Emerging Technological Innovations in Library Management and Services

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Abstract

In the modern era, information seeking behavior is increasing day and day. The ancient or traditional library management and services are not enough to satisfy the knowledge sector of the user. So the emerging of new technological innovations are necessary to provide the right information to the right users in the right time. This paper deals with the recent emerging innovations in the information technology and how they are useful to provide the effective services of the library.

Keywords: Information Seeking Behavior; Technology; Network Services; Innovative Methods.

Introduction

In the emerging knowledge society, the libraries have to face many challenges to satisfy the user needs for the past few decades. New technologies are used to improve the library services and management and for the preservation of library materials for a long time because library has all the living records of all human civilization. These records are the treasure to the future generations. In the changing scenario, information and communication technology (ICT) has been the most instrumental factor for the effective library services.

Innovation

The concept of innovation is to make or identify a meaningful interpretation or an idea to solve the problem. Another way it is a significant task of Problem solving Technique. Online dictionary of library and Information science describes the best innovative practices as follows, "In the application of theory to real-life situations procedures that, when properly, applied constantly yield superior results and are therefore used as reference points in valuation of the effective of alternative methods of

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Reprint's Request: V. R. Rajan, 27, Paradise Apartments, Post office Complex, Venkata Nager Puducherry -605011. E-mail: rajan_arthi@yahoo.com accomplishing the same task." According to Peter Drucker, the father of modern management science always refers that the innovation is the specific instrument of entrepreneurship that endows resources with a new capacity to create wealth.

Need of Innovative Service

Information seeking is thus a natural and necessary mechanism of human existence (Marchionini, 1995). Information seeking involves personal reasons for seeking information, the kids of information which are being sought and the ways and sources with which needed information is being sought. Change in this seeking behavior leads to the emerging innovation technologies in library management and services. Changing needs of users have changed the role of a librarian which has transformed a librarian into information professionals. Information professionals should work between the knowledge source and its seekers. Common obstacles in the information seeking process identified by respondents include lake of time, doubt about the existence of relevant information retrieval of too much of information and different with navigation and searching.

Emerging Innovations

There are so many innovative technologies emerging in library management and services in this latest trend. The libraries utilize the technologies According to their infrastructure, type of library, need of the library, the place where it is located and amount of fund allotted by the government to the library etc.

Some of the specific technological innovations are:

- 1. Staff Management,
- 2. Training Programmes,
- 3. Resource sharing and networking,
- 4. Library Automation,
- 5. Open Source Software,
- 6. Internet Search Engines Semantic Web,
- 7. World Wide Web,
- 8. E-Learning,
- 9. Word 2.0,
- 10. Digitalization.

Staff Management

For the effective and innovative library services the librarian and Library staff members should possess a high skill and have an updated knowledge of technical advancement in library science. They should understand the requirements of the users and satisfy their expectations. The librarian has also the responsibility to resolve the problems faced by the staff members due to their technical in expertise and ensure that they are user friendly. They should provide portable qualifications against nationally recognized competency standards. In a competency based assessment system. It is recognized that learning can come from a variety of sources, both on the job and off the job, formal and informal. System management specifies the way in which the systems in the library are interconnected each other and also to the outside world.

Training Programs

The goal of this Program is to motivate Professional staff and learners to enhance their skills and to update their knowledge. especially for the learners to increase their knowledge seeking behavior, to know the no of volumes in a particular library, working hours and type of a library and what are the services rendered to the users of the library. This is very useful to create a user friendly atmosphere for the learners and help to get the right information in a right time.

Resource Sharing and Networking

Resource sharing is nothing but sharing of library resources in terms of documents, manpower, services and equipments by certain participating libraries among themselves on the basis of the principle of cooperation.

Networking means putting together the sub sets of information centers or libraries in order to work in a co-operation manner.

The objectives of resource sharing are to create an environment in which libraries can offer better services and more materials in the same cost:

- To improve the utilization of resources between the users,
- Minimize the cost,
- Maximize the accessibility of resources,
- Extend the availability of resources.

Libray Automation

According to Webster's dictionary "automation is the technique of making an apparatus, a process or a system operate automatically". In other words, it is the machinery that mathematically manipulates information storing, select, presents and records input data or internally generated data. Automation is used for automatic technical process. The Automation is necessary in library because:

- Information explosion,
- Increase in the collection of libraries,
- Inability of users to explore the unlimited literature and information of their interest,
- Advances in the computer and communication technology,
- Wastage of user/staff time in locating the information,
- Provide wide access to resources within the libraries and elsewhere Planning for library Automation.

Open Source Software

OSS is computer software for which the source code has been made available for the users. Users are then able to read it or change as they wish. The open source software is one which would satisfy the following criteria.

- The source code may be adapted to individual required code be modified and passed to others.
- The software source code must be available at an accessible location
- Anyone may use open source software as their desire.
- No of OSS software have different versions used depends upon the type of library.

S. no	Oss Software	Version
1.	Avanthi	1.0
2.	Emilda	1.2.1
3.	Koha	2.2.0
4.	Gnutcea	1.5
5.	Learning Access ILS	_
6.	Obiblio	0.5.1
7.	Open bible	2.0.3
8.	Phpmy Bibli	2.0.3
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Most projects have started as the classical OSS single developers. OSS makes the library management and services very effective.

The Semantic Web – Internet Search Engine

The semantic is the study of linguistic meaning. The term "Semantic Web" was coined by Tim Berners-Lee, the inventor of the World Wide Web and the Director of the consortium. He defines the Semantic Web as "Web of data that can be processed directly and indirectly by machines". It is actual concerned with the arrangements of their sentences and other linguistic objects express, not with the arrangements of their syntactic parts. The Semantic Web is Open Access information and it has the web resource policy. They are

- To provide the relevant context with minimum time consuming to search out irrelevant or outdated data sources.
- To help the users to get required information in correct linguistic meaning.

The Semantic Web throws light on the internet environment offered by the Web based learning system.

World Wide Web

Web is popularly known as the term of World Wide Web or Internet or Online. The internet and its "publishing Arm" the www are important components in the communication process. The Web is a client or server system used to asses all kind of information to anyone on the net. The information can be in the form of regular text, hypertext, Pictures, Sounds, Usenet newsgroups and other type of data. Web services provide a distributed information system and information sharing for any number of users at any time. It provides:

- A distributed information system.
- Receipts and delivery of electronic publication and access to data stored on remote computers.
- Online real time interaction with other network users

Equal opportunity for access to all type of users.

E-learning

E-learning is a continuous process when the learner is unable to attend the traditional methods of learning which was introduced in our educational patterns. The students need to learn the syllabus with nearby libraries or materials sent by the course organizer. Modern media such as radio and television were also used in the distance mode of learning process. These medias benefit a lot the learner, but they have their own limitations. The distance mode of learning process is further strengthened by video conference mode. The nodal centre will have studio where the experts assemble and deliver the lecture. This technique will create the environment of the classroom and enables direct interaction between the teacher and learner.

E- Documents -There are some information sources, which are counted in the category of Non-Documentary sources, the data are transferred in the form of CD's, DVD's, Microfilm, Audio Visual Materials. They are called Electronic Documents or E- Documents.

The Books available in Electronic form are called E-Books.

The journals available in Electronic form are called E- Journals.

It is very useful to the users because it can be read in any time and anywhere by having this material using computer and it can be preserved for a long time.

Web 2.0 Technology

The Web2.0 is becoming an important and central topic in our information world, and more and more libraries worldwide are using its different applications. Libraries and librarians all over the world are using web2.0 technologies to promote services, share information, engage with users and network with colleagues on a global scale. Some libraries use blogs which serve as excellent sources of information- a place where librarians can express their opinion.

Digitalization

Data available in the form of digits is library is called a digital library. Converting the data to this form is called digitalization and it is stored for long term. Retrieving the metadata from data file, interpreting the retrieved data in a decoded

representation rendering the data for human access is also includes the process of digitalization. This process is a very significant method for easy access of the users and long term accessibility.

Conclusion

The successful operation of any library depends to a large extent on the choice of library collections, management and services. Consequently, the librarians must be aware of the user community connected to the library sources. Emerging Innovation techniques are very much useful for giving the right information for the right user in right time.

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