MANAGEMENT OF ONLINE DATABASES IN THE UNIVERSITY LIBRARY: A CASE STUDY OF JAYAKAR LIBRARY, SAVITRIBAI PHULE UNIVERSITY, PUNE

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ABSTRACT

OCLC in 2003 conducted a study on “perceptions of libraries and information resources”. The major findings of this study revealed that only one percent of users and two percent of college students begin their search going to a library website (Kennedy, Marie R & LaGuardia Cheryl, 2013). This result indicated that users’ first choice for searching information is “Search Engine”. If librarians are not giving proper attention to management of electronic resources, then the entire librarianship is going to perish very shortly. Keeping in mind, the challenges before librarianship, the present paper discusses the various methods and models of managing e-resources in libraries. The paper highlights major issues and shares practical experiences at Jayakar Library of Savitribai Phule Pune University, Pune of managing electronic resources.

Key words: Electronic resource management, Online databases, life cycle of e-resources.


1. INTRODUCTION

University libraries play an important role to support the mission of the university. The well developed library will enhance the teaching and research of the university. Library by taking into consideration present and future needs of the researcher should develop the collection. The impact of the information and communication technology has made a drastic change on the libraries. The revolution in publishing industry due to this technology has made publishers to shift to electronic publishing. A large amount of electronic resources are now available in the market. These electronic resources are namely e-books, e-journals, online databases, e-
images, e-news, e-music and sound collections. The management of these resources requires skills. There is a difference in management of print and electronic resources.

2. ONLINE DATABASES

Databases are generally collections of articles of journals, reviews, abstracts, dissertations etc. According to Dictionary of Library and Information Science (2005) Database a large regularly updated file of digitized information (bibliographic records, abstracts, full text documents, directory entries, images, statistics etc.) related to a specific subject, subject or field, consisting of records of uniform format organized for ease and speed of search and retrieval and managed with the aid of database management system (DBMS) software. Content is created by the database producer (for e.g. The American Psychological Association) which usually publishes a print version (Psychological abstracts) and leases the content to one or more database vendors (EBSCO, OCLC etc.) and provide electronic access to the data after it has been converted to machine readable form (Psych Info) usually on CD ROM or online via internet using proprietary search software.

According to Encarta Webster’s Dictionary of English Language (2004) (2) it is defined as “systematically arranged collection of computer data, structured so that it can be automatically retrieved or manipulated”.

A database consists of individual records. Each record contains information for an individual item, which provides a brief description of that item. In simple words, database is a collection of data, arranged in a systematic way to store and retrieve the information in an easy way.

2.1. Types of Online Databases

The online databases can classified according to the information content in it. Many different types of databases exist.

According to Jasco Peter and Lancaster F W (2010) databases are categorized into following types:

- Bibliographic databases
- Full text databases
- Image databases
- Databases referring to other physical objects (Other than text or images)
- Numeric and statistical databases
- Descriptive databases
- Directories and other reference sources.

**Bibliographic database:** Bibliographic database usually refers to a database containing records that represent various types of publications. Each record describes a publication. E.g. Catalogs of books in a library.

**Full text database:** A full text database is similar to a bibliographic database in that it deals with items in the form of text. As name suggests a full text database contains the complete text of the items it includes and not just records. E.g Databases containing newspaper or magazine articles, laws. a company’s technical reports etc.

**Image databases:** An image database as the term is used in this book is similar to a bibliographic database in that it contains records describing things. The items described are in pictorial form like paintings, photographs etc.
Databases referring to other physical objects: Database can also deal with physical objects other than those in the text or picture form. E.g. catalogs of exhibits in a museum or flora of a particular region.

Numeric and statistical database: This type of database include statistics of various types, such as records of sales or scientific data such as data on the thermo physical properties of materials, census data etc.

Descriptive database: These databases are compendia of various kinds, such as descriptions of the resources of a particular geographical region, the programs offered by a university or college, E.g. many of the home pages existing on the internet can be considered brief descriptive databases.

Directories and other reference sources: This type of database is one that is the electronic equivalent of some types of reference book, such as a directory of organizations, encyclopaedia.

Another way is according to the information contain in the databases may be a single subject (Chemistry) or multidisciplinary (IEEE) problem oriented (environmental pollution), mission oriented (space) or oriented towards certain types of transactions (trading stocks and bonds).

3. MANAGEMENT OF ONLINE DATABASES

Traditionally libraries were managing print resources in regular manner with various records were kept, resources were catalogued, classified and send to circulation. The impact of internet and information and communication technology, made the changes in library’s collection. Libraries started subscribing various electronic journals, electronic books and online databases as per researcher’s recommendations. Libraries become hybrid in nature. Management of print resources and electronic resources is quite different. While managing electronic resources librarians must be aware of various stages involved while managing electronic resources.

3.1. Life Cycle of Electronic Resources

3.1.1. Electronic Resource Management Initiative

The life cycle of e-resources is not an original ideal. a. In 2001, due to complexity and growing number of e resources a group of librarians realized they were all developing their own systems to try and cope with the challenges. This collaboration became known as the E-Resource Management Initiative, or ERMI. In 2003, the ERMI group became more formally organized and, under the sponsorship of the Digital Library Federation (DLF), spent the next several months creating a data dictionary, entity diagrams and functional requirements for E-Resource Management systems.

3.1.2. Oliver Pesch’s Model

Various stages which are followed every year while managing electronic resources is referred as life cycle of e-resources. Oliver Pesch has designed the life cycle of electronic resources in which 5 major steps are involved. Which are acquire, provide access, administer, provide support and evaluate monitor.

3.1.3. Terms

Another model was TERMS (Techniques in E-Resource Management) which began in 2008. TERMS main aim was to define e-resources life cycle and set out best practices with...
examples. The latest version was recorded in 2013 after various suggestions and comments on earlier version. It consists of six stages which are as follows:

1. Investigating new content for purchase or addition.
2. Acquiring new content
3. Implementation
4. Ongoing evaluation and access
5. Annual review
6. Cancellation and replacement review.

3.1.4. Oliver Pesch’s Model of life cycle of e-resources

![Oliver Pesch’s model of life cycle of e-resources.](image)

The Pesch’s model gives information regarding different steps involved in management of electronic resources. In this model author has discussed various tasks and activities which were performed at every stage of life cycle. The author has listed various new tasks now involved which were absent in the management of print resources such as license and price negotiation, access, preservation, maintenance etc. At each stage of life cycle there are challenges before the librarians.

**Acquire:** At this stage arrangement of trials, negotiation of license terms and study of various pricing model involves.

**Provide Access:** Access provision for the e resources is different than print. Managing the links to full text, helping users to locate the resources, providing IP range as well as remote access.

**Administer:** This stage covers the tasks such as managing the website or library portal where the links to e-resources is provided. The updating of this information from time to time is also necessary.

**Provide Support:** The main task involve to provide the interrupted supply of information to users. For this librarian has to check the access and if any problem arrives provide the solution consulting the publishers representative.

**Evaluation:** Feed back from the users and usage of e resource has to be check before the renewal of the e resource.
4. JAYAKAR LIBRARY, SAVITRIBAI PHULE PUNE UNIVERSITY

The central library of Savitribai Phule Pune University, Pune which is know as Jayakar Library, is one of the best centres for reference and online resources in the country. The library was founded in 1950. Library is having a collection of more than 4,50,000 books and journals. Library subscribes to Indian and foreign research journals, and receives periodicals on a gratis and exchange basis. It subscribes to print as well as electronic resources. Jayakar Library has implemented RFID technology along with smart cards to students and faculty. Library is using LIBSYS software for automation. Library is a part of Universal Digital Library project since 2002. Jayakar Library is one of the university libraries which is a member of UGC-INFONET consortia. Under this programme library has access to more than 5000 electronic journals and books. In the university campus wi fi network is available. The collection of library is accessible through internet. Library has developed its own website which is available on http://www.lib.unipune.ac.in:8080/.

The Jayakar Library subscribes around 26 full text and bibliographic databases. Presently all these resources are managed through the e-resource portal. It provides description of all subscribed electronic databases and its contents. Another special feature of Jayakar Library is that it has also set up a digital library using D-space open source software. It has digitized old books, manuscripts, annual reports of university and letters of eminent persons and freedom fighters. The digital library is accessible on http://www.192.168.4.5:8080/jspui/.

4.1. Total Collection

Table 1 Collection of library during last five years:

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<th></th>
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</tr>
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<tbody>
<tr>
<td>1</td>
<td>Jayakar Library, SPPU Pune University</td>
<td>485337</td>
<td>491843</td>
<td>498514</td>
<td>505551</td>
<td>511748</td>
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</tbody>
</table>

Above Table 1 reveals that there is a continuous growth in the collection. Above figures includes all types of reading materials, which covers print as well as electronic resources.

4.2. Budget

Table 2 Total Budget received during the last five years.

<table>
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<tbody>
<tr>
<td>Jayakar Library, SPPU</td>
<td>28002070</td>
<td>32513342</td>
<td>37509480</td>
<td>42534483</td>
<td>50400000</td>
</tr>
</tbody>
</table>

Savitribai Phule Pune University is one of the most prominent universities in India. Authorities of the university are always encouraging to provide the better library services. To meet the user’s information needs and to provide better services and facilities the university provides large funding amount to library.
4.3. Allocation of Budget

<table>
<thead>
<tr>
<th>Year</th>
<th>Print Resources (In Rs.)</th>
<th>Electronic Resources (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Books</td>
<td>Periodicals</td>
</tr>
<tr>
<td>2010-2011</td>
<td>8000000</td>
<td>9150000</td>
</tr>
<tr>
<td>2011-2012</td>
<td>10000000</td>
<td>11500000</td>
</tr>
<tr>
<td>2012-2013</td>
<td>8000000</td>
<td>14450000</td>
</tr>
<tr>
<td>2013-2014</td>
<td>9600000</td>
<td>12500000</td>
</tr>
<tr>
<td>2014-2015</td>
<td>15000000</td>
<td>13000000</td>
</tr>
</tbody>
</table>

Table 3 reflects that library is focusing on acquiring e-resources as per the requirements of users. It is worthwhile to mention that there is increasing ratio of print to electronic resources it is from 30% to 75% during the last five years. Due to the greater demands by the researchers more budget is allocated to electronic resources than print resources. These e resources include CD Rom books, e journals and major portion to online databases.

4.4. Number of Online Databases Subscribed

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>JL- SPPU, Pune</td>
<td>9</td>
<td>18</td>
<td>16</td>
<td>21</td>
<td>26</td>
</tr>
</tbody>
</table>

Jayakar Library’s main task is to acquire the most relevant and useful databases. The above Table 4 indicates that how library is purchasing large number of databases to provide the scholarly information to the users/
4.4.1. Subjectwise list of online databases

Table 5 Subject wise list of online databases

<table>
<thead>
<tr>
<th>Sr No.</th>
<th>Name of the online database</th>
<th>Subjects covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>All subjects</td>
<td>J Gate Plus, EBSCO’s Academic Search Premiere, Web of Science, Scopus, Indian Citation Index, Proquest Dissertation and Thesis full text, Sage Research Methods Online.</td>
</tr>
<tr>
<td>2.</td>
<td>Geology, Geography, Environmental Science</td>
<td>GeoScience World</td>
</tr>
<tr>
<td>5.</td>
<td>Agriculture, Basic and Applied Science, Management, Engineering, Medical and Social Science</td>
<td>i-Scholar</td>
</tr>
<tr>
<td>6.</td>
<td>Law</td>
<td>Lexis Nexis, Manupatra, CLA Online</td>
</tr>
<tr>
<td>7.</td>
<td>Psychology and all Branches</td>
<td>Psych Article, Psych Info</td>
</tr>
<tr>
<td>8.</td>
<td>Botany, Zoology, Biotechnology, Microbiology, Bioinformatics, Health Science</td>
<td>Proquest Health and Biological Collection, Biological Abstracts</td>
</tr>
<tr>
<td>9.</td>
<td>History and Defence Studies</td>
<td>House of Commons Parliamentary Papers,</td>
</tr>
<tr>
<td>10.</td>
<td>Literature English</td>
<td>Proquest Literature Online</td>
</tr>
<tr>
<td>11.</td>
<td>Library Science</td>
<td>LISA, LISTA, IndianJournals.com (Library Science)</td>
</tr>
<tr>
<td>12.</td>
<td>Communication and mass media, Journalism</td>
<td>EBSCO’s communication and mass media complete, Newspaper Source Plus</td>
</tr>
<tr>
<td>13.</td>
<td>Organic and Inorganic Chemistry</td>
<td>Reaxys</td>
</tr>
<tr>
<td>14.</td>
<td>Science and technology</td>
<td>Science Online</td>
</tr>
</tbody>
</table>

The library has a very balanced collection development policy. The list of databases mentioned in the above table 5 shows that library is giving equal weightage to all the subjects. It is found that during the last five years number of online databases subscribed was increasing. Databases are subscribed from publishers as well as aggregators.

4.5. Implementation of Life cycle of E-resources in Jayakar Library

4.5.1. Acquire

In this stage of life cycle discovery of resource and its acquisition is involved. Various publishers and vendors come into the library with their new products. Library suggest them the concerned department and ask them to bring the recommendation. After receiving the recommendation library check for duplication of contents, authenticity, updation and take financial sanction from the authority. After the sanction the product is negotiated in the
technical advisory committee regarding licensing and other terms and conditions. Technical advisory committee sanctions proposal below Rs 5 lakhs. The proposals above Rs 5 lakhs are send to purchase committee. After sanction of proposal purchase order is prepared and send to the publisher/vendor/aggregator. As per terms and conditions payment is made.

4.5.2. Access
Librarian gives the Internet Protocol range of the campus to the publisher and access is initiated. The website of the new online database is added in the library portal and email is send to all the faculty and researchers. The remote access to the online database is given through EZ proxy.

4.5.3. Administer
The detail record of online database is maintained in the excel format with their activation and expiry date. The list of journals available in the database is linked on portal. Signed copy of license agreement is preserved.

4.5.4. Provide Support
For any difficulties in access and for training and demonstration the librarian contact the publishers representative and sort the issue. Librarian with the help of publisher arranges demonstration of the online database every year in the library as well as at departmental level.
4.5.5. Evaluate and Monitor
Librarian from time to time take the usage reports of the online database from the publisher. Check the usage statistics and according to the usage decide to renew or cancel the database.

5. CONCLUSIONS
In the Jayakar library, Savitribai Phule Pune University online databases are managed according to the life cycle of electronic resources. Each step in the life cycle is followed. It was found that there is no acquisition policy for electronic resources in the Jayakar Library. No efforts for preservation of electronic resources were found. Need for information search literacy was found and efforts towards this are going on.

Due to acquisition of the updated and valuable products by the library research output of the university is also increased. Researchers and faculty take full advantage of the online databases. Online databases are a valuable resource. Acquisition of the subject specific and research databases strengthens the library collection.

REFERENCES