#### AN INVESTIGATION INTO THE FEATURES OF WEB OPACS IN INDIA

by

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#### 0. Introduction

In the beginning of new Millennium, the Indian library and information scenario has seen tremendous developments with regard to the information handling management. One of the areas is the design and development of online catalogues mostly by academic and special libraries. The recent dynamic changes and improvements in the functioning of INFLIBNET and other regional networks in India has had an impact on the libraries. Added to this, the University Grants Commission is also supporting financially the university and major college libraries for the application of Information Technology in managing information. As a prelude, it is the prime step for every library to prepare comprehensive bibliographic records in a machine-readable form. Therefore, the design and development of online catalogues (OPACs) has gained significance in the Indian scenario. Already thousands of libraries, both academic and special, have designed and being developed their OPACs by adopting either commercial software or in-house-developed software. In this context, the INFLIBNET has also developed SOUL (Software for University Library) and being upgraded to incorporate MARC21 in its OPAC module. A further development of online catalogues in India is uploading of some of the major library OPACs into the Web.

#### 1. Scope

This paper presents the survey of Web based catalogues in India. It is found from the net that around 17 library and information centers have put up their catalogues via Web. This paper presents an analysis of these Web OPACs features and highlights major findings of the survey via net. The survey forms a part of major research on OPACs in India being conducted by the authors.

# 2. Web OPAC: Concept Explained

It is an advancement over traditional OPACs, serving as a gateway to the resources not only held by the respective library but also to the holdings of other linked libraries without limiting to local collection and going beyond to regional, national and international levels. In the near future, one can see the potentiality of the full text environment in the web-based OPACs. (Harmsen, 2000)

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The features of Web-based OPACs are as follows:

- ?? Web OPAC is Internet connected to online catalogue.
- ?? Can be accessed remotely.
- ?? Provides direct access to a library's bibliographic database.
- ?? Offers opportunities to have access to various resources of other libraries on the web.
- ?? Has the ability to use hypertext links to facilitate navigation through Bibliographic records.
- ?? Has usual features of OPAC

## 3. Analysis and Discussion

### 3.1 Sample size

In the Appendix A, a list of Web OPACs in India has been given, that is17 libraries have put up their catalogues via Web. Probably the total number of libraries might vary. However, for the purpose of this paper, 17 libraries which were readily available over net has been considered for the analysis. Accordingly the consolidated analysis of the features of Web OPACs under survey has been given as Appendix B.

#### 3.2 Classification of Web OPACs

It is found that out of 17 Web OPACs, 5 belongs to Academic libraries, 6 Special libraries, 2 Public libraries and 4 Union catalogues.

#### 3. 3 Types of Software used

11 out of 17 Web OPACs has been designed and developed by using in-house-developed software. This probably may be due to cost factor to go in for commercial software. This further infers that those respective libraries have the technical know how to develop in-house software.

#### 3.4 Search features

Most of the Web OPACs are offering simple search features and few are offering both simple and complex search facilities. In addition, they also provide browsing capabilities (5 OPACs) followed by phrase searching (9), and Boolean searching (11). The much wanted feature of providing Hypertext links in a bibliographic record display has not been widely seen since but only three Web OPACs has such facility and the same is true with regard to the truncation and word adjacent or word proximity operators.

#### 3.5 Access points

The conventional access points such as author, title, etc. have been provided by all the Web OPACs under survey. This is followed by keyword searching (15 OPACs). It is very unfortunate that only 5 OPACs have made subject headings access points. By and large, 3 OPACs did not make provision to a wide variety of access points which any web based catalogue should provide, like keyword in titles, ISBN/ISSN, Class Number, series, etc.

#### 3.6 Search Strategy

All the Web OPACs display the search strategy applied. However, the other search strategy features such as provision of example for every type of search and search refinement features have not been considered by the majority of the Web OPACs under survey.

#### 3.7 Display

It is interesting to note that all the Web OPACs have made provision for brief as well full bibliographic displays. At the same time, it is observed that the display levels are customizable in 10 Web OPACs and the provision of number of records displayed per screen has been examined in 7 Web OPACs.

#### 3.8 Entry structure

All the Web OPACs in survey have considered local format for entry structure and only 3 Web OPACs supports MARC.

#### 3.9 Output features

While all Web OPACs provided for exporting and downloading of the retrieved records, on the other hand only one (Indian Institute of Technology, Mumbai) library Web OPAC has made provision to transmit the retrieved records through e-mail.

#### **3.10 Others**

Only three, out of 17 Web OPACs surveyed, have provided links to external sources and help messages. In addition to the web access to the catalogue, three Web OPACs have also been provided via telnet access.

# 4. Major findings

- 4.1 The emergence of Web OPACs in India can be characterized as a phenomena of new Millennium.
- 4.2 It is not an encouraging factor, since a meager per cent of OPACs have been connected to the web in India, while the situation in the West is quiet different, and encouraging.

- 4.3 When the INTERNET technologies are fast growing in the Information handling, Management and Retrieval, the situation in India with regard to web OPACs is developing at snail speed.
- 4.4 It is also observed that (Appendix A) the Union Catalogue of books for Bangalore libraries have adopted different software such as WWWISIS, Free WAIS and MG.
- 4.5 The use of in-house developed software is dominant in the libraries in India.

#### 5. Conclusion

This paper presented an overview of the Web OPACs in India, which are to be further strengthened and developed so as to accommodate the various features. However, with recent advances in Information Technology, an ample scope for further development is possible. The Library and Information Science professionals and system developers are carrying out more research in order to enhance the retrieval capabilities of online catalogue. Such an endeavor would certainly pave the new way of thinking about the very concept of Web OPACs in the days to come. In the light of changing dimensions of library services with the application of new Information Communications Technology, the design and development of online catalogues, is to be strengthened to provide effective access to the resources of the libraries. It is hoped that in this New Millennium, with the help of UGC through its "INFLIBNET" program, the libraries in India will have a glorious future.

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# APPENDIX A: LIST OF WEB OPACs IN INDIA

Sl.No.	Name of the Library	Location	URL
1.	TIFR OPAC	Mumbai	telnet://library.tifr.e.
2.	IISc. Library Catalogue	Bangalore	http://www.ncsi.iisc
			telnet://144.16.72.1
<b>3.</b>	NCSI Library Catalogue	Bangalore	http://144.16.72.15
4.	ULCSS of 14 Bangalore Libraries (1997, 1998, and		http://ucat.ncsi.iisc.
	1999)	Bangalore	
	UC of Books in IISc., NAL and RRI		http://144.16.72.15
			http://144.16.72.15
			http://144.16.72.15
5.	Institute of Rural Management OPAC	Mumbai	telnet://library.irm.e
6.	Catalogue of Books, Bioinformatics Centre, University	Pune	http://202.41.70.17
	of Pune		
7.	PuneNet Books Database (39 Libraries)	Pune	http://202.41.70.34
8.	Delnet Online Databases	New Delhi	http://delnet.nic.in/v
			telnet://164.100.24
9.	Indira Gandhi Institute of Development Research's	Mumbai	http://www.igidr.ac
	OPAC		

Sl.No.	Name of the Library	Location	URL
10.	Mylibnet Holdings D atabase	Mysore	http://www.mylibnet.
11.	Study Centre for Indian Literature in English &	Madurai	http://www.scilet.org/
	Translation, The American College, Madurai SCILET		
	- Online Catalogue		
<b>12.</b>	American Information Resource Centres (AIRC) in	New Delhi	http://www.american
	India		
13.	Indian Institute of Technology	Kharagpur	http://library.iitkgp.e
14.	Indian Institute of Technology	Mumbai	http://library.iitb.ern
15.	NCSI	Bangalore	http://www.ncsi.iisc.e
16.	ICAST, NAL	Bangalore	http://www.cmmacs.e
17.	BCL INDIA	New Delhi	http://www.bclindia.

# APPENDIX B: CONSOLIDATED ANALYSIS OF INDIAN WEB OPACs FEATURES

Characteristics	Academic	Special	Union
	Libraries	Libraries	Catalogue/N
1. Number of libraries	5	6	4
2. OPACs interface used			
i. Commercial	2	3	
ii. In-house-developed	3	3	4
3. Search Features			
	_		
i Simple Search	5	6	4
ii. Complex or advanced Search	1	2	2
Provision of browsing capabilities	1	2	1
Provision for phrase searching	2	3	2
Provision for Boolean searching	2	4	3
Provision for truncation	2	1	1
Provision for word adjacency and/or word proximity operators			1
Hypertext links in full bibliographic record display	1	1	
4. Access Points			
Author	5	6	4
Title	5	6	4
Keyword	4	5	4
Subject heading	1	2	
Keyword in title	2	3	
Keyword in Subject		2	
Combined search such as author / title / keyword	3	4	1

Characteristics	Academic	Special	Union
	Libraries	Libraries	Catalogue/N
Class Number	1	1	
ISBN	1		
Copy location	5	4	4
5. Search Strategy			
Display search strategy	5	6	4
Provides examples under each type of search	2		
Search limits/search refinement features	3	1	
6. Display			
Provision for brie f/full bibliographic displays or both	5	6	4
Display levels (Customisable display screens)	3	5	
Limiting the number for the display of records (output	2	2	1

control)			
7. Entry structure			
C. A.C. MADG.C.			1
Support for MARC formats			1
Provision for library structured entry format	4	6	4
Both MARC formats and library structural format			1
8. Output features			
Provision for exporting/downloading of retrieved records	5	6	4
Provision for the transmission of retrieved records through	1		
e-mail			

Characteristics	Academic	Special	Union
	Libraries	Libraries	Catalogue/N
9. Others			
Links to external sources	1	1	
Help	1		
Access mode			
i.telnet	1	1	1
ii. www	5	6	4