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User awareness: About databases & online resources

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Abstract
The basic purpºse of library is to disseminate knowledge mainly through availability of right documents to the right person at the right time. IT has radically altered the nature of the services being delivered in contemporary libraries. Education and awareness are the key to the success of IT based resources. Librarians must recognize the expanding nature of the challenges and utilize IT technologies for better services.

Keywords: Information Communication Technology, Library Rules, Database, e-resources

1. Introduction

The basic purpose of library is to disseminate knowledge mainly through availability of right documents to the right person at the right time. Another very important role that school libraries to play lies in the realm of creativity. Children should take for reading just for the pleasure it holds. Once they are booked to books, they will never in their life feel lonely because they will always have the great minds and hearts of authors, biographer, novelists, simple story tellers, dramatists and poets as their companions. They will through the books they read, visit far off lands meet the people of the world and develop insights into different culture and mores. Reading elevates the spirit and empowers the mind. And libraries are the ideal places from which such an exciting journey can begin.

The term "Library Automation" is being used extensively in library parlour to mean the application of computer to perform some of the traditional library activities such as acquisition, cataloging, circulation, stock verification etc. Information Retrieval, automatic indexing and abstracting and networking are included in its preview. Besides computer, telecommunication technology and reprography technology are also playing a significant role in library automation making libraries and librarians to reduce their objectives and roles respectively.

2. Ranganathan's Five Laws & Digital Era

The five laws of library science laid by the theoretical foundation for the management of library and information centre around the globe. In fact these laws acted as the guiding principles for the scientists and engineers who were and the flag bearers for the technological developments. It is emphasized here that all the technological development which are now being implemented in the libraries might have been developed keeping in mind the future libraries. Hence the question of relevance of five laws in today's digital world in itself is questionable. Following flow chart has been attempted to justify the five laws in modern context.

- Law 1) Books are for use: Online resources are available when and where needed.
- Law 2) Every reader his book : Effective use of E resource prove that whenever the relevant material is available in the network can be accessed,
- Law 3) every book is a reader: WWW, Networking, Sharing & Library Consortia.
- Law 4) save the time of the reader: Multidimensional key word searching options.
- Law 5) A library is a growing organism: No boundary or barrier of time/anytime anywhere access.

3. ICT: Information Communication Technologies.

The Libraries are facing a paradigm shift. These are changing from traditional libraries to digital libraries. The ICT, globalization and changing user needs are the significant factors responsible for the changes. ICT is being used for automation of in house functions, reference services and preservation of the information sources.

Revolution in ICT in the past decade had drastic and far reaching impact on all aspects of human life. The internet has added a new dimension to information technology giving birth to such rich concepts as digital libraries knowledge management etc. Digitization and digital libraries are more common with new changing environment in libraries.

Further, because the printed material continues to deteriorate rapidly, digitization of these materials would help to preserve originals and reformatted copies to use. So reformatting of damaged or endangered books or documents is an efficient and economically viable option. Digitization will help increase accessibility to records and facilitate in information sharing by keeping it on secure place with few duplicate copies.

Now it is time and opportunity for the library profession in this age to siege leadership roles and help shape their future. Library professionals will have to act as facilitators, advisors, consultant instructors and navigators, met data manager, searcher, researcher, evaluator, organizer, preserver, promoter, communicator, technical expert as well as a manager, entrepreneur, advocate and visionary leader. But sometimes it may be necessary to follow while someone else steps up for a while and cuts down forest in front of us, clearing a new path.

The success of the mission or project requires the librarian to be both leader and follower, constantly providing guidelines from either role "(Griffiths, I.M 1999, Page 17)". They should lead and follow the information revolution.

Library professionals need to continue to develop their traditional role as a teacher especially in assisting others to learn the skills needed to find and evaluate appropriate information sources. In contrast to the historical role of a

librarian sitting in a building and waiting for readers to come to the library to seek assistance to locate the material, the teacher librarian actively finds users in variety of settings to provide instructions about information resources and to assist them in acquiring skills in locating, evaluating and using a variety of methods of information location and presenting such interactive, networks, multimedia complier instructions.

The teacher librarian embodies an outreach mind set. one in which librarians define a range of information needs of their varied users community (Faculty, researchers & other library readers) and design and present instructions in a variety of formats (Lecture, self bases teaching, group and individual learning) and at different venues in library, classroom, dormitory, over internet and computer assisted tutorials to meet the needs "(Ashraf Tariq, 2003, page 11)".

The concept of library instructions or user education will range from general instructions or orientation on information resources to instruct in the complexities of using and even sometimes developing sophisticated electronic database to assisting faculty in incorporating multimedia resources in their courses. The librarian should develop the capacity to evaluate the precise requirement of the users in the form of information seeking behavior, besides having knowledge of how to access the world resources available online. For users they are the mentors by mediating access, engendering competence festering independence through information literacy skill programmers.

Resource managers, digital bridge creators and produces, expert advisors, role in upliftment of rural community, advisory, resource producers, guide and educators, technical experts, guides to gateway of knowledge.

To meet this challenge of giving them Information Communication Technologies

As a result of application of computer, ICT and reprographic devices, great change is taking place in library and information resource centers. The new technology is tending to alter radically our libraries and information resource centers.

As a result our library system will undergo a major transformation in the area of information processing, storage and retrieval. Application amid the use of computer is an established norm in bibliographical information handling in advanced countries, but in India the pace of development in libraries is visibly slow. Never the less the things are changing for good and more libraries are turning to computerization. The areas which needs immediate computerization data base are

- Creating Social Database.
- One time access to Remote Database.
- Downloading of Information.
- Library Operations: Cataloging, Indexing, Circulation, Acquisition, Inventories, Serial Control.
- Data communication & Networking, E Mail, Message System, etc.
- Management I System, Computing, Statistical Manipulation, Tabulation etc.
- Other Applications, E Publishing Document Delivery, Translation.
- Library Software (UNESCO – Bibliographic Package) (CDS – ISIS is Very Popular).

Software works on simple PC/XT and is also available on UNIX & NOVELL platform. The Window version has also been released.

It is a web based library automation and information retrieval system, uses single integrated data base making for non-redundant data storage, efficient data transaction process and searching. The functional modules included are:-

- Acquisition
- Cataloguing
- Circulation
- Serials Control
- OPAC
- E-Mail and instant messaging integrated in different modules of S/W to ensure efficient communication between library and users, venders.

4. Resource Managers

The Librarians need to broaden their length and breadth of cataloguing to include electronic resources both generated and stored on local networks along with the Internet (Ashraf Tariq, 2003, Page 12). Another area where the librarian can help is in the organization of networked information resources. Librarians need to take initiative for creating better organizations and access to what is available on the internet through creating and managing metadata and URLs. A virtual library is virtually useless if the users have no infrastructure from which to search and identify the material they want or to establish the authenticity of material which is found. Not only will librarians need to be able to provide intellectual and physical access to networked resources but they would also need to contribute to the process of establishing the authenticity for these resources.

5. Continuous Professional Development (CDS)

The evolution of technology is taking place very rapidly and the new kind of information techniques and tools are frequently coming in the market. So an information professional must be a continuous learner to keep up with these technological changes. Formal education along will not be sufficient in the time to come It must be updated with short term continuing professional education courses. Learning and relearning is the modern trend, "professional reading is also a strong pillar of professional development. Hence it must become a habit of all the library and information professionals." (Jagtar Singh, 2008).

6. Emerging Database Technologies

The efficient management of data or information is the most important objective of any organization of service agency like a library. The success of the library in today's time of information bombardment now depends more upon the ability to acquire accurate, reliable information sources within time with help of technology. The specifically designed databases are of a great help to attain such a success.

Database system is a tool that simplifies the management of data and information and helps to extract the useful piece of information by acting as a repository of information within the organization's information system.

Database Management System (DBMS) is a collection of interrelated data and set of programs to access those data. The collection of data are usually referred to as database, e.g. in a

library traditional catalogue or online public access catalogue (OPAC) or web OPAC are all databases encompassing the information about the information sources in the particular library or all those libraries which are working together in a network. The primary aim of any DBMS is to provide a way to store and retrieve database information that is both convenient and efficient.

Data and information are closely related in the sense that information is processed, organized or summarized data. The collection of related data when put together communicate useful and meaningful representation to the user becomes information.

6.1 Database

Collection of data or information organized for rapid search and retrieval, especially by a computer. Databases are structured to facilitate storage, retrieval, modification, and deletion of data in conjunction with various data-processing operations. A database consists of a file or set of files that can be broken down into records, each of which consists of one or more fields. Fields are the basic units of data storage. Users retrieve database information primarily through queries. Using keywords and sorting commands, users can rapidly search, rearrange, group and select the field in many records to retrieve or create reports on particular aggregates of data according to the rules of the database management system being used.

6.2 Data processing

Manipulation of data by a computer, it includes the conversion of raw data to machine readable form, flow of data through the CPU and memory to output devices, and formatting or transformation of output. Any use of computers to perform defined operations on data can be included under data processing. In the commercial world, data processing refers to the processing of data required to run organization and business.

6.3 Data compression

Process of reducing the amount of data needed for storage of transmission of a given piece of information (text, graphics, video, sound, etc.) typically by use of encoding techniques. Data compression is characterized as either lossy or lossless depending on whether some data is discarded or not, respectively. Lossless compression scans the data for repetitive sequences or regions and replaces them with a single "token". For example, every occurrence of the word the or region with the colour red might be converted to $ ZIP and GIF are the most common lossless formats for text and graphics, respectively. Lossy compression is frequently used for photographs, video, and sound files where the loss of some detail is generally unnoticeable JPEG and MPEG are the most common lossy formats.

6.4 Data encryption

Process of disguising information as "cipher text or data that will be unintelligible to an unauthorized person. Decryption is the process of converting cipher text back into its original format, sometimes called plain text. Computers encrypt data by applying an algorithm to a block of data. A personal key known only to the message's transmitter and intended receiver is used to control the encryption. Well-designed keys are almost impregnable. A key 16 characters long selected at random from 256 ASCII characters could take for longer than the 15-billion-year age of the universe to decode, assuming the perpetrator attempted 100 million different key combinations per second. Symmetric encryption requires the same key for both encryption and decryption. Asymmetric encryption, or public-key cryptography, requires a pair of keys, one for encryption and one for decryption.

6.5 Database software by Vengie Beal

Database software is the phrase used to describe any software that is designed for creating database and managing the information shared in them. Sometimes referred to as database management system (DBMS). Database software is used for a number of reasons in an industry or organizations for keeping your book-keeping. On task, compiling, clients list to running your on-line websites. Because they have so many uses, there are dozens of database software programmes available.

6.6 Database Categories

- Microsoft Access
- Structured Query Language (SQL)
- Microsoft SQL Service
- Oracle Database

6.7 Top Five Desktop Databases

- Microsoft Access 2007
- File maker pro
- Alpha Five
- Paradox
- Lotus Approach

Everything about Technology

Mobile computer	Software	Online	Gaming
I. Pad	Animation	Internet Basis	Xbox Tames
I phone / I. Pad	Antivirus	Google	Play station
PC support	Collaboration	Twitter	W4 Games
Macs	Content Management	Security	Chats
PC Review	Database	Blogging	Nintendo DS

7. Conclusion

It is very necessary to provide new services and improve the existing ones to suit the requirements of the users. A continuous interaction with users for feedback and maintain the standard of service. With the inception of IT based resources, both librarians and users overwhelmed with their potential and these have attracted extensive academic interest. Libraries being service organizations need such information resources and services that gratify user's need instantaneously use of IT by the libraries in designing and delivering the information products and services have made a good impact on users by playing a vital role in providing appropriate information in less time with ease of access. IT has radically altered the nature of the services being delivered in contemporary libraries. However, use education and awareness are the key to the success of IT based resources. Librarians must recognize the expanding nature of the challenges and utilize IT technologies for better tomorrows.

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