Web Based Library Services at IIM Shillong: A Short Communication

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Abstract: Teaching information literacy skills is a major initiative for today's instruction librarians. The advent of web portals on the campus provides a unique teaching opportunity. Libraries are undergoing rapid changes due to the developments in Information Communication Technology (ICT). Paper based resources are giving way to electronic resources. The dynamic linking capability of web has provided users unrestricted access to information. Internet, more specifically World Wide Web has become the world's largest source of information. This paper describes how the library web portal of IIM Shillong provides a new opportunity for instruction that addresses the needs, expectations, and changing learning styles of today's technology savvy students.
Keywords: Teaching Opportunity, ICT, Web Portal, Web Based Services

INTRODUCTION

Academic libraries continue to evolve from their former, somewhat passive presence on campus to be more active participants in the educational process. This change is primarily driven by two decades of rapid advances in information technologies, and the recognition that libraries must adapt to a new paradigm of student needs and expectations and a new model of providing relevant and meaningful services. As a result, teaching information literacy skills, and outreach activities to promote the educational role of the library have become major initiatives for librarians [1].

Advances in information technologies have resulted in something of an information glut. Although the width and breadth of information has expanded exponentially, the depth of it is decidedly lacking. This poses a significant challenge for libraries [2]. Despite having an abundance of information at their fingertips, students lack the basic information literacy skills to find, critically evaluate, synthesize, and apply good information in a meaningful way. The challenge for libraries is to continue to push information literacy as a major initiative, and to find new ways of teaching information literacy skills.

Advances in information technologies also provide unique teaching opportunities for librarians. The IIM Shillong web portal initiated in the year 2009 as a simple web site for students and it provides customized and personalized online services and the portal displays fine-grained content that corresponds to their academic status, area of study, and research and development.

A Web Portal can be defined as a website for a specific audience that aggregates an array of content and provides an array of services. They are the sites on the World Wide Web that typically provide personalized capabilities to their visitors. They are designed to use distributed applications, different numbers and types of middleware, and hardware to provide services from a number of different sources. Content linked in library portal is superior to the open access content available on the Web.

Authentication software, commonly known as Web Access Management (WAM) are available that allow the library to govern the access to licensed electronic content. Commonly referred to as simply a portal, it is a website that offers access to a broad array of resources and services of libraries such as e-journals, online databases, Web OPAC, new additions and any other static information about library services.

NEED FOR LIBRARY WEB PORTAL

Web is a very large hypertext information space where different types of users can search and find information in different domains. With the help of general directories and search engines, users may be able to locate and access needed information to some extent. Search engines provide a convenient way for information searching but users often find themselves facing the information overload problem. So quantity and as well as quality dazzles the user and the user most often inadvertently loses his / her track. A carefully designed web portal avoids this pit fall by weaving together e-resources to provide coherent view of the discipline. This also assists them in knowledge sharing activities.

Librarians have realized that multiplication of e-resources is a serious problem for end users. Users find it difficult to decide which is the most appropriate database or resource to search for information relevant to their need. Web portals are the websites which solve this problem by providing access to all relevant e-resources at one point, thus relieving the user from the hassles of accessing different sources from different websites.

REVIEW OF LITERATURE

The developments in information and communication technologies (ICT) and their subsequent absorption in library and information science (LIS) have forced information professionals to change the way they are functioning at present. Because of their popularity with the users, an overwhelming attention is being given to the web-based information services in libraries [3].

Engineering college library, by developing homepage, can disseminate a wide range of information to users' community. It is the best way to keep users abreast about latest developments of library resources and services with the introduction of pictures, graphics, 3D images, audio and video. A lovely homepage of the library could be developed which will really help the users to have a complete knowledge of library[4].

The digitization of the library collections or e-resources has given a new mission to librarians in terms of providing training to the users in the skills needed to discover access to in-house as well as remote materials, and in evaluating the retrieved information. In a digitized library, an engineering college librarian is required to be an active player--retrieving information from vendors, publishers, web sites, and other e-resources on the one hand; and processing and transmitting it to the users on the other hand. The information has to be transmitted to library staff by training and upgrading of skills [5].

Kanaujia &Satyanarayanhad conducted a level of awareness and demand of web based learning environment among Science & Technology information seekers. The major findings of the study revealed that 49.2% users browsed the Web for more than 2 to 4 hours and 14% for more than 5 hours a day. The study further showed that 36.6% users consulted e-journals regularly on the Internet, 40.4% used Internet for consulting technical reports, 24.8% to find online databases and 10.4% for telnet service [6].

KNOWLEDGE CENTRE OF IIM SHILLONG: A SHORT DESCRIPTION

The Knowledge Centre (Library) (figure; 1) of RGIIM, Shillong which is one of the most modern and tech savvy libraries in the country, has started functioning right from the time of inception of the Institute. Our goal is to make the library one of the most vibrant and productive branches of the Institute so that it may keep pace with the global, dynamic and technology enabled information age, and meet the expectations of its end users.

Fig.1. Knowledge center, IIM Shillong.

With the above aim in view, within a short span of time, we have acquired an excellent collection of management related books, journals and non-book materials, which we consider as our greatest asset. The library maintains separate collection of Reference Books, Text Books, General books, Working Papers and other documents, whereas the non-book collection consists of video cassettes, Compact Discs, etc. Faculty members are requested to make regular requisition of latest books to add value to the Knowledge Centre and equip the library with the latest collection of books. The library also has the latest collection of periodicals, magazines and newspapers. We have also begun the process of updating the Centre with rich collection of both Indian and Foreign Journals for which the process in underway Journals are available both online as well as in printed volumes. The Library is also equipped with the latest E-Resources (EBooks, E-Journals, and Data-base) such as CMIE – Prowess, ISI-Emerging Markets, ProQuest, and EBSCO – Business SourceComplete. We also have access to HBR cases which are widely used by all students and faculty members. The Library also has some special Collections of i) EXIM Bank, ii) World Bank, and iii) Harvard Business Review. The Knowledge Centre also joined the IIM Consortia Cross Sharing of E-Journals with three Publishers: (i) Taylor and Francis, (ii) Wiley-Blackwell and (ii) Springer.

We have also arranged for a Tie up with:

- AIMS (Association of Indian Management Schools)
- American Library, Kolkata
- ASSOCHAM (Association of Chamber of Commerce)
- British Council Library, Kolkata,
- Exim Banks,
- All the Indian Institute of Managements, IIMs
- HBSP (Harvard Business School Publishing)
- IGCC (Indo-German Chamber of Commerce)
- AACSB (Association to Advanced Collegiate Schools of Business)

International to become part of the premier Global Management education network. National Institute of Rural Development (NIRD) for greater and better exchange of library resources. The varied type of services that we make available in our Knowledge Centre apart from lending are the References Services, CAS (Current Awareness Services), SDI (Selective Dissemination of Information), Reprographic Services, Information Alert Services (E- Mail Services), Lestyou-miss (newspaper clippings) services, and ILL (inter library Loan) services and services. All the above mentioned online facilities are available through the Knowledge Centre E-Portal of the Institute.

The most significant achievement as far as the library facilities are concerned is related to the "Library Automation" Services. We are one of the few libraries in the country which is fully automated and the VTLS software with RFID Library Management System is being used for the purpose of house-keeping of library activities and networking systems such as intranet, internet and Wi-Fi. The RFID technology makes the Circulation of books easier as the end-users can do the ISSUE and RETURN through the KIOSK and DROP BOX machine respectively, along with the use of smart proximity cards. The entire Library is covered by CCTV. This new technological environment enables the library to serve its clientele in a better, faster and in a more efficient manner.

The five different levels of automation which needs to be highlighted are as follows:

- Library cataloguing system - OPAC for easy access by users
- House-keeping operations and networking
- Development of CD-ROM library/products
- E-mail System and Internet
- RFID (Rapid Radio Identification) - for security purposes

The Library of IIM Shillong is forever open to new and innovative ideas and we are determined to make our Knowledge Centre one of the best and user friendly library in the country.

ELEMENTS OF AN IDEAL LIBRARY WEB PORTAL
The seven C's that any web portal must have are the seven attributes that help in building an ideal portal for any library 7].

- **Context:** Portal should have an aesthetical, functional look and feel. The colours chosen, the layout, etc. should be refreshing and inviting the users.
- **Contents:** Portal should provide link to another source only after its authenticity and credentials are verified. Users tend to view the references provided by institution portals as the authoritative and genuine ones. So the content on the portal must adhere to certain strict evaluation policy.
- **Community:** The community or group of users for whom the portal is dedicated is the third important attribute to be considered before deciding the content and layout of the portal. The specific needs of the users should be kept in view while designing the portal.
- **Customization:** It is the portal ability to suit every individual in the organization. Though it is little difficult considering the multitude of areas and needs of people in the organization, some extent of personalization can be achieved in providing different interfaces An ideal portal must allow the users to customize their interface; select databases of interest; and create current awareness profiles.
- **Communication:** It's the way the user communicates his needs to the portal and how the portal responds and satisfies the users' queries. Portal must have options for searching the portal content. Easy navigation is one of the hall marks of an ideal portal.
- **Connection:** This is the extent of linkages between the portal and other sites mentioned in the portal. It's the networking within the portal site. The links provided must be checked on a regular basis, and any broken link must be corrected immediately.
- **Commerce:** This refers to the actual sale of products and services. This is meant for commercial organizations and this attribute may also have relevance to academic institutions but for libraries, its relevance is very limited.

NEED FOR WEB BASED LIBRARY SERVICES [7]
A modern library can make its own web site because of following reasons.

- Facilities and promote library use
- To provide the basic information about the library and its services
- To permit online access to local services
- To make gateway to networked information services

- To introduce integrated push based services

BASIC ADVANTAGES OF WEB BASED SERVICES [8]
- To save the precious time of the scientist
- Availability of less number of library staff to carry out the library works and services
- Less dependence upon the library staff for getting the required information
- Location of laboratories/ departments in different places in the campus
- Instant and elaborate information requirements for R&D activities
- Information for decision making in MIS
- Multifold increase of the cost of books and journals
- Availability of information in different places and also in different formats
- Cut in library budget.

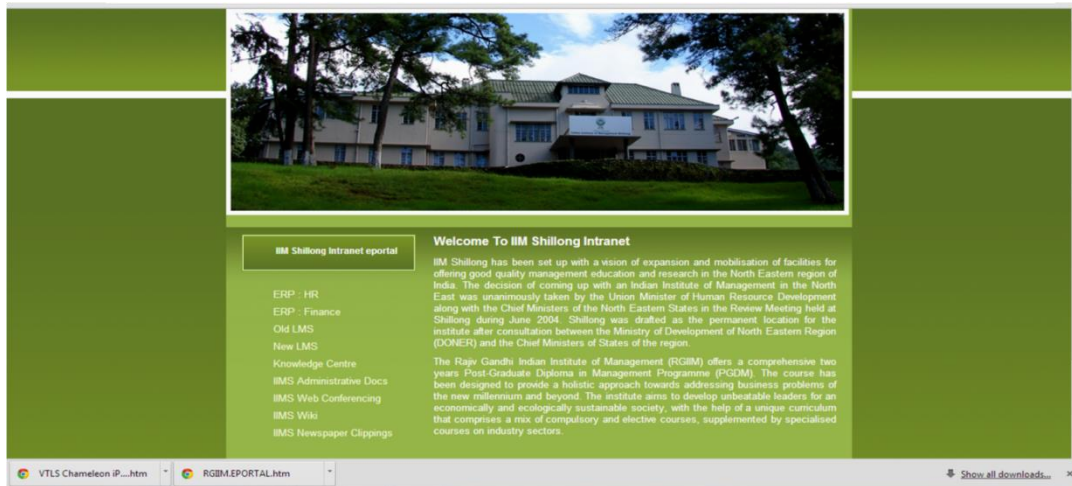## FUTURE OF WEB BASED LIBRARY SERVICES
- Library Web services will continue to expand, offering:
- More full-text electronic journals. Eventually, indexes that do not now include full text will begin to do so, or link to external resources. OCLC's Electronic Collections Online may mature as such a service.
- Better bibliographic access to full-text periodicals either through cataloging, databases, or vendors that "aggregate" access. Savings on Inter library loan and user convenience are incentives.
- Electronic reserves, either locally or through vendors who simplify copyright issues. More web forms for user feedback, and perhaps a virtual librarian who interacts in real time chat or video conferencing. While there's nothing like a simple phone call, the virtual librarian wouldn't have to be in the library.
- Well-developed user education modules or tutorials, especially to support independent exploration of library and web resources. Library web authors are getting more sophisticated and able to take advantage of appropriate technologies and

software. More document delivery services to distance education or commuter students. This will not be cheap, but it's the type of thing that users want. Meltdown or solutions to the "printing problem" when "everything" is on the Web and nobody is using microfiche or printed periodicals.
- More resources through creative consortia purchasing. Statewide cooperation will become more common. SOLINET has also been a leader in coordinating contracts for its members.
- Experiments with customized interfaces that organize resources for individual library users. People seem to either like or dislike a portal-style interface, finding them comfortingly personal or restrictive.
- Somebody will have to figure out how to keep Word users from saving print documents as XML, without thinking in terms of Web, not print, space. XML will be embraced as a way to control page appearance and behavior, but it will take a while for people to figure out how to use it well.

WEB PORTAL OF IIM SHILLONG
- The web offers libraries the possibility to become disseminators of information through creating Web Sites. Recognizing that the Web site often serves as the "face" of the library and the first access point, the IIM Shillong began the process in early 2009 to ensure that the Web Site content not only remains current but adds value and showcases the Library's resources.
- The Web-based resources are the most commonly used resources which are considered to be the quickest and simplest way to retrieve information.
- The library website http://rgiimshillong.eportal was launched during the year 2009. This web site provides information on Government, Education, Universities, Scholarships, Competition Exams, Examination results. Employment, Other Library Links, etc.
- The goal is not only to build digital content into the site but also to ensure that information on the site is updated in a timely fashion.

Fig.2 Intranet Web portal of IIM Shillong.

WEB BASED LIBRARY SERVICES AT IIM SHILLONG

Considering the growing impact of Information and Communication Technologies (ICT), Web technologies and Database technologies, the IIM Shillong has set up a Digital Library in early 2009 to disseminate web based library services to the right reader at the right time.

Fig.3 Web Based Library Services of IIM Shillong.

The Knowledge Centre IIM Shillong provides a new way of organizing information and publishing it over the internet or on CD-ROM & also provides the following information online. New Books List ,Serial Collections, Newspapers, Periodicals, Print Journals Reference &Special Collections like; Maps, Videos, Government Publications, Music Scores, Audio Cassettes Top News Stories, Wall Street Journal, New York Times, Time Magazine, Rolling Stone, Newsweek, IRS Documents.Database Links such as; E-Book Cambridge, EBSCO - Business Source Complete, Insight, ISI Emerging Market, ProQuest, CMIE - Prowess, CMIE Economic Outlook, Datamonitor 360, Indiastat, CapitalinePlus, WorldBank,, Marketline, Euromonitor, Crisil. Through IIM Consortium; Springer link, Wiley-Blackwell, Taylor & Francis Online Journals / Magazines: Economic & Political Weekly (EPW), Capital MarketAmerican_ Accounting_Association (A.A.A) SAGE etc.

METHODOLOGY

This article is based on part of a questionnaire survey conducted for this studies at Knowledge Centre IIM Shillong. This survey covered the web based library development of IIM Shillong to understand and measure the impact of information technology applications on library resources and services. Different questionnaires were administered to all the users (faculty, staff members and students) to understand the usage pattern of the Internet and the web-based library services that are expected. The questionnaire was designed to be quick and easy to complete. Among others, the questionnaire specifically contained questions on.

OBJECTIVES OF THE STUDY

The objectives of the study are:

- ➤ To study the availability of institutes' websites and the extent of library information hosted on the websites;
- ➤ To find out whether the libraries have a direct hyperlink on their college homepage;
- ➤ To study the regular use of the Internet by users and their frequency of visit to institutes' websites;
- ➤ To identify the library transactions that users wish to carry out using the Internet;
- ➤ To investigate whether the college libraries have a static or dynamic website;
- ➤ To measure the extent of the web-based services offered by the Knowledge Centre IIM Shillong.

HYPOTHESIS

The researcher has undergone three major hypotheses they are:

- ➤ Institutes have to try to attract the library users to their websites as they provide only static information about library and its services;
- ➤ The majority of the users in the institutes use the Internet on a regular basis;
- ➤ Most of the transactions users do at the library should be carried out through the intranet at their convenience.

EXTENT OF INFORMATION ON THE WEBSITES

The Knowledge Centre IIM Shillong has presents the lots of information on the institutes' websites. It is observed that almost all the general information about library is available on its websites. The following information is mentioned below:

- General Information
- Features of Knowledge Centre, IIM Shillong.
- Round- the-clock reference service
- Online resources
- Exclusive newspaper section
- Collection details of Library Materials

The following materials are available in the GGI's library. These are represented below table-1.

Table-1:Details of Library Materials

Sl.No	Items	Total in Nos.	Remarks
01	Books	10,630 (reference books only)	We have been issuing all the text books to all the students from the beginning of the session.
02	Journals (print)	52	
03	Journals (online)	14 (Databases)	Through consortium
04	Magazines (print)	18	
05	News Papers	16	Including Employment news
06	CD/DVD	600	
07	Back Volumes	300	
08	Project Report	312	

The Knowledge Centre, IIM Shillong offers customized library services like:

- Reference service for reference books, journals, magazines, back volumes, Project Report, etc.
- Digital library services
- Reprographic Services.
- Newspaper clippings
- E-Journals
- E-Books
- On-line public access catalogue (OPAC)

The Majority of the Users in the Institutes Use the Internet on a Regular Basis

The Internet provides us with much information in just an instant. Since anyone can publish information on the Internet, it is important to carefully evaluate the web sites before using the information in reports, projects, discussions, and activities. A good educational institute website, this is a subject which not so exhaustively researched to end up for conclusion about how good is an educational website of an any educational institute, teachers may feel overwhelmed when it comes to evaluating web sites of their institute but generally are the aware of various criteria that governs evaluate a good website of an institute. Just like it is important to choose a good book by the educator to present to their students, a good educational website has certain criteria to be considered before it is presented to the students of the education institutes.

The Users of Knowledge Centre IIM Shillong were asked about their Internet usage. The below mentions that an overwhelming number of faculty members 25(100%), Staff Members 38 (95%) and 270

(98%) students have indicated the use of the Internet on a regular basis. It is also observed that 5% of staff members and 2% of students indicated that they do not use the internet regularly. Which is illustrated in the table 2.

Table 2. Regular Use of Internet

Faculty Members	Staff Members	Students
25	38	270
(100%)	(95%)	(98%)

Library Transaction carried out through the Web

To fulfill the requirement of our study, a survey have been taken from users (both faculty, Staff and students), what the library transaction they wish to carry out at their ends through the web or internet. The observations are given in the Table 3. About 96% faculty members and more than 55% students indicated that they wish to search books' database includes the both text and reference. Only very few no of faculties 48% faculty members and 69 % students indicated that they wish to know the availability of a particular document. About 48% faculty members and 69% students wish to do a refined search of books (like subject, titles, author(s), Publisher, Year of publication…etc), using all possible approaches. No doubt reservation of books through the Web OPAC is available. This facility is provided to the student at the time of non-availability of the books, it is not provided to the faculty. More than 80% of the students have avail the reservation facility.

Table.3. Library Transactions Carried Out Using the Internet

	Faculty Members	Staff Members	Students
Search database of the books (both Text & Reference)	24 (96%)	01 (2.5%)	150 (55%)
To know the availability of a books	12 (48%)	02 (5%)	190 (69%)
To search books using all approaches (like subject, titles Authors, Publishers, Year of Publications, Publishers…etc.)	12 (48%)	02 (5%)	190 (69%)
Reservation of a book	NA	NA	220 (80%)
Additional services Provided by library	05 (20%)	00	200 (73%)

From the above it is clear that about 20% faculty members and 73 % of the student would access the website to know more about services rendered by library. A close scrutiny and comparison of responses reveals that most of the faculty members and students agree with each other that maximum number of transactions they wish to carry out using the Internet.

SCOPE AND LIMITATIONS

The scope of the study is limited to studying the web-based services expected from Knowledge Centre, IIM Shillong .The limitation is that this article covers only the day-to-day library transactions like online catalogue, reservations, etc. Access to online resources also includes because they will have to be web-based only.

FUTURE SCOPE

Library Web services will continue to expand, offering: more full-text electronic journals. Eventually, indexes that do not now include full text will begin to do so, or link to external resources. OCLC's Electronic Collections Online may mature as such a service better bibliographic access to full-text periodicals either through cataloging, databases, or vendors that "aggregate" access. Savings on Interlibrary Loan and user convenience are incentives. Electronic reserves, either locally or through vendors who simplify copyright issues. More Web forms for user feedback, and perhaps a virtual librarian who interacts in real time chat or video conferencing. While there's nothing like a simple phone call, the virtual librarian wouldn't have to be in the library. Well-developed user education modules or tutorials, especially to support independent exploration of library and Web resources. Library Web authors are getting more sophisticated and able to take advantage of appropriate technologies and software.

CONCLUSION

Developments in information and communication technologies (ICT) have a profound impact on every sphere of academic activity. Library and information management is not an exception to this. Business and management libraries have so far not adapted the innovations of the Internet and networking to the fullest extent. Earlier, card catalogue was called as the "Mirror to the Library". Now in this age of the Internet, it is the library portal that is being called as the "Mirror of the Library". Library portal reflects the strengths and weaknesses of the libraries very effectively. They are also the tool through which libraries are trying to reach out to the techsavvy user. Libraries should make consistent efforts to provide web-based services to their users.

Library resources on the net are plentiful, and it requires some effort to organize them, since the services and information are often interrelated and get mixed up. Thus portals are very instrumental in enhancing access to e-resources that a library holds. Since the IIM Consortium & INDEST-AICTE Consortium are providing access to e-resources for all IIMs through the portal. The portal trend is fast catching for accessing e-resources and information services. The needlepoint for any library is to engage in the development of customized portals and provide web based library services for enhancing access to library resources and services.The survey has revealed that, the Knowledge Centre, IIM Shillong has the full potential to develop the library. It is hoped that library of this institutes will eradicate the lacunas and continue its development in a fully functional way.

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