DIGITAL PRESERVATION TECHNOLOGIES & STRATEGIES AND STANDARDS

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ABSTRACT:

Digital Preservation is becoming necessary for the future time. Digital libraries have been built all over the world. Libraries are engaged in creating and maintaining digital libraries. One of the important aspects or key part of any digital preservation activity is the format of the document in which the digital document is created and added in the digital library or repository. One of the main challenges in maintaining digital libraries is the digital preservation. The paper discusses about the purpose of digital preservation, digital preservation strategies and standard.

KEYWORDS : *Digital preservation, Digital strategies and standards, Preservation.*

INTRODUCTION:

Digital preservation refers to management of digital information over time to ensure its accessibility. Digital preservation is the set of processes and activities that ensure continued access to information and all kinds of records, scientific and cultural heritage existing in digital formats. This includes the preservation of materials resulting from digital reformatting, but particularly information is born-digital and has no analog counterpart. The rate of change in computer technology shows that information can be inaccessible within a decade. Preservation is therefore an immediate issue for digital resources than for traditional. Digital preservation will need proactive preservation. Preservation of Digital materials is of increasing importance for a wide range of activities with in education and research. Much of the knowledge base and intellectual assets of institutions and staff are now in digital form.

DEFINITION OF DIGITAL PRESERVATION:
- According to a recent statement from the council on library and information resources; "Digital preservation refers to the various methods of keeping digital material alive into future" (K, Vinitha etc. 2007)
- Digital preservation combines policies, strategies and actions to ensure the accurate rendering of authenticated content over time, regardless of the challenges of media failure and technological change. Digital preservation applies to both born digital and reformatted content.

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- Digital preservation combines policies, strategies and actions to ensure to reformatted and born digital content regardless of the challenges of media failure and technological change. The goal of digital.

DIGITAL PRESERVATION NEED

- Digital resources are playing vital roles to fulfill the requirements of the users working towards higher education and research.
- First object of libraries archives and other custodians is to satisfy the user's expectation and users requirements. They should preserve materials in all formats.
- User expectations are always changing. Yet users especially, research scholars need both traditional documents and electronic documents or old information and current information.
- Education and research heavily dependent on digital content and digitalized content and digitalized information

DIGITAL PRESERVATION: PRESERVATION TO BE TAKEN:

- High quality original images preferably be stored on archival quality.
- Maintain consist ant temperature 20 deg c (68 deg f)
- Avoid large and rapid flections on temperature/humanity.
- Store media on then original cases.
- Return to controlled storage immediately after use.
- Minimize explore to sunlight.
- Avoid exposure to magnetic field (or magnetic media.)

ISSUES IN DIGITAL PRESERVATION

- **Hardware**

  New computing hardware opens the door to new and improved software leading to software and file format obsolesces. These changes force older peripherals into retirements along with their compatible computers.

- **File Format and software**

  Determine the file format status of yours digital holdings. What formats and versions are represented, in what quantities? Such an inventory is an important step towards managing file format risk the range of formats in use should be consolidated to minimize duplication and eliminate problem formats. This process is known as normalization.

- **Media format**

  There are three commonly used categories of digital storage media disk, tape and solid state. The mature of the physical media on which digital data is stores presents a major challenge to the preservation of digital content. The great variety of media types their often rapid obsolescence from technological change and their vulnerability to physical degradation all contribute to problems.

- **Physical Threats**

  Digital storage media and hardware are subject to numerous internal and external for less that can damage or destroy their readability.

- **Physical Degradation**

  There is the more basic question of how to deal with fact that media physically degenerate of become absolute how long will various media types last of thesis considerable controversy around the issues with Kodak claiming on one report that its writable CD would last 217 year under certain condition others observe that such media start to degrade after only a couple of years.

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SOFTWARES AVILABLE FOR DIGITAL PRESERVATION:

1. Improved access – searching and browsing. Search becomes easy and comfortable.
2. Alchemy (R)
   Information management research Ine.
   http//:://www.imrgold.com
3. CONTENT dm.
   DimeMA, Inc.http//Contentdm.com/
4. There is software are that will help to manage to items through the entire digitalization process and create a "place" for users to locate (e.g. CONTENT dm).
5. There is software are that only provides indexing and access services, but does not so far a wide verity of file formats including digital images (e.g. in magic content server). The following software packages listed below fit into one of these categories:

DIGITAL PRESERVATION STRATEGIES

In 2006 the online computer library center developed a four point strategy for the long term preservation of digital objects that consisted of:

- Determining the appropriate metadata needed for each object type & how it is associated with the object.
- Evaluating the digital content object to determine what type & degree of format conversion or other preservation action should be applied.
- Providing access to the content.
  There are several additional strategies that individuals & organizations may use to actively combat the loss of digital information.
- Assessing the risks for loss of content posed by technology variables such as commonly used proprietary file formats & software applications.

DIGITAL PRESERVATION STANDARDS

- Make the preserved information available to the designated community.
- Determine, either by it or in conjunction with other parties which communities should become the designated community & therefore, should be able to understand the information provided.
- Negotiate for & accept appropriate information from information producers.
- Obtain sufficient control of the information provided to the level needed to ensure long term preservation.
- Ensure that the information to be preserved is independently understandable to the designated community in other words the community should be able to understand the information without needing the assistance of the experts who produced the information.

CONCLUSION

The preservation strategies are actively employed the information which the technologies are enabling to be created, manipulated, disseminated, located & started with increasing case information will rapidly become inaccessible. There is a need for further research and appropriate strategies are being tested but technology will continue to evolve and will continue to raise new issues. Software or hardware paradigms documents types or record keeping practices changing. This approach must be extensible Digital preservation can handle only expatriation. Knowledge of management and application of digital software can help to preserve the digital resources because of their quantum of complexities in their nature.

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