USAGE OF ELECTRONIC JOURNALS UNDER UGC INFONET E-JOURNAL CONSORTIUM IN NORTH EASTERN UNIVERSITY LIBRARIES

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Abstract

The rapid development of the Internet during the 1990s has opened up a new possibility where traditional print journals are being replaced by, or at least supplemented by, the electronic journals. Low library budget and increasing cost of subscription are some of the important factors for shift from print media to electronic one This paper discusses the role of UGC-Infonet in promotion of E-journals in the country through E-journal consortium. Highlights that the usage of E-journals is much below the expected target by the Universities of North East which have been given access to E-journals. This has been supported by usage statistics by these five universities.

Keywords : E-journals, Academic Libraries Consortium – India, INFLIBNET, Consortia.

1.   INTRODUCTION

Technological revolution in academic libraries have changed the ways in which libraries use and find information today. Developments in electronic technologies, computers and communication technologies have drastically affected the role of librarians. To overcome the limitations of physical ownership, libraries supplement their collections through Inter-Library Loan (ILL) and document supply services (DDS). Unfortunately academic libraries in India have not yet shown interest in DDS and ILL, though there are few agencies that are involved in initiating and implementing ILL. In the past, it has been observed that libraries are moving slowly from Print to Electronic media. Libraries, faced with declining budgets and high cost of journals are not able to purchase all publications and materials that their users would generally expect to have. The escalating price of the rapidly growing numbers of electronic journals and databases has forced the librarians to think alternative options to subscribe to E-resources. Perhaps the formation of consortia is an answer to this problem. Indian Academic libraries are no exception to this fact, which also are also gradually shifting from print format to electronic format, though electronic sources have their own limitations but accessing large number of E-journals or resources globally is significant advantage. UGC- INFONET developed by UGC in collaboration with INFLIBNET is a landmark initiative towards sharing of E-resources the formation of consortia. The new release of electronic resources under the consortia in the year 2004 for fifty universities is a milestone in the history of higher education system.

2.   ELECTRONIC JOURNALS

Electronic journals are often referred to interchangeably as "electronic publishing", "electronic serials", "online journals" and "electronic periodicals". While some authors simply take an electronic journal as a publication whose primary means of delivery to subscribers is through a computer file, others define it strictly to be "a full text electronic publication, which may include images, and is intended to be published indefinitely" The only thing that can be said definitively is that e-journals are serial publications available in digital format. Some are distributed on CD-ROMs, some over the Internet. Electronic Journals are counterpart of print journals which are browsed, viewed, searched and save using network computers.

As far as access is concerned, electronic journals are the ideal solution for users. They permit full-text access via computer terminals irrespective of location. No more user frustration because of non-availability of material on the shelf because of various reasons. Electronic publishing has reduced time lag from 3-6 months, as electronic version can be made available and accessible within minimum possible time.

3.   UGC INFONET (E-JOURNAL CONSORTIUM)

It is an ambitious project launched by UGC in collaboration with INFLIBNET which facilitates access to large number of E-journals to academic community in India. There are two aspects, one deals with the network connectivity to universities, which is known as UGC- INFONET and other addresses the issues, related to E-journals. UGC has formed various committees to address these issues. The objective behind the consortium is to facilitate access a large number of electronic resources to the academic community of the country. Both the projects are being executed and implemented by INFLIBNET in collaboration with UGC and ERNET India. In order to provide access to E- resources, UGC has spent huge sum of amount in terms of both recurring and Non–recurring grants. This is the largest consortium with a vision and plans to reach out more than 150 + universities and several thousand colleges affiliated to these universities, over a period of time. The consortium can take credit for investing significant time for making considerable evaluation of resources for selection and obtaining the various pricing terms and models from the vendors. The consortium is a trend-setter in thoughtfully adopted e-only model without any links to the current print holdings by its member universities.

It is subscribing to large number of electronic journals which includes full text and Indexing and abstracting databases for the benefit of million of users in India. It offers high quality collection of 4600+ full text electronic resources from 25 different publishers to academic community, comprising of faculty, staff, researchers and students. Keeping in view the large number of universities in the country, services of E-journals has been planned to be implement in various phases which are given below:

3.1.   Phase-I

In first phase, (2004), fifty universities were identified and provided access to more than 2000 E-journals in different disciplines. The first fifty universities have been selected based on certain criteria, viz. existing infrastructure, number of scientific research, no of students and research scholars enrolled and Internet connectivity in the campus. National Negotiation Committee consisting of five members is responsible for selection, negotiation and identification of E-resources. In the year 2004, the committee, judiciously selected reputed society publications along with some reputed commercial publishers and finalized the deal for 18 publishers and spent Rs. 1681,38,043/-. The access is given to first fifty universities. These fifty universities were given financial assistance to establish campus LAN and necessary infrastructure for Internet connectivity. After establishment of network, they were asked to send the IP addresses to INFLIBNET. By using IP addresses of these universities, accesses to E-journals are being provided. INFLIBNET forwarded the IP addresses of respective universities to the publishers/aggregators. After series of the meeting with publishers, librarians, MOU were signed and it was formally launched by His Excellency Honorable Dr. A P J Abdul Kalam, the President of India at Vigyan Bhavan, New Delhi on 28th December 2003 in the Golden Jubilee Celebration of UGC.

3.2   Phase-II

New set of 50 more universities were given access to E-journals after releasing the grants for developing network infrastructure in the year 2005. Additional expenditure was incurred to subscribe new resources. The costs for inclusion of these universities and subscription of these e-resources is around 25 crore.

3.3   Phase-III

In the third year (2006), the consortium would cover remaining universities and colleges. There are around 50 universities which have been deprived of the access to E- journals and are expected to establish network infrastructure soon. Suitable measures have already been taken and grants were provided for networking. Colleges are integral part of education systems where millions of students enroll every year in pursuit of higher education. UGC aims to extend E-journals facility to select 200 colleges shortly.
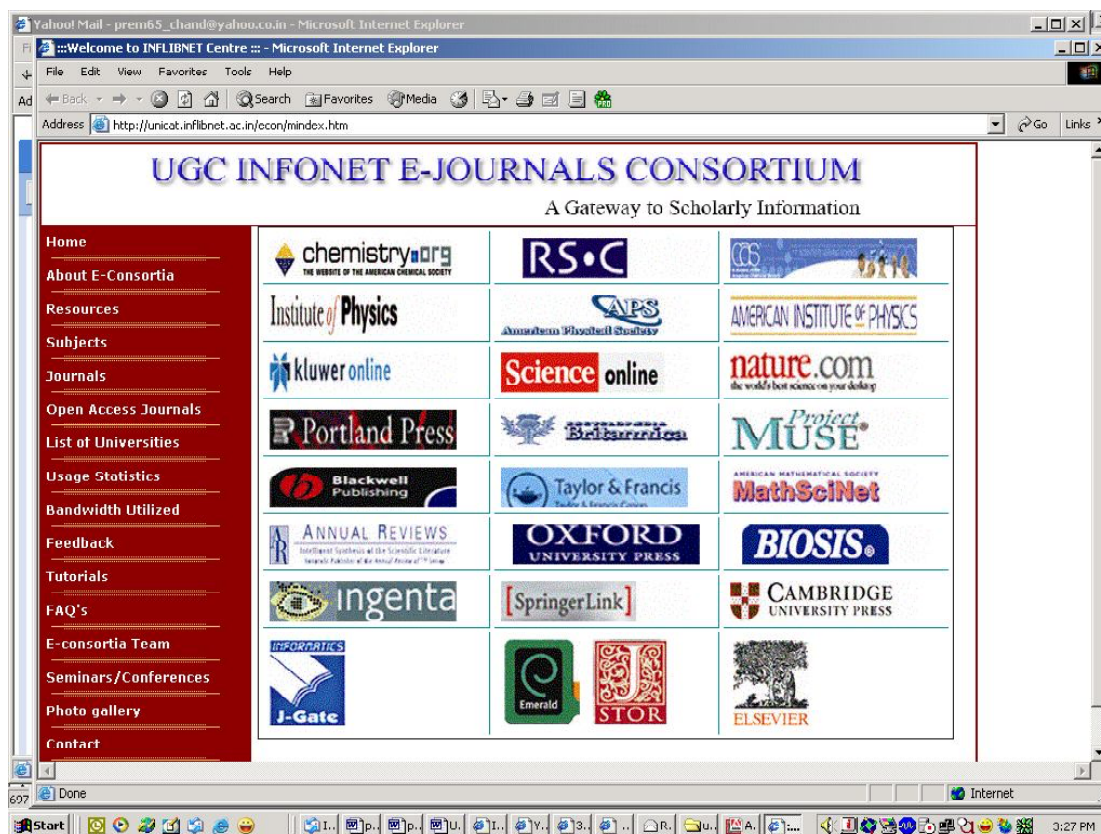
Fig –1

4.   WEB BASED ACCESS

INFLIBNET has developed web based access to e-journals covered under UGC- INFONET E-journal consortium which has became most popular tool for users, scholars, and researchers for locating desired information.(Fig 1). The site provided comprehensive information about the scope of the entire project including list of universities covered besides links to open access journals. Another advantage of the site is simple search interface to retrieve the information according to subject, title and publisher. It has further hyperlinks to full text against each journal title which makes the job of user easier. The web

page is flooded with other important links such as web site of all the resources covered under consortia , list of universities covered eligible for E-journal facilities , usage statistics , bandwidth utilization and tutorial on access to e-journals . Universities covered under the consortium can make use of the web site to explore the e-journals as it automatically resolve the IP address of respective universities.

5.   E-JOURNALS ACCESSIBILITY TO UNIVERSITIES OF NORTH EAST

Access to electronic resources requires good IT infrastructure, availability of satisfactory number of PCs in network environment and good speed of INTERNET connectivity. If any of these is not available, these facilities remain unutilized. Other factor, which is also responsible for usage is awareness among users. Statistics reveal that most of the universities in the region are not making desired use of E-journals due to some or the other reasons. But despite the best efforts of INFLIBNET, universities in the region are yet to catch up with mainstream. Access to E-journals in the north east is given to five universities in the year 2004. These universities are North Eastern Hill University, Tezpur University , University of North Bengal , Guwhati University, Manipur University. These universities were given more than 1700 full text journals from different publishers. These resources are :

No.	Name of Publisher	No. of Journals / databases	Access from
1	American Chemical Society	31	Vol.1 issue 1
2	Royal Society of Chemistry	24 + 6 Databases	1997
3	Institute of Physics	36	Vol.1 issue 1
4	Cambridge University Press	72	1997
5	AIP/APS	27	1997
6	Project Muse	222	1999 onwards
7	JSTOR	517	Vol.1 issue 1
8	Kluwer Academic	647	1995 onwards
9	Springer Link	533	1995 onwards
10	Annual Reviews	29	1994 onwards
11	Emerald	28	1995
12	Nature	1	1997
13	Science Online	1	1997
14	Encyclopedia Britannica	1 Database	complete collection
15	Elsevier Science - Life Sciences	34	1995 onwards
16	Biological Abstracts	1 Database	1969 onwards
17	Chemical Abstracts	1 Database	1907 onwards
18	Chemical Abstracts	1 Database through STN	1907 onwards
19	J-Gate Portal	1 Product	2000 onwards
20	Ingenta Portal	1 Product	1997 onwards, some back access as well

In the year 2005 INFLIBNET has extended the access E-journals to four more universities in north East region . Hence Arunachal Pradesh University, Assam University , Dibrugarh University , Nagaland University became part of UGC- INFONET E-journal consortium. Keeping in view the demand from various places, resources from Taylor and Francis , Blackwell, Mathscienet , Portland press and Project Euclid have been subscribed under the consortium and access is given to all 100 universities.

6.   USAGE STATISTICS

In networked information environment, the ability to monitor the traffic and usage is complex issue. As the access is based on IP wherein multiple uses can search the site and download the content. Most electronic resources available through consortia are served from the server maintained and controlled by publishers, aggregator and vendor. They control the data and we rely upon them. through the publishers . INFLIBNET spent increasing amount of money on electronic resources , many suspect that it should be possible to use the actual electronic media to track usage of these journals more carefully than it was possible with paper journal.

It has been difficult and complex to obtain reliable data from publishers. This has created problems in obtaining accurate use statistics for E- journals. With new standards like COUNTER has made librarians job easy. COUNTER stands for (Counting Online Usage of Networked Electronic Resources) is an international initiative designed to serve librarians, publishers and intermediaries by facilitating the recording and exchange of online usage statistics. The use of online information resources has been growing exponentially and it is widely agreed by producers and purchasers of information that the use of these resources should be measured in a more consistent way. Building on a number of important, existing initiatives, COUNTER has set out to achieve this. During the last few years there has been a growing realisation that a truly international effort, involving vendors, librarians and intermediaries, would be required to develop acceptable, global standards for measuring online usage. The seed for this international effort began to germinate in the UK, with the PALS (Publisher and Librarian Solutions) group formed by the Joint Information Systems Committee (JISC), the Association of Learned and Professional Society Publishers (ALPSP) and The Publishers Association. Under the Chairmanship of Richard Gedye of Oxford University Press, PALS made considerable progress in 2000 and 2001 in developing the framework and processes that evolved into COUNTER. In March 2002 COUNTER was formally launched, with a fully international Steering Group, a dedicated Project Director and a set of clear objectives.

 As access to electronic journals carried out electronically, it should be relatively easy to count at least in terms of number which is far simpler than trying to gauge the number of people picking up print journal. COUNTER brings new benefits to librarians, publishers and intermediaries.

INFLIBNET has been constituently receiving and monitoring monthly statistics of usage of member libraries supplied by the publishers/ aggregators. Data available for first set of five universities in North East region covered during the year 2004 is given below:

No	Name of Publishers	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	Kluwer	0	0	0	64	2	59	4	33	19	87	59	158	485
2	Springer	0	0	0	28	14	24	15	13	15	38	15	20	182
3	American Chemical Soc.	0	0	12	400	398	717	321	173	136	305	212	130	2164
4	Annual Reviews	0	0	58	117	96	110	120	29	31	58	3	67	689
5	Biological Abstract	0	0	0	165	122	288	914	452	1825	522	4288		8576
6	Elsevier	0	0	0	0	5	9	18	5	42	16	1	71	167
7	Institute of Physics	0	0	7	33	20	15	24	17	23	8	20	33	200
8	Science Online	0	0	0	0	0	0	0	0	14	4	0	7	25
9	APS/AIP											**172**	69	241
10	Cambridge Uni. Press	0	0	10	192	4	0	0	88	8	25	42	50	419
												Total		**13151**

Monthly Statistics of North Bengal University during the tear 2004

No	Name of Publishers	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	Kluwer	0	0	0	0	55	173	54	35	12	25	11	17	382
2	Springer	0	0	0	8	8	235	58	51	15	32	21	16	444
3	American Chemical Soc.	532	1077	395	244	301	525	127	423	433	674	505	556	5792
4	Annual Reviews	0	0	0	0	8	132	4	8	12	11	0	65	240
5	Cambridge Uni. Press	0	2	8	0	10	12	0	0	6	5	16	12	645
6	Elsevier	10	7	0	2	88	34	43	164	154	112	27	21	662
7	Institute of Physics	0	215	148	58	50	36	69	81	57	47	89	59	909
8	Science Online	0	0	0	0	0	0	0	73	38	18	34	6	169
9	APS/AIP											**623**	29	652
												Total		**9895**

Monthly Statistics of Tejpur University during the year 2004

No	Name of Publishers	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	ACS	0	0	446	916	668	350	448	612	239	303	216	58	4256
2	Biological Abstract	0	0	0	0	33	143	0	0	11	0	187	0	374
3	Cambridge Uni. Press	0	3	9	70	13	3	7	3	5	20	41	8	182
4	Emerald	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Kluwer	0	0	0	3	17	92	48	28	23	52	4	7	274
6	Springer	0	0	0	0	18	19	406	39	41	59	29	6	617
7	Annual Reviews	0	0	10	7	16	15	3	7	7	5	0	23	93
8	Elsevier	0	0	0	0	3	1	17	18	38	4	39	8	127
9	Institute of Physics	0	0	3	25	47	44	52	64	36	23	18	23	320
10	Science Online	0	0	0	0	0	0	0	10	17	6	18	8	59
11	APS/AIP											**2367**	17	2384
												Total		**8686**

Monthly Statistics of NEHU , Shillong during the year 2004

No	Name of Publishers	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	Kluwer	0	0	0	1	29	29	5	0	20	203	61	234	582
2	Springer	0	0	0	33	55	9	3	0	22	146	207	18	493
3	ACS	0	14	92	17	31	38	30	0	1	38	47	22	330
4	Annual Reviews	0	0	2	2	2	0	0	0	1	3	0	5	15
5	Biological Abstract	24	11	0	0	0	0	0	0	0	0	35		70
6	Cambridge Uni. Press	1	0	5	7	2	0	0	1	0	8	30	31	85
7	Elsevier	3	1	0	7	1	10	1	0	0	2	0	3	28
8	Emerald	0	0	0	0	1	0	0	0	0	6	1	14	22
9	Institute of Physics	29	17	52	19	58	10	61	3	34	96	35	157	571
10	APS/AIP											**352**	220	572
												Total		**2786**

Monthly Statistics of Manipur University during the year 2004

No	Name of Publishers	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	Kluwer	0	0	0	0	0	0	0	0	0	13	2	4	19
2	Springer	0	0	0	0	0	0	0	0	0	0	1	0	
3	ACS	0	0	0	0	0	0	0	0	1	0	0	0	1
4	Annual Reviews	0	0	0	0	0	0	0	0	0	0	0	0	
5	Biological Abstract	0	0	0	0	0	0	0	0	0	0	0		
6	Cambridge Uni. Press	0	0	0	0	0	0	0	0	0	0	0	0	
7	Elsevier								0	0	0	0	0	
8	Institute of Physics	0	0	0	0	0	0	0	3	1	0	0	2	2
9	AIP/APS											**10**	0	10
												Total		**32**

Monthly Statistics of Guwhati University during the year 2004
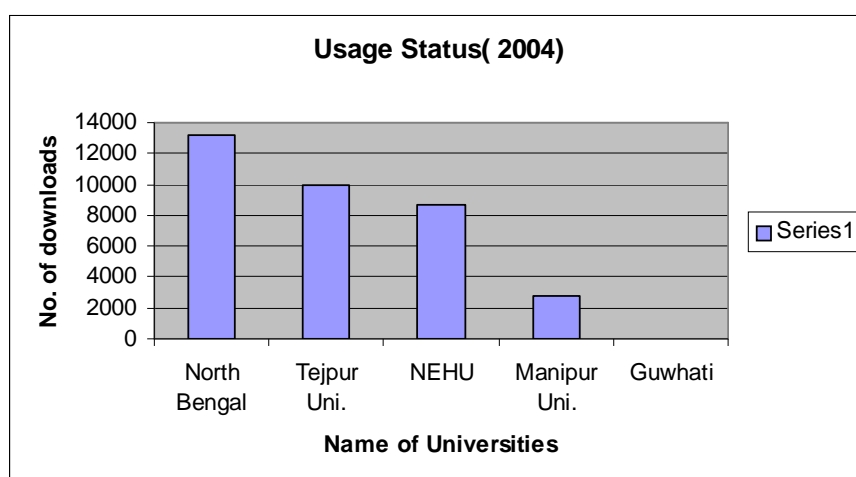
Usage Status(2004)

Above graph shows that usage status in Guwhati University is lowest. The number of articles downloaded from nine different publishers during the year 2004 is only thirty-two. The basic reason behind the low usage in this university is lack of proper network infrastructure and vacant post of librarian. The number of downloads is maximum in North Bengal University followed by Tejpur university, North Eastern Hill University and Manipur University. High usage in respective universities can be measured by number of factors such as total number of students enrolled, number of faculty members in each department and research scholars.

The statistics of these universities has been derived from the data provided by respective publishers during the year 2004. It reveals that users are not making best use of these resources. However, we assume that in first year after launching this new service, usage statistics can not be very high as E-journals culture in university system has just in infancy stage and gradually catching up. Furthermore, Indian users have not yet developed the habit of reading using Networked computers. Another factor for low usage is lack of proper infrastructure besides less number of computers in the library. In coming years, we expect that things will drastically change and users across the country will use these resources more effectively and efficiently.

Due to the lack of complete usage statistics for the second set of universities covered in the year 2005 could not presented.

7. PROMOTION

Complexity of electronic environment makes end users searching more difficult, and the need for user education therefore became more necessary. Keeping in view these factors in mind, INFLIBNET has initiated numerous programmes to promote the e-journal culture in various universities. Various One day awareness programmes were organized for the benefit of users at universities besides five national seminars in different parts of the country.

8. CONCLUSION

Despite the effort by UGC and INFLIBNET libraries are not making best use of the resources. To overcome this problem, librarians should play pro- active role to educate and encourage users to search relevant literature.

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