

Digitalization of Research Work : An Asset to the Library

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This paper discusses the role digitalization in reference to University Library. It also highlights the impact of digitalization on library services. The purpose of preservation is to ensure protection of information of enduring values for access by present and future generation. Digital preservation is a challenging task for any Library.

Keywords: Digital Library, Education, Digitalization, Digital Access

1. Introduction

In the past academic libraries were totally by their Physical parameters. Library users initiated the interactions by going to the library. They physically walked around the library and searched or searched or browsed for their information, or asked a librarian for help. When successful, they read or took the hard copy information out of the library. This model supported a wide variety of users from many different disciplines. With the introduction of library technology those physical boundaries have slowly changed. The searching was done via microfiche or CDROMs then information was either photocopied or read in the library online.

With the advent of web-accessible digital libraries and remote authentication, users' physical interaction with the library could completely change. Digital libraries (DLs) have the potential to transform aspects of the education process, with remote access to specialized information in a format that is easily updated and speedy searching access facilitates. However, the invisible presence of these resources, their poor usability and user support has made their impact less dramatic. A key element in the successful design and implementation of digital libraries has, in the important on the community involvement in resulting technology systems. The role of librarian and the changing impact of DLs across all the academic disciplines although crucial have no been fully researched.

2. Libraries and Digital Libraries

A digital library is a library in which collections are stored in digital formats (as opposed to print, a microform, or other media) and accessible by computer. The digital content may be stored locally, or accessed remotely via computer networks. A digital library is a type of information retrieval system. The DELOS Digital Library Reference Model defines a digital library as:

An organization, which might be virtual, that comprehensively collects, manages and preserves for the long term rich digital content, and offers to its user communities specialized functionality on that content, of measurable quality and according to codified policies.

The first use of the term digital library in print may have been in a 1988 report to the Corporation for National Research Initiatives. The term digital library was first popularized by the NSF/DARPA/NASA Digital Libraries Initiatives in 1994.

3. Factors Responsible for Emergence of Digital Library

A well informed and computer literate user base has started to demand more information at the desktop. Library budget were not able to cope with the user's rising demands for hard copy journal titles. Users demanding documents for their research were not concerned whether these were held locally in the library or obtained from outside, as long as they could be supplied quickly.

The distinction between library collection management and document delivery, the ownership and access approaches were increasingly becoming blurred. Librarians started giving increased emphasis to provide access to resources available elsewhere rather than physically possessing resources.

4. Types of Digital Library

The term Digital library is diffuse enough to be applied to a wide range of collections and organizations, but, to be considered a digital library; an online collection of information must be managed by and made accessible to a community of users. Thus, some web sites can be considered digital libraries, but far from all. Nevertheless, as a result of the development of the internet and its search potential, digital libraries such as the Library of Congress are now developing in a web-based environment. Public, School and College libraries are also able to develop digital download websites, featuring e-Books, audio books, music and video.

A distinction is often made between content that was created in a digital format, known as born-digital, and information that has been converted from a physical medium, e.g. paper, by digitizing. The term hybrid library is sometimes used for libraries that have both physical collections and digital collections. For example, American Memory is a digital library within the Library of Congress. Some important digital libraries also serve as long term archives.

5. Changing Face of Libraries

Research and learning are increasingly supported by digital information environments. The as yet unfulfilled promise is a rich fabric of scholarly resources, learning materials, and cultural artifacts, seamlessly integrated and readily accessible, organized in ways that facilitate traditional uses and encourage new uses as yet undefined.

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Fulfilling this promise requires the cultivation of stakeholder communities that, through their working and learning experiences, meaningfully engage with digital information environments. Meaningful engagement is, in turn, contingent on the following prerequisites:

- **Predictability and comprehensiveness:** A critical mass of digital resources must be developed. Where coverage is intermittent and/or unpredictable, usefulness is diminished and stakeholder interest will not grow.
- **Interoperability:** Digital content must be easily shared between services or users; usable without specialist tools; surfaced in a variety of environments; and supported by consistent methods for discovery and interaction. Digital content should also be managed using well-understood practices, and supported by services that can be recombined to meet new user needs.
- **Transaction ability:** Mechanisms are needed to establish authoritatively the identity of content, services and users interacting within the information environment, as well as to manage intellectual property rights and privacy, and to secure the integrity and authenticity of content and services.
- **Preservability:** The long-term future of digital resource must be assured, in order to protect investments in digital collections, and to ensure that the scholarly and cultural record is maintained in both its historical continuity and media diversity.

6. Digitization of Research Work- an Aasset to the Library

University library a store house of knowledge is not restricted to the provision of teaching materials. A group of scholars always peeps into the library to strengthen the research insight. University library is designed to add value to the university by enhancing the research strength. The most significant role in the present context to be played by university library is to store scientifically research documents.

In the emerging institution like K.S.K.V.Kachchh University, library is to be designed to promote the store value and use value of classical research documents. For the library of a new university like Kachchh University, the task of storage of research has two way importances..

Fresh young scholars would expect library to serve with past references and current updated research materials. Similarly being a new university research strength tends to increase the demand due to present research progress. This highlights the fact, that the system would not suffice the purpose.

In near future as, part of digitalization of university library should also be a "Digital knowledge centre". This would necessitate demand for easy online access to research documents. This could be better classified in respect of the specialization in the said subjects. Digitization can also make it possible an abstract to be stored electronically providing quick easy and appropriate access to strengthen review of literature. There is all possibility of separate tools to be resorted in digitalization process enabling the scholars to have direct access to the particular part of the research.

Digitalization of research documents can be more strengthened with copyright applications as and when required. It may restrict as easy access to the full document on the part of the documents where copyright is required to be obtained. Currently all thesis and dissertation are open to access, so student easily copy them despite the fact that rules are there, so it becomes difficult to check or restrict the same. This limitation can be avoided in case of digitalization.

Particular parts i.e. charts/policy documents/ tables could be digitalized separately in case of which at the request of the researcher and with the approval of the researcher access could be made possible. Such digitalization of research documents can easily be obtained with due technical permission. To begin with the initial stage, with limited infrastructure at least "SYNOPSIS" should be digitalizing if not the complete thesis. Synopsis has enough potential to serve the perspective researchers for their preliminaries reference or review of literature.

Digital University library would create the basic process through separate storing and maintaining of documents. For individual researcher, it becomes difficult to subscribe to all global process of digitalization. However digital library in option to that can have access to digital documents and different materials. Membership of digital library can be available with professional charges and that would strengthen the capacity of the digital library for better higher professional services, and others without membership would not be able to access for the same.

7. Sustainability

For digital libraries to be successful, they must be sustainable, scalable and usable. With a world-class Center for Human-Computer Interaction, working towards a usable system will be an ongoing and central concern for our efforts. Usability labs and research in remote usability evaluation should help our efforts, as will relate to the projects. So, we turn our attention to the successful digital libraries, starting with sustainability.

8. Mission

K.S.K.V. Kachchh University with a postgraduate program is obliged to deal with Thesis and Desertions and to ensure that postgraduate students are properly educated. Thus, to carry out the mission of educating

graduate students and handling their Thesis and Desertions, universities should ensure that they know how to publish electronically and how to use digital libraries. Similarly, many university libraries or archives have assumed the responsibility of having copies of works written by local faculty, staff and students. This has been particularly strong tradition in the area of thesis and dissertations. On many campuses the library is committed to maintaining such works indefinitely, which fits into goals of the University.

9. Infrastructure

Universities support students in their roles of publishers and researcher, having the right infrastructure to support local involvement. This infrastructure is still built stage which is ultimately so prove it self as most convenient and updated for research scholars.

10. University

Each university has responsibility for its own Thesis and Desertions collection, but can handle that locally or assign it to others. At the level of a university the problems are not terribly large - even if a thousand Electronic Thesis and Desertions are submitted in a year, the disk space required to store them probably would cost less than thousands.

11. Plans

University library has started to receive the Thesis and Dissertation in soft format. They are in the planning of sharing the research and projects.

12. Education and Evaluation

Since we aim to improve postgraduate education, we must afford equal access and undertake a careful evaluation. A detailed evaluation plan is given in the proposal, to include surveys, logging, focus groups, and other efforts. Usability studies will help with detailed analysis and improvements of interfaces. Thus, we hope to not only develop a large and valuable digital library to support postgraduate education and research, but also to show that it has proved to be of benefit, and that postgraduate students indeed know how to publish electronically and how to use digital libraries.

13. Student Enriching Higher Skill

- ⇒ University Library creates an opportunity for researchers to develop their skill in the area of research.
- ⇒ University Library will plan for a cost effective alternative for printing and binding a large number of copy.
- ⇒ Thesis and dissertation are easily available via the University Web.

14. Value Addition for Faculty

- ⇒ University Library will plan for Thesis and Dissertation on inter-library loan with the help unique identity number for the online access.
- ⇒ Researchers can undertake full content search for Thesis and Dissertation on the Web.
- ⇒ Researchers can be able to access Thesis and Dissertation as they are required.
- ⇒ Researchers share his/her views to motivate students with the feedback form and suggestions

15. Merits of Digital Libraries

- ⇒ Minimum space and maximum storage
- ⇒ Any time access to current research
- ⇒ Available at 24?7
- ⇒ Libraries will never charge overdue or no fines
- ⇒ Maximum utilization with minimum staff
- ⇒ Minimum cost and maximum utilization
- ⇒ It also provides facility for downloading and printing
- ⇒ Provides universal accessibility

16. Conclusion

The foremost responsibility of digital libraries is to ensure the future accessibility of information and preservation of thesis and dissertations. Objectives of digital libraries consider organizing information, maintaining intellectual property rights, and presenting, retrieving and visualizing digital material. Research is underway on the questions of integrity, authenticity, and user requirements of digital resources. Authenticity and integrity of digital information have been underlying concerns in digital preservation because of the ease of altering digital objects and the dynamic information. The most important changes digital libraries bring may be in advancing informal learning. The same advantages that accrue to classroom learning also accrue to individuals pursuing their own learning.

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