

AUTOMATION AND DIGITIZATION OF LIBRARY SERVICES IN COLLEGES: AN OVERVIEW

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ABSTRACT

We currently reside in an era characterized by a technological and communicative revolution, facilitating effortless access to information regarding educational institutions in the context of library services. The proliferation of numerous free digital library software packages has rendered the creation, collection, development, and dissemination of information through digital means a prevalent and appealing approach for library and information professionals. It is a well-established fact that the implementation of Information and Communication Technology (ICT) has significantly enhanced the efficacy and utility of library services. As a result, the entire spectrum of library services has transformed, positioning libraries as central hubs of knowledge and information. Today, users can effortlessly access extensive information, aided by technology. This research paper underscores the imperative for the automation and digitization of library services in the contemporary knowledge landscape.

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

INTRODUCTION

Information and Communication Technology has influenced many aspects of library services. It has created an opportunity to deliver value-based information services and access to a wide array of digital information for users. Currently, the majority of library services are undergoing automation and digitisation, with numerous services having seen transformation in recent years. From this viewpoint, library automation refers to the utilisation of appropriate machinery to execute library functions automatically, minimising the need for manual or cognitive labour by personnel. Furthermore, it denotes the automation of library maintenance tasks mostly through the use of computers.

NEED OF AUTOMATION

Automation is described as the approach by which a process or system operates library services autonomously. The Encyclopaedia of Information and Library Services defines automation as the technology focused on the design and development of processes and systems that reduce the need for human intervention in library operations. This encompasses the mechanisation of library services, typically including housekeeping tasks such as acquisition, serial control, cataloguing, circulation, reference services, and administrative functions within libraries. Currently, library automation is the predominant phrase utilised to denote the process of library operations through the use of computers. The digitisation of library services constitutes one aspect of library automation. The automation of library services is necessary for the following reasons:

- It enhances the quality, velocity, precision, and efficacy of library services.

- The accessibility of information in conventional formats enhances its efficacy in the realm of knowledge.
- It enhances the efficiency of library personnel across several services such as acquisition, cataloguing, circulation, and serial control.
- The influence of ICT enhances the efficacy and usability of library services.
- It provides superior access to additional networks and systems.
- It facilitates broader transmission of information and services.
- It conserves the time of both library personnel and patrons.
- It facilitates rapid processing of library services.
- It offers novel services previously unattainable in libraries.
- It enhances the administration of the library's financial and physical resources.

DIGITIZATION OF LIBRARY SERVICES

A digital library resource is a collection of digital computing storage and communication equipment, along with the software necessary to replicate and enhance the offerings of traditional libraries. It is not a singular entry; rather, its connections are obvious to the end user. Furthermore, it offers enhanced accessibility, available at any location and at any time. It is a digital publishing tool that facilitates the conversion between various digital formats to meet the specifications of a certain digital library. Today, it is advantageous for both library service suppliers and customers.

The initial step is digitising appropriate materials for inclusion in a digital library collection, which entails scanning all pages of each publication to obtain digital images, thereby converting each paper into an image format. The primary instruments of this system for recording, storing, transmitting, and communicating information include computers, keyboards, web search engines, and the internet, which facilitate access to authentic

and well-evaluated information, thereby enhancing the functionality of library systems more effectively and efficiently.

The requisite infrastructure for digitisation services:

- Hardware: - High End servers, CD/ DVD Servers, CD/DVD Writer, Client or Server.
- Software: - DIENST, EPRINTS, GREEN STORE, ROADS AND SITE SEARC
- 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

The primary resources need for the digitisation of library services are as follows:

- High-speed connectivity of internet services.
- The establishment of a bibliographic database for print and non-print resources accessible across LAN and WAN.
- Acquisition of need-based digital resources in the formats of CD-ROM, optical disc, and multimedia versions.
- Subscription-based electronic journals and electronic books.
- Email, Bulletin Board, and Internet Website
- Access to business databases online in relevant fields.

NEED OF DIGITIZATION

Digitisation is the process of transforming the contents of a document from physical form into a machine-readable format. It provides access to materials in electronic format. It is the process of converting printed information from books, articles, sports, photos, and images into an electronic storage format on computers. It pertains to the transformation of analogue data into digital data. The primary objective of digitisation is to create

information systems that give access to a cohesive array of materials in digital format, hence facilitating the comprehensive exploitation of the opportunities presented by these digital resources. Furthermore, it facilitates the minimisation of physical information storage. Similarly, it allows multiple users to simultaneously access the same content through more cost-effective services. Consequently, the digitisation of library services is predicated on the following aspects:

- It offers an intuitive interface for users.
- It grants access to an extensive repository of information.
- It facilitates link representation and endorses sophisticated search and retrieval.
- It facilitates access to information that has been available for an extended period.
- It facilitates the conclusion of posting, annotation, and information integration.
- It amalgamates personal, group, enterprise, and public digital libraries.
- It guarantees the provision of library services at all hours.
- It facilitates concurrent access, allowing numerous users to utilise the same resources simultaneously and from any location.
- It presents significant preservation and conservation challenges while offering a sustainable long-term answer.
- It possesses the capacity to store significantly more information, whereas traditional libraries are constrained by spatial limitations.
- It enhances legibility and eliminates apparent imperfections such as stains and discoloration.

CHALLENGES OF LIBRARY AUTOMATION AND DIGITIZATION

There are several issues and obstacles on the path of digitalisation and automation of library services as follows:

- Tools and technical challenges.
- Requirement for scalable technological solutions and methodologies.
- Scanning facilities and surroundings.
- Mass digitisation of library books.
- Encapsulated knowledge or information regarding web storage and preservation methodologies.
- Dissemination of digital files.
- Commercial access to electronic books.
- Lack of financial resources.
- Insufficient computing proficiency.
- Administrative and social issues.

RECOMMENDATIONS

The process of automating and digitising library services is fraught with issues. Consequently, the following recommendations are made to address the issues:

- Rapid digitisation of the unique collection of manuscripts and archives is necessary.
- Technology in digital libraries needs to be controlled.
- More efficient digitisation tools ought to be created.
- It is important to use proper management as part of the digital library.
- All users should be able to access the internet for free.
- A well-defined strategy should be in place for the digitisation of library services.
- Before scanning, all of the material should be compiled to make the best use of the resources available.
- Documents should be scanned using a digital camera to prevent the original data from being destroyed.
- Tracking the selection, scanning, and finishing of documents is critically needed.
- Expertization should be prioritised in order to prevent issues connected to software and hardware.
- The process of digitising data storage requirements beforehand to ensure that

the documents are hosted live without any delays.

- It should be done in a planned manner and with the right software.
- Every employee and professional should be an expert in digitisation.

CONCLUSION

To prevent any mismanagement of the library services, digitisation and automation of library services are therefore technical tasks that should only be carried out by technical professionals. However, libraries should use caution when scanning the data and consider the needs of users. Always consider the original document's quality before digitising it. Furthermore, to guarantee that all information or materials are documented, the newest and most efficient technology should be employed. Users should understand how to utilise ICT, and library employees should be knowledgeable to make it work in the modern world. All librarians have a responsibility to encourage patrons to visit the library. To put it another way, for best outcomes, the automation and digitisation of library services should only be carried out by professionals or technical people.

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