ONE CLICK KNOWLEDGE THROUGH E-CAPSULE

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ABSTRACT
E-resources are today's most important part of sharing knowledge. It includes on-line reading of database related to news feed, science & technology, history and literature. E-resources are not only making space between experienced intellectuals but also with school going teenagers as they find it much more exciting and interesting. E-based learning is very fast, convenient as well as environmental friendly for not using papers manufactured by destroying the forest. The data for this study was collected and compiled from various resources and especially from the digital library. This write up will focus on preservation and challenges related to management and development.

KEYWORDS: Digital preservation, digitization, Dspace, Digital obsolescence and On-line reading

INTRODUCTION

Alternative knowledge sourcs such as audio cassette tapes, video tapes, computer disks, CD-ROMS and DVD needs special equipment to display items and give challenge to preserve the information contained on sometimes fragile storage media. I The online data is huge and and items are complex as website contain a number of different file formats which mandate its preservation.

Digitization

Digitization is the process of representing an object, an image, or a signal by a discrete set of its points or samples. Example:- Maps, Manuscripts, moving images and sound.

Importance of Active preservation

Margaret Hedstro points out that "digital preservation raises challenges of a fundamentally different nature which are added to the problems of preserving traditional format materials. According to a report by the US library of congress, 44% of the sites available on the internet in 1998 had vanished one year later, these includes website for the E-Mail services and social network etc.

Strategies

A four point-strategy developed by online computer library centre (OCLC), in 2006, for the long term preservation of digital objects that consist of

- Assessing the risk for the loss content posed by technology variables such as commonly used proprietary file formats and software application.
- Evaluating the digital content objects to determine what type and degree of format preservation actions should be applied.
- Determining the appropriate metadata needed for each object type and how it is associated with he objects.

Refreshing

Refreshing is the transfer of data between two type of the same storage medium so there are no bitrates changes or alteration of data. This strategy may need to be combined with migration when the software or hardware required to read the data is no longer available or is unable to understand the format of the data. Refreshing will likely always is necessary due to the deterioration of physical media.

Migration

Migration is the transferring of data to newer system environments. This may include conversion of resources from one format to another (e.g., conversion of Microsoft word to PDF or open document), from one operating system another (e.g., solaris to Linux). So the resource remains fully accessible and functional.

Replication

Creating duplicate copies of data on one or more system is called replication. Data that exists as a single copy in only one location is highly vulnerable to software or hardware failure, intentional or accidental alteration, and environmental catastrophes like fire, flooding, etc. Digital data is more likely to survive if it is replicated in several locations. Replicated data may introduce difficulties in refreshing, versioning, and access control since the data is located in multiple places.
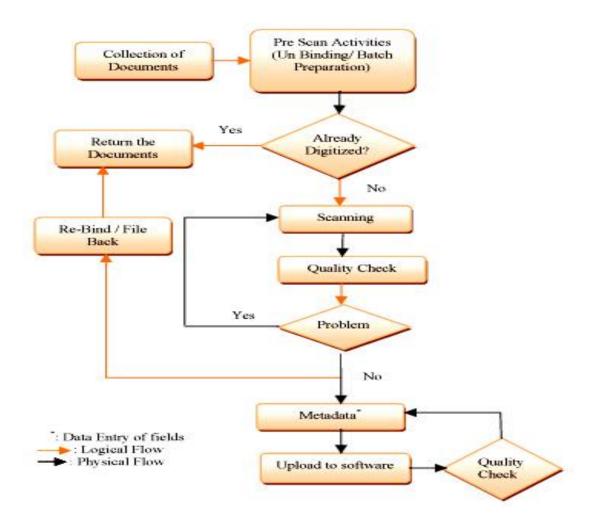
Emulation

Emulation is the replicating of functionally of an obsolete system . Emulators may be built for applications, operating systems, or hardware platforms. Emulation has

been a popular strategy for retaining the functionality of old video game system.

The challenges

The challenges of integrating electronic resource are many. Several author suggested comprehensive approaches to library collection development in an electronic age. The first challenge digital preservation

faces is that the media on which digital content Stand are more vulnerable to deterioration and catastrophic loss as the recording media for digital data deteriorate at much more rappid pace. This charestic of digital form leaves a very short time frame for preservation decision and actions

Digital Obsolescence

This challenge is exacerbated by the lack of established standards, protocols, and proven methods for preserving digital information as there is no guarantee of safety and preservation of any digital media, including Tapes, CDs and Pen drive etc. Hedstrom further explained that all digital library researches have been focused on "architectures and systems for information organization and retrieval, presentation and visualization, and administration of intellectual property rights". Crowe and Sanders (1992) see these technology-driven changes as actually increasing the need for cooperation and communication among institutions. In order to continue to provide effective physical access to documents, libraries must increase cooperation to overcome potential funding and management problems, such as communication failures, and lack of standard access and authority for resource sharing.
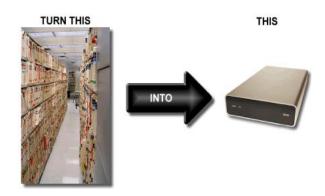

Cost

Digitization is high cost required process for its creation, production, and dissemination and introduced new and uncertain economic realities. In digital customers are required to pay fees for access to digital services and collections, thus, forming major obstacle in digitization.

Organizational

Digital library require 24 X 7 power supply, long term organization and institutional commitments. Management of the technical infrastructure for "digital library" services will be a significant obstacle for most libraries fluctuations in budget and continuous increase in the capital for development and maintenance. As compared to print collection, local administration of the digital collections is harder and more expensive.

Intellectual Property Right

An intellectual property is an intangible asset and many laws are implemented for its protection thus creating big barrier for preserving the digital documents and are involved with complex method for resolving the legal and practical questions of migration intellectual property, that includes the creators and owners of intellectual property, managers of digital archives, and actual and potential users of intellectual property.

CONCLUSION

As digital library is less expensive more reliable, easy to manipulate, flexible compatible with other digital systems but it also provide sampling error,require greater bandwidth than analogue to transmit the same information and need communication system to be synchronized.

A strategy with defined selection priorities for digitization is critical and should be informed by a convergence in the consideration for both preservation and access. The focus should be based on traditional preservation decisions such as the value of materials; the condition of materials; use of materials ensuring a high level of success. For the library of Congress, items of national interest are prime candidates and digitizing this object improves access while reducing the wear and tear on the originals.Digital conversion is not a yet a form of preservation; which relies on long-term, stable media, which cannot be expected with today's technology. The only accepted long-term preservation media are durable acid-free paper or preservation microfilm (Gertz, 2000, p. 97).

Access to successful digital surrogates often encourages people to wish to consult the original. This impacts staff in other ways with more calls, letters, and requests for publication or reproduction of the materials, and added reference service is necessary (de Stefano, 2000, p. 13). High-quality surrogates must be created in order to satisfy the users' needs, or they will need to go back and consult the original (de Stefano, p. 21-22).

Financial costs are extremely high and cultural institutions usually operate with either flat or marginally increasing budgets. Operational environments must have fundraising and accountability. With such great costs of staff time and funding, the "risk of loss", is very high (Conway, 2000).

Ease of access to a digital collection leads to high expectations of end-users. There is a tendency to believe that everything is available online, that every piece of information is true and accurate, and that everything available online is free. Rarely do users understand or appreciate the scope of the collection and its relationship to other parts of the collection. (Ingram, 2000, p. 19).

In India , libraries are facing many problem initially in digital preservation as shortage of fund provided them, intellectual right issues, less interest of parent institutes and staff.

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