

# Digital Preservation: Some Opportunities, Issues and Challenges Emphasizing Possible Solution

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**Abstract – Digitalization is one of the important aspects in today's age of information. The development of content management and development is in many ways possible with the help of Digital Preservation. Future Content Management and Content Dissemination are possible with healthy and sophisticated Digitalization. Digitalization or Digital Information Service is provided from remote database through interactive communication with the help of communication channels. Digitalization plays an important role both in manual or offline Information Services and Online Information Services. Though it has benefit but deals with certain issues and challenges. Thus, it is essential to find out the way for solving some Digitalization problems. This paper talks about Digital Preservation which includes meaning and nature of Digitalization, characteristics and so on. Paper is also illustrated some way to solve recent problem deals with Digitalization.**

**Keywords: Digitalization, Content Management, Social Informatics, Content Digitalization, Information Science Practice**

## I. INTRODUCTION

Digitalization is the process and mechanism of digital content building with the help of image processing and scanning systems. The Digitalization need is the need of hour for its transformation from manual document to the digital one and similarly transforming content from manually transferred Digital Product become easy ones Digitalization process is completed. In Digitalization Online Information Delivery become easy and can access the database directly or via a service provider and such kind of services are provided by the Information Networks and similar Foundation such as Information Centre, Data Centre, and Information Systems and so on. However, in today's age internet becomes important tool for Digital

Data and content delivery. Earlier, Digitalization with online platform comes during 1980's and such services are comes with text based services [01, 03, 05]. The development and need of Digitalization realized during 1990's when Internet becomes commercially available. Earlier, the internet was only deals with Governmental Services but once the services open up to the common people that time the need and importance of Digitalization spread all over [06].

## II. OBJECTIVE OF THE STUDY

The main aim of this conceptual and theoretical paper includes but not limited to as follows:

1. To know basic about Digitalization and its need and importance in contemporary era;
2. To learn basic about the characteristics and nature of Digitalization;
3. To know basic about the contemporary and up-to-date services comes with Digitalization Process;
4. To know latest about the challenges and similar aspects in the field of Digitalization;
5. To know basic and advances about strategy to find out contemporary problems deals with Digitalization and Online content.

## III. DIGITAL PRESERVATION: BASICS

Digital Preservation is the need of hour. Digital Preservation is deals with so many aspects like content collection, selection, selection, organization, processing, management and dissemination. In Digital Preservation first of all content tries to collect and make Digitalization Directly; where as in manual Documentation they need to scan through the scan machine and assembled in one single folder or file[07, 08, 09].

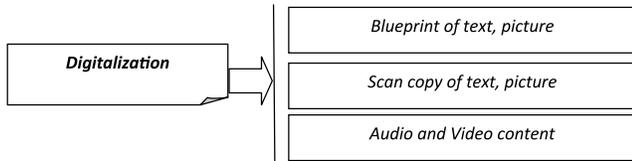


Fig. 1 Depicted basic of Digital preservation and digital archives

Digital Preservation is important for Future uses in all most every where including healthcare, hospitality, organization and business housing, chemical and scientific lab, educational foundations and so on. Digitalization and online or soft content is helpful many ways including money serving, future uses, easy modification, transparent delivery, number of works and delivery is possible with Digitalization [10, 11].

**IV. DIGITAL PRESERVATION: ADVANTAGES**

Digitalization comes with so many advantages and benefits which including but not limited to as follows:

- Digitalization helps in easy modification in existing content and no need to write the content again;
- Digitalization helps in money saving as it helps in Digital Circulation every where and make available for future. In Digitalization, we no need to write all the details again and just copy and channel transfer is enough for that;
- In Digitalization one can use the content in future of he/she keep the details on files in side the storage system and handheld mechanism such as Pen drive, HDD, CD-DVD and so on;
- Digitalization helps in advance computing services through the digital services;
- Digitalization helps in healthy content and information infrastructure building;
- Digital preservation keeps knowledge more healthy and sophisticated [14, 16].

**V. DIGITAL PRESERVATION: ISSUES**

**Technical Issues**

- Building Digital Preservation needs so many tools and technologies such as computing technologies, networking technologies, communication technologies, multimedia technologies, database technologies in one single platform for healthy and sophisticated content/information infrastructure building;

- Digital Preservation needs sophisticated software for managing such information in digital manner and here the problem is in availability of software and packages most of the available software are costly and commercial and hence availability of free and open source software is an important issue to look into;
- Proper understanding of Information-People-Technology is very much urgent and important.

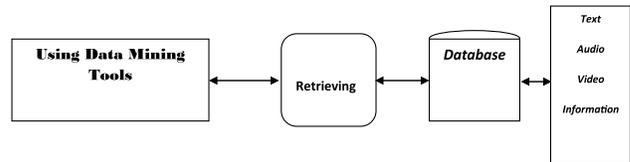


Fig. 2 Depicted Data Mining tools and its basic functioning

**Social and Copyright Issues**

- Social Issues are most important in Digitalization. It is essential that during presentation of content or document in digital platform; here copyright matter should keep in mind. In many cases transforming or changes of book into digital form needs proper permission of the author and may be publisher too. And in certain cases, prior permission is not needed;
- Many people are not ware about the concept of Digitalization. Thus awareness among the masses are very much urgent requirement for ultimate aim fulfillment of the Digitalization [17,19].

**HR and Skill Related Issues**

- Building offline based Digitalization and online Digitalization needs several technologies to the people who prepare Digitalization system. Thus knowledge of interdisciplinary skill of information and technologies are also very much important;
- Skills related to Digital preservation is changed day-by-day.

**Financial Issues**

- Building big information infrastructure needs so many hardware and technologies such as Computing, Database, Website, Networking Devices, and all such technologies needs financial support. As far as technologies are concerned, Digitalization needs financial support. Purchasing computer, hardware, software, application, utilities needs financial support;

- Digitalization is a lifelong process, it needs time to time monitoring and up gradation in technologies [such as database, web technologies, multimedia technologies and so on]; thus proper financial support is very much important.

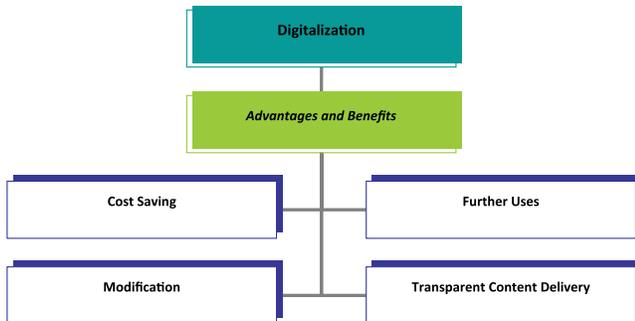


Fig. 3 Depicted Data Mining tools and its wider advantages

**Other Issues**

- Information explosion is another issue, day by day knowledge is changing and thus changes of content is very much urgent requirement for healthy and sophisticated Digital preservation systems;
- Writing content and according to the time need is an important and urgent requirement for healthy and sophisticated Digitalization process;
- Up gradation in content is another issue[22, 23];
- Content in image structure is the key challenging issue on such content is not possible to changes;
- During converting and preservation of digital content it is very much important that, the content should be transfer from word process or similar application directly rather than converting word process based file into picture or similar format and thus its preservation in digital repository.

**VI. SOME PROPOSED SOLUTION ON CONTEMPORARY ISSUES**

- Proper technical solution is needed in the form of ready made software for Digitalization, availability of the free and open source software in this field;
- Proper manpower in the field; who should know about information and technical aspects of Digitalization; the HR Team also need to be aware about the modern and latest development in this field;

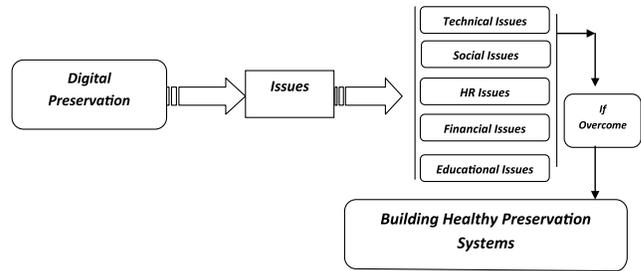


Fig. 4 Depicted Contemporary issues related to Digital Preservation

- During conversation of document in to Digital form it is better to find out in actual work data and primary file [word based] for better future uses and modification, if needed;
- A proper understanding between publisher and Digital Preservation provider is very much urgent for healthy and sophisticated service in Digital content delivery and management;
- Proper awareness creation is essential in the field of Digitalization among the common people for better and healthy utilization of Digital Content;
- Proper funding from Government and concerned institutional level is important for complete utilization of Digital process and Digital and online content delivery;
- Proper tie up may be built between publisher and content developer [24, 25].

**VII. FINDINGS AND SUGGESTIONS**

Digitalization is cost effective method in the field of content development. Digitalization is useful in several organization and institution such as healthcare, hospitality, commerce and management, education and Government sector too. Today much software are coming in the field of Digitalization for healthy content development. Digitalization process still in developing stage in Governmental establishments.

Still awareness in this sector is very much limited and thus proper awareness creation is very much important. Ministry of IT, Computing and Science and Technology department need to take initiative for proper utilization of Digitalization in developing countries. Governmental establishment, department is need to use Digitalized documentation strategy for further development for their activities.

### VIII. CONCLUSION

Digitalization is most important and urgent think in today's age. We are called today's age as the 'Age of Information'. People are now making broader electronic content generation in computer, mobile, facebook and so on. Ultimately healthy Digitalization process help in building sophisticated Information Infrastructure building. Digitalization with Cloud Computing becomes easier and most cost effective in the age of Big Data Management [04, 05, 16].

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