

Information Resources in Digital Era

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ABSTRACT

The digital information environment changed the way information is created, collected, consolidated and communicated. With the advancement in technology the time to retrieve information has reduced drastically. Library services become automated and information services become electronic. Users expect to receive information quickly and without having to visit the library. Thus, to meet the changing information needs of users, libraries should have proper communication strategy to provide qualitative library services to the user.

Paper highlights various information sources and services preferred by users and focuses upon various Information Searching Tools such as web applications, mobile applications, online databases, Social networking, Subject Dictionaries, Networking of libraries, web OPAC, Encyclopaedias, RSS, wiki, blogs, video conference and information, visualization, e-books, e-journals etc. to provide better and qualitative services to the users. Paper emphasise on the role communication technologies to satisfy the needs and expectations of the users.

1. Introduction

Information Centres and Libraries are playing a vital role by providing the information required by the users for their research and developmental activities. The libraries offer various types of information resources to the user and spread the knowledge. The traditional mode of information services was based on the print media, bibliographic listing, book borrowing, reading room whereas with the application of Information Technology the trends in the library and information centres are also shifting towards modernization, the present mode lays emphasis on digital information resources, web and Internet resources for providing the services. Libraries have been significantly transformed with the advent of Internet and the ability to provide resources to people who may never visit a physical building, but use resources intensively in their own homes or work places. The resources, methods and practices used for gathering information are changing rapidly and the value added services are emerging as key elements in the new library environment.

2. Information Resources

People want faster approach to information in the context of increasing demand on their time by home, workplace, and social network. Academic libraries are changing dramatically by adopting new means of technology in all activities of print to e-environment like online accessibility for 24/7, availability of numerous e-databases, e-journals and wide range of information resources and services for users. The information users are availing these facilities to full fill their information needs. Technologies that provide better qualitative services to their users are discussed below:

- **Networking of Libraries:** A library network is broadly described as a group of libraries coming together with some agreement of understanding to help each other with a view to satisfying the information needs of their users.

Networking of libraries improves the efficiency of housekeeping operations and promotes adoption of standards in library operations. It supports coordination of a library with other regional, national & international network for exchange of information and documents. It also helps to generate new services and to improve the efficiency of existing ones.

- **Web OPAC:** Search and retrieval of library materials has become easy due to OPAC. An online public access catalog is an online database of materials held by a library or group of libraries. Users search a library catalog principally to locate books and other material available at a library. Library catalogs began providing improved search mechanisms, including keyword searching, as well as ancillary functions, such as the ability to place holds on items that had been checked-out. Basic features of Web OPAC includes:
 - *Search facility:* By specifying Author, Title, subject, year of publication or any other field.
 - *Status of the book:* Whether the book is on shelf or issued.
 - Number of copies available in library.
 - Due date for the borrowed books.

The newest generation of library catalog systems is distinguished from earlier OPACs by their use of more sophisticated search technologies, features aimed at greater user interaction and participation with the system, including tagging and reviews.

- **Social Networking:** Online social networking sites allow users – through personal computers or mobile phones – to share ideas, activities, events, and interests within their individual social networks and all typically for free. Various Sites are devoted to information sharing such as Twitter,

Redditt, Digg etc. Companies and business organizations are making their profiles on these sites to promote their products and services. Social Media use among consumers has exploded in recent years and shows no sign of stopping. There are over 1.23 billion users on Facebook, 465 million on WhatsApp, Twitter is estimated to be beyond 200 million users, and more video content is uploaded to YouTube in a 60-day period than what three major U.S. television networks created in 60 years. Areas such as eLearning, remote diagnostics, and mServices are growing steadily. These social networking sites have become a powerful tool to reach a wide population. It provides a common platform to individuals and organizations to interact communicate and share their views and thoughts on a particular service or products. Libraries are not lagging behind in this concern. Many libraries have created their profile on these sites to communicate with their patrons where users can give their views and suggestions regarding particular service being offered.

- **Web Applications:** Today libraries are adopting web 2.0 technologies which provide an online collaboration, participation, sharing of information and communication services. Application of Web 2.0 and 3.0 in academic libraries has gained importance. Web 2.0, also known as Library 2.0, is user centred web, where blogs, wikis, social networks, multimedia applications, dynamic programming scripts are being used for collection, contribution and collaboration on the web. The underlying principle is 'share the resources collectively'. Application of Web 2.0 in libraries has taken the libraries into a new generation. Web 3.0 is knocking at the doors! Web 3.0, also known as semantic web, is smarter and can understand what a user wants.
- **Mobile Applications:** The mobile phone has placed more computing power in the hands of more people than even telecommunications experts in the 1980s thought would be possible. Mobile learning implies participating in learning activities anywhere, at anytime. Mobile technology has for instance has facilitated download of course materials on to the mobile. Interactive mobile websites and OPACs can be accessed any time, any where by the user. The mobile Website is the next step for libraries in providing universal access to resources and information. The mobile Web, is the World Wide Web which as accessed through a mobile device ranging from a cellular phone to an iPod Touch. Users who have handsets and mobile phones which have Web capabilities can search and browse the Internet from anywhere they can get a cellular signal.
- **Online Databases:** An online database is a database accessible from a network, including from the Internet. User do not have to download and install programs on his computer, he need only a browser and an internet connection. Online database differ from typical traditional local databases, held in an individual computer such as Oracle, Microsoft SQL Server, Sybase, etc. in following way:
 - These online databases are delivered primarily via a web browser.
 - They support Multi-user admin console where multiple staff can work on the database at the same time, each with their own set of privileges
 - They are often purchased by a monthly subscription
 - They embed common collaboration features such as sharing, email notifications, etc.
- **Subject Dictionaries:** Many Online Specialized dictionaries arranged by subject or genre are easily accessible today. Examples are Computer Dictionary Online, Law Dictionary, Medical dictionary, the Dictionary of Literary Biography, The Grove Dictionary of Art Online etc. Sub-field dictionaries are also available today, these are specialized dictionaries that have been designed and compiled to cover the terms of one or possibly more sub-fields of a particular subject field. A sub-field dictionary covers only a limited part of one single subject field. Examples of sub-field dictionaries are a dictionary of contract law (as opposed to the single-field dictionary of law) and a dictionary of fusion welding (as opposed to a dictionary of welding), or a dictionary of ethical philosophy (as opposed to a dictionary of philosophy). The advantage of sub-field dictionaries is that they can easily be maximizing dictionaries, i.e. deep rather than broad, attempting to cover as many terms of the sub-field as possible. Consequently, sub-field dictionaries are ideal for extensive coverage of the linguistic and extra-linguistic aspects within a particular subject field.
- **Encyclopaedias:** An encyclopaedia is a type of reference work – a compendium holding a summary of information from either all branches of knowledge or a particular branch of knowledge. Encyclopaedias are divided into articles or entries, which are usually accessed alphabetically by article name. Unlike dictionary entries, which focus on linguistic information about words, encyclopaedia articles focus on factual information to cover the thing or concept for which the article name stands. Entries of an Encyclopaedia are longer and more detailed than those in most dictionaries.
- **RSS:** Most people are interested in many websites whose content changes on an unpredictable schedule. Examples of such websites are news sites, community and religious organization information pages, product information pages, medical websites, and weblogs etc., repeatedly checking each website to see if there is any new content can be very tedious. RSS (Really Simple Syndication) is a convenient way to keep up with new content on website. It informs updates to users about blogs or websites, which are interested by them. Hundreds of thousands of websites now provide this feature RSS feed, including major news organizations like the New York Times, the BBC, as well as many weblogs. With the use of RSS feed the libraries can make announcement of the availability of new books and other resources in a given subject area. Librarians can subscribe to RSS from the sources for compiling their customized alerts.

- **Video Conference and Information:** The use of video and other social media in information dissemination has increased. A video conference involves audio and video technologies at two or more points to present geographically separated parties to each other both visually and auditory through a set of interactive telecommunications technologies. Most commonly video conference have been held at dedicated centers such as Teaching, Learning & Technology Center, videoconferencing center in the Anteater Instructional and Research building. Today individuals can video conference in pairs using their personal computer and applications such as Google Talk or Skype 2.0 (limited to two people per conversation) and some additional hardware such as a webcam.
- **Blogs:** A blog is a discussion or informational site published on the World Wide Web. It is a powerful two-way based tool. A blog is a website where users can enter their thoughts, ideas, suggestions, and comments. Blog entries known as blog posts are made in journal style and are usually displayed in reverse chronological order; entries listed in specific categories that can be searched; links to other sites of interest and places for comments; and a monthly archive of previous entries. A blog entry might contain text, images or links to other blogs and web pages. Any library user can publish a blog post easily and cheaply through a web interface, and any reader can place a comment on a blog post. Blogs can also be used for the collection development where the users request the resources.
- **Visualization:** Visualization is a technique for creating images, diagrams, or animations to communicate a message. Visualization through visual imagery has been an effective way to communicate both abstract and concrete ideas since the dawn of man. Visualization today

has ever-expanding applications in science, education, engineering, interactive multimedia, medicine, etc.

- **E-Publications:** Electronic-publishing includes creation, distribution and shearing of digital content through a variety of electronic media. It takes the format of works published online, on a compact disk, emailed, or provided in a file format compatible with handheld electronic readers. Digital Publishing takes advantage of networking tools and multimedia capability. Examples of E-Publishing include the digital publication of e-books, e-journals, e-dictionaries and electronic article etc.

The Information Communication technologies are playing an exemplary role in the life of human being in day to day activities. The information users are using these electronic resources to full fill their information needs.

3. Conclusion

The fast-paced technological developments have changed the way the users' access and retrieve information. Information is an important resource, valuable input and power for societal development. It is power as it is the basis of all planning, indeed of all activities. Academic libraries are greatly challenged in satisfying their customer needs since their target market (lecturers, researchers, undergraduate students and postgraduate students) is highly demanding and dynamic in nature. Accuracy of information, precision, appropriateness, completeness and relevance of the information are basic factors to measure the satisfaction level of users. The internet and the World Wide Web (WWW) have made it possible for users to locate what they need without getting into the library. The advancement of information resources has changed the librarian's role as a guide to information rather than the traditional role of an information keeper.

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