

Digital Libraries - Digital Librarians and Future Roles

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Abstract

Digital library is a collection of textual, numeric data, scanned images, graphics, audio & video recordings that provides access to digital collection for ease of retrieval of information to the users. Digital librarianship, which it defines as a set of traditional librarianship. Says librarians should become progressively acquainted with digital collections so as to understand once will they replace their ancient written resources with the digital counterparts, either for a fee or for gratis. Reports

Keywords: Digital Libraries, Digital Librarianship, Future Libraries, Electronic Resources, Library Services

Introduction

Digital libraries are systems providing user with coherent access to a really massive, organized repository of Information and knowledge Digital library could be a international virtual library. The library of thousands of networked electronic libraries from the down of civilization, the intellectual brains have poured their state indifferent directions in form of print and non-print kind to enlightened mass to explore varied analysis and development. Many terms are coined at totally different times to represent the thought of library while not books. Libraries having info in machine readable format or having access to info in digital format have up to associate degree surprising highlight and thereby the standard libraries were conformed to issues to satisfy the moment growing demands of the user communities for his or her dimensional approaches. Recent advances within the info world have reworked the role of library in distributive info to user. Increase within the variety of user and their totally different wants have created electronic equipment libraries to use new communication technology. As a results of this there's a worldwide would like and trend to gather organize manage, defend and distribute info in digital kind.

Digital Library

The terms, which have been in vogue at different times, include paperless library, virtual library, and electronic library online library, desktop library, and polyglot library, library without boundaries and more recently digital libraries.(Mahapatra,2004) The term Digital library in broad sense is a computerized system that allows users to obtain a coherent means of access to an organized electronically stored repository of information and data.

The digital library is making the library undergo a change in the paradigm o f its role to create organize and distribution o f information resources. A digital library is a distributed electronic collection that covers virtually all fields of human endeavor to serve the defined community.(Krishnamurthy, 2004)

Clifford Lynch (1996) a well know expert on Internet and web technology, defined digital library as “System providing a community o f users with coherent access to a large organized

repository of information and knowledge. The digital library is not just one entity, but multiple sources are seamlessly integrated.”

Standards of digital libraries

There are two items about digital libraries which are significant: a) the standards of digital library and the challenges that the digital libraries are facing with. In continue we will explain each one of them:

Ultimately, both Dublin Core and MARC21 standards are use normally for labeling contents in digital libraries. On the one hand, Dublin Core is a set of metadata elements. It includes all the creative expressions of Dublin Core metadata (it means modifying code, design and expression and controlled terms) that are considered for facilitating resources discovery. Dublin Core has developed since 1995 through a set of invitational focused workshops that collects experts from the world of library, network and researching communities of digital library and kinds of technical content. Dublin Core is a content-descriptive metadata model for improving electronic resources that are used by descriptive communities of official resources, like museums, libraries, governmental agencies, and commercial organizations. Dublin Core is based upon XML language. There is the possibility of using several combinational forms for DC evidence including descriptive framework of resources (RDF and DTD and extensible Markup Language model. One the other hand, the catalogue of Machine reader (MARC) has been used since 1968 for programming, saving and exchanging data for bibliography. MARC has been created in congress library for exchanging the machine of readable bibliography resources among libraries.

MARC21 is the result of MRAC change with a major difference that is increased for listing electronic resources. In fact, both standards are consistent so that converting metadata from one format to another is possible by using appropriate surveying (Pascal 1et al, 2006).

Features of Digital Library

Digital library is a collection of textual, numeric data, scanned images, graphics, audio & video recordings that provides access to digital collection for ease of retrieval of information to the users.

- Provide access to very large information collection(s)
- Focus on providing access to primary (or complete) information not merely surrogates or indexes.
- Support multi media content
- Network accessible Provide user-friendly interface
- Use declarative representation of document (e.g. tagged small text) in addition or as against image, ostsript, etc. forms
- Unique referencing of digital objects
- Enable link representation to local external object (hypertext)
- Clearly separate the digital library and the user interfaces by employing client server architecture.
- Support traditional library mission of collection development organization. Access and preservation.
- Support advanced search and retrieval
- Available for a very time
- Integrate personal group enterprise public digital library.(Malwad, 1996)

Digital Librarianship

Digital librarianship, which it defines as a set of traditional librarianship. Says librarians should become progressively acquainted with digital collections so as to understand once will they replace their ancient written resources with the digital counterparts, either for a fee or for gratis. Reports that the development of free databases afraid traditional publishers, noting they use each accessible forum to warn against the perils, though says that some costly, ancient databases can even be dangerous. Highlights digital finding tools and says it's no accident that the simplest ones come back from libraries and library faculties that have librarians who are well-versed in organizing, cataloging, classifying, and categorization print and non-print documents. Maintains that digitally literate librarians can steer patrons to each the physical shelves and also the virtual digital shelves for data.

The Future Role of Librarians

The most significant change in the role of librarians might be absence of their direct personal assistance and service to the users. However, they would play the role of information workers or knowledge workers. They would turn out to be knowledge counselors or the information intermediaries. Their task will be to tap the tacit knowledge that is available in the organization where they work. They will be more technology savvies rather than scholarship oriented professionals. They need to work with big data. The job of information intermediaries and information broking would emerge as the major business. The task of information storage and retrieval would become tougher as there will be unprecedented growth of information in terms of Zetta bytes and Yotta bytes of structured and unstructured digital data/information which literally means millions of Libraries of Congress. Data mining and data warehousing will prove to be a tough task and the future librarians need to acquire the finer skills of data mining and data warehousing.

Future Trends

- Closing the gap between biology & technology
- International Wireless Network
- Artificial Intelligence
- Increasing Entrepreneurial/Flex work force
- Increased free time
- Virtual Education
- Presumes rather than Consumers (producer's consumers)
- Project-based workforce
- Increasing focus on research data management for publications
- Prioritization of mobile content and delivery
- Evolving nature of the scholarly record
- Increasing accessibility of research content
- Continual progress in technology, standards and infrastructure
- Rise of new forms of multidisciplinary research

Services of Digital library

- Advanced users rights management
- Creation of notes and sharing them among users
- Current awareness services
- Helping with Databases
- Display of the digital content in native resolution

- e-Journals
- E-mail reference
- Helping the state university libraries put digital collections online
- Highlighted results of the search shown directly on the page
- Hosting digital collections and indexes
- Internet service
- Making scholarly journals accessible on the web
- Online requests
- OPAC
- Possibility to generate customized watermarked documents
- Possibility to link ILS with the digital library
- Print on demand
- Providing tools for managing digital resources over time
- SDI service
- Searchability in the whole digital library on the page level
- Support of modern technologies like tablets and other “touch” devices
- Support of text, images and formulas extraction directly from the pages
- Usage of the file format which was used for the long-term preservation
- Virtual reference

Challenges

- Embedding academic and research librarians in curriculum
- Rethinking the roles and skills of librarians
- Capturing and archiving the digital outputs of research as collection material
- Competition from alternative avenues of discovery
- Embracing the need for radical change
- Maintaining ongoing integration, interoperability and collaborative projects

Development in Technology

- Electronic publishing
- Mobile apps
- Bibliometrics and citation technologies
- Open content
- The Internet of Things
- Semantic web and linked data
- Emphasizing community space
- Digital media labs
- Electronic outposts

Conclusions

Libraries exist to serve users in a fluid environment of evolving expectations, technological influences, and institutional imperatives. As organizations, libraries have always understood their unique role in society. The remarkable growth of Internet has made significant revolution in all the areas of science and technology. Rather than using it as a tool for searching and retrieving information, Internet has become the king of all media, by which we can access virtual information and can build a virtual library to provide timely, quality service to the users. Librarians of this digital era, are in the position to change their role as arbitrary information scientists/gatekeepers and to meet the challenges of the Internet, World

Wide Web, online access in the knowledge society. So they must enrich their knowledge with special skills of the latest IT developments, to browse, access and retrieve a particular information across the global networks and to organize and manage the information by building digital libraries and by which they can provide quality e-information service to the knowledge society.

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