



# Digitization of University Library

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## Abstract:

The process of converting information from a conventional format into a digitally readable version is known as digitization. When digitizing a printed book, a scanner or camera is typically employed for the task; manuscripts, artworks, Ph.D. theses, etc. are also included in this category. Modern preservation strategies promote digitization as a means of advancement. This paper describes the Importance of Digitization, Need of Digitization, Advantages of Digitization, Disadvantages of Digitization, Preservation of Digitization, Mission of University library for digitization, Resources of digitization in University library, Constraints to digitization.

**Keywords:** Digitization, University Library.

## 1. Introduction:

The society of today is one that uses digital devices. Pearce-Moses defines digitization as the process of converting analogue documents into binary electronic (digital) form, particularly for hard disc storage and computer use. Through digitization, materials are converted from analogue formats that people can read to digital formats that only machines can read. To digitise knowledge contents, tools such as scanners, cameras, editing software, and other equipment can be utilised. Ph.D. theses, rare books, manuscripts, photographs, voice recordings, and images are just a few of the crucial sorts of assets that can be digitally preserved because to these advancements. Different forms, such as text, audio, and video, are used to create information. Easy access to information resources is provided by digitization. Readers can quickly and conveniently search for collections using digitised documents at any time anywhere. The process of digitization makes the invisible to be visible. A number of users can access the same document at the same time without hindrance. It also removes the trouble of distance, as users do not have to travel to locations that possess the hard copies of materials. Digitization is a time consuming and very expensive venture, but it is a brawny



way to cope up with the problems of shortage of important periodicals, rare book, manuscripts and other literature in knowledge resources centers in the developing world. Numerous organizations and Library are taking initiatives in digitizing their documents, archives of newspapers, rare books, manuscripts, artefacts, Ph.D. theses and M.Phil. Dissertations and other historical documents and images. This helps scientists, administrators, readers, and other information seekers to have, wide access to innovations possible at a correct time which are earlier outside their domain.

Digitization is characterized as, “Transformation of analogue things into computerized organize for the reason of expanding past get to and where suitability, to help with conservation, development. It is connected to all angles of administrations given by the library.” In basic words, digitization implies procuring, checking, altering, changing, putting away and holding data in standardized and organized way with innovation back. With specialized scanners, application, reports are changing over into advanced groups and put away for advance reference through difficult plates, compact circles or web-based application’.

## **2. Definition of digitization:**

Witten and David (2003) characterized Digitization as the method of taking conventional library materials that are in shape of books and papers, uncommon books to change over them to the electronic implies computerized shape where they can be put away and controlled by a computer. The US Founded of Historical center and Library Services defines digitization is the method of changing, making, and keeping up books, original copies, craftsmanship works, verifiable records, photographs, diary, etc. in electronic representation so they can be seen through computers and keen phones, tablet.

“Ding, Choo Ming (2000) Get to to electronic data is cheaper than its print partner when all the records are put away in an electronic organize with consistent offices and gear. Advanced writings can be connected, hence made intelligently; other than, it improves the recovery of more data. It is common nowadays to discover more data being digitized and transferred into the Web or CD-ROM in arrange to be made correspondingly available globally”.

## **3. Importance of digitization:**



Concurring to Bist (2006), taking after are a few the significance of the Digitization.

- i) To make accessible the uncommon and chronicled materials to the peruses.
- ii) To look rapidly conjointly they are more rapidly and proficiently open. It moreover advances e-learning openings.
- iii) Digitization too makes a difference in advancing and showcasing of library assets around the world. It too pulls in the peruse to the library to see the initial fabric; advance, it increments the income of library.
- iv) Preservation of archive is made conceivable here by making digital copy accessible to the clients, which spares the initial record.
- v) Information has got the financial esteem conjointly required for the purpose of society, instruction, majority rule government, progression of science and innovation all around.
- vi) Maximum utilizes of the information records leads to great life consisting of flexibility, wellbeing, moral conduct, verifiable, shrewdness and prosperity.
- vii) To protect the Records: That's to permit individuals to studied more seasoned, uncommon, imperative or one of a kind reports without harm to the firsts.
- viii) To reuse the archives. It implies to alter reports into distinctive designs; for illustration to utilize pictures in a slideshow and to receive the substance for a distinctive reason.

In its most principle sense, the term “digitization” create to the change of assets that were at first formed in elective set-up an electronic form, then again, the meaning prohibits resources that were at first made carefully, such as thing, whether that thing may be a photo, a word ready archive, or a transcribed letter.

#### **4. Need of digitization:**

The essential idea of digitization is to form full utilize of ICT offices for getting to around the world assets and useful for society at the same time. As going computerized is the require of the hour, to stay environment sound and secure. Different organizations are included in digitization their fabric since they stay affected of the persevering esteem of such assets for learning. Digitization moreover raises the notoriety of the educate as worldwide



clients can know the regulation collection and utilize these e- assets from removed places. By digitization their collection, educate can make data accessible that was once as it were accessible to a select bunch of peruses.

Digitization a archive in print or other physical media (e.g., sound recordings) makes the record more valuable as well as more available. It is conceivable for a user to conduct a full-text search on a archive that's digitized. It is conceivable to make hyperlinks to lead a peruser to related things inside the content itself as well as to outside assets. Eventually, digitization does not cruel supplanting the conventional library collections and administrations; or maybe, it serves to improve them. A report can be changed over into advanced organize depending on the objective of digitization, conclusion client, accessibility of funds, etc. Whereas the targets of digitization activities contrast from organization to organization, the essential objective is to move forward the get to. Other goals incorporate taken a toll investment funds, conservation, keeping pace with innovation and data sharing. The foremost noteworthy challenges in arranging and executing of a digitisation venture, relate to specialized restrictions, budgetary limitations, copyright contemplations, need of arrangement rules and finally, the determination of materials for digitization. Whereas unused and rising advances permit advanced data to be displayed in imaginative ways, the larger part of potential clients are improbable to have get to to advanced equipment and program. Sharing of data among different educate is frequently confined by the utilize of incongruent program.

**4.1 Quality Conservation:** The computerized data has potential for subjective conservation of data. The preservation-quality pictures can be checked at tall determination and bit profundity for best conceivable quality. The quality remains the same in show disdain toward of different utilization by a few clients. In any case, caution got to be worked out whereas choosing digitized data as conservation media.

**4.2 Different referencing:** Computerized data can be utilized at the same time by a few clients at a time.

**4.3 Wide zone utilization:** Computerized data can be made available to far off clients through the computer systems over the Web.



4.4 Security degree: Profitable reports and records are filtered and kept in advanced organize for security.

4.5 Documented capacity: Digitization is utilized for rebuilding of uncommon fabric. The uncommon books, pictures or documented fabric are kept in digitized organize as a common hone.

### **5. Points of interest of digitization:**

Digitization brings together investigate data on subjects, which are accessible in different designs in different areas. These computerized materials or sources may be greatest scatted. Hence, digitization permits simple get to permitting to construct collection and compare things which can be seen side exclusively by ethicalness representation and get to to advanced reference materials particularly pictures that give a awesome bargain of data to analysts. It is effortlessly combined with cautioning administrations, Simple to transfer to any put on web immediately. Office to make multi-media assets. Contain mixed media data. Duplication of computerized assets is simple.

### **6. Impediments of Digitization:**

1. Librarians are way of the unused innovation.
2. Requires uncommon abilities to set up and keep up Curator.
3. Bandwidth problem in getting to interactive media assets and full text-journals.
4. Scanning to unique reports of the complete collections.
5. The fundamental disadvantage is the taken a toll of digitization and conservation of records. In this perspective one can legitimize the fetched of digitizing of a interesting collection.

### **7. Preservation and digitization:**

The major advantage of digitization is preservation. It reduces handling of the old, rare, important or fragile material, hopefully extending the life of the original. Preservation means guaranteed longevity and safe of the intelligent content, although it has not been proven that digitized document will survive as long as hard disc. Preservation is more than digitization so Digital conversion alone does not constitute preservation since all document



are not normally digitized due to a number of factors such as budgetary constraints, lack of expertise, information scientist and copyright and ethical problems.

### **8. Mission of University library for digitization:**

Objectives of digitization more or less coordinate with the college library mission. The digitization we go towards most extreme user's fulfilments. No questions it'll premise the inquire about, educating, learning of the college. Within the light of mission of college library they discover closeness to the owing focuses:

1. Preserve to utilize for descendants.
2. To capture, altering, store, handle and spread data in advanced frame.
3. Save the space and more time both.
4. Facilitate for organizing and information asset sharing.
5. Make accessible to farther clients.
6. Maximizing user' fulfillment by giving numerous and simple get to.
7. Foundation of unused esteem included library benefit.
8. We can overcome with the issue of space in pleasing the materials which each college library is confronting directly.
9. Resoruces of digitization in library:

College library should choose what is to be digitized and what can be protected on other media or information record. Whether there's a ought to incorporate entirety collection for digitization or a parcel of it. The choice may be taken directed by the sum of reserves accessible. A conventional college library collection for the most part comprises of the taking after digitization.

1. Manuscripts.
2. Rare books.
3. Technical Reports and Annual Reports.
4. Newspapers and magazines.
5. Theses and dissertations.



6. Institute Special collection, if any.

By building the digital collection, University library may proceed to develop the digital library; which may include electronic journals, electronic books, and full text article databases, databases.

Digitization of these will be proved beneficial for readers. Technical reports and annual reports issued and published by institutions are grey and important literature, containing valuable information not available through any other channel. University may shift their priority of digitization based on the needs of clients and nature of the institution. All these do not relate to copyright issue, so digitization of such materials is easy’.

### 10. Constraints to digitization:

The constraints in initiating digitization program in the national context have to be looked at the form of following perspectives:

#### Technology:

‘There exist as various ills as virtues for technology and computer technology are no different either. How good and effective is technology is also a matter of debated. Not to say that technology is bad, but very new things have a habit of not working properly for quite a while’. ‘The database technology is so rapidly changing that each collection must be migrated into new data management organizations, simultaneously with the migration of the individual data objects. The ultimate goal is to preserve not only the bits associated with the original data, but also the context that licenses the data to be interpreted’.

#### Infrastructure:

‘Access to hardware and software, access to telephone connections, and knowledge of protocols can limit access to important information if it is available only online’ (Weisser, 1997). ‘The actual costs of retrospective conversion will vary according to the condition, formats, contents, and volume of the original collections; the choice of scanning technologies; editing; scanning in house versus contracting; the level of metadata needed to provide basic access; and the range of searching processing functions to be supported. Funds are always on the decline or being kept steady or enhanced only to counter the price increase and/or inflation. Since a large part of the library budget will be spent on staff and collection,





there is very little left for buying computer systems and allied equipment like scanners, printers, etc., and software required for digitization’.

### **Source:**

There are resources not possible to digitize either as the copyright are held by someone else or their physical size or condition prohibiting transfer to electronic form. A wide array of contents held by our library could only be used in the print form as per the existing rules.

### **Copyrights:**

Researcher had sometimes included graphics, diagrams, paragraph and other copyrighted material in their Ph.D. theses and M.Phil. Dissertations are without acquiring approvals unless the work was accepted for commercial publication. There will be demands from the user community to digitized formal collection of rare document, manuscripts, books and back volumes of journals for which the library has no copyright authentication to do. The radars thus get discouraged by the digitization work and show less enthusiasm and energy towards use of those changed. Even for those sources digitized after procuring the legal rights, there might be problems to enforce them as the network and digital information is so pervading.

### **Difficult to archive:**

In contrast to the source-related concerns only for print archiving, technology related concerns in addition are to be addressed for digital archiving. Access to technology is still limited, limiting the availability of digital information and some may want to include interactive components, CGI-scripting elements that are becoming common on Web sites, elements that are not easily archived because they may change with each reading.

### **Mindset:**

There are human resource implications, including the need for more staff to carry out labor-intensive digital work, the demand for staff with new and different skills, the challenges of “up-spilling” and retraining, and the need to redefine job descriptions and skill necessities. Even though contents are aplenty in our libraries for digitization, still the lack of concrete projects for library digitization can be attributed only to the mindset. Here comes not only the lack of interest of the professionals, or the loading of professional time for routine tasks





leaving them very little time to innovate, but the matter of wide concern is the lack of priorities from the Institution side for framing, supporting and implementing viable projects.

The digital library development and digitization of local collection is a logical culmination of the exposition library community spent on computer technology over the last few decades. Though our libraries are facing a shortage of contents like books or journals many more there is a wide spectrum of formal and informal sources available with them that could be changed into digital form by devising suitable action plan.

### **Conclusion:**

One of the most benefits of digitization is to preserve rare and delicate objects by upgrading their get to to numerous numbers of clients at the same time. Exceptionally frequently, when an question is uncommon and valuable, gets to as it were permitted for a certain category of individuals. Going advanced seems permit more users to appreciate the advantage of get to. In spite of the fact that, digitisation of awesome focal points for get to like, permitting clients to discover, recover, think about and control fabric, it cannot be considered as a great substitute for conservation since of ever changing groups, conventions and computer program utilized for making computerized objects. There are a few reasons for libraries to go for digitisation and there are as numerous way make the digitize harms, depending on desires and employments. The preliminary as on for the digitisation is the require of the client for helpful get to to tall quality data.

### **References:**

1. Alhaji, ibrahimusman. (2005). Digitization of library resources and the formation of Digital Libraries: a practical method. Retrieved from: <http://www.ais.up.ac>
2. Beebe, L., & Meyers, B. (1999). The Unsettled State of Archive. The Journal of Electronic Publishing, 4, Retrieved from: <http://www.press.umich.edu/iep/04-04/beebe.html>
3. Choudhury, G. S., Requardt, C., Fujinaga, I., DiLauro, T., Brown, E. W., Warner, J. W., & Harrington, B. (2000). Digital Workflow Management: The Lester S. Levy Digitized Collection of Sheet Music. First Monday, 5(6). Retrieved from- <http://www.firstmonday.org/issue5.6/Choudhury/index.html>
4. Devi, T. S., and S. T. Singh. (2004). Problems and Prospects of Digital Library in Manipur: A Conceptual Study. In 2nd Convention Planner - 2004, Ahmedabad:



- INFLIBNET. Retrieved from <http://ir.inflibnet.ac.in/bitstream/1944/418/1/04Planner4>.
5. Hodge, G. (2000). An Information Life-Cycle Approach: Best Practices for Digital Archive. The Journal of Electronic Publishing, 5, Retrieved February 25, 2016, from <http://www.press.umich.edu/iep/05-04/hodge.html>.
  6. Singh, s. n. (2006). Digitization initiatives and university libraries in india. 4th Convention PLANNER -2006, Mizoram University, Aizawl, 08-11 Nov., 2006, INFLIBNET Centre, Ahmedabad, Retrieved from: <http://ir.inflibnet.ac.in/bitstream/1944/1220/1/202-209>.
  7. Moore, Baru, C. (2000). Collection-Based Persistent Digital Archives Part 1 and 2. D-Lib Magazine, 6 (2-5), Retrieved from <http://www.dlib.org/dlib/march00/moore03moore-ptl.html>
  8. Moses Weisser, C., & Walker, J. R. (1997). Electronic Theses and Dissertations: Digitizing Scholarship for Its Own Sake. The Journal of Electronic Publishing, 3(2), 59- 76. Retrieved from- <http://www.press.umich.edu/iep/03-02/etd.html>
  9. Ming, Ding Choo. (2000). Access to Digital Information: Some Break - through and Obstacles. Journal of Librarian ship and Information Society 32.
  10. Sharma, Neelam. (2010). Automation and digitization of university libraries a study of university libraries. (Ph.D.Thesis, Punjab University) pp.23-35, Retrieved from- <http://shodhganga.inflibnet.ac.in:8080/jspui/handle/10603/80092>
  11. Tariq, Ashraf. (2010). Developing Sustainable Digital Library's: Socio Technical Perspective. New York: Information Science Reference.
  12. Noerr, P. L. (2000). The Digital Library Toolkit (2nd Ed.). Palo Alto: Sun Microsystems. Retrieved from- <http://www.sun.com/products-n-solutions/edu/libraries/digitaltoolkit.html>.
  13. Witten and David Zhou, Y.(2013).Are Your Digital Documents Web Friendly: Making Scanned Documents Web Accessible. Information technology and Libraries,29(3). Received from- [http://lib.hku.hk/etd2013/presentation/Veeranjaneyulu %20-%20Krishikosh](http://lib.hku.hk/etd2013/presentation/Veeranjaneyulu%20-%20Krishikosh).