

E-resources in University Libraries of Karnataka: A Study

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Abstract

The paper reports the results of a survey conducted to know the collection of e-resources in Karnataka state university libraries. Attempts have been made to know the Internet facilities, procurement of CD-ROM databases and online resources, participation in consortium activities and e-resources accessible through such consortium activities in the university libraries. The paper traces the barriers in collection of e-resources in the university libraries. The university libraries under the study have insufficient number of Internet nodes, low bandwidth, poor collection of CD-ROM databases and online resources. The scholarly literature accessible under the UGC-Infonet E-Journal Consortium is the only strength of these university libraries, as far as collection of e-resources is concerned.]

Keywords: Electronic Resources, University Libraries - Karnataka

1. Introduction

Higher education today is changing from a conventional type of campus-based university into an Internet-based virtual university; and from time and space confined education to life-long, ubiquitous and perpetual education. In the present day digital environment the teachers can address their students scattered all over the world from distant place. Internet-based teaching and training materials are gaining popularity among the academic community (Sangam and Vatnal, 2000). Internet has altered the ways in which the research activities are carried out (Prodhani and Gautam, 2001).

Changes in technology in recent years have dramatically altered how information is accessed, stored and disseminated. Whereas information provision in academic libraries was previously based upon the collection of physical library materials, it is now increasingly the case that academic libraries are moving into the virtual arena. With advances in

technology and e-publishing access to information on a local, regional, national and international basis, by overcoming the traditional barriers of time and space has become easy. Large amount of scholarly literature in the form of full-text journals, books, reports, etc., are published in electronic medium. Recognising the fact that the use of ICT opens new avenues for better services in new found digital environment, the libraries in higher education are adopting to new technologies. The present study attempts to explore the ways in which the university libraries in Karnataka have responded to the changing information environment and made provision for e-resources in order to satisfy their user community.

2. Objectives

The objectives of the present study are:

- i) to know the Internet facilities in university libraries of Karnataka;
- ii) to know the CD-ROM collection in university libraries of Karnataka;



- iii) to know the online resources subscribed by the university libraries of Karnataka;
- iv) to know the e-resources available through the consortia in university libraries of Karnataka; and
- v) to know the barriers in collection of e-resources in university libraries of Karnataka.

3. Methodology

The survey method has been used for the present study. The questionnaire has been used as a data collection tool.

4. Scope of the Study

The scope of the study area is limited to Karnataka State. The Libraries of only six universities which are included in the Karnataka State Universities Act, 2000 have been taken into consideration for the purpose of the present study. The university libraries which are included in the present study are:

Kuvempu University Library (KUL) at Shankaraghatta near Shivamogga, Mangalore University Library (MaUL) at Konaje near Mangalore, and Mysore University Library (MUL) at Mysore.

5. Analysis

5.1 Internet Facilities

With an intention to know the Internet facilities made available in the universities under the study, with special emphasis on their respective university libraries, the librarians were asked to furnish the details. The data received in this regard has been presented in Table 1.

The universities under the study have either leased line or V-SAT, or both for Internet connection either from BSNL or ERNET India, or both of them. The Internet bandwidth varies from 512 kbps to 4 mbps. The Internet nodes created in the libraries vary from

Table 1: Internet facilities in the university libraries

S1. No.	Internet Facilities in University Library	BUL	GUL	KaUL	KUL	MaUL	MUL
01	Type of Connection	V-SAT Leased Line	V-SAT	V-SAT, Leased Line	Leased Line	V-SAT Leased Line	Leased Line
02	Service Provider	BSNL, ERNET India	ERNET India	BSNL, ERNET India	BSNL, ERNET India	BSNL, ERNET India	BSNL
03	Bandwidth	512 kbps+ 2 Mbps	2 Mbps	512 kbps	2 Mbps+ 2 Mbps	512 kbps+ 2 Mbps	2 Mbps
04	No. of Nodes Created	75	140	25	45	12	15
05	Browsing Section	Yes	Yes	Yes	Yes	No	Yes
06	Separate Browsing Section for Academic Staff	Yes	Yes	No	Yes	No	Yes
07	No. of Nodes for Academic Staff	18	40	-	10	-	02
08	Personnel Supervising Internet Section	Library Staff with IT skills, and IT Trained	Library Staff with IT skills	Library Staff with IT skills	IT trained staff	-	Library staff
09	Department Chamber	Yes	Yes	Yes	Yes	Yes	Yes
10	Levels of Provision	All Academic Staff	All Academic Staff	Chairpersons of Departments	All Academic Staff	Chairpersons and Professors, Readers	All Academic Staff
11	Plans to Update Network Infrastructure	Yes	No	Yes	Yes	Yes	Yes

Bangalore University Library (BUL) at Bangalore, Gulbarga University Library (GUL) at Gulbarga, Karnatak University Library (KaUL) at Dharwad,

140 in GUL to only 12 in MaUL. Except MaUL, all other university libraries have Internet browsing section. Four university libraries have separate

Internet browsing sections for academic staff. The Internet nodes created for academic staff in the libraries varies from 40 in GUL to 02 in MUL.

5.2 CD-ROM Collection

CD-ROMs technology came into existence in the mid-1980s. Since then CD-ROM databases containing various types of information—bibliographic and full-text databases, numeric databases, and of late multimedia databases—have become very popular and highly used information sources (Chowdhuri & Chowdhuri, 2001). The details of the collection of CD-ROMs available in the university libraries under the study are presented in Table 2.

Table 2: CD-ROM collection in university libraries

S.N.	CD-ROMs	BUL	GUL	KaUL	KUL	MaUL	MUL
01	No. of CD-ROMs	785	616	657	575	750	900
02	CD-Net Facility	-	Yes	-	-	-	-

It is clear from the Table that the MUL has the highest number of CD-ROMs with 900 followed by the BUL with 785 and MaUL with 750 CD-ROMs. The KUL has the least number of CD-ROMs (575). Only GUL has CD-Net facility.

The university librarians were also asked to furnish the details of the important CD-ROMs available in their libraries and the details are given in Table 3.

As can be seen from the Table 3, all the university libraries under the study have the CD-ROM databases namely the BIOSIS and MathSci supplied under the UGC-Infonet programme. The GUL and MaUL have procured comparatively a worthy collection in the form of CD-ROMs. The KaUL has not procured the CD-ROMs of importance.

Table 3: Important CD-ROMs available in university libraries

BUL	GUL	KaUL	KUL	MaUL	MUL
1) BIOSIS	1) ABI Inform	1) BIOSIS	1) Atlas,	1) BIOSIS	1) Analytical
2) Census of India 2001	2) BIOSIS	2) MathSci	Maps of India	2) Chaitanya Sangayana	Abstracts
3) CMIE	3) Biotech Abstracts		2) BIOSIS	3) Distance Education Database	2) BIOSIS
4) India Patents	4) Cabasac		3) Census of India 2001	4) Indian Science Abstracts	3) Econlit
5) MathSci	5) Cross Culture		4) Fluid Mechanics	5) Information Directory of E-Resources	4) Eric
6) Psychinf	6) Dissertation Abst. Inf		5) Mahatma Gandhi Biography	6) Indian Business Insight (IBID)	5) Geography
	7) Econlit		6) Maps of India	7) Manorama Knowledge Adventure	6) Human Nutrition
	8) Eric		7) MathSci	8) MathSci	7) ISA Plus
	9) Georef		8) Mysore Vishwavidyalaya	9) National	8) LISA
	10) Indian Business Insight (IBID)		English-Kannada Nighantu		9) MathSci
	11) INSPEC				10) OCLC Environmental Library
	12) LISA Plus				11) PsychLit
	13) MathSci				12) Socio
	14) Psychinfo				

	15) Sociofile 16) Supreme Court Case Finder		9) Tenth Five Year Plan Report	Union Catalogue of Science Serials 10) National Geographic 11) Perfect Guru Yoga 12) Social Science Index	13) File Wilson Business Periodicals
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5.3 Online Information Sources subscribed by the University Libraries

In order to satisfy the information needs of the users, the university libraries need to subscribe to the online resources individually. The details furnished by the university librarians about the subscription of online information sources is given in Table 4.

Table 4: Online information sources subscribed by university libraries

Sl. No.	Online Sources	BUL	GUL	KaUL	KUL	MaUL	MUL
01	Subscribed Online Sources	Yes	-	-	-	Yes	-
02	Type of Source subscribed:	-					
2.1	E-Books	-	-	-	-	-	-
2.2	E-Journals	-	-	-	-	-	-
2.3	E-Reference Sources	Yes	-	-	-	-	-
2.4	Abstracting and Indexing Journals	Yes	-	-	-	Yes	-
2.5	Others	-	-	-	-	-	-

Except the BUL and MaUL, none of the other university libraries under the study is subscribing to any online resources individually. The BUL has a subscription to e-reference resources, namely Exrefer, and EBSCO Academic Premier. The MaUL has subscription to the abstracting service, namely Inside Web.

5.4 Online Information Sources Accessible through Consortia

The questions were raised to the university librarians under study to know the consortia in which they participate. The data received in this regard have been given in Table 5.

Table 5: Participation of university libraries in consortia

S.N.	Consortium	BUL	GUL	KaUL	KUL	MaUL	MUL
1	Participation	Yes	Yes	Yes	Yes	Yes	Yes
2	Consortia :						
3	UGC-Infonet	Yes	Yes	Yes	Yes	Yes	Yes
4	Others	-	-	-	-	-	-

The data presented in Table 5 shows that all the university libraries under the study are active participants of the UGC-Infonet E-Journal Consortium only.

5.4. UGC-Infonet E-Journals Consortium

UGC-Infonet E-Journal Consortium has been launched by the University Grants Commission (India) with an intention to bring a qualitative change in the supply of scholarly literature published all over the world and making it accessible to the academic community of higher education. The Consortium is an ambitious programme of UGC to

interlink all the universities in the country with state-of-art technology. The Network will overlay on ERNET backbone and provide Internet and Intranet Services. In order to make use of these resources, the selected Indian universities have been provided with funds for the establishment of campus LANs. Under this programme a large number of full-text journals published in different subjects, bibliographic databases, and gateway portals are accessible. The JCCC (J-Gate Custom Content for Consortia), a gateway portal, has been recently added in the Consortium. This gateway portal provides access to more than 7900 journals (INFLIBNET Centre, Ahmedabad). The UGC-Infonet E-Journals Consortium aims at covering all fields of learning including Arts and Humanities, Social Sciences, Physical Sciences and Chemical Sciences, Life Sciences, Mathematics, Statistics and Computer Sciences (Murthy, 2006).

5.5 Barriers in Collection of E-Resources

The collection of electronic information sources is not out of problems. With an intention to know the barriers in the collection of electronic information sources by the university librarians, questions were raised to them. The response received from them has been presented in Table 6.

Table 6: Barriers in the collection of e-resources in university libraries

Sl. No.	Barriers	BUL	GUL	KaUL	KUL	MaUL	MUL
01	Lack of Funds	03	01	01	01	01	02
02	Lack of Knowledge to use e-resources among users	02	04	04	03	02	01
03	Lack of Support from the University Administration	03	02	03	02	03	02
04	Lack of ICT Infrastructure	03	03	04	04	03	03
05	Frequent Power Cut	02	03	04	05	02	03
06	Lack of trained staff	02	04	05	02	02	03
07	Library Staff's Resistance to Change	03	04	05	02	04	02
08	Cost Effectiveness	03	03	04	01	02	05
09	Others	-	-	-	-	-	-

(Rating Scale: 1=Strongly agree, 2= Agree, 3= Undecided, 4= Disagree, 5= Strongly disagree)

As can be seen from the data presented in the Table, the majority of the university librarians strongly agree with the barrier of lack of funds, and just agree with the barrier of lack of support from the university administration. They are uncertain about the barriers of lack of trained staff, and cost effectiveness as the problems in collection of electronic information sources in their university libraries. The university librarians disagree with the statements - lack of ICT infrastructure, lack of trained staff, and library staff's resistance to change - as the barriers in the collection of electronic information sources.

6. Major Findings

The major findings of the study are given below:

- ◆ All the university libraries under the study are participating in the UGC-Infonet E-Journal Consortium and this is the only strength of these university libraries as far as e-resources are concerned.
- ◆ As far as Internet facilities are concerned, the university libraries under the study are poorly equipped. The MaUL has only 12 Internet

nodes. The Internet bandwidth made available in universities is very low. The MaUL does not have Internet browsing section at all. The MaUL and KaUL have not provided Internet facility to the department chambers of all the academic staff.

- ◆ The MUL has maximum of 900 CD-ROMs whereas KUL has only 575 CD-ROMs. The university libraries have procured a negligible number of CD-ROM databases. Neither university libraries have sufficient number of computers to use CD-ROMs nor they issue them, nor do they have CD-Net facility for providing access to the academic staff at their department chambers.
- ◆ Except BUL and MaUL, none of the university libraries under the study is subscribing any online sources. The online sources subscribed by BUL and MaUL are highly negligible.
- ◆ University librarians strongly agree with the barrier of lack of funds in collection of e-resources in their libraries. Lack of support from university administration was another stumbling block in collection of e-resources.
- ◆ None of the university libraries under this study have formulated any perspective plans to collect e-resources.

6. Suggestions

- ◆ Every university library should have separate Internet browsing section with sufficient number of Internet nodes exclusively meant for users. Internet bandwidth should be increased in order to provide speedy access to the e-resources.
- ◆ The university libraries should procure CD-ROM databases required for the benefit of end-

users. CD-Net facility should be provided to have access by the end-users.

- ◆ The university libraries under the study should plan for subscription of online-resources.
- ◆ The Universities should allocate the funds required for procurement of CD-ROM databases, online resources and enhance sufficient Internet facilities in their respective libraries.

8. Conclusions

The scholarly literature accessible under the UGC-Infonet E-Journal Consortium has occupied the lion share of the e-resources available in these university libraries. In spite of the profuse support extended by the UGC, the Karnataka State university libraries have failed to develop electronic information sources for the benefit of their academic community. This can be attributed to the fact that these university libraries have not received the same support from their own universities in procurement of e-resources. There is an acute need on the part of the university libraries to take steps to establish extensive campus LAN, develop collection of CD-ROM databases and CD-Net facility, and to give due importance for subscribing online resources on their own to serve the academic and research community better.

The educational institutions engaged in pursuit of higher education and research must learn quickly, that, academic excellence cannot be achieved without opening themselves to the changes taking place in today's ICT driven networked digital environment. Developments in ICT, no doubt has reduced the world into "vasudaiva kutumbakam" or a "global village" but the spectrum of the world of information it has created is so vast and deep that demand cent percent dedication and commitment from the teacher

to keep abreast with the developments in one's own field of specialization. Earlier the universities in India in general and Karnataka in particular realize this fact better it would be for their academics to face the challenges of the knowledge society.

9. References

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