Web-based Information Management at Institute of Technology & Marine Engineering Library: A Case Study

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Web-based library & information service makes easy for any library to deliver information through a variety of deployment options over the Internet or Intranet. This paper discusses a brief account on information management (IM), web-based information management & services. The paper also elaborates an overview of Institute of Technology & Marine Engineering (ITME) Library and explains the different web-based information services available at ITME Library.

Keywords: Information Management, Web-based Information Management, ITME Library, Web-based Library Services, Internet, Intranet.

"Libraries need to offer traditional services more efficiently and new services which appeal to those comfortable with new ways of accessing information." – Anonymous

1.   Introduction

Change! Change! Change is everywhere. Like the steadily increasing processing power of computers, our lives are growing ever more complex. Advances in technology allow us to do more with every minute of our waking day. Similarly libraries are also changing day by day. Handwritten manuscripts have moved to low-cost industrial printing, private or pay libraries to open and free public libraries, handwritten catalogue cards to typed catalogue cards and typed catalogue cards to computerized catalogue. Change has been constant for libraries.
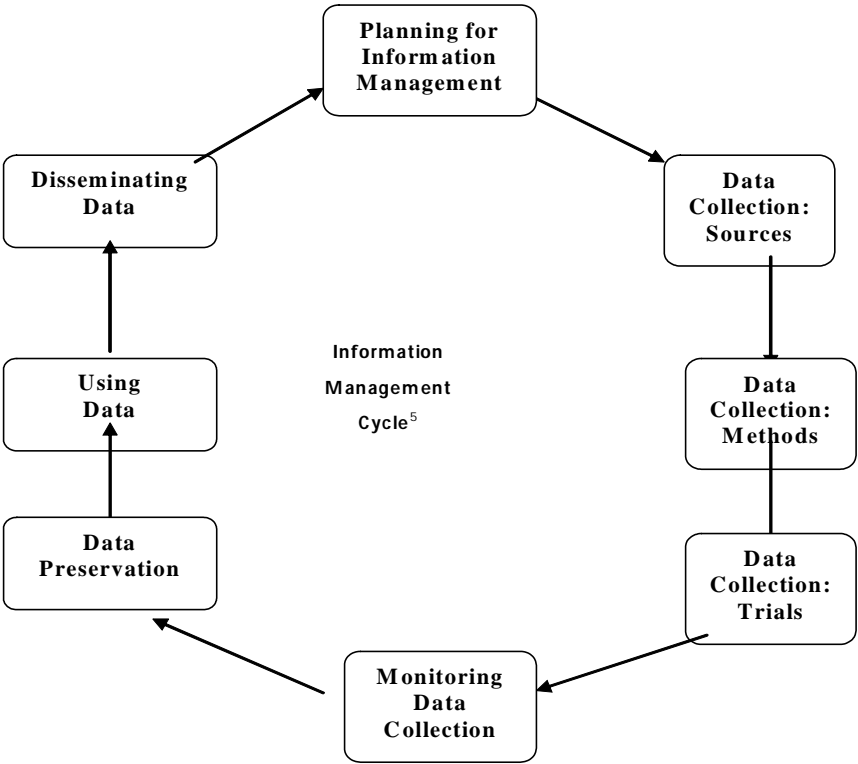
Information! Information! Information is everywhere. In the present age of information outburst, it has been increasingly felt that information needs and users must become the central focus of attention in the libraries. Academic scenario in the libraries has undergone a tremendous change presuming newer dimension influenced by information technology. Libraries are primarily entrusted with a host of pre-destined tasks like acquiring, organizing, preserving, retrieving and disseminating information to the users. Information Technology has inclined the nature of libraries in engineering colleges. They are undergoing momentous changes not only in physical structure but also in function, services, collection development, technical processing and dissemination of information.

2.   Information Management

The term 'Information Management' is used ambiguously in the literatures of several fields. In the field of Library & Information Science, it is identified with the emerging market for information workers or

managers whose perception of information embraces data, organizational intelligence, competitive intelligence, external information resources of all kinds and the associated technology (manual or machine) for handling these different sources. Information Management (IM) or Information Resource Management (IRM) is the collection and management of information from one or more sources and the distribution of that information to one or more audiences rather users. This sometimes involves those who have a stake in, or a right to that information. Management means the organization of and control over the structure, processing and delivery of information[12].

With the proliferation of information technology starting in the 1970s, the job of information management took on a new light, and also began to include the field of Data maintenance. In short, information management entails organizing, retrieving, acquiring and maintaining information[2]. Information management is thus a means by which a library & information centre maximizes the efficiency, with which it plans, collects, processes, controls, disseminates and uses its information and through which it ensure that the value of that information is identified and exploited to the fullest extent[9]. Information management is conceptualized in a cyclic order, rather than as a linear process. A cycle allows for feedback and alteration throughout its implementation.

3 Web-Based Information Management

The management of information with the help of Web, rather World Wide Web (WWW), may be called as web-based information management. WWW, as a public source of information, contains enormous amount of data in different formats, like HTML, XML, PDF, etc. The devastating mass of available information and its ever-increasing number of characteristics have made it really difficult for librarians to preserve, search and retrieve information pin-pointedly, exhaustively and expeditiously[8]. Digital preservation is one of the answers to the problem. It concerns that the records/ documents which are created electronically will remain available, usable, and authentic. The emergence of the World Wide Web and Internet as a new media of information storage and delivery provide an unparalleled media for delivery of information with greater speed and economy. The web technology and Internet/ Intranet has changed the way of information is stored, retrieved and disseminated in the libraries[1]. Intranet technologies can be applied in library for better quality information services. Internal website or Intranet is built from the same concepts and technologies used for the Internet, such as client-server computing and the Internet Protocol Suite (TCP/IP)[3]. It is an internal network for publishing information resources within the organization. Information is made accessible across local and wide area network (LAN/WAN) from any desktop. At the advent this modern technology, libraries are moving towards providing their services in a digital environment. Using an intranet website, organization can effectively use the vast information resources it possesses and strategically position with minimal time, cost and effort. The improved access to remote library collections is making the use of electronic information resources more realistic and more attractive satisfying the Fourth Law of Library Science enunciated by Dr. S.R. Ranganathan.

4 ITME Library: A Brief Overview

Institute of Technology & Marine Engineering i.e., ITME was founded in the year 2002 by Educational Development Trust, Kolkata. The Institute is affiliated to West Bengal University of Technology, Kolkata and is recognized & approved by All India Council for Technical Education (AICTE), New Delhi & D.G. Shipping, Govt. of India, Mumbai. The fully residential Institute offers professional education in 6 branches of engineering, viz., Marine Engineering, Computer Science & Engineering, Information Technology, Biotechnology, Electronics & Communication Engineering (B.Tech.) and Nautical Science (BNS) at the undergraduate level and VLSI & Embedded Systems at post graduate level (M.Tech.). The Institute is ISO 9001:2000 certified and the courses of Marine Engineering & Nautical Science are CRISIL rated[4].

The Library of the Institute was established since its inception. The prime source of knowledge is undoubtedly the Institute's exhaustive library. Where, effort has been made to provide students as well as faculty/ staff members with all the information they need, to satisfy the Institute's vision 'Towards Tomorrow'.

The Library is the lung of every educational institute, which breathes knowledge and information into the minds of the students. The ITME Library is well-equipped with an elaborate collection of national and international books, journals/ magazines, CD-ROMs and other resources in the field of Engineering Science & Technology, Humanities, Physics, Chemistry, Mathematics, Management, Career Guidance, etc.

4.1   Collection

The resources of the Library stand as follows at a glance:

Type of Collection	TOTAL
Books	23,833
CD-ROMs	1210
Journals & Magazines	269
Bound Volumes	150
Newspapers	06

4.2   Services

The Library is providing the following services to the users:
- Reading Room Service
- Home Lending Service
- Overnight Service
- Book Bank
- Online Journals
- Photocopying Service
- Inter-Library Loan Service
- OPAC (Online Public Access Catalogue)
- Display of New Arrivals
- Reference Service

4.3   Library Staff Members

ITME Library has a good team of highly qualified professional, semi-professional and non-professional staff members.

4.4   Automation

The term 'Automation' describes the way in which a machine is programmed to do a job that a person might normally do. Library automation refers to use of computers, associated peripherals such as mag-

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netic tapes, disks, optical media, etc. and utilization of computer-based products and services in all types of library functions and operations. The use of computers and related techniques make the right information to the right reader at the right time in a right form. Automation is the pre-requisite for networking of libraries and resource sharing. It makes the library to provide the services very efficiently, rapidly, accurately, adequately, and obviously economically. It is now seems to be mandatory requirement in the modern libraries to cope up the requirements of new knowledge, increased collection of materials or documents, problems relating to their acquisition, storage, processing, dissemination and transmission of information[11].

4.5 Library Management Software

ITME Library has started computerization since 2006 using LibSys (LSEase Rel. 5.7.1) automation software for all the house-keeping operations like acquisition, cataloguing, circulation, serial control, etc. At present, the fully automated library has five complete & up-to-date databases, viz., databases of Library Books, Book Bank, Print Journals, CD-ROMs and Back Volumes of Periodicals. LibSys is integrated library management software. ITME Library has a license of LibSys Unlimited users and the facility of OPAC (Online Public Access Catalogue) is available throughout the campus of ITME. As the ITME is a fully residential institute, students are getting the benefit of OPAC facility in their hostel. LibSys at ITME Library is functioning on the Windows Platform and the entire collection of books, CDs, etc. is bar-coded generating through LibSys. A single bar-coded Library Membership Card is provided to every user.

4.5.1 Web-Based Services

The Web is changing the way in which the academic libraries provide effective services to its users. Now-a-days, the libraries have embraced the potential of the web-based library services to meet the needs of its users[1]. ITME Library is not an exception in this age of information explosion. We have created a library internal website for publishing information within the campus. It may be treated as Web Portal of ITME Library. Web-based services are normally the services through the webpage, OPAC, providing online access to E-Journals, E-Books, etc. We are providing some of the web-based services to our users which are under the following heads:

4.5.2 Webpage

"INSTITUTE OF TECHNOLOGY & MARINE ENGINEERING LIBRARY Your Local Gateway to Global Footsteps …".

The Webpage of ITME Library is named as written above. The portal has all the information relating to library including an exhaustive profile of each & every staff member of the library under the head 'Our

Team'. The italics portion of the previous sentence is mentioned here specifically as the 'profile of library staff members' is a neglected area in the majority of college/ university websites in West Bengal. We are created an institutional digital repository using DSpace in which the total question papers of B.Tech, BNS, M.Tech. (VLSI design) of WBUT, the syllabus of the same, the archives of journal article from IEL Online database, Library Notices, Seminar/ Conference Alert, etc. will be available in near future.

4.5.3   OPAC

Online Public Access Catalogue i.e. OPAC facility is available throughout the campus. One can access OPAC through the library web portal by one clicking 'Library Catalogue'. All the databases of Library Books, Book Bank, CD-ROMs, Back Volumes, and Journals are available in the OPAC.

4.5.4   E-Journals

We have the institutional membership of INDEST (Indian National Digital Library in Engineering Sciences and Technology) – AICTE Consortium. We are providing nascent information to the users from the database of 'IEL Online' through the said consortium. The IEL Online provides unparalleled access to the publications, covers more than 9,50,000 documents from over 12,00 publications including 241 journals, transactions, magazines, conference proceedings, and IEEE standards. The journals in the data-base in full text with back volumes are available.

5.   Conclusion

The world is in the midst of an electronic communications revolution. Electronic information services particularly web-based library services will become more widespread and sophisticated as the web becomes common place throughout the world[1]. The web-based library service is a trend and the libraries have to take full benefits of internet/ intranet and web facilities. Web-based information service will become highly effective in academic libraries especially in the library like ours, since the students as well as faculty/staff members can easily access the information at their desktop without wasting their valuable time.

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References

1.   Bhatnagar, Anjana. Web-based library services. In PLANNER – 2005, 10-11 Nov, 2005, organized by Assam University, Assam. p.426-434.

2.   http://en.wikipedia.org/wiki/Information_management   (Accessed on 06.10.2009).

3.   http://en.wikipedia.org/wiki/Intranet (Accessed on 08.10.2009).

4.   http://library.itme.com (Accessed on 10.10.2009).

5.   http://www.gichd.org/fileadmin/user_upload/images (Accessed on 07.10.2009).

6.   Mal, Debkumar. Application of information technology in private engineering college libraries of greater Kolkata: an analytical study. University of Calcutta (Kolkata). M.Phil Dissertation. 2007 (unpublished). p. iii-v.

7.   Pathak, S K, Mishra, Ashrushikta and Sahoo, Geetanjali. Future of web based library and information services: an Indian scenario. In PLANNER – 2008, 06-07 Nov, 2008, organized by Nagaland University, Nagaland. p.406-414.

8.   Patra, Nihar K, Pani, Ashis K and Thaty, Rajendra K. Web-based information management: HTML, XML, PDF and image format: an analysis in comparison. In CALIBER – 2006, 02-04 Feb, 2006, Gulbarga. p.40-54.

9.   Rao, I K Ravichandra. Information management: scope, definition, challenges & issues. In: DRTC workshop on information management. p.1-16.

10. Sampath Kumar, B T, Santhosh Kumar, K T and Dharani Kumar, P. Web portals and forums: powerful tools for providing web based library services. In 23rd National Seminar of IASLIC, organized by Bose Institute, Kolkata, 2008. Spl. Pub. No. 48. p.341–347.

11. Satyanarayana, M. INFLIBNET: its activities in library automation. IASLIC Bulletin 50 (2), 2005, p.110-115.

12. Wilson, T D. Information management. http://informationr.net/tdw/publ/papers/ encyclopedia_entry.html (Accessed on 21.09.2009).

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