DIGITAL INFORMATION MANAGEMENT AND RETRIEVAL SYSTEM

J C Sharma

Abstract

Digital forms of Libraries are being faced with new challenges with new development in Information Technology and the widespread availability of information. These challenges include the collection development, processing and dissemination of information in Digital Information resources. It is an Information Resource, which contains information in the form of binary digits, and, therefore, a digital resource can be created at the hard disk of a computer or can be stored on a CD or remote computer, which can be accessed on the internet easily.

Keywords: Digital Library, Information Management, Knowledge Management, Information Retrieval

1. What is Digitization?

Digitization means acquiring, converting, storing and retrieving in standardization and organized manner, with help of modern technical gadgets. Libraries collect and preserve materials in order to serve their information seekers, the most obvious benefit of digitization is to preserve and provide the aggregation of various resources, in digital form, using digital technology, and resources are preserved for future generation and simultaneously made accessible for current use. Most of the rare materials housed in various libraries of the world are not in good shape and required special preservation techniques. Therefore, library professionals are looking forward digitizing the documents as a possible solution. By digitizing the library collections, the libraries are not only doing the job of preservation and conservation, but also providing the users easy and remote access to knowledge sources with the help of powerful retrieval tools in the present era.

2. Digital Information

Information especially Digital Information is considered as a valuable organizational resource. Just as people, machines and capital are considered to be corporate resources; information is the fourth resource. Therefore, like other resources information should also receive special attention of management. Information is considered as a message, saved in the documents and into a computer. It has sender and receiver. Knowledge is described as information when used with a purpose and intention.
3. Digital Library

In simple terms “Electronic Library” is called Digital Library. Digital Information denotes a library in which all holdings are in machine readable form. It is a storehouse of digitized information. Digital Library may be defined as a new way of carrying out the functions of libraries encompassing new types of information resources, new methods of storage and preservation, a new approaches to classification and cataloguing and intensive use of electronic system.

4. Why Digital Information Management?

In private and corporate sectors, it was understood as providing management with information for planning and decision-making. Since information management is concerned with effectiveness, it should also include retention of material and elimination of redundant information. Hence Information Management is primarily concerned with acquisition and effective storage and retrieval process and decisions regarding what to retain, what information to discard etc.

Next, the ever-expanding volume of information has to be controlled by defining users needs. The storage devices include varieties of physical formats and electronic and digital documents. Thus Information Management is essential and involves integration of specialists, tools, systems, technologies, processing and dissemination/delivery of information which would be used to achieve organizational goals. With advancement of computer technology, the information scientists gave attention to holistic approach to Digital Information Management by bringing in both computing and communicating in this gigantic world.

5. Knowledge Management and Information Management

Knowledge management is the process of transforming information and intellectual assets into enduring value. It connects people with the knowledge that they need to take action. In corporate sector managing knowledge is considered as a key to achieve break through a competitive advantage. what is the difference between information management and knowledge management ? Both concepts refer to managing (handling, directing, governing, controlling, coordinating, planning, organizing) processes and the products of these processes. In addition, since knowledge in form of information, it follows that knowledge management is a most robust form of information management that provides management of activities not generally available in Information Management.

6. Digital Information Retrieval / Delivery System

In almost all libraries digital resources are acquired/created for the users. The development of an Information Retrieval/Delivery System or search software is one of the important components of
Digital Information Resource. The Information Retrieval System should be capable to search and to allow a mapping between the users’ specific need and the items in the database that will answer that need.

Digital Information Retrieval System is a system that is capable of storage, retrieval and maintenance of information. Information in this context can be composed of text, images, audio, video and other multimedia objects. The system consists of a software programme that facilitates a user in finding the information the user needs. The system may use standard computer hardware to support the search sub-function and to convert non-textual sources to a searchable media. The gauge of the success of an Information System is how it can minimize the overhead for a user to find the needed information.

7. Indian Scenario

In India there is lot of scope for Librarians to become Digital Information Manager by talking advantage offered by the technology for publishing and distributing information. Today the community of readers / users at large wants web-based information resources due to the location, time, accuracy and speed advantage. Gradually the users / readers are turning away from Conventional Library Systems to Digital Library System. The need of users today and tomorrow is to provide digital information on their desktop.

8. References


ABOUT AUTHOR

Mr. J C Sharma is working as Assistant Librarian in National Institute of Technology, Kurukshetra.