief that information professionals are best suited for the CIO's job since they already have the basic skills and attitude for such a job. The expertise of information professionals in searching for and providing access to explicit knowledge in the form of documents, their skills in understanding clients needs, their knowledge of information sources and their skills in organizing information and developing databases have been core competencies used by organizations. Besides the developments in different types of libraries, documentation/information centers, bibliographical services, etc; library and information networks at local level such as DELNET and CALIBNET and at the national level such as ENVIS, NISSAT and INFLIBNET and others are being developed. Access through information networks such as NICNET, ERNET, SIRNET, INDONET and several others is being utilized in the LISS in the country for services such as CAS and SDI. INTERNET facilities are being used in many libraries and information systems for benefit of the users.

Communications technology is the most fundamental change in past many years influencing both teaching and knowledge management. Digital networks are transforming the way we work and are reshaping personal communication and entertainment. The transmission model that still dominates educational system has also changed, but only to a small extent Information Technology (IT)'s role in economic growth cannot be understated. It is important to realize that the digital economy is more than an economy generated on the Internet. IT has enabled the creation of a host of tools to create, manipulate, organize, transmit, store and act on information in digital form in new ways and through new organizational forms. Information resources and services, networking, digital libraries and institutional repository are the rules of the game in knowledge management today. The web OPAC facility gives the user an access to information through the digital world. It saves time, energy, cost and is easily accessible from any place. Consequently several Academic Institution

Libraries are focusing on digitization to save the readers' time as per Dr. S.R. Ranganathan's Fourth Law. "Save the time of the reader"

The implementation of Information and Communication Technology, in the routines of the library activities facilitates users to manage knowledge. Modern librarians ensure that the right information is delivered to the right person in the right time in order to take the most appropriate decision. This also complies with Dr.S.R. Ranganathan's Fourth Law of library science, stated above. The Knowledge Management system is developing rapidly in the present era in the form of collection of data or knowledge information. The digitization process helps the knowledge information to be shared with other people through Internet/ intranet.

E-learning

Online learning currently captures current / popular perception of educational technology. E-learning is a complex system composed of institutional, individual, technical, social components and change in any one of these will affect the complete system. It is an open system powered by Internet. The essential feature of e-learning extends beyond its access to information and builds on its communication and interactive features.

E-learning includes a range of electronically networked information and communication technology by means of which learning can take place. Majority of electronic information is now transferred to digital form. Generally digital coding makes for less interference and thus better quality of the communication. It is time now that the educational dinosaur utilizes the technologies of e-learning and move away from the transmission modality to interactive information and communication technology based knowledge transfer. E-learning is a very important issue in the higher education today. A seminar organized by the British Council on 'use of (IT) Information Technology in classrooms' opened the eyes of teaching fraternity to many simple devices / tools that can enhance pedagogy such as Concordance, blogs, Wikis and communities. E-learning as a term is a hybrid, like many compounds, the two elements have worked together to create a new hybrid,. i.e. E-learning.

E-learning is capable of creating a community of inquiry that is independent of time and space and with the combination of interactive and reflective characteristics it can stimulate and facilitate a level of higher order. Institutions must be prepared to focus greater attention and strategic integrations of e-learning, how it meets the challenges and demands of the knowledge era. World Wide Web (WWW) has the potential of delivering learning to a variety of people. Most of the learning programs delivered via internet using web browser use features such as video conferencing, interactive class rooms, and discussion forums on net and live lectures. The systematic storage, retrieval and re-use of information has always been a defining feature of formal education. The impact of the net on media used in distance education is illustrated in various technologies used for distance education.

Academic Institution/ Universities/ colleges are now focusing on e-learning activities to meet the demand of the student community. The success of online higher education depends on a strong faculty commitment to teaching in this new environment. Such commitments open a number of organizational issues and challenges that become prominent with the introduction of e-learning into higher education. E-learning depends upon instructors' ability to impart content to their students. Since, scientific communication is not restricted by national boundaries, faculty members' right to use the creative works of others is essential to their teaching and their students learning. Digital learning is now not only easy to do but easy to disseminate. The most significant consequence of the digital era with the increasing availability of digital editing software has been to open the possibility of making moving – image texts in the classroom. The general distribution of video-editing software appears to have offered the possibility of a shift from consumption to production. E-learning is not a computer system. We cannot buy it off and shelf and plug it in. E-learning system means having people talking, writing, teaching and learning with each other online via a software tool, such implementation is only the surface of the e-learning environment.

CONCLUSION

Knowledge Management helps library and information professionals in improving the services being rendered to their users. Information professionals have to recast their roles as knowledge professional. The librarian's

roles should not be limited to being the custodians of information but they have to acquire skills to keep themselves updated so as to cope intelligently and objectively with the effective and efficient knowledge management in Academic libraries. Information technology and systems can provide effective support in implementing knowledge management. Librarians should train themselves and their staff to develop the appropriate knowledge management systems and use information technologies to equipped libraries to provide better, faster and pinpointed services to its clients/ users. Digital Libraries are also the best defenders of access to information. More than ever, access to knowledge determines the quality. Workers, students, researchers, parents and teachers alike can, through libraries, grow and develop their own vision of a just society, express themselves, and act as per the current digital scenario. The impact of information technology encourages users to search information to retrieve the required information. It also helps the knowledge economy by promoting more of knowledge management, more of Open Source Software, more of knowledge sharing and R&D of knowledge management. However, the digital library can enhance traditional libraries but can not replace them. If we were to replace the entire library into digital form, all stored in a reader, the end result of delivering the content may be the same or even better, but the feel would be missing.

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