Digital library services at the Indian Statistical Institute

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Abstract

Purpose – Aims to share the experience of the design of digital library in relation to digitise of database and making use of user community with a view to give an efficient library practice.

Design/methodology/approach – Presents a case study approach to the design of digital library service to provide insight in to the development of online resources.

Findings – Important services like online resource, online public access catalogue (OPAC), consortium and how these sources are helpful in building digital collection in Indian Statistical Institute Bangalore library are discussed.

Practical implications – In a short period, considerable progress has been made in consortium project in the Indian Statistical Institute libraries. To meet the vision of the academic environment, the library has set up in place strategies that will enable it to provide new information services by which more users of the institution will benefit.

Originality/value – Gives an introduction to the digitations of the Indian Statistical Institute Library, Ban galore. Focuses on the key initiatives of the various databases.

Keywords Digital libraries, Information services, Internet, Resources, India

Paper type Case study

1. Introduction

Digital library, the electronic library, the virtual library, the hybrid library without walls, are all concepts that librarians seem to be dealing with all the time. Arms (2000) defines a digital library as follows:

> A managed collection of information, with associated services, where the information is stored in digital formats and accessible over a network.

Trolley (1997) defines an electronic library as the:

> common vision of librarians, publishers, technology experts and researchers of access to all information anywhere, anytime.

Digital libraries are electronic libraries in which large number of geographically distributed users can access the contents of large and diverse repositories of electronic objects. Electronic objects include networked text, images, maps, sounds videos and catalogues and scientific, business and government data sets. Digital libraries are concerned with the creation and management of information resources, the movement of information across global networks and the effective use of information by a wide range of users (Borgman, 1999).

Digital resources are being built up as self-service centres and librarians continue to play the role of information provider. Over the years librarians have introduced online public access catalogues (OPACs), CD-ROM databases and, more recently, internet access to their libraries. This will eventually lead to working in a completely virtual library environment. Digital libraries offer such benefits as equitable access, reduced

barriers of distance, timeliness, shared resources and content delivery. To create true digital libraries, not just digital collections, will require librarians to work closely together to create and open, distributed, publicly accessible resources, as well as establish a collaborative structure to coordinate and guide implementation.

The Indian Statistical Institute (ISI) is funded by the Government of India and its Bangalore Centre is one of the three most important centres of ISI. The ISI Bangalore Centre library was established in 1976 to meet the academic and research interests of students, scholar, teachers and others. It has one of the best collections of literature on statistics, mathematics, quality engineering/ management and library and information science in India. Currently it subscribes to around 270 international journals on various subjects. The overall collection of books and reference materials, namely reports, reprints, directories, encyclopaedias, CDs etc., totals approximately 35,000 items. The library is automated, which enables better management and easier access to information by users.

2. Building a digital library at ISI

The term "digital library" is nowadays used to indicate both the system that implements the services of a globally accessible library and the digital content of the library itself, i.e. the set of documents that are maintained and disseminated (Wilson *et al.*, 2002). The ISI library has been building up digital collections since 2000. The library has a diverse collection and 270 current titles that are being served up to its users from a set of independent web sites. Like many other libraries, the ISI library delivers and manages all types of digital content. The purposes of a digital library are several fold:

- information that is digitised can become available to anyone anywhere in the world;
- to promote efficient delivery of information economically to all the users;
- information resources can be made freely available on the internet; and
- to promote past and efficient delivery of information economically to all the users.

Gateway resources and services for accessing e-journals and e-books are hosted at the ISI Bangalore Centre web site. It has the following infrastructure:

- High-speed internet access infrastructure.
- Resource-sharing tools and technology for both electronic and print resources.
- Licensing e-content (journals, books and other e-learning resources) from the publisher through consortia-based acquisition and access models.

The ISI Library subscribes to 270 journals, 200 of which are online in the full text format in addition to the print subscription. These electronic journals are provided by the publisher, converted to HTML and made to available on the web. The information resources on the internet are stored as computer files together with their internet protocol (IP) address. The database gives details of the publisher and year of the volumes available in the library. The databases are available for standalone or networked use and are categorised by alphabetical title and subject into electronic free journals, online databases, and internet resources – including subject gateways.

3. Digital content resources

Immediacy, accuracy and currency of information are the most important factors in fulfilling users information needs and the ISI Digital Library (www.isibang.ac.in) thus provides pertinent information about its library collections. It focuses on the electronic resources that are acquired by ISI and available to users in the library, over the local area network on the internet. Some of the digital resources of information by which ISI users can retrieve the required information with in a reasonable time with speed and accuracy are listed below:

- Online journal.
- Useful links to Library and Information Science, Mathematics (www.isibang.ac.in/library) Union.
- Catalogue of periodicals in Bangalore Libraries, Union catalogue of Economics, Management, Social Sciences libraries (www.isibang.ac.in).
- Science Direct Elsevier (ISI Libraries) Consortium (www.isibang.ac.in/library).
- OPAC.
- CD-ROMs (500 CDs from the books and journals).
- PROWESS (economic database).

4. Implementation of the consortium

The recent growth in the number and size of digital library applications has introduced the issue of services and collections. Perhaps the most significant management strategy that libraries use today in the acquisition of networked, licensed electronic resources is the growing use of consortia purchasing and licensing (John, 1998). A contract to use Elsevier Science electronic publication has been signed by the ISI and the provider. The primary purpose of the library in establishing a consortium is to share electronic journals among other ISI libraries such as Kolkatta, Delhi, and Bangalore. The solution had to come from networking the libraries in all the centres to permit co-operative procurement and resource sharing. Thus ISI libraries could use the Elsevier Science Direct consortium gateway for sharing and accessing both print and e-journals.

The Consortium was formed to contribute to the development of research through the acquisition of electronic publication by the participating libraries of the ISI. Implementation of this project includes the following stages already achieved:

- Constitution of the consortium by the three libraries.
- Access, search, browse and view the licensed products.
- Print and down load of a limited number of articles, abstracts, records or parts of chapters from the licensed products.

5. User interface

As noted, the ISI Library offers access to the service Elsevier Science Direct database. A number of text fields allow the user to search on several kinds of information such as title, publisher, year, ISSN, etc. When a search is request, the Science Direct database returns a list of titles and links to the electronic version of those articles. The ISI system

contains links to the main menu and services and these pages offer a description of each library services and the user interface, which deals with all aspects of the interaction between the user and the system. Using the document option, the user can browse through each document. To save time, however, there is a direct link from the main home page. Once the user has clicked on the service icon on the menu structure of the information is on four levels:

(1) an introductory screen which gives the user the option to choose the appropriate information;

(2) the main menu, form which the user makes a choice about the types of information;

(3) a sub menu which refines the choices available to the topic; and

(4) the information page, which gives a user the detailed information on the required topic.

6. Conclusion

In a period of just over one year, considerable progress has been made in a Consortium project within libraries of the ISI. The emergence of information on the internet in this area along with the ever-growing library resources has encouraged the libraries to adopted digital information technologies and thus provide better information services. Through these digital resources more users of the ISI have benefited from improved information access and availability. Furthermore, the systems are enabling ISI staff to create and provide more effective information services to their users.

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