

A Need to Library Digitization - New Challenges

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Abstract: *The implementation of digitalization as a preservation strategy has grown to become phenomena on a global scale, and it is also the most popular approach these days to keep a library collection in good shape... This article provides an explanation of the methods and methodology involved in digitization, as well as a discussion of the reasons why digitization is necessary. The problems and difficulties associated with the digitalization process are also brought to light in this article. The project faces significant challenges, the most significant of which are the legal and financial aspects. Other variables are explored as well, along with potential solutions to the problems that have been identified. This article demonstrates that there are obstacles standing in the way of the digitization of academic libraries, and it draws to a close by stating that despite the fact that digitization is a challenge, information professionals and librarians still need to be equipped having the hands-on experience and the strategic foresight to put it into action in a way that is both regulated and controllable.*

Keywords: Digitization, technology, library Resources, software, automation preservation, phenomena, optimization

I. INTRODUCTION

A digital library is a collection of digital documents or objects. This definition is the dominant perception of many people of today. A digital library as an organized and focused collection of digital objects, including text, images, video and audio, with the methods of access and retrieval and for the selection, creation, organization, maintenance and sharing of collection. "Digital Libraries are organization that provides the resources, including the specialized staff to Seles structure, offer intellectual access to interpret, distribute, preserve the integrity of and ensure the persistence over time of collections of digital works so that they are readily and economically available for use by a defined community or set of communities." (DLF2001)¹

The phrases " "institutional repositories", "open archives," and "digital libraries" are all terms that refer to different types of and "other comparable services" are becoming increasingly popular in today's society. These services allow users to access digital information and knowledge resources for a variety of reasons. In this regard, the library has implemented a wide variety of cutting-edge technology in order to improve the quality of its services. One sort of digital content was originally created in an analogue format (such printed books or manuscripts, for example), and then It was changed over to its digital equivalent. The second kind of digital content is anything that was developed in a digital format itself. The second one is said to have been "born digital," which means that it was created first in a form that a machine is able to read digitally websites and many forms of multimedia).

DIGITIZATION

Digitization started with the introduction of computers in library activities in 1980s in India by it was limited to creation of bibliographic database and housekeeping operations. This conversion of bibliographic catalogue record into digital format was the initial stage but now it has been broadened by implementing it to conversion of full text, graphics, sound, video records etc. "Digitization refers to the process of translating a piece of information such as book, sound recording, picture or video into bits. Bits are the fundamental units of information in computer systems. Turning information into these binary digits is called digitization" Digitization is one of the hot topics in librarianship today. To build a 'digital library' requires that the content of a collection be available electronically. The fustian of the

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information highway has provided the impetus to convert many existing paper-based (of sound, video) collection into new digital media. The assumptions that digital collections will be more accessible to a broader range of users, presumably through networking techniques and new efficiencies are to be gained in resource sharing and for preservation. Recent developments in manufacture digital elements as well as fully automated processes on a strategy, planning and shop floor level. Although the number of publications in this field increases, many scholar and practitioners lack a differentiated use of the related terms of “digitization”, “digitalization” and “automation”. In the previous couple of years, systems for digitizing books at fast and similarly minimal effort have enhanced extensive with the outcome that it is presently conceivable to digitize a great many books for every year. Google book-examining venture is likewise working with libraries to offer digitize books pushing forward on the digitize book domain.

NEED OF LIBRARY DIGITIZATION

Digitization improves access to library resources. By digitizing library collections, information will be accessible to all instead of a group of researchers. Digital projects allow users to search for collections rapidly and comprehensive from anywhere at any time. Digitization makes the invisible to be visible. Several users can access the same material the same time without hindrance. It also removes the problem of distance, as users do not have to travel to libraries that possess the hard copies of library materials before they can access and use such materials. A digital library can be made to serve a region. Making resources more accessible with online research in distance.

Digitising a document in print or other physical media (e.g., sound recordings) makes the document more useful as well as more accessible. It is possible for a user to conduct a full-text search on a document that is digitised and it is possible to create hyperlinks to lead a reader to related items within the text itself as well as to external resources. Ultimately, digitisation does not mean replacing traditional library collections and services; rather, it serves to enhance them. A document can be converted into digital format depending on the objective of digitisation, end user, availability of finances, etc. While the objectives of digitisation initiatives differ from organisation to organisation, the primary objective is to improve access. Other objectives include cost savings, preservation, keeping pace with technology, and information sharing. The most significant challenges in planning and execution of a digitisation project relate to technical limitations, budgetary constraints, copyright considerations, lack of policy guidelines and, lastly, the selection of materials for digitisation. While new and emerging technologies allow digital information to be presented in innovative ways, the majority of potential users are unlikely to have access to sophisticated hardware and software. Sharing of information among various institutions is often restricted by the use of incompatible software. One of the main benefits of digitisation is to preserve rare and fragile objects with enhancing their access to multiple number of users simultaneously. Very often, when an object is rare and precious, access is only allowed for certain category of people. Going digital could allow more users to enjoy the benefit of access. Although, digitisation offers great advantages for access, allowing users to find, retrieve, study and manipulate material, it cannot be considered as a good alternate for preservation because of ever changing formats, protocols and software used for creating digital objects. There are several reasons for libraries to go for digitisation and there are as many ways to create the digitised images, depending on the needs and uses. The prime reason for the digitisation is the need of the user for convenient access to high quality information. Other important considerations are:

²Quality Preservation

The digital information has potential for qualitative preservation of information. The preservation-quality images can be scanned at high resolution and bit depth for best possible quality. The quality remains the same in spite of multiple usages by several users. However, caution need to be exercised while choosing digitized information as preservation media.

Multiple Referencing

Digital information can be used simultaneously by several users at a time.

Wide Area Usage

Digital information can be made accessible to distant users through the computer networks over the Internet.

²<https://egyankosh.ac.in/bitstream/123456789/26305/1/Unit-8.pdf>

CHALLENGES OF DIGITIZATION OF LIBRARY RESOURCES³

While digitizing library resources offers significant benefits, it also presents several challenges that libraries must address. Here are some common challenges associated with the digitization process:

Copyright considerations pose a major challenge in digitization efforts. Libraries must navigate complex legal frameworks to ensure compliance with copyright laws. Obtaining permissions from rights holders and managing licensing agreements can be time-consuming and resource-intensive.

Some library materials are copyrighted, meaning permission must be obtained from the copyright holder before being digitized. This can be a time-consuming and expensive process.

Digitization requires skilled staff with the knowledge and expertise to carry out the process correctly. Libraries may need to hire additional staff or train existing staff in digitization techniques.

Digitization requires the use of specialized equipment and software. Libraries may need to purchase new equipment or upgrade their existing systems.

Digitization requires adequate storage space for digital files. Libraries may need to invest in new storage solutions.

Digitization involves handling sensitive user information and personal data. Libraries must ensure appropriate privacy and data protection measures, comply with applicable data protection laws, and implement security protocols to safeguard user information from unauthorized access or breaches.

Digitized materials must be maintained to ensure that they are accessible and usable. Libraries must have a plan for the long-term maintenance of their digitized collections.

Metadata plays a crucial role in organizing and describing digitized resources. Libraries must invest effort and expertise in creating accurate and standardized metadata for each item. Consistent metadata practices are essential for effective search ability and interoperability across various platforms and systems.

Ensuring the quality and accuracy of digitized materials is essential. Libraries must establish quality control measures to verify the fidelity of digitized content and validate metadata. Adhering to established digitization standards, such as resolution, colour accuracy, and file formats, is important for maintaining consistency and interoperability.

Sustaining digitized collections requires on-going commitment and resources. Libraries must plan for the long-term maintenance, updates, and migration of digital content as technology evolves. Funding challenges, changing priorities, and shifting technological landscapes can impact the sustainability of digital collections.

The digitization of library resources brings a multitude of benefits while also presenting unique challenges. The benefits include increased accessibility, preservation of fragile materials, global reach, enhanced search ability, space optimization, expanded availability, multimedia integration, cost savings, collaborative opportunities, and improved user engagement. However, challenges such as copyright considerations, resource allocation, technological infrastructure, metadata standardization, digital preservation, privacy and data security, accessibility, cultural diversity, and long-term sustainability must be carefully addressed. Despite these challenges, libraries continue to embrace digitization as a crucial component of modern librarianship, striving to provide wider access to knowledge, foster collaboration, and meet the evolving needs of users in the digital age. By effectively navigating the benefits and challenges of digitization, libraries can harness the power of technology to transform how information is shared, preserved, and accessed, ultimately enriching the scholarly and cultural landscape for generations to come.

II. CONCLUSION

Digitization is an important aspect for academic libraries in 21st century. As user demand grows for the digitization of cultural research material; the academic library community will need to pay close and careful attention to the changing information needs of scholars and students of the humanities. Digitization is an essential task in modern day libraries. If a library is to live up to current challenges, it has to go digital, that is, provide online services. The major problem of digitization is to be found lack of financial support from the parent organization. Unawareness about its important in the academic environment, lack of facilities including manpower, technical skills hardware, software and infrastructure facility to show poor digitization. Libraries need to build digital information sources and services using the modern technology to satisfy the users demand and laws of Library Science.

³<https://www.lisedunetwork.com/digitization-and-library/>

SUGGESTION

Improved information sharing. Through the appropriate metadata and information exchange protocols, the digital libraries can easily share information with other similar digital libraries and provide enhanced access to users.

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