

Information about Services and Information Resources on Websites of Selected Libraries in Rajasthan: A Study

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ABSTRACT

A website is considered as an important promotional/informational tool for all kind of organisations. It informs the visitors about the institution, its mission, resources, services, activities, and so on; encourage visitors to interact with the services/resources; exchange services and products with electronic transfer of money; and establish continuous dialogue among the employees and the visitors. Libraries being public service institution, it becomes necessary that they have more and more information in the public access through websites. Data pertaining to 12 selected library and research centres in Rajasthan was collected from their websites during September-December 2010. Analysis found that information resources and services available on the websites vary from library to library.

Keywords: Library websites, e-journals, library services, e-resources

1. INTRODUCTION

In the traditional library, users had to enter the library to use its services and resources. With e-resources and e-services, libraries have started to offer a virtual entrance to the users through the libraries' websites. Such visits, in analogy to the traditional physical visits, are called virtual visits¹. Today, people around the globe are using internet for communication, searching and accessing information, learning and also for entertainment. Presences on the internet through organisational websites have become essential for organisations. But the quality of content and information of the websites have been issues².

As for libraries, their own websites can be effectively used for provisioning information services. Library websites not only are a gateway to an institution's resources but also create direct links to the native interface of each resource.

Users may search the library's online catalogue; use a subject guide or database to access a citation form the internet or access full text articles of web based journals; they may browse an e-journal; fill out an interlibrary lending form; e-mail a reference question via the ask-a-librarian service or borrow an e-book all by remote access³.

2. UNIVERSITIES AND RESEARCH CENTRES IN RAJASTHAN

Rajasthan is the largest state in the Indian Union. With 10 per cent of the landmass of the country and 5 per cent of its population, it presents huge challenges in terms of development and socio-economic growth. Two-thirds of the State is desert areas with severe water shortages and other attendant disadvantages. Given these natural disadvantages, the State fully realises that the prospects of all-round development can be improved only if care is taken to develop information technology and used for the development of education. In Rajasthan, academic libraries began computerising their library operations only after the year 2000. There are number of academic and research institutions in Rajasthan that have computerised libraries and about fifty of them are part of e-resources consortia or library network. Important academic and research institutions in Rajasthan include a law university, a technical university, a Sanskrit university, an open university, two agricultural universities, a health science university, six affiliated universities, eight deemed universities, thirteen private universities, six research centres, and other engineering and management colleges. Recently an Indian Institute of Management and an Indian Institute of Technology have also been established in the State.

In the recent years, a number of e-journals/e-resources consortia have been formed by the academic/research libraries in India. It is essential for these libraries to have websites or web pages to provide information on the e-resources and also act as a gateway to provide access to the e-resources. In Rajasthan there are many educational and research institutions having libraries. For the purpose of this study, the libraries attached to the institutions have been categorised into:

- General universities
- Deemed universities
- Agricultural universities
- Medical universities
- Technological institutes
- Research institutions

Websites of two each from the above mentioned categories of libraries that are members of e-resources consortia or/and library networks as shown in Table 1 have been chosen for the present study.

3. LITERATURE REVIEW

There have been a number of studies that focus on the library websites and most of the studies are about the performance evaluation and usability of library websites with very little importance given to the content analysis. These studies are related to different areas like website design, web credibility, content features of websites, structure of websites, content and usability of e-resources on websites.

Babu⁴ analyses the various aspects of the credibility of university websites in Tamil Nadu. He found that the universities studied have their own websites but they lacked standard design and structure. Clausen⁵ compared Danish university library websites and found that the library websites were above average. Cohen & Still⁶ found that larger institutions made greater use of freely available internet resources and were more likely to create web version of paper documents. Still⁷ in a study of university library websites in four English speaking countries found that the visual display of information was similar across all countries and there was much less information on instructional materials and remote access. Vijaykumar⁸, *et al.* reported that the library websites of Indian institutes of technology were different from one another in many respects.

Osorio⁹ studied websites of science-engineering libraries of 45 universities, using a prototyping model to access content and design. A list of 66 elements was developed consisting of design features such as navigation bar, library photograph/logo, screen lengths, and colours, and content features such as search this site, electronic resources, user education program, subject guides, and electronic reference. Osorio also identified predominant design features represented in the science-engineering libraries studied. This approach forms the starting point for the authors' methodology regarding distance education pages. Bao¹⁰ looked at how academic libraries provide links to commercial databases and remote access to those resources. The study found that less than one-half of the surveyed institutions (67 of 143 or 46.9 %) use web-based interactive reference as an extension of their traditional reference services. Web-

Table 1. Information about university/institution under study

Name of university/institutions	Type of university/institute	URL address of library	Member of consortium/network
University of Rajasthan, Jaipur	General university	http://www.uniraj.ac.in	UGC-INFONET
Mohan Lal Sukhadia University, Udaipur	General university	http://www.mlsu.ac.in	UGC-INFONET
Banasthali Vidyapeeth University, Banasthali	Deemed university	http://www.banasthali.org	UGC-INFONET
Jain Vishwa Bharati Institute, Ladnun	Deemed university	http://jvbi.ac.in/	UGC-INFONET, DELNET
Maharana Pratap University of Agriculture & Technology, Udaipur	Agricultural university	http://www.mpuat.ac.in/index.php?id=53&type=DP	AGRIS, AGRICOLA, CAB-CD Database
Rajasthan Agricultural University, Bikaner	Agricultural university	http://www.raubikaner.org	NISAGENET, CERA
Sawai Man Singh Medical College, Jaipur (Rajasthan Health Science University)	Medical university	http://medicaleducation.rajasthan.gov.in/jaipur/facilities.asp	DELNET
National Institute of Medical Sciences (NIMS), Jaipur	Medical university	http://www.nimsuniversity.org/campus.php	DELNET
Malviya National Institute of Technology, Jaipur	Technological institute	http://mnit.ac.in/division/facilities/library/	AICTE-INDEST, DELNET
Mody Institute of Technology & Science, Laxmangarh	Technological institute	http://www.mitsuniversity.ac.in/library.aspx	AICTE-INDEST, DELNET
Central Arid Zone Research Institute, Jodhpur	Research institute	http://www.cazri.res.in/library.html	CERA
Indian Institute of Health Management Research, Jaipur	Research institute	http://www.jaipur.iihmr.org/frmLibrary.aspx	DELNET

based interactive reference services are primarily used to provide brief factual information, basic guidance in conducting library research on a topic, and answer questions about library resources, services, policies, procedures, and facilities. McGillis & Toms¹¹ and Battleson¹² *et al.* reported on usability studies of academic library websites. Coffta & Schoen¹³ examined websites from four- and five-year colleges and universities to find out about interlibrary loan policies, contact information, and holdings. King¹⁴ examined the homepages of ARL libraries to compare design similarities and differences. He categorised his findings in seven sections like background, document header, footer, document body, page length, number of steps to library homepage from parent institution website, and domain name server. There are many and various examples of checklists designed to evaluate internet resources but there are only a few regarding academic library websites. The scope of such papers again is limited and does not include all the constituent technologies or components as applicable to this.

3.1 Types of Library Websites and Their Research Area

There are different types of academic libraries like university, colleges, schools, research and many more. While there are a number of studies to be done that examine the webpages of academic library websites and public library websites, few concentrate solely on special libraries. These libraries serve the very specific information needs of users and patrons. Furthermore, library websites are a very useful resource that can be improved with further study and analysis. The more information that is collected about website content and design, the better library websites can become. Table 2 summarises different types of websites and their different research areas from relevant studies.

4. OBJECTIVES OF STUDY

- To determine the library services and facilities offered through library websites;
- To find out whether the libraries have a direct link to their electronic resources on their webpage; and
- To find if the libraries' homepage promote the library services.

5. METHODOLOGY

There are many checklists designed to evaluate internet resources, but there are only a few regarding academic library websites⁴³. In fact, there are no commonly accepted standards or even sets of criteria for evaluating such websites. For the present study a checklist was designed and developed on the basis of

previous evaluations of such websites by Susan⁴⁴, Dickstein & Mills⁴⁵, Kupersmith⁴⁶, Kumar³³, *et al.* Haneefaa³² K⁴⁸, Coffta & Schoen D M¹³, Battleson¹², Chao⁴³, Vasantha⁴⁰, Vijaykumar⁸, Shukla⁴⁷, Kalara⁴⁸ and Jalal⁴⁹ were useful for preparing a comprehensive checklist for evaluation of library websites. The checklist included general information, information about library collection, information on e-resources, information about library services, and linking pattern for e-resources. This checklist was used to record the features present on each website. It was extended, as necessary, as new features were noted on webpages accessed for the study.

The data collection was done for the three months period of September-December 2010 for further analysis.

6. ANALYSIS

6.1 General Information Available on Website

The library portal of any institution has to provide general information about library regarding about institution (a library website usually accessible under any main university's website, if it is so why a library website explain about institution), about library, library objectives, area and site plan, contact information, date of update, departmental library, FAQs, library automation, library committee and other information, library staff, membership information, news and events, working hours, suggestions and feedback sections. It also should include authority, copyright, domain name, and aesthetic features of the site.

Figure 1 shows the general information content of the selected library websites. It is revealed that six of the twelve libraries provide their history on their website. These include University of Rajasthan, Mohan Lal Sukhadia University, BV, Jain Vishwa Bharati Institute, Mody Institute of Technology & Science, and Central Arid Zone Research Institute. Seventy five percent of the libraries provide information about their institution. The library portals of Jain Vishwa Bharati Institute, University of Rajasthan and Central Arid Zone Research Institute provide more general information on their library home pages as compared to the others. Whereas, the website of SMS medical college and National Institute of Medical Sciences University provide limited information regarding their library services. They just provide an image in the link of facilities and services available institution.

The FAQs links are available on the websites of Banasthali Vidyapeeth, Jain Vishwa Bharati Institute, Maharana Pratap University of Agriculture & Technology, Rajasthan Agricultural University, and Malviya National Institute of Technology libraries. Only Indian Institute of Health Management Research library provides information about library objectives on their homepage.

Table 2. Summary of earlier studies on websites, and relevant areas

Website type	Research area	Selected article(s)	Geographical orientation	Research method
Academic library websites	Web sites design	Adams ¹⁵ (2002)	USA	Content analysis
	Web portals, library e-resources	Shokeen ¹⁶ (2009)	India	Seven C's
	Content and Usability	Sapa ¹⁷ (2005)	Polish and USA	Content analysis
	Content and Design	Onyancha ¹⁸ (2007)	South Africa countries	Link and Content analysis
School library websites	Content features	Clyde ¹⁹ (1996)	Various countries	Content analysis
	Content features	Clyde ²⁰ (1999)	Various countries	Content analysis
	Content features	Clyde ²¹ (2004)	Various countries	Content analysis
	Content features	Jurkowski ²² (2004)	USA	Content analysis
	Content of home pages	Osareh ²³ (2003)	Around the world	Content analysis
University library websites	Content features	Elgohary ²⁴ (2007)	Arab countries	Web impact factor
	Content analysis	Jeyshankar ²⁵ (2009)	India	Webometric analysis
	Citation analysis	Wang ²⁶ (2005)	USA	Webometric analysis
	Content and structural features	Wood ²⁷ (2009)	South Africa	Content analysis
Government websites	Content and link analysis	Sasikala ²⁸ (2003)	India, USA and UK	Content analysis
	Web impact factor, web link analysis	Walia ²⁹ (2010)	India	Webometric analysis
Central university library websites	Search engines, link analysis, WIB	Babu ³⁰ (2010)	India	Webometrics
Association of research libraries	Content features	Detlor ³¹ (2006)	USA	Content analysis
National library websites	Content features	Haneefa ³² (2010)	Asian countries	Content analysis
Management library websites	contents and usability	Kumar ³³ (2009)	India	Content analysis
Special library	Library portal, e-resources, content analysis	Letha ³⁴ (2006)	India	Content & design analysis
Academic, public & special library websites	Content features	Qutab ³⁵ (2009)	Pakistan	Content analysis
Art library websites	Content and structural features	Michalec ³⁶ (2006)	USA	Content analysis
IIT's library websites	Content analysis	Pathak ³⁷ (2008)	India	Content analysis
IUCAA library	Library services, library homepage	Sahu ³⁸ (2005)	India	Content analysis
Private universities	Web impact factors	Utulu ³⁹ (2008)	Nigeria	Website and web presence analysis
Science universities	Design features and usability features	Vasantha ⁴⁰ (2008)	Around the world	Content and design analysis
NHS library website	Content and design	Ebenezer ⁴¹ (2003)	UK	Content analysis
Other websites	Link analysis, search engines	Mukherjee ⁴² (2009)	India	Webometrics

6.2 Library Collection

According to the Encyclopaedia of Library and Information Science, 'Library collection is the sum total of library materials, books, manuscripts, serials, government documents, hamlets, catalogues, reports, recordings, microfilms reel, micro cards and microfiche, CDs etc., that make up the holding of a particular library'⁵⁷. The present study made an attempt to examine the availability of information about library collection on

the websites of respective libraries and data is presented in Fig. 2. All the selected libraries give information about their collection on their websites. The scope of their presentation varies from general to highly detailed. Figure 2 shows the information about the collection such as books, audio-visual materials, CD/DVDs, e-books, e-journals, microfilms and microfiche, patents, project reports, standards, etc. It is found that about 66 per cent of libraries provide details of their books and journals and

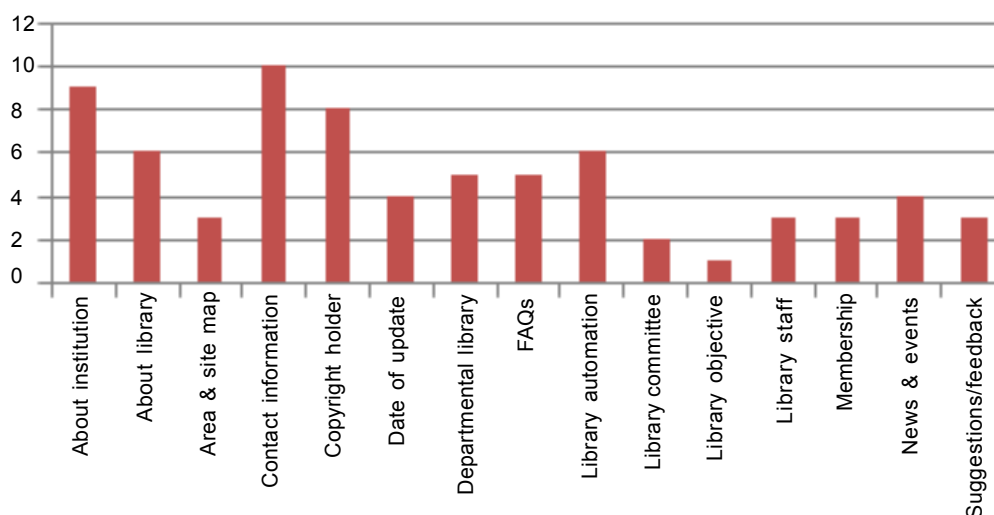


Figure 1. General information about library.

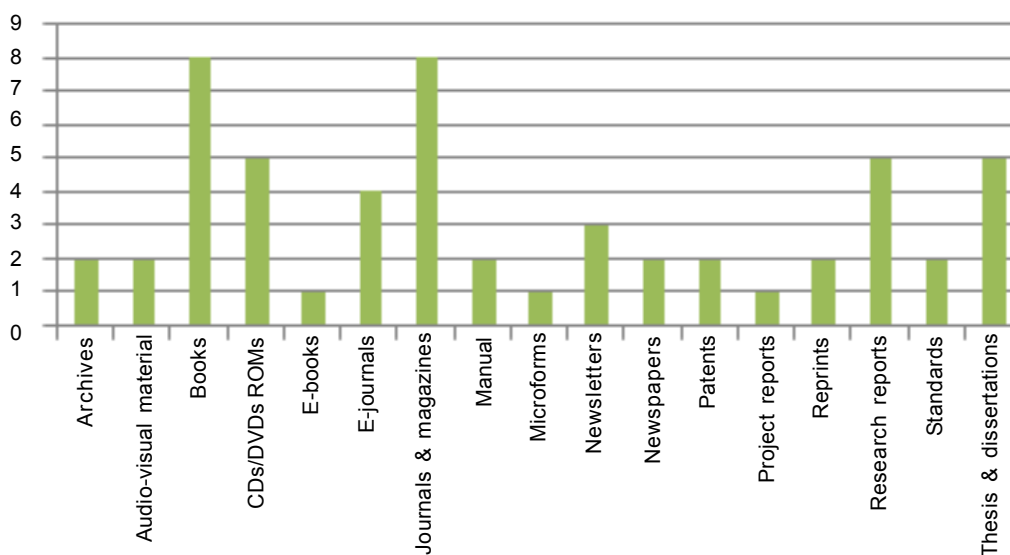


Figure 2. Information about library collections.

magazines on their websites. These include University of Rajasthan, Mohan Lal Sukhadia University, Banasthali Vidyapeeth University, Jain Vishwa Bharati Institute, Malviya National Institute of Technology, Mody Institute of Technology & Science, Central Arid Zone Research Institute, and Indian Institute of Health Management Research. The library of University of Rajasthan, Banasthali Vidyapeeth University, Mody Institute of Technology & Science and Indian Institute of Health Management Research provides information about e-journals. About 42 per cent of libraries (Jain Vishwa Bharati Institute, Malviya National Institute of Technology, Mody Institute of Technology & Science, Central Arid Zone Research Institute, and Indian Institute of Health Management Research) have CD and DVD-ROM collections. Only Indian Institute of Health Management Research library gives information about collection of e-books. Sawai ManSingh Medical College and National Institute of Medical Sciences did not give any information about their collection.

6.3 Information About E-resources

Since the libraries chosen for this study are members of either e-resources consortia, library networks or both, they have access to a large pool of varied e-resources that include e-journals, e-books, and databases and so on. Institutional repositories are being promoted and even mandated in many institutions in India. It was found that 66 per cent of the institutes have institutional repositories on their websites. Six libraries were found to be subscribing to online databases; they include University of Rajasthan, Banasthali Vidyapeeth University, Malviya National Institute of Technology, Mody Institute of Technology & Science, Central Arid Zone Research Institute and Indian institute of health management and research. Three libraries, viz., University of Rajasthan, Banasthali Vidyapeeth University and Malviya National Institute of Technology provide links to different consortium through their website. Only Indian Institute of Health Management Research library provides library

membership form through website. Malviya National Institute of Technology library provides user guide for their different users. University of Rajasthan provides the link for downloaded dissertation and theses for their users. Mohan Lal Sukhadia University and Maharana Pratap University of Agriculture & Technology provide Examination papers for downloading on their websites. Libraries of Rajasthan Agricultural University, Sawai ManSingh Medical College, Malviya National Institute of Technology and Indian Institute of Health Management Research provides links to different libraries and information centers. Only four of libraries having a CD ROM databases includes Malviya National Institute of Technology, Maharana Pratap University of Agriculture & Technology, Mody Institute of Technology & Science and Central Arid Zone Research Institute. Study clearly shows

that Malviya National Institute of Technology and Indian Institute of Health Management Research having a good collection of e-resources and they provide links through their website and National Institute of Medical Sciences and Sawai Man Singh Medical College are very poor in the collection of E-resources. (Figure 3)

University of Rajasthan, Banasthali Vidyapeeth University and Malviya National Institute of Technology library websites have more links and retrieval interface in the comparison to other library websites studied. Websites of these three libraries provide links to the full text databases with user authentication; such facility is available in the campuses only. A screen shot of the e-journal list at the University of Rajasthan website is shown in Fig. 4.

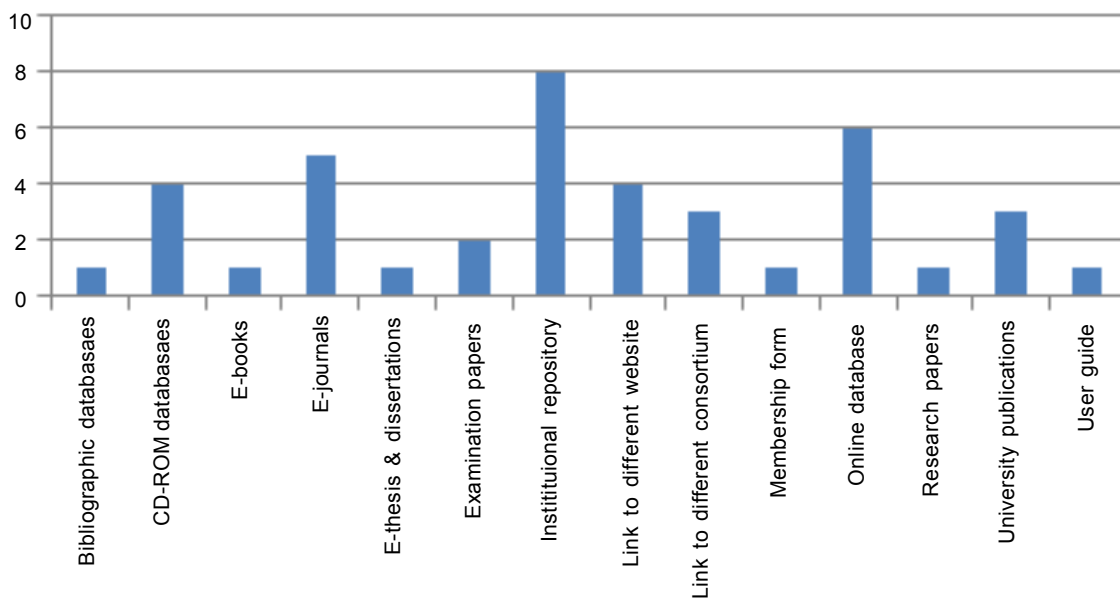


Figure 3. Information on e-resources.

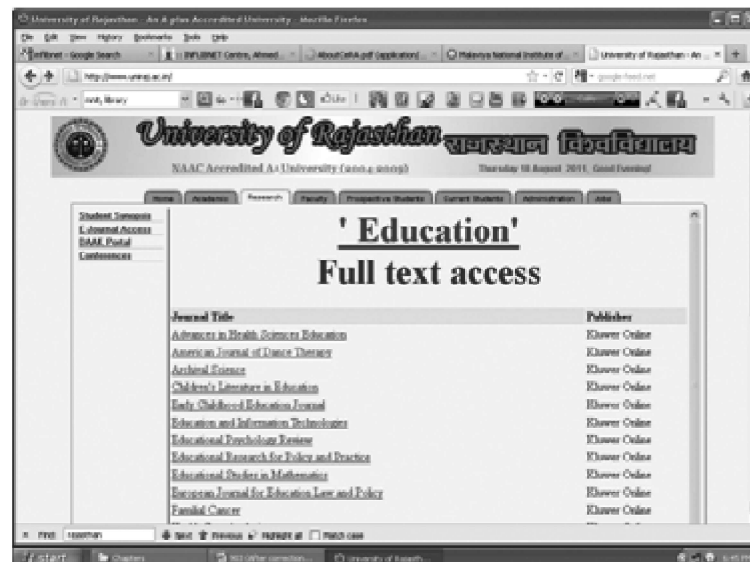


Figure 4. Screenshot of University of Rajasthan e-journals list.

Ten library websites indicate that they are member of library consortia/ network and the users can access e-resources through UGC-INFONET, AICTE-INDEST, DELNET, NISAGNET, CERA (Consortium for E-resources in Agriculture) etc. Further, it was observed that Malviya National Institute of Technology library is subscribing journals from J-Gate India and also provide online link to access these journals in its library portal. It is worth to note that the library portal of National Institute of Medical Sciences and Sawai Man Singh Medical College provide information and links to these e-resources.

6.4 Library Services

Library services describe the facilities provided by a library for the use of book and dissemination of information. Library and information centers are relating to two areas, which are largely document-oriented, have also shaping in a way, which have now given them distinct status.

Figure 5 depicts the various kinds of services like audio & videos service, bibliographical services, CAS and SDI, e-journals access, internet & intranet access, Issue & return of books, newspaper clippings, video viewing facility, reprographic services, xeroxing service, book bank facility, web OPAC, etc., which are made available in the libraries. It is found that University of Rajasthan, Malviya National Institute of Technology, Central Arid Zone Research Institute and Indian Institute of Health Management Research provide information regarding their services.

Seven out of 12 university library provide internet access to their users. It include University of Rajasthan, Mohan Lal Sukhadia University, Maharana Pratap University of Agriculture & Technology, Mody Institute of

Technology & Science, Malviya National Institute of Technology, Central Arid Zone Research Institute, Indian Institute of Health Management Research. The Jain Vishwa Bharati Institute, Malviya National Institute of Technology and Indian Institute of Health Management Research (33 %) having a web OPAC facility through their website. Malviya National Institute of Technology library provide video viewing facility, site search, reprographic services and audio and video using facility. And only Indian Institute of Health Management Research provides CAS and SDI journal and magazines contents, new arrivals list, and newspaper clipping service to their users.

Linking e-resources is an important facility provided to the users. Such links are provided through the library website itself; or through publishers' website, through specific data center or through search engines.

7. DISCUSSIONS

The finding of the study clearly show that all library websites having information and sitemap on library portal. Websites of the Sawai Man Singh Medical College and National Institute of Medical Sciences have produce image of the library on the website of their respective institutions. May be they have lack of knowledge about the importance of library portals through which they provides links. Some time it is also found that due to administration or management instructions some of the institutions did not produce more information on the library portals. So librarians or library in-charge put strong reasons in support to their management for providing more and current information on the web portals which helps users for accessing the information through linkage which are far from the institution and spent more time to access e-resources.

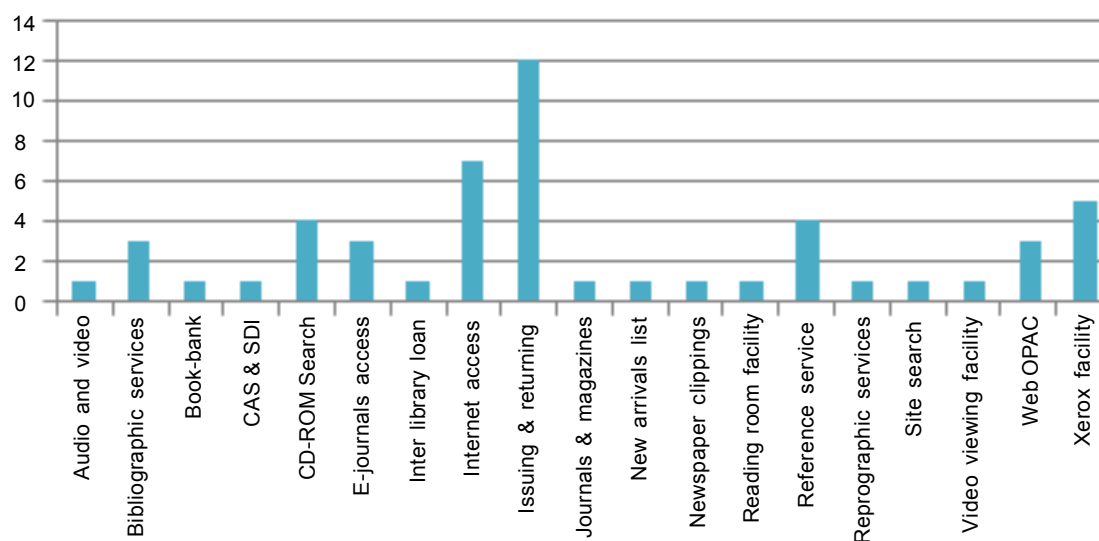


Figure 5. Information about library services.

It is also found that all the library websites have information about books, Journals, reference sources and back volume of journals, etc. The study clearly indicates that almost all library websites have given contact information, FAQs, and copyright holder.

Whereas, important points like library rules, location, subscription of e-newspapers, lecture notes, exhibitions, online seminars, indexing and abstracting services, translation services, training and guidance for the users, SMS queries, organisational structure of the library, web based circulation, promotion of library services, etc., have not been covered on the library websites.

Some of the institutions provide link to the library but no information has been uploaded. There is no direct link to e-resources consortia. These consortia are not used off-campus. The information or brief report of the library available on the library website is not updated regularly and it is found to be old. Hence, it is mandatory to update these regularly with date of last updating and frequency of updating. This will add more credibility to the site. For example: The information loaded on Central Arid Zone Research Institute website is not updated since 2006.

Only Malviya National Institute of Technology library gives information regarding their future plans. Only Malviya National Institute of Technology Library provides branch-wise book bank list for SC/ST students. Some of the libraries uploaded pictures and graphics to show their facilities. No library provides information regarding open and close access system.

Indian Institute of Health Management Research library is the only library which provides link to the membership form. University of Rajasthan library website provides list of CD-ROMs databases available in the library.

8. CONCLUSIONS

The study gives an informative preview of the contents and design of library websites in Rajasthan. Although the libraries have a web presence and varying levels of services, there is enormous scope of improving the websites. For example, University of Rajasthan and Malviya National Institute of technology website found give more and more library information and linkage to its homepage as compared to others. They give all the information in the paragraphs and produce very less links information to the homepage.

It is observed that the entire library websites of Rajasthan are different from one another in many respects. These are identified as premier institutes of higher education and research and Technology in Rajasthan. Having common goal, there is need for library cooperation among the libraries. To achieve this kind of

cooperation, there is need to design and develop a unique type of library website containing resources and services of their individual libraries and also providing links libraries of other libraries. Further, there is also need to form an educational network specialised among the libraries. At present most of the libraries are member of UGC-INFONET, AICTE INDEST, AGRIS, etc.

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