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DIGITAL PRESERVATION AND EASY RETRIEVAL TOOLS IN ACADEMIC LIBRARY SERVICES

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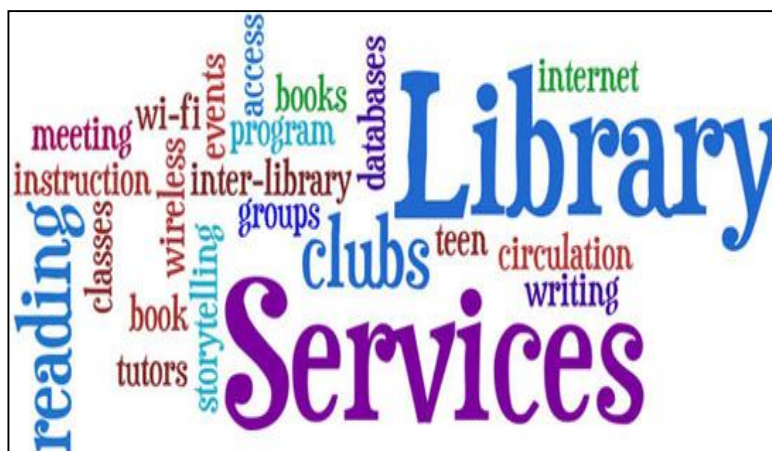
ABSTRACT

With the rise of information and communication technology, web and mobile technology has changed the way users access information and anticipate their information resources. This technology changes and the collection strategy in the library has completely changed due to the expectations of the users and increasing e-publishing. Technological advances, high standards, user-friendliness and easy accessibility are the reasons for the rapid growth of digital-only content in the library. Any loss of digital resources will have a severe impact on library services. So, it is very important to save digital resources for a long time to serve students and researchers efficiently. This paper discusses digital protection, the need for digital protection in educational libraries, and the various models and methods that are popularly used for digital protection.

KEYWORD: - information and communication technology , information resources.

INTRODUCTION:

The primary responsibility of any library is the collection, organization and dissemination of information resources. In addition to these three, the most important responsibility of the library is to preserve the resources in the library in a good, usable and accessible condition. Today's libraries have a wide variety of materials, which can be referred to as information resources, including books, periodicals, CDs, DVDs, etc. and non-book-like content from other



electronic sources. Advances in ICT, the Internet, and mobile technology have made it possible for anyone to become a writer and publish on the Internet. The number of scholarly articles, journals, books and a variety of content in digital form has grown rapidly, and this increase in online digital content is reflected in the growing percentage of e-resources in educational libraries. The librarian must currently have sufficient knowledge of how to protect the various resources of the library, saving basically means adopting the right and appropriate measures and techniques to maintain resources in a good, usable and accessible condition. Editing physical artwork, such as printed material and non-book material, automatically acquires permanent possession of the contents of the library. But the use of resources such as e-journals, e-books, online databases, etc., accessible through the Internet, is governed by rights or agreements without ownership, and these resources will not remain in the library. Different standards, strategies and models are used in digital protection.

Due to the variety of user needs and expectations, 24x7 resource access, download facility, print and export facility, remote access

access, simultaneous multiple user access and fast search and recovery facilities are the main reasons for the growth of online resources in libraries. . "Today, with the introduction of information and communication technology, the environment of educational resources has changed a lot. University faculties, research scholars and students are moving towards flexible information resources. In this direction, e-resources have opened up new worlds for the user community." "Electronic resources are revolutionizing the libraries of engineering colleges. Many librarians believe that these sources have fundamentally changed the principles of selection." E-books, which are currently less than a percentage in 2001, grew by 50% in 2013 and are based on self-published titles, while online book selling platforms grew by 20% between 2012 and 201. Books in the Brick and Mortar Book Store declined 1.1% in the year 2011. "This report shows the growth of e-books in the publishing industry. UGC-Inflibnet, Indest and other consortiums are offering thousands of online journals and e-books at a lower price. Price: Technological advances, high standards, user-friendliness and easy accessibility are the only reasons for the rapid growth of digital content in libraries.

NEED OF DIGITAL PERSPECTIVE:

Acquisition of printed material automatically results in permanent possession of the material but in the case of e-sources or digital content, libraries do not actually 'receive' copies of digital content, instead libraries will have the right to access resources i.e. licenses or contracts to use resources for a specified period. Libraries must have the necessary infrastructure to access digital content in order to host a copy of all licensed digital content. Libraries in the field of e-journals subscribe to a specific journal for one year. Libraries will have access to that journal for a subscription period, if it continues, they will have access to the current year and past affairs in this subscription library or the library can get a copy of the current year in the format prescribed by the publishers, download it to the local system for future use.

The real problem is that if the library stops subscribing to a particular journal for various reasons, the libraries may lose its contents and this issue can be resolved by signing a papyrus agreement with the publisher. Since libraries do not own the resources, they do not have the right to collect them without the publisher's authorization, so libraries must negotiate with the publisher and enter into agreements with the publisher for appropriate perpetual access and archiving rights. . The Digital Library Federation (DLF) defines licensed access, specifies the right to permanent access to licensed literature paid for during the term of the license agreement, while "archival right" defines the right to retain electronic copies of licensed material permanently. Getting regular access agreements and archival copies is a primary and important step in digital protection, but not a complete solution for digital protection. Unlike paper protection ... Digital protection requires active and stable maintenance"

The Information Technology encyclopaedia defines digital protection as "the process of keeping digitally generated materials in a usable condition." The obsolescence of computer equipment, software and storage media exacerbates the problem of physical protection. There is also a reference to the practice of digitizing objects originally produced in non-digital format (print, film, etc.) to avoid permanent damage due to deterioration of the physical medium. Digital preservation is a series of management strategies and activities necessary to ensure long-lasting usability, authenticity, search ability and accessibility of content.

Near and medium term access is achieved in the following ways:

1. **Backup:** Backups have been understood to require protection of near-term data access since the content was copied and stored in multiple locations for easy data restoration when equipment failed or data was corrupted.
2. **Redundancy of System Access:** Most content delivery systems are configured for redundancy so that the entire system runs on two or more computers in two or more data centres. These multiple systems can be online at the same time or there can be a 'hot spare' that can be brought online quickly if one of the first systems fails.
3. **Replication of Byte:** Byte replication is the process by which multiple copies of identical files, file systems, or websites are created. They can be written on other online computers or offline media. These

replicas are usually placed in different geographical locations and do not require special software to access the content.

4. **Long Term Digital Preservation:** Backup, system access, system redundancy, and byte replication are useful for near and medium access, but not enough for long-term protection of digital content. Further necessary steps must be taken for long-term digital protection. To solve this problem all digital content can be kept in a separate place or organization called Digital Protection Institute in addition to the publisher and library. Such digital conservation organizations must have the technology infrastructure and the ability to support digital content as it is created. In order to preserve digital content in advance, digital protection organizations must obtain legal rights from the respective publishers.

DIGITAL PRESERVATION STANDARDS:

1. **OAIS:** This reference model addresses the entire task of saving archive information, including input, archival storage, data management, access and dissemination. It also addresses the migration of digital information into new media and forms, the data models used to represent information, the role of software in information protection, and the exchange of digital information in archives.
2. **PREMIS:** The PREMIS Data Dictionary for Preservation Metadata is an international standard for supporting the protection of metadata digital objects and ensuring their long-term usefulness. Developed by an international team of experts, PREMIS has been implemented in digital protection projects around the world, and PREMIS support has been incorporated into many commercial and open-source digital protection tools and systems. The Premises Editorial Committee coordinates the version and implementation of standards with data version, XML schema and auxiliary documentation.
3. **TRAC:** These tools can help libraries, scholars, publishers, and others to judge the reliability of repositories and digital storage services. It was published by CRL in 2007. ISO 16363 / TDR - ISO 16363, or TDR, commonly referred to as the ISO standard up to February 2012. This is a review of the track checklist. Many of the changes were structural and focused on the same core area.
4. **DRAMBORA:** The Digital Repository Audit method, based on the Risk Assessment (DRAMBORA), jointly developed by the Digital Cure Centre (DCC) and Digital Preservation Europe (DPE), shows the main intellectual results of the pilot repository audits conducted by DCC in 2006 and 2007. It introduces a methodology for self-assessment, which encourages organizations to establish a broad self-awareness of their objective actions and assets before identifying, evaluating and managing the risks involved in their organization.

PROTICO:

Portico is a non-profit organization dedicated to the preservation of scholarly material published electronically and to ensure that this material remains available to future generations of scholars, researchers and students. JSTTR, Ithaca, Andrew W. With the support of the Mellon Foundation and the Library of Congress, the Portico 2005 officially focused on e-journal protection. Portico saves content through format-based migration policy. The main points of this policy are to identify the key preservation metadata at the starting point of practical protection of content preservation, such as content being moved only where necessary. In the event of a major natural disaster or business breakdown, the portico collection could easily be moved to a new one. And, while archives are dark, publishers and libraries are granted audit privileges that allow them to review the status of content.

Many organizations successfully run various organizations in India to increase the purchasing power of libraries, increase the availability of resources and provide automated services. Most used consortia like Indest, UGC-Inflibnet, CSIR, Forsa etc. have separate libraries. They should provide a safety net for all online journals and databases they subscribe to. This clause may be included in the license agreement they have signed with the publisher. The AICTE Indian team has more than 1200 organizations and offers more than 12000 e-journals. The UGCFONET Consortium has more than 400 organizations and their member organizations have over 7500 journals and numerous databases available. If you consider other organizations with thousands of organizations participating in this organization, this organization can take

important steps for digital protection in India. They can start creating a new model that will be right for their member organizations. This will help thousands of organizations save their digital content for future use.

CONCLUSION:

Researchers, users and the general public are rapidly moving towards using digital content. The World Wide Web has seen an increase in global content digital content. This precious knowledge must be preserved for the future. Libraries and publishers are the two main groups of participants in the digital protection service, so they need to join together to find the right digital protection service. A single library cannot achieve this, so the government and other leading organizations will have to initiate and support the process of digital protection. And most importantly, it is a long-term process of long-term digital protection that can be achieved by collaborating in digital protection by sharing responsibilities and costs.

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