
Web Based Library Services : A Study on Research Libraries in Karnataka

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Abstract

The paper presents how research libraries are effectively using web technology to provide their services. It is observed from the study that all the research libraries under the study are following Hybrid culture (manual & electronic) in providing the library and Information services to their clients. The results also conclude that, majority of the aerospace research libraries effectively use web technology to provide library services when compared to biological and health science libraries. But all selected academic libraries provide web based library services when compared to aerospace and Biological & Health Science libraries.

Keywords : Library Services, Research Library.

0. Introduction

Web technology has become pervasive in all walks of our life, be it research, business, entertainment or others. In other words, web technology is talk of the day and need of the hour in order to remain competitive. It is changing the way people think, work or run a business. On one hand web technology is changing the way in which the activities of work place are being carried out and on the other hand there are challenges like poor infrastructure, lack of knowledge and information on effective use of web Technology. It becomes evident in such a situation to go for reassessment and reevaluation of the entire activities of work place where web technology is used to provide the library services.

1. Review of Literature

Literature search is an essential link in the process in research. It helps to know what the other researchers in specified subject have done. So an attempt has been made here to identify the related literature published in the area of study. The information sources consulted for the review includes, books, journals, articles, library and information science abstract [LISA], International dissertation abstracts, conference/ seminar papers and other resources.

2. Need for the Study

This is a crucial moment to bring up successful case studies in Web Technology application in libraries as well as raising awareness about the use of Web Technology in Research libraries specifically information disseminating. Also it is apt time to carry out case studies to examine existing application of Web technology in research libraries in a region, particularly in developing country.

3. Objectives of the Study

This study is carried out to know, how research libraries are effectively using the web technology for providing their library services and

1. Current scenario of web technology in research libraries.
2. To know the different library services provided through web technology

4. Research Methodology

The study is designed, developed and carried out to determine and analyze the existing position and use of Web technology for providing library services. The principal tool for data collection covering the research libraries spread across the Karnataka state is "Questionnaire". We grouped National Aerospace Laboratory (NAL) library, Hindustan Aeronautical Limited (HAL) library, Aeronautical Development Agency (ADA) library and Centre for Air Borne System (CABS) library into Aerospace libraries. Central Food Technological Research Institute (CFTRI) library, National Institute of Mental Health and Neuro Sciences (NIMHANS) library, Kidwai Memorial Institute of Oncology (KMIO) library and National Center for Biological Sciences (NCBS) library into Biological and Health Science Libraries and Indian Institute of Science (IISc) library, Indian Institute of Management Bangalore (IIMB) library, Indian Institute of Astrophysics (IIA) library and Raman Research Institute (RRI) library into Academic Libraries for our convenience.

5. Analysis of the Data

The data collected was analyzed in terms of various aspects related to the study using Statistical Package for Social Sciences [SPSS] software. The data was interpreted in terms of objectives defined.

5.1 Library Services

A library service is "acid test" for effective library functioning. Library services are means of sharing knowledge to wide spectrum of user community. Librarianship is a media of service in a library for users to meet their needs like research, educational, intellectual and others. Effective library services make functional library qualitative. Library, even with a small collection, can provide effective library services provided it effectively uses available information technology applications.

5.2 Level of Library Services Provided

To identify the level of library and information services provided at institutional level, local/regional level, national and international level, a questionnaire was distributed to the respondents in this regard. The collective responses are depicted in the Table 1 for necessary statistical interpretation.

Table 1: Level of Library Services Provided

Libraries	Parent Institution		Local level		Region level		National level		International level	
	No.	%	No.	%	No.	%	No.	%	No.	%
Aerospace Libraries	4	100	2	50	3	75	2	50	1	25
Biological and Health science Libraries	4	100	2	50	3	75	3	75	2	50
Academic Libraries	4	100	3	75	3	75	3	75	1	25
Total	12	100	7	58.33	9	75	8	66.67	4	33.33

Table - 1

Table 1 also points out that all research libraries provide their service to users of its parent institution. While 9 (75%) research libraries are providing their service at regional level, 8 (66.67%) at national level, 7 (53.33%) at Local level, only 4 (33.33%) research libraries provide their services at international level.

From the table 1 it is clear that, libraries are the heart of the Parent Institution and work towards the achievements of the parent organizational goal, as all libraries provide their services to parent Institution.

5.3 Way of Providing Library Services

To identify whether research libraries provide library services through manual mode, automated mode, LAN of library or through its homepage, respondents were asked to describe, how were they providing library services. The responses elicited from them are depicted in Table 2 for necessary statistical analysis.

Table 2: Media of Library service

Libraries	Manual		Automated Library		LAN of Library		Web Page of Library	
	No.	%	No.	%	No.	%	No.	%
Aerospace Libraries	4	100	4	100	4	100	3	75
Biological & Health science Libraries	4	100	3	75	3	75	2	50
Academic Libraries	4	100	4	100	2	50	4	100
Total	12	100	11	91.67	9	75	9	75

Table – 2

Table 2 clearly indicates that all research libraries provide library services manually. Out of 12 selected research libraries, 11(91.67%) research libraries provide the library services through automated library followed by 9 (75%) libraries who provide services through LAN and Home page of the library.

Further it is very interesting to note here that, all selected Academic libraries are providing web based library services and aerospace libraries provide automated and LAN based library services

5.4 Library Services through Web Technology

A good and well designed library web page is not only excellent media for publicizing the library functions, activities, programmes, resources and services but also helps to bring to the notice of users all significant information which they must know in developing and using their library³. To assess the degree of web technology in the library services, the survey included a questionnaire about the web-based library services offered by each library. The collective responses are depicted in the Table 3 for further statistical interpretation.

Table 3 : Web based Library services

Services	Aerospace Libraries		Biological & Health Science Libraries		Academic Libraries		Total	
	No.	%	No.	%	No.	%	No.	%
Literature Search	2	50	2	50	2	50	6	50
Indexing	2	50	1	25	1	25	4	33.33
Reference	2	50	1	25	1	25	4	33.33
Referral	1	25	1	25	2	50	4	33.33
News Clipping	2	50	0	0	1	25	3	25
Bibliographic	2	50	1	25	1	25	4	33.33
Translation	0	0	0	0	2	50	2	16.67
Abstract	2	50	1	25	1	25	4	33.33
SDI	1	25	1	25	1	25	3	25
ILL	1	25	1	25	2	50	4	33.33
Technical Enquiry	2	50	1	25	0	0	3	25
Publication	2	50	1	25	0	0	3	25
New arrivals	2	50	1	25	1	25	4	33.33
Retrospective Search	2	50	1	25	1	25	4	33.33

The computed data in the Table 3 demonstrate that, out of 12 libraries surveyed, nearly half of the libraries provide web based literature services, 33.33% of the libraries provide web based Indexing, Reference, Referral, Bibliographic, Abstract, Inter library loan, New arrival and retrospective search services. Remaining 25 % of the libraries provide web based News clipping, SDI, Technical Enquiry and Publication services.

When we made observation between the responded questionnaire and respective library website, we came to know that, all most all library websites provide their link to other sources or libraries, but in the questionnaire only a few members have responded that, they are providing web based referral services. As per our knowledge linking is also directs the library users from one source to other for particular information, which is nothing but referral service. Another aspects is that all most all libraries in the study have maintained the Online Public Access Catalogue (OPAC), but a few of the respondents answered that they are providing retrospective services through manual, automated, LAN and web based modes. We hope retrospective search can be done through OPAC.

5.5 Summing up

It is observed from the study that all the research libraries under the study are following Hybrid culture (manual & electronic) in providing the library and Information services to their clients. It clearly indicates that even though we have sophisticated technologies to provide faster services to its clients, we still retain the manual mode, because a small group of users still needs the manual mode of information services or lack of the infrastructure facilities or budget. But a hybrid type of services is essential in any kind of libraries.

6. References

1. Buckland, M. (1992). Redesigning library services: A manifesto. Chicago: American Library Association.
2. Kannappanavar, B U. and Vijayakumar, M. (2001). Use of IT in University of Agricultural Science Libraries of Karnataka. A comparative study. DESIDOC Bulletin of Information Technology, Vol.21 (1), p21-26.
3. Malhan I V and Vijay Gupta. Publicizing the University Library Resources and services through the University Library Home page. In Academic Libraries in Internet Era. Ed by PSG Kumar, CP Vashishth. Ahmedabad: INFLIBNET, 1999. P - 378
4. Sharma, Sumati. (2000). Information Technology in special library environment. DESIDOC Bulletin of Information Technology, Vol. 19 (6), p 19.

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