
AN ANALYTICAL STUDY OF EBSCO ONLINE JOURNAL DATABASES: WITH SPECIAL REFERENCE TO I.G.M. LIBRARY, UNIVERSITY OF HYDERABAD

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Abstract

The paper describes the importance of journal as an important medium of communicating recent developments in scientific research and the dependence of academic community of any University for their research work. It also presents the latest trend of journal publishing in electronic medium. Since, Indira Gandhi Memorial Library is the first University Library to introduce one of the major online medium to their academic community by subscribing EBSCO Online Journals Database, an analytical study of the usage statistics was undertaken in terms of number of sessions, searches, abstracts and full text articles in order to measure deficiencies in the system. The data indicates that the usage is found extensive during initial years than the subsequent years. Abstracts and full text articles are more extensively referred Linking activity is also found to be constantly increased.. It is observed that the user's unawareness regarding these developments is primarily affecting the usage of this new medium, whereas audit, renewal procedures, networking problems, etc. are added to the decline of the usage of e-journals. The paper suggests that a lot of orientation and publicity is still required to the academic community to increase the level of usage of such databases.

Keywords: Aggregator Resources; E-Journals Database; EBSCO Online Databases-Usage; E-Journals-Usage.

1. Introduction

Since the invention of the Journal in 1665 as a medium for communicating recent developments of scientific information generated by research, it has been dominating all the primary sources of information all through the years. Further, it became an indispensable document not only for scientists but also for libraries. The importance of journals in scientific research is well described by Strauss, Streve and Brown (1972) and Stuart and Miller (1980) "The Journals constitute a most important part of science and technology, library resources because they publish the immediate results of experimental research and technical developments. A continuous record of scientific advances is presented in these journals. Scholarly journals not only help in avoiding duplication in research but also sharing the results of research conducted nationally and internationally. . ."

The invention of computer and IT applications in information storage and communication has tremendously revolutionized the publishing industry. Now several academic institutions like universities, societies and commercial publishers, marketing their journals in electronic form apart from print

media. These electronic journals are accessible from publishers website or through aggregators site at subscription price, where as some are available as complementary. This electronic media transformed the current trend of study and research to browse for electronic form of information, whether it is a piece of text or graphics, statistical data or abstract/full text article. University libraries in the developed countries are already rapidly using electronic journals and their data bases. The readership studies at 3 universities by Donald W. King and others (2003) demonstrated that, how the electronic journal collection has influenced the use patterns of faculty and staff. Further they found that the use of electronic journals was more, when available in the library than to individuals.

2. EBSCO Databases

EBSCO claims to be the worldwide leader in providing information access and management solutions through print and electronic journal subscription services, research database development, online access to more than 100 databases, thousands of e-journals, and e-books covering more than 60,000 publishers worldwide. They also provide serial content in the form of online bibliographic and full text databases as per the research needs of libraries at affordable prices. EBSCO specialized for academic, medical, government, public, school libraries and corporate organizations. It offers three premiere databases of which Business Source and Health Source are for public libraries. The Academic Search Premier for academic institutions.

The Academic Search Premier of EBSCO offers a vast combination of bibliographic and full text databases of journals facilitating A & I search retrieval. It covers multi-disciplinary full text database with indexes and abstracts for more than 4,700 publications, including 3,600 plus peer-reviewed publications. The subjects covered are Social Sciences, Computer Sciences, Engineering, Physics, Chemistry, Language and Linguistics, Arts & Literature, Medical Sciences, Ethnic Studies. Further it offers critical information from many sources unique to this database. The majority of full text titles are available in PDF and scanned-in-color.

Elite version get back files from 1985, where as Academic Search Premier Customers benefit from PDF archives back to 1975 for more than 100 of the main linking services. EBSCO along with other publishers, several large universities in UK and USA is maintaining abstracts and indices in PDF back files for many of the publications.

The Business Source Premier is useful for business schools and libraries contains information in every area of business, management, economics, finance, accounting etc with daily updates. It provides full text information for more than 7,800 scholarly business journals and more than 1,125 peer-reviewed business publications.

These EBSCO's databases are accessible through EBSCOhost. EBSCO SmartLinks technology provides links to the full text of articles in other EBSCOhost databases and in e-journals subscribed through EBSCO from other publishers. EBSCOhost offers a basic as well as advanced search features. In the words of EBSCOhost "it is the customizable basic and advanced searching supported by Boolean logic, enhanced subject indexing and journal searching to assist users in performing thorough investigations of their research topics with links from the full record display to related articles by subject, journal issue or author".

- Basic search is supported by limiters (full text, references, scholarly journals, published date, publication, number of pages, images, publication type, and expanders for related words, search within full text articles etc.
- Advanced search includes features like searching default fields using Boolean operators, limiters, expanders in general exclusive to the database.
- EBSCOhost allows researchers to print, e-mail or download multiple articles and build upon their search terms.
- Results can be limited or refined by various criteria including subject, author, journal, date, peer-reviewed status and full text availability.

3. IGM Library, University of Hyderabad

IGM Library, University of Hyderabad is the first university library in India in subscribing to EBSCO databases viz. Academic Search and Business Search Elites since the year 2001 at a cost of 12.5 lakhs and later got updated to Premieres. From the year 2004 the library added TOC Premiere, the newly launched Hyperlinked database (Table of Contents of Journals) By subscribing EBSCO online journal databases and providing internet based library services, the IGM library has introduced a remarkable academic environment in the University campus. The library has ventured this activity by means of vendors' demonstration, brain storming sessions, orientation program before launching this program. Circulars were also sent to schools/ departments and mailed to all users. Information pertaining to electronic journals was displayed on the library home page. Since the initial year, EBSCO Host has been updating their databases by adding new serials and University is thereby benefiting by the coverage of the print subscriptions and also the additional serials in those databases. The following chart presents the increase in number of full text journals in these two major databases from the year 2001 to 2004.

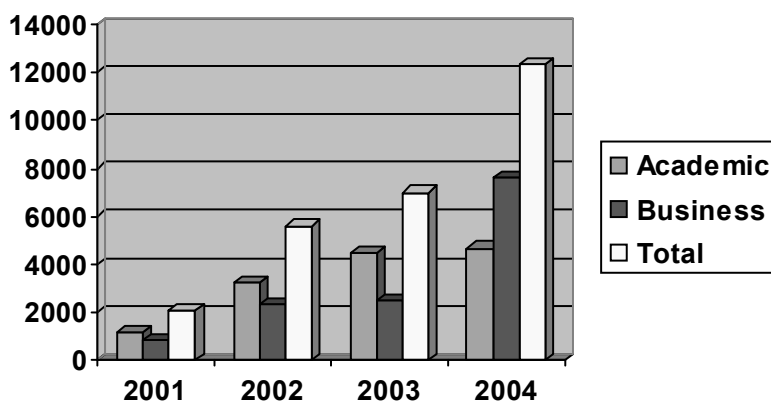


Chart -1 Full Text Journals in EBSCO data bases (2001-2004)

The chart indicates that there is a constant increase in the number of journals in all data bases. Further, when the current print journals subscriptions of the library are compared with EBSCO database 40 -70 journals are available in EBSCO HOST, resulting in considerable amount of savings. The savings ranged between 6.75 lakhs to 12.5 lakhs in print journal subscriptions during the period 2001-2004. The following table presents the year wise coverage of print journals in EBSCO databases and the savings in the subscription budget of the library.

Table-1 Current (Print) Journals Covered in EBSCO (2001-2004)

Year	No. of Full text Journals (appxly)	% of Journals increase (year wise)	Coverage of current Journal	
			No. or Jrnl	Cost of Rs Lakhs (Savings)
2001	2066	-	70	12.50
2002	5586	3520- 170%	44	6.75
2003	7000	1414- 25%	41	7.08
2004	12300	5300- 76%	41	8.84

4. Evaluation of Databases and Services

Since the advent of the concept of Globalization several organizations are concentrating on optimum customer's satisfaction adopting TQM Principles. B K. Dalai and others (1997) advocate that, it is necessary to evaluate the library services from time to time to assess the user needs, their interaction with the system, to understand their information seeking behavior and their satisfaction levels of the services. In order to find out how the EBSCO Databases are used by the academic community of the university and to ascertain their satisfaction, a statistical analysis of the data pertaining to usage is essential. Further it helps in getting the cost benefit and also impress upon the future services. It enables the Institutions to participate in Consortia to reduce the cost of subscriptions and to meet the user's requirements of journals.

4.1 Need

Evaluation of web based library services found to be necessary as Academic and Research Institutions are spending considerable amount on these package subscriptions. P.Mounissamy and B.S.Swaroop Rani (2005) observed that, different digital formats, interfaces, pricing structures, and access restrictions complicate the ability to evaluate journal resources. Considering the changing trends of the library collection, it is probably time to refine the role of performance as well as the nature of what and how to measure the usage of electronic journals." Further –

- The online journal services are expensive
- The aggregators/publishers are always updating services in terms of access facilities and increasing the number of journals, etc.
- To bring awareness among administrators, finance and audit about these electronic databases/ journals since these are new to them.

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- The terms and conditions of licenses or agreements for accessing electronic databases are in favor of the publisher/aggregator.
 - Any disturbance or breakdowns in the net service or maintenance of the website of the aggregator cause interruption in the service
 - Helps in decision making to add a new service or for the continuation of the on going service
 - Academic community in India is yet to be familiarized to use electronic journals as the infra structural facilities and ICT (Information & Communication Technology) orientation is still very less.

4.2 Objectives of the study

Since there is a need to evaluate the EBSCO online journal databases the study has been undertaken with the following objectives.

- To find out whether academic community of University of Hyderabad is accessing electronic journals regularly
- To observe how far the databases are satisfying the needs of the academic community of the university.
- To note which data base of EBSCO is more frequently used
- To make decisions regarding renewals additions and deletions of subscriptions to online journal databases.
- To suggest to the Aggregators/Publisher to improve the services

4.3 Methodology and Analysis of Data

User studies with regard to electronic journals were conducted to measure the satisfaction levels of the user community and the services offered by any Organization/Agency. Though several methods such as Interviews, Questionnaires, and Observations etc. are in practice, for the present evaluative study the usage statistics given by the EBSCO have been taken, since the aggregator presents the data for the benefit of the online administrator which helps to measure the frequency of usage of these electronic journal databases by the academic community of the University and their satisfaction.

- Quantitatively the EBSCO updates
 - Increase in the number of full text journals and abstracts in each database subscribed over the years
 - Development of access features
 - Navigational facilities
 - Linking features
 - Cost variations
- Similarly EBSCO presents usage data under several headings such as:
 - Year
 - Database

- Sessions
- Searches
- Download of full text of articles /abstracts
- Journal title etc.

Since the study is limited to usage of the databases during 2001—2004 by the University of Hyderabad academic community, the following parameters are selected from the above list. The other parameters are omitted since the data given by EBSCO is not continuous.

- Number of sessions of databases in each year
- Searches vs. hits from the databases
- Number of downloads for full text or abstracts of articles from each database over the years
- Link activity of the users.

As mentioned the usage data pertaining to these parameters was taken from the EBSCO records for the years 2001-2004. Similarly the number of journals in each database over the years was taken from the library subscription files. The percentage of usage was arrived by dividing the usage data of the particular year by the number of journals subscribed during that year, and multiplied by hundred. The entire data thus arrived was presented in the following tables and charts.

4.3.1 Usage of EBSCO Databases (Year wise)

The following table presents the usage of databases in respect of searches, abstracts and full text downloads during the period 2001 -2004. From the table it is evident that the percentage of usage is very high in the year 2002, whereas it is moderate during other years. The highest usage activity is found in abstracts and full text journals during the period.

Table -2 Usage of EBSCO Database Year wise - 2001-2004

Year	2001	2002	2003	2004
No. of Journals	2066	5586	7000	12300
Sessions	841 41%	3610 65 %	2540 36 %	6424 52 %
Searches	467 23 %	4997 89 %	5668 81 %	2808 23 %
Abstracts	458 22 %	11170 200 %	13278 190 %	11049 90 %
Full Text	2979 144 %	7914 142 %	4838 69 %	3042 25 %

4.3.2 Usage of EBSCO by Database wise

Since the library is subscribing two databases, the user statistics pertaining to these databases are tabulated for the study.

4.3.2.1 Academic Search Premier

From the data presented in the table it is observed that the usage of this data base during 2001 is very high and moderate during the subsequent years. Further, the data reveals that abstracts and full text articles were referred extensively during the period

Table -3 Usage of Academic Search Premiere Database 2001-2004

Year	2001	2002	2003	2004
No of Journals	2066	5586	7000	12300
Sessions	2702 131 %	312 6 %	286 4 %	1561 13 %
Searches	2788 135 %	2457 44 %	6154 88 %	4145 34 %
Abstracts	2443 118 %	3238 58 %	10464 149 %	3263 26 %
Full Text	4491 217 %	1705 31 %	8325 119 %	2222 18 %

4.3.2.2 Business Source Premier

The data from the above table indicate that, similar to Academic search premier the use of Business source premier is more during 2001 and average during other years. Abstracts and full text articles were extensively referred during the period.

Table - 4 Usage of Business Source Premiere 2001-2004

Year	2001	2002	2003	2004
No of Journals	2066	5586	7000	12300
Sessions	376 18 %	1155 21 %	1620 23 %	1592 13 %
Searches	2788 135 %	1372 25 %	1267 18 %	1585 13 %
Abstracts	1191 58 %	2176 39 %	1796 26 %	1503 12 %
Full Text	1224 59 %	1121 20 %	1286 18 %	1625 13 %

4.3.2.3 Link Activity of the data bases (2001-2004)

From the chart it is evident that the linking activity among the databases has constantly increased over the period.

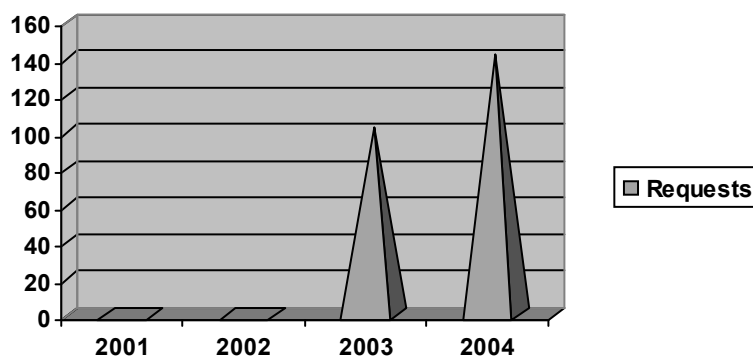


Chart -2 Linking activities for the years 2001-04

5. Findings

From the analysis of the electronic journals usage data supplied by EBSCO it is found that –

1. The journals in the databases of EBSCO have increased enormously from 2066 during 2001 to 12300 by 2004, whereas, there is no cost escalation in the subscription.
2. IGM Library has saved a considerable amount from the print journal subscriptions by subscribing to EBSCO database. The savings ranged from Rs. 7 lakhs to Rs.12.5 lakhs.
3. The use of the main databases, Academic search premier and Business source premier is more during 2001 and 2002 and subsequently declined.
4. Abstracts and full text articles were more extensively preferred.
5. Linking activity among the databases was increased constantly over the period.
6. The declining use of EBCO online journal databases can be attributed to the fact that the UGC through its INFONET Program is providing several e-journals from most reputed Publishers, Universities and Societies from the year 2003.

6. Conclusions

IGM Library is the first university library to subscribe EBSCO online journal databases in India since the year 2001. So the usage of these databases during the initial years is observed to be extensive. However renewal problems, audit quarries, networking difficulties etc had considerable influence in reducing the use during subsequent years. Further, UGC/INFLIBNET with its INFONET program is providing some Indian Universities access to e-journals from many prestigious publishers and University of Hyderabad is one of the preferred universities to participate in the Network. The campus users are deriving journals benefits from those databases also. The following factors also had considerable influence in the declining use of the EBSCO databases during 2003 and 2004.

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- All the users are not aware of the significance of these online journal services
 - Academic community of the university still prefers to use the conventional print journals only.
 - Indifferent attitude of the academic community to use latest IT advancements.
 - Lack of proper publicity and orientation to the users.
 - Lack of ICT knowledge.
 - Lack of interaction between staff and users
 - The exhaustiveness of the databases may not be relevant to the users.

Hence, in order to improve the use of electronic journal databases and to make it cost effective the following measures can be taken by the library.

- A lot of orientation and training programmes needs to be given to the users at regular intervals.
- Interactive sessions have to be encouraged among staff and users to motivate to use of e-journals and searching databases.
- Publicity material received from the publishers has to be displayed in the library and departments.
- Handouts and brochures with necessary guidelines have to be developed for user's reference as per the subject.
- Developing web pages, how to use the e-journal databases.
- Monitoring the usage statistics would help to find the actual usage of these journals.

If the above measures are taken by the libraries the use of e-journal databases will invariably increase to optimum level and considerable amount can be saved from print journal subscriptions

References

1. Dalai, B.K. and others. Library Use - an Analytical Study. *Annals of Library Science and Documentation*. Vol. 44 (2) 1997. P.73-77.
2. King, Donald W. and others. Patterns of Journal Use by Faculty at Three Diverse Universities. *D-Lib Magazine*. Vol.9 (10) October 2003.
3. LaGuardia, Cheryl, Ed. Electronically speaking. *Database & Disc Reviews*. *Library Journal*. May 2002. P.142
4. Mounissamy, P. and Swaroop Rani, B.S. Evaluation of usage and usability of electronic journals. *SRELS Journal of Information Management*. Vol.42 (2) June 2005. P.189-205.
5. Marcum Deanna B. and Gerald George. Who uses what? *D-Lib Magazine*. Vol.9 (10) October 2003.
6. Schwartz, Ruth Bolotin and Russo, Michele C. How to quickly find articles in the Top IS Journals. *Communications of the ACM*. Vol.47 (2) February 2004. P.98 -101.
7. <http://search.epnet.com>
8. <http://eadmin.epnet.com>
9. <http://www.ebsco.com>