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Importance of Digital Repository in Knowledge Management

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ABSTRACT
Today's technologically advanced world accumulates implicit knowledge, as well as tacit knowledge, primarily in digital form, making Knowledge Management (KM) increasingly dependent on tools, specifically digital content management platforms and repositories. With these, a complete Knowledge Organization System (KOS) can be formed, powered by a subject classification system like a thesaurus or ontology. The Information must be of value to the users before it can be considered knowledge; this is why we need Knowledge Management (KM) in digital libraries and institutional repositories. KM refers to the tools, technologies, practices, and cognitive processes that enable organizations to acquire, organize, sustain, apply, share, and renew both tacit and explicit knowledge - all with the aim of improving performance and creating value. Digital libraries and institutional repositories comprise a curated collection of digital knowledge resources for sharing.
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INTRODUCTION

As information systems, digital repositories ingest, store, manage, preserve, and provide access to digital content. For bridging knowledge gaps between privileged and underprivileged communities in the information society, free flow of information is a fundamental principle. [1] In a society where citizens have universal access to information and knowledge, ranging from public information to specialized or customized information pertaining to their profession, vocation, or culture, social inclusion and economic empowerment are also achieved. [1] It is gaining momentum in developed countries which have the necessary information infrastructure to provide universal access to information and knowledge. [2].

Aiming to achieve universal access to information and knowledge, Open Access is a new mode of scholarly communication within the digital environment. While Open Access helps digital inclusion of citizens in developing countries by bringing within easy reach full-text contents of scholarly works, documentary heritage collections and development-related literature, the Digital Library remains a knowledge repository for such citizens, indigenous people, communities and institutions. You can set up a table or booth at new faculty orientation events to meet and greet faculty. Take advantage of existing opportunities for meeting and greeting faculty. If possible, connect a laptop to a large high-definition monitor in the room to project a slideshow of images from collections. Demonstrating objects from existing collections or building a collection can be done with additional laptops. [2]

Understanding the role of a digital repository in preserving digital content is key to engaging participants in digital preservation. It is common for physical items to be preserved in libraries, museums, or archives, where they are kept in climate-controlled environments to

prevent pests and mold and away from damaging light. Library and archive professionals monitor the locations of items in order to maintain control over their collections and know their locations. For digital items to remain in good condition, they also need special housing and management. In a digital repository, digital items are organized and searchable, and they are stored in a specific, persistent location so repository managers can maintain intellectual control and researchers can find what they're looking for. In addition to storing digital objects online, a digital repository preserves their integrity for years to come. [3]

Digital repository systems, regardless of the specific software, are usually structured in a similar way. The majority of repositories use relational databases such as Oracle, Microsoft SQL, PostgresSQL, or MySQL. Relationship databases organize data into tables which are linked by relationships. Both Oracle and Microsoft SQL are proprietary systems that require licensing, while MySQL and Postgres are open source systems. Having repositories built on databases ensures long-term flexibility and functionality by eliminating flat file structures. You must make sure that you can easily extract data from your repository and import it into another system using a standard open format such as XML if you want to move your repository from one system to another.[3]

Digital Repository in Library Science

A knowledge repository is an online database that collects, arranges, and classifies information - typically in a private instance. However, public databases exist to organize public domain intelligence. These repositories are also referred to as Digital Learning Repositories, Digital Object Repositories and Electronic Performance Support Systems. Nowadays, companies of all sizes and industries consider it crucial to store and share corporate knowledge. The emergence of digital resources such as online databases and corporate intranets provide training organizations with the means to generate and maintain knowledge repositories for employees' and customers' benefit. [4]

Knowledge repositories enable organizations to link individuals with information and expertise from around the world through online libraries that are searchable, discussion forums and other components. They provide a centralized place for each person to add, contribute to, and share learning resources that can be employed in curricula design and content creation for both traditional and digital learning settings. Such repositories have grown to be integral parts of corporate knowledge management systems, as well as a significant stimulant of collaborative and incidental learning activities. [4]

Effective digital knowledge repositories have several key characteristics:

- **Centralization:** One consistent interface enables global tagging, sharing and commenting on a wide variety of digital courseware and content curated from multiple sources. [5]
- **Content management:** Audiovisual files, simulations, data, learning modules, articles, blogs, YouTube videos, best practices guidance, monitoring capabilities, and contact information are some of the types of content that can be managed. There are multiple ways to search content, including key words and learning outcomes. [5]
- **Cost savings:** Repositories can potentially reduce the cost of training and education by making affordable course materials available, reducing the necessity for classroom training, and stimulating productive informal learning. [6]
- **Access control:** It is possible for curators to accomplish various goals by restricting individual content pieces using password authentication and other security features. Many access controls involve safeguarding proprietary information and protecting intellectual property. Several repositories, but not all, employ digital rights management (DRM) to protect and monetize intellectual property.[6]
- **Record management:** Repositories can be integrated with learning management systems for seamless learning and talent management. [7]

A digital repository can be institutional or disciplinary. Institutional repositories are collections of resources that are specific to a particular institution. For example, MINDS@UW is the institutional repository of the University of Wisconsin. [8]

- **MINDS@UW:** Faculty and staff at UW add materials to MINDS@UW.
- **dList:** Library and information science sources mainly from North America.
- **E-LIS :**A collection of international sources about library and information science. Contains a large number of European sources.

- **SPARC:** As a resource for those interested in establishing, accessing, or simply learning about online repositories, both institutional and disciplinary, SPARC, Scholarly Publishing and Academic Resources Coalition, assembles resources. The Association of Research Libraries developed SPARC in 1997-98 and its members are mostly universities and research libraries. The purpose of SPARC is to improve access to scholarly materials. [8]
- **OAIster:** It contains 23 million records and provides access to over 1100 different collections of open access digital materials.

India Institutional Repository

An Institutional repository is an online archive that showcases the institution's scholarly work to a global audience. It consists of services allowing universities and organizations to publish, manage, and store digital content generated by employees and other members of the community. This digital service represents the joint effort of librarians, archives, IT personnel, university administrators, faculty, and policy makers in providing access and ensuring long-term preservation of digital materials. Moreover, it presents new avenues for connecting with the outside world thereby requiring a reassessment of organizational policies and cultural relationships. [9]

Indian Digital Repositories and Institutional Repositories include the following initiatives: [9]

- Catalysis Database www.eprints.iitm.ac.in
- Knowledge Community on Children in India: Turning Knowledge into Action www.kcci.org.in Librarians' Digital Library (LDL) https://drtc.isibang.ac.in/
- OpenMED@NIC http://openmed.nic.in/
- Digital Archive of National Institute of Technology Rourkela http://dspace.nitrkl.ac.in/ dspace/
- Electronic Theses and Dissertations of Indian Institute of Science (ETD@IISc) http:// etd.ncsi.iisc.ernet.in
- Open Access Repository of IISc Research Publications (ePrints@IISc) http:// eprints.iisc.ernet.in/.

Digital Library Initiatives

India has a vast amount of cultural heritage resources in the form of documents that are in danger of fading away due to lack of preservation, rarity, and physical deterioration. The loss of this important intellectual wealth could lead to serious repercussions for humanity if we fail to protect it now. The digital library projects being undertaken by public institutions throughout the country attempt to rectify this situation by preserving, documenting and making available these multi-cultural and multi-lingual contents through top-notch initiatives like .

- Digital Library of India www.new.dli.ernet.in, http://dli.iiit.ac.in, www.dli.cdacnoida.in Traditional Knowledge Digital Library www.tkdl.res.in
- Archives of Indian Labour: Integrated Labour History Research Programme www.indialabourarchives.org
- CSIR Explorations http://csirexplorations.com/
- Cultural Heritage Digital Library in Hindi http://tdil.mit.gov.in/coilnet/ignca/welcome.html
- Digital e-Library (Dware Dware Gyan Sampadaa/Providing Books at Your Doorsteps) http:// mobilelibrary.cdacnoida.in
- India Education Digital Library http://www.edudl.gov.in
- Indian National Digital Library in Engineering Sciences and Technology (INDEST) Consortium http://indest.iitd.ac.in/

CONCLUSION

A digital repository is an effective way of managing and storing digital content. It can be either subject or institutional in its focus, providing valuable exposure to make documents accessible to a wider audience. As part of knowledge management (KM), such a system - comprised of a categorized repository and a corresponding organization system i.e. thesaurus with semantic relationships - should be taken into account when planning and implementing any KM strategy. This could lead to the integration or repositioning of these

systems, making them standalone knowledge resource or part of larger aggregator knowledge systems.

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