Abstract
Libraries function as an essential integral component in higher education system. Academic libraries in India are facing a lot of problems due to static budget and exponential price hike of library collections. The library environment is currently undergoing a rapid and dynamic revolution leading to new generation of libraries with the emphasis on e-resources. A lot of efforts have been taken in past few years to overcome this problem of financial crunch by resource sharing through consortia for university libraries. UGC-INFONET and INDEST-AICTE Consortium are two major initiatives for university library users. These revolutionary steps are providing scholarly resources including peer reviewed journals, databases, abstracts proceedings etc. These efforts must be a boon to university library users which will definitely boost the level of higher education system in our country.

Keywords: E-resources, Consortia, University libraries in India.

Introduction
Change is the law of nature and as it is very apparent in the present library culture, libraries are not untouched by the change which is affecting almost every activity in the library. A few decades back Lancaster talked about the “paperless society”. R.G. Parashwar stated in his one book “paperless society” is a distance dream. That day has gone when it was only a dream, now that very idea sounded whimsical all over the world. However, we took a step towards a paperless society very rapidly and the most of libraries particularly university & special libraries, began allocating separate funds for e-resources.

E-resources
An electronic resource is defined as a resource which requires computer access or any electronic product that delivers a collection of data, be it text referring to full text bases, electronic journals, image collections, other multimedia products and numerical, graphical or time based, as a commercially available title that has been published with an aim to being marketed. These may be delivered on CD ROM, on tape, via internet and so on. Over the past few years, a numbers of techniques and related standards have been developed which allow documents to be created and distributed in electric form. Hence to cope with the present situation, libraries are shifting towards new media, namely electronic resources for their collection developments that the demands of users are better fulfilled. The e-resources on magnetic and optical media have a vast impact on the collections of university libraries. These are more useful due to inherent capabilities for manipulation and searching, providing information access is cheaper to acquiring information resources, savings in storage and maintenance etc. and sometimes the electronic form is the only alternative.

Types of e-resources
The e-resources are basically divided in two major types are:

1. Online e-resources, which may include:
   - e-journal (Full text & bibliographic)
   - e-books
   - on-line Databases
   - Web sites
2. Other electronic resources may include:
   - CD ROM
   - Diskettes
   - Other portable computer databases

Advantages of e-resources
The reasons for actually embarking on the purchasing of electronic resources are generally accepted because of the ease of usability, readability, affordability and accessibility. The following are the advantages of e-resources over the print media
1. **Multi-access**: A networked product can provide multiple points of access at multiple points in time (24 hours a day, 7 days a week) and to multiple simultaneous users.

2. **Speed**: An electronic resource is lot quicker to browse or search, to extract information from, and to integrate that information into other material and to cross-search or reference between different publications.

3. **Functionality**: E-resource will allow the user to approach the publications to analyze its content in new ways by click of the mouse on search mode.

4. **Content**: The e-resources can consist of a vast amount of information, but more importantly the material can consist of mixed media i.e. images, video, audio animation which could not be replaced in print.

Apart from the above some other advantages of e-resources may include: international reach, unlimited capabilities, reduced cost, convenience, searchability and linking.

**University Libraries in India**

According to University Handbook (31st ed.) we have 279 University-level institutions (AIU Member) including 60 deemed Universities, 188 are conventional Universities including 32 institution for specialized studies in various disciplines, 37 institutions provide education in agriculture, 38 engineering and technical institutions, one journalism, four law, 16 health science and 10 are Open Universities. In addition, there are more than 13,150 affiliated colleges, 88.21 lakh students and 4.27 lakh teachers; it is really a great challenge to ensure effective coordination and communication. All universities, deemed universities and R&D Institutions are functioning under various education and R&D systems like All India Council for Technical Education (AICTE), University Grants Commission (UGC), Indian Council of Agricultural Research (ICAR) and Indian Council of Medical Research (ICMR) etc.

These all have library systems to support education, learning and research and meet information needs of their academic and research community. These are the hub for information storage and dissemination.

**Indian Library Consortia Scenario for e-resources**

Library consortium is a group of two or more libraries which have agreed to co-operate with one another in order to fulfill certain similar needs, usually resource sharing. It usually, refers to co-operation, Co-ordination and collaboration between, and amongst libraries for the purpose of sharing information. Consortia are basically, evolving a form of cooperation among the libraries which come together to share resources electronically. It has gained momentum even in developing countries like India.

Some of the successful library consortia setup so far in India are:

1. **UGC-INFONET E-Journal consortium.**
   http://www.ugc.ac.in/new_initiatives/infonet.html

   http://www.paniti.iltl.ac.in/indest

3. **Inter University Centres (IUC-DAEF Consortia)** (Atomic Energy)
   http://brahma.iuc.res.in/-iuc_cc/iuc_loc.html

4. **Health Sciences Library and Information Network (HELINET)**
   http://www.rguhs.ac.in/hn/ne_whell.html

5. **Forum for Resource Sharing in Astronomy and Astrophysics (FORSRA)**
   http://www.iap.res.in/library/forsa.html

6. **Council of Scientific and Industrial Research (CSIR e-journal consortium)**
   http://www.niscair.res.in

Apart from the mentioned consortia, there have been efforts to setup similar kind of consortia by ICAR, ICMR, ICSSR and other governmental agencies to provide and access to e-resources. Among the above all consortia, UGC-INFONET and INDEST–AICTE Consortium are proving to be a boon for the academic users. These two major initiatives have come to the rescue of academic libraries so that they can cater to the needs of academic depending upon them. These revolutionary steps are providing scholarly resources including peer reviewed journals, databases, abstracts, proceedings etc. These efforts will definitely boost the higher education system of our country.

**UGC-INFONET**

UGC-INFONET E-Journals consortium initiative was undertaken by the UGC to facilitate free access to scholarly e-journals and databases in all fields and disciplines by the research and academic community across the country through joint partnership of UGC, INFLIBNET and ERNET. This includes interlinking Universities and Colleges in the country electronically with a view to achieving maximum efficiency through Internet enabled teaching, learning and governance. All universities and colleges who are under the purview of UGC have been provided UGC-INFONET Connectivity and access to scholarly e-Journals and Databases. More than 4,500 full text e-journals are available now. As of May 2006, 122 universities are accessing resources from the programme. The access is based on IP range. This effort has had a noticeable impact on the research and academic community.

**E-resources made available**

- **American Chemical Society (ACS)**
  http://pubs.acs.org/about_category.html

- **American Institute of Physics (AIP)**
  http://www.aip.org

- **American Physical Society (APS)**
  http://www.aps.org

- **Annual Reviews**
  http://arjournals.annualreviews.org
INDEST–AICTE Consortium

The “Indian National Digital Library in Engineering Sciences and Technology (INDEST Consortium)” was set-up in 2003 by The Ministry of Human Resources Development (MHRD). 38 centrally funded Govt. institutions including IITs, Sc, NITs and some other institutions are the core members of the INDEST–AICTE Consortium. The Ministry provides funds required for providing access to electronic resources to the core members through the consortium headquarters set-up at the IIT Delhi. The total no. of members through the consortium has now grown to 483 (including 38 IITs, IISc, NITs and other institutes; 63 members from AICTE; 99 self supported Engineering colleges and institutes and 285 institutions have recently joined under the new scheme). The consortium subscribes to over 6500 electronic journals from a number of publishers and aggregators.

E-resources available through the INDEST–AICTE Consortium

ABI / Inform Complete
http://www.il.proquest.com/pqdaeto

ACM Digital Library
http://portal.acm.org/portal.cfm

American Society of Civil Engineers Online Journals
http://www.asme.org/pubs/journals/

American Society of Mechanical Engineers Journals
http://www.asme.org/pubs/journals/

ASTM International Standard and Journals
Standards: http://enterprise.astm.org
Journals: http://journals.ip.astm.org

Capitaline
http://www.capitaline.com/

DEL
www.digitalengineeringlibrary.com

Ei Compendex Plus
www.engineeringvillage2.org/

Conclusion

Academic libraries have really understood that consortia based subscriptions is cost effective and also avoids redundant expenses and duplicate subscriptions. The effort of UGC-INFONET and INDEST–AICTE Consortium are appreciable and will definitely strengthen higher education system in India free and or highly subsidized access to scholarly e-resources will help educational institutions in fulfill their mission in to reality. In the long run consortia approach will be much more popular in user community and that day is not so far behind when consortia approach will expand the country’s information base.

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