

PRESERVATION OF INFORMATION MANAGEMENT IN DIGITAL ERA

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ABSTRACT

Information today is recognized as a very valuable and powerful resource Forcing information management disciplines to become highly professional and technologically updated. All information in any recorded format can be conveyed in one common format – digital. The paints the vision of a sweeping and awesome potential of information access and of a powerful and flexible structuring of Information. With the rapid growth of science and technology, the wealth of information has been prolific. Thus it was never need to manage and it had been more critical.

Keyword: Information Management

1. INTRODUCTION

Modern society is based on information. So, information is considered as the fourth resource after money, money, materials and manpower. In the present era the information is not only to be considered as a resource and also it is a production and basic need of the third world. The development in electronic information system has influenced libraries in a big way and helped the professional to disseminate the information quickly, exhaustively and expeditiously out of the deluge of information. The traditional concept of libraries which was completely based on print media is changing towards digital / electronic form with the help of information Technology. The new media and technology may be used to preserve documents for a long time.

2. APPLICATION OF IT RESOURCE

IT resources are categorized according to their core functionality by which they enhance library services and are not mutually exclusive. However, this categorization is a useful guideline for planning and implementing IT in an appropriate library setup. The type of library wherein each resource can be more appropriately used is also mentioned.

The primary method of building and digital resources is digitization. Digitization refers to the process of converting an item such as printed text, manuscript, image or sound recording, picture, picture or video into digital form. Digital has become the order of the day due to the significant advances computer and communication technology has brought in the post internet information age wherever we are living. Digitization solves the traditional library problems such as conservation, preservation, storage, space. Multimedia documents and the remote access for information collection.

3. GENERAL DEVELOPMENT

More and more university department, college and elite schools will have more IT environment. Their libraries will also be using PCs.

A dedicated TV channel is likely to come up for education and training AI – based training will be available training institutions (including those in the R&D and industrial sector).

Digital Preservation is preserving the digital medium that holds the digital information by storing it in the correct environment and following agreed storage and handling procedures; copying the digital information into

newer, fresher media before the old media deteriorates. Preservation concerns include deciding what to digitize, formats for texts and images, quality of image and costs. Digital preservation refers to the various methods of keeping digital materials alive into the future. Includes everything from electronic publications on CD-ROM to Online database and collections of experimental data in digital collections in the face of rapidly changing technological and organizational infrastructure elements.

4. DIGITAL PRESERVATION

Digital preservation is the planning, resource allocation and application of preservation method and technology necessary to ensure the digital recording of materials and to maintain the ability to display, retrieve and use digital collection in the face of rapidly technological and organizational infrastructure and elements. Preservation generally means keeping an object safe from harmful effects such as loss, damage, destruction and the like. The purpose of preservation is to ensure protection of information of enduring value for access by present and future generation. In recent decades, many libraries and archives have established formal preservation programming for traditional materials which include regular allocation of resources for preservation, preventive measures to arrest deterioration of materials, remedial measures to restore the usability of selected materials and the incorporation of preservation needs and requirements into overall programme planning

5. OBJECTIVES OF PRESERVATION

To reduce the effect of deteriorating factors such as temperature, light moisture, flood, fire, fungus, bacteria, insects, pollution, dust and the important factors called "Human".

- To Maintain the historical value of information
- To Make it easy to use and handle
- To Make information Survive Longer
- To Provide Worldwide accessibility

6. PRESERVATION APPROACH

Digital Preservation involves copying the digital information into newer media before the old media become so obsolete that the data cannot be accessed. This is referred to as copying of refreshing. In this process integrity of digital information is preserved. It Is clear that the life time of a medium determine the period of time for which the information recorded on the medium is stored safely without loss.

Types of Media for Preservation 1.

Micro form Media:

- Microfilming
- Microfiche

2. Magnetic Media :

- * Hard Disk (40 GB and more)
- * Floppy Disk (100 MB and more)
- * Cartridge Tape Disk (CTD, 40 GB and more)

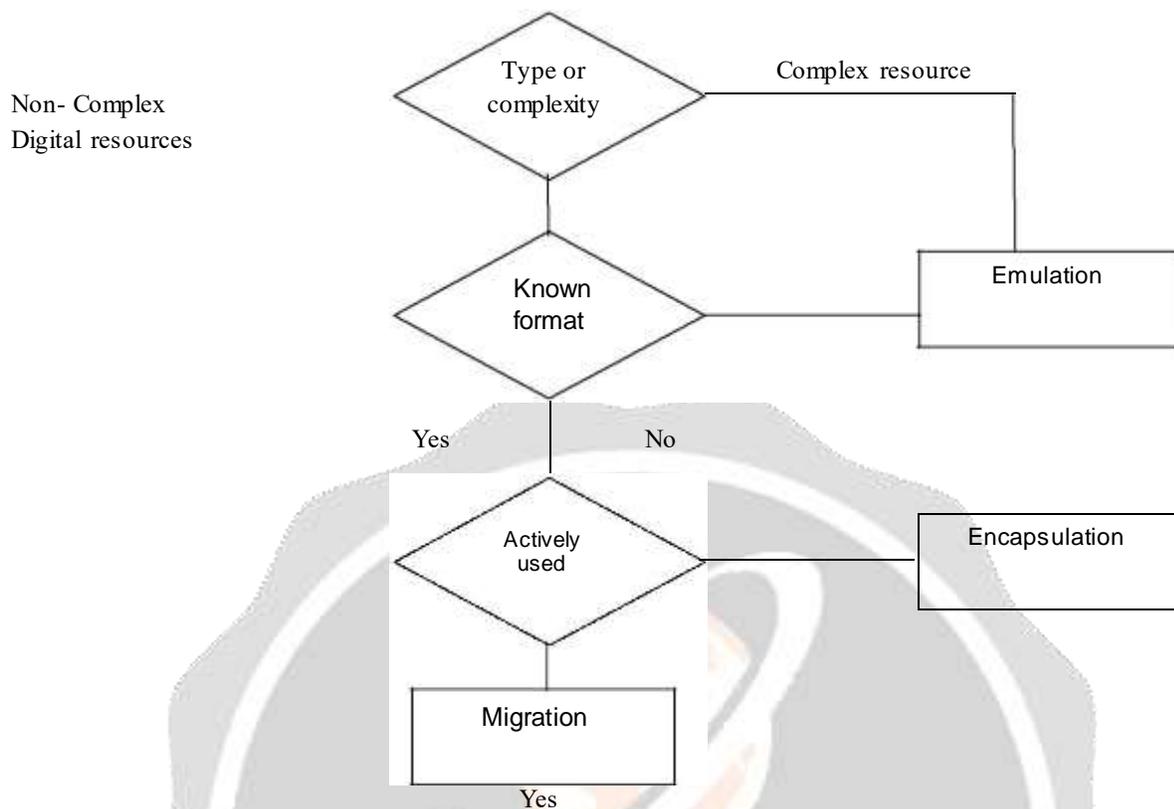
3. Optical Media:

- * CDROM (600 MB) of textual information but now only multimedia digital CDs are becoming more widely used (Storage capacity has also increased multiple fold).

4. Networking Media:

- Internet is a cheap and economical medium for preservation of information for longer and worldwide use. There are three important ways namely Bulletin Board, Website and Portal being used for preservation and dissemination of information worldwide.

Selection of Preservation Strategy.



7. PROCESS FOR PRESERVATION

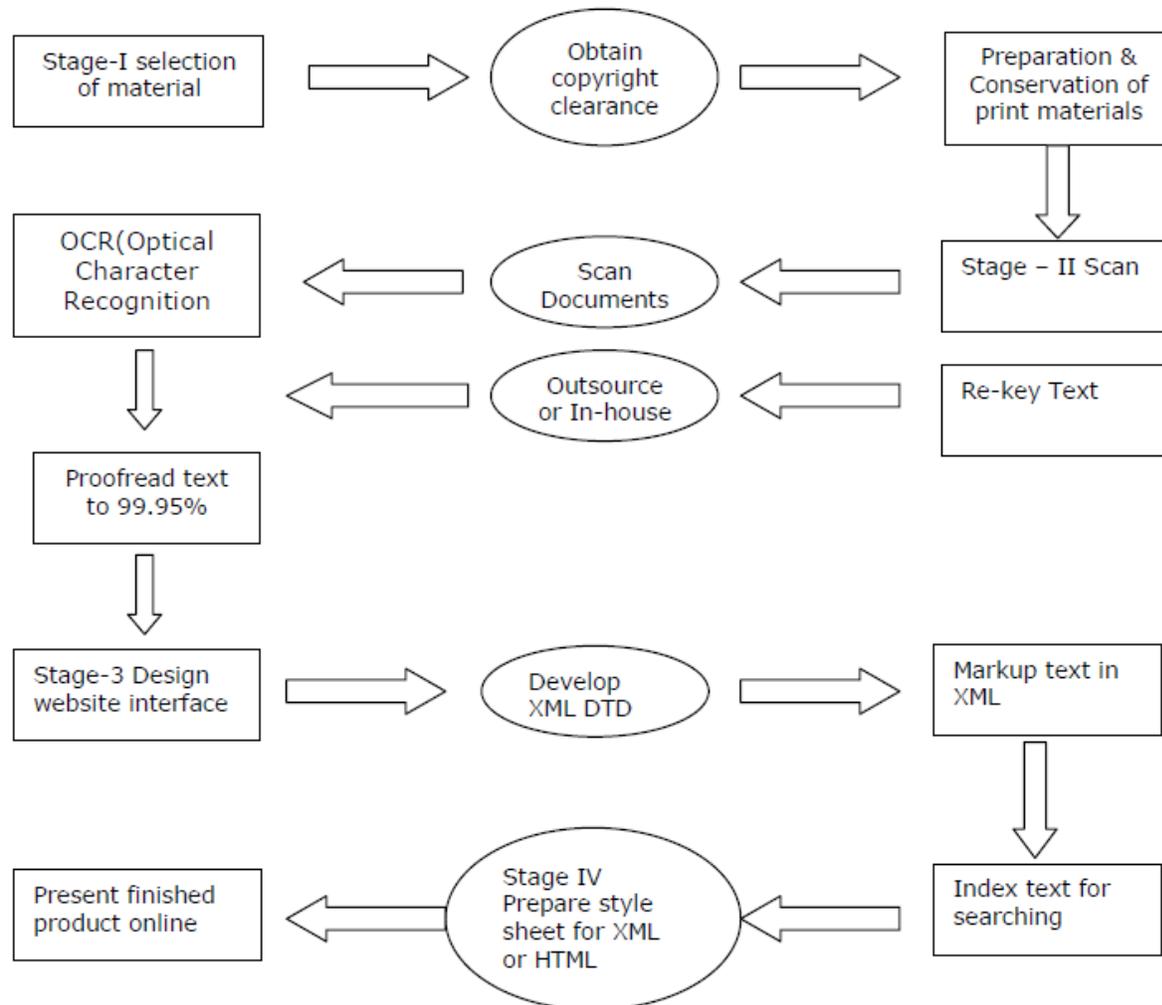
The preservation of library collection through IT is an easy task if you have all the required infrastructure on one platform. The preservation process can be divided into the following two processes:

Scanning documents and making image file:

In this process the scanning of documents is an initial process. The documents should not be scanned below 300 dpi resolution. Basically, the resolution depends on the physical condition of the documents the scanned image are typically stored in file formats like JPG, TIFF etc. The final output is converted to a light format like PDF. PDF formats allow various security measures to be build in to prevent a user from edition, downloading, or even printing.

Scanning and preparing full textiles: The scanned and processed image before being converted to PDF files, under the process to separate the text and media from the image files. The next process which is an important task is to rectify the errors and make text files error free with the help of Optical Character and Recognition (OCR) Process. This process also involves proof reading checking quality of text files. After completion of all the above process, the text is converted into the markup language like XML, HTML etc. along with complete tagging which enables the database to be integrated with any WEB applications.

Digitization Process



8. CD- ROM E-MAIL AND INTERNET

Use of e-mail and internet will be very common among government departments, research and higher academic institutions. Even students and general public will be using these facilities and much more by libraries and information centers.

Resource sharing will grow only slowly. Use of CD- ROMs Will increase further.

On-demand publishing will be common. Authors will increasingly use DTP for preparing their texts , product (publications) design by authors will not however be common

There will be many electronic publications in the country, particularly on internet Internet edition of periodicals and other publications will significantly increase.

Major library suppliers will provide stock position through e-mail and some online. They will supply more non – paper and composite publications.

More and more library users will carry out CD and online searches by themselves. So, library professionals must develop expertise in conducting complicated searches and in using expert/ hypertext methods.

9. IT IN LIBRARIES

With the expansion of print and multimedia sources in life, libraries and have to adapt to societys greater dependence on computers.

Online catalogues have replaced card catalogues, more materials is available on CDs and DVDs users can search remote database for information.

Digital Divide

Before minimizing Digital divide among the users and helping them to familiarize with digital and virtual libraries, the libraries professional strive hard to remove the digital divide among themselves by getting proper training in IT.

Trends in India

In India, still the financial provisions and allocation for digital materials have not reached a significant stage.

Key measures towards digital preservation in India:

- i. To provide guidance in formulation policies which are appropriate for the purpose of data creation management and long – term preservation.
- ii. Assist agencies in designing digitization programmes, which maximize their cost effectiveness and fitness for purpose over the life cycle of the resource.
- iii. Inform strategic planning amongst institutions and information centers, which invest in the creation and/ or collection of digital information resources and seek in some way to ensure the long term viability of those resources.
- iv. To help raise awareness of the strategic issues, dependencies and need for co-operation between the different stakeholders and agencies identified in the study.

Some, following, prominent institute and libraries etc. have not only adopted this concept but also are trying for various possible measures to implement all kinds of preservation techniques.

- a. Centre for Development Studies (Trivandrum)
- b. Developing Library Network (DELNET, New Delhi)
- c. Health Education Library for People (Mumbai)
- d. INFLIBNET (Ahmadabad)
- e. Indian Institute of Health Management Research (Jaipur)
- f. IIT's (Mumbai , Delhi, kharagpur, Chennai)
- g. Indian Agriculture Research Institute (New Delhi)

Challenges

Digital Preservation has raised many challenges of a fundamentally different nature which are divergent compared to the problems of preserving traditional format materials. They are as follows: The long term digital preservation problem calls for a long term solution that does not require continual effort or repeated invention of new approaches every time format, software or hardware paradigms, documents types in a uniform way, while being capable of evolving as necessary.

The following challenges can be considered in digital preservation:

- Digital Preservation impacts anyone with electronic materials.

- Rapidly changing technology makes “Preservation” a challenging and ongoing concern.
- Ease of use today is tomorrow’s headache.

Advantage of preservation

- Space saving
- Easy access
- Easy to handle
- Easy to transmit
- Time saving task
- Low cost
- Less Manpower involved

Disadvantages of Preservation

- * Process of installation is complex and costly
- * Lack of infrastructure: In Developing countries like India, it is a very tedious job to provide all infrastructure facilities at one platform as and when it is required.
- Insufficient Budget.
- Shortage of expertise in India

10. CONCLUSION

There are many tools and techniques available for efficient information management and tools should be used to manage the digital information efficiently. There are some definite technical issues that must be resolved before starting the preservation of digital resources. Now the government and many institutes are gradually realizing the need of digital preserving as UGC – Infonet and other like programme is the innovative steps towards digitization and digital preservation.

11. REFERENCES

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