Automation and Digitization of Library Services: An Overview

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Abstract: Today we are living in the age of technology and communication revolution. Therefore, it is very easy to get any information for educational institutes in the perspective of library services. Nowadays due to the availability of many free digital library software packages, the creation, collection, development and sharing of information through the digital way has become very popular and attractive method for library and information professionals. It is also well-known fact that the use of ICT has made it more feasible and useful for library services. Consequently due to the use of ICT the whole services of library have changed and libraries are considered as the hub of the knowledge and information. Today the users feel free to access the vast information without any problem with the help of technology. The present research paper highlights the need of automation and digitization of library services in the present scenario of the knowledge world.

Keywords: ICT, Automation, Digitization, Challenges, Library Services, Users.

Introduction: The fact is that ICT has impacted on every sphere of library services. It has added an opportunity to provide value based information services and access to a vast variety of digital information to the users. Today most of the library services are under the process of automation and digitization and a large number of library services have gone under a change in the recent years. In this perspective, library automation may mean use of suitable machines to perform the activities of library mechanically without many manual or mental efforts by manpower. Moreover, it signifies the mechanization of library housekeeping operations predominantly by computers.

Need of Automation: Actually automation is defined as the technique a process or a system that operates library services automatically. According to the Encyclopedia of Information and Library Services: "Automation is the technology concerned with design and development of the process and

system that minimizes the necessity of human intervention in their operation in the process of mechanization of library services and covers usually housekeeping operations such as acquisition, serial control, cataloguing, circulation, references and administration of work in libraries. Today library automation is the most commonly used term to describe the mechanism of library activities using computers. The computerization of library services is a part of library automation. The automation of library services needs on the following grounds:

- It improves the quality, speed, accuracy and effectiveness of library services.
- Availability of information in traditional format makes it better and more effective in the knowledge world.
- It increases the efficiency of library staff in many services like acquisition, cataloging, circulation and in serial control.
- The impact of ICT makes it more effective and usable in library services.
- It has a better access to other networks and systems.
- It helps in wider dissemination of Information and services.
- It helps to spare the time of both library staff and clients or users.
- It provides a speedy processing of library services.
- It provides new services not hither to possible in libraries.
- It improves the management of financial and physical resources of the library.

Digitization of Library Services: A digital library resources is an assemblage of digital computing storage and communication machinery together with the software needed to reduce emulate and extend the resources provided by traditional library. It is not a single entry rather than its linkages are transparent to end user. Moreover, it provides more enterable access, anywhere and anytime. It is a digital publishing tools connected from one digital format to another to suit the requirements of a particular digital library. Today it is a boon for library services providers and users.

Here it is to say that the first step is computing proper documents into a digital library collection to obtain images of all pages of all publication in digital format by scanning them through scanner, a digital image of each paper is reamed and transformed into image. The main tool of such system of recordings, storing, transmission and communication of information records, computers,

keyboards, web search engine and the internet system through which we can get authentic and well valuated information and library system function more effectively and efficiently on the basis of standardization norms. The infrastructure needed for digitization services:

- Hardware:- High End servers, CD/ DVD Servers, CD/DVD Writer, Client or Server.
- Software:- DIENST, EPRINTS, GREEN STORE, ROADS AND SITE SEARCH
- Scanners:- A3 Size, A4 Size, Digital Camera
- Compatible operation system, outsourcing of Digital Resources, Fiber Optic Connectivity.
- Manpower, Trained Staff and Users.

Resources of Digitization: There are some main resources required for digitization of library services as under:

- High speed connectivity of Internet Services.
- The creation of bibliographic database of print and non-print materials made available via LAN and WAN.
- Acquisition of need based digital resources in the form of CD-ROM, Optical Disk and multimedia version.
- Subscription E-journals and E-books.
- E-mail , Bulletin Board and Internet web
- Facility to access commercial database via online in the related areas.

Need of Digitization: Digitization is the art of converting the contents of a document from hard copy into machine readable format. It makes material available electronically. In general, it is the process of translating the printed information contained in books, articles, sports, pictures, images etc. into electronics storage format in computers. Basically it refers to the conversion of analogue data into digital data. The main purpose of digitization is to develop Information systems providing access to a coherent collection of materials which will be in a digital format and enable full utilization of the opportunities that are offered by the materials available in the digital format. Moreover, it helps in the reduction of physical storage of information. Likewise, it enables several users to view the same thing at the same time with the more cost effective services. Therefore digitization of library services is based on the following aspects:-

- It provides user friendly interface.

- It provides access to a very large collection of information.

- It enables link representation and supports advanced search and retrieval.

- It helps to provide information available for a very long time.

- It is supported in ending publishing, annotation and integration of information.

- It integrates personal, group, enterprise and public digital libraries.

- It ensures availability of library services round to clock.

- It provides multiple access and the same resources can be used simultaneously by a large number of users at the same time and anywhere.

- It poses much preservation and conservation concerns and provides a long term solution.

- It has a potentiality ready to store much more information whereas traditional libraries are limited by storage space.

- It has legibility and removes visible flaws such as stains and discoloration.

Challenges of Library Automation and Digitization: There are some problems and challenges in the way of digitalization and automation of library services as under:-

- Tools and technical issues.

- Requirement of scalable technology of solution and techniques.

- Scanning facilities and environment.

- Digitalization of library books at the mass level.

- Trapped knowledge or information on the web storage and preservation techniques.

- Sharing of digital files.

- Commercial access to digital books.

- Non availability of financial resources.

- Lack of computer knowledge.

- Administrative problems and Social problems.

Suggestions: There are so many problems in the work of digitization and automation of library services. Therefore there are some suggestions to tackle the problems as under:-

- The unique collection of manuscripts and archives should be digitized at a rapid rate.

- Digital library technology should be managed.

- More effective tools of digitization should be developed.

- Right management as a part of digital library should be used.

- There should be a free access of internet facility for all users.

- There should be a clear cut plan for digitization of library services.

- For the better use of available resources, all the material should be compiled before scanning.

- To avoid the destruction of the original information the scanning of documents should be through a digital camera.

- It is urgently required to track the selection, scanning and completion of document.

- To avoid software-hardware related problems, expertization should be given priority.

- The work of digitizing the data storage needs in advance so that there could be no delay in hosting the documents live.

- Appropriate software should be used and it should be performed in a planned way.

- All the staff and professionals should be experts of digitization work.

Conclusion: Thus, digitization and automation of library services is a technical task and it should be done only by the technical experts to avoid any mismanagement in the library services. Nevertheless we should think of the needs of users and libraries should be careful while scanning the data. Always be careful about the quality of the original document to be digitized. Moreover, the most effective and new technology should be used to ensure the documentation of any material or information. The users should be aware of the use of ICT and Library staff should be expertise to make it effective today. It is the duty of all librarians how to make the users turn towards the library. In other words, we can say that the process of automation and digitization of library services should be done only by the experts or technical staff for the better results.

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