

## Information search strategies of integrated library management software between Koha and LibSys:

### A comparative study of web OPAC

<sup>1</sup> Shalthingla R Shimrey, <sup>2</sup> Jaman Hussan Ahmed

<sup>1</sup> MLISc Student, University of Science and Technology Meghalaya, Techno City, Ri-Bhoi, Baridua, Meghalaya, India

<sup>2</sup> Assistant Librarian, University of Science and Technology, Meghalaya, Techno City, Ri-Bhoi, Baridua, Meghalaya, India

#### Abstract

Library Science is a profession that is full of people passionate about making a positive change in the library as well as in the world. And the information's is to communicate users who are seeking information to disseminate in different aspects. Togetherly, Library and information science are the perspective of collection, preservation and tools of management library resources. Library software has become the most powerful tool for changing the environment of libraries from traditional way to computerized, from electronic to digitalize. Web OPAC is a medium which connect library user with library resources, which are available in the library. The paper highlighted some search strategy of Koha and LibSys, which are available in their Web OPAC and also showing the differences after retrieving the search result.

**Keywords:** information search strategies, koha, libsys, library

#### 1. Introduction

Library is a place of information centers for all the users that has collection of sources stored such as books, journals, articles, periodicals, documents, films, maps and an ancient materials so on. In modern libraries have lots of change the design of collecting using electronic devices such as e-journals, e-books, from the e-resource which providing material is accessible by electronic and digitalize method. Library is a fast growing organism. The ancient methods of maintaining it are no longer dynamic and efficient. Libraries often provide public facilities for access to their electronic resources and the internet. For expeditious retrieval and dissemination of information and better service for the clientele, application of modern techniques has become absolutely indispensable. A properly computerized library will help its users with quick and speedy services.

#### 2. Objectives of the study

The main objectives of the study are

- To find out the information search techniques in LibSys and KOHA.
- To find how LibSys and Koha can help the library users in getting information.
- To collect and compile necessary information regarding searches from LibSys and Koha.
- To show the differences between these two software in providing information.
- To show the difference after generating the results of a document, holding the same title.

#### 3. Scope of the study

The main scope of the study is to show how the software generates different results by using same search techniques. This study will also help to find out the different searches in both the software. With the help of

these searching techniques one could be able to find their desirable information. Different techniques are available to conduct searches effectively. This study will show the differences in search strategies of Koha and LibSys. Koha is an open- source library management software which the library can acquire freely whereas LibSys is a commercial software, to acquire it the library must pay something in return. Both Koha and Libsys have different search strategies among those strategies Boolean search i.e. advanced search is common in both the software's but the difference lies when the result display in the computer screen even by holding the same title. So, the main aim or scope of the study is to show all the differences that lie in the search strategies of both the software's. So that maximum relevant information is retrieved according to the users need.

#### 4. Literature Reviews

Aute and Ghumare (2014) <sup>[2]</sup> "Library Management Software's : Libsys 7 & Koha" in their study library software has become the most powerful tool for changing the scenario of libraries from traditional to automated, from automated to electronic to describe the open source library management software and to point-out views of librarians and users about software which is used for automation packages Koha and commercial package of LibSys. It is also describe the objective of open source and commercial library software and its operations to find out best open source software and to set priorities for software selection to evaluate LIBSYS & KOHA Library Management Software's. Archana, Padmakumar, and Beena (2014) <sup>[1]</sup> "Catalogue Interfaces of Integrated Library Management Systems (ILMS): Experiences in a Proprietary and Open Source Software" Computerization of library operations in developing countries began in the 1970s with the automation of Catalogue records. Library

automation gathered momentum in the 1990s<sup>1</sup> with the increased availability of software and affordable hardware. An automated Catalogue has two interfaces: (a) Librarian interface and (b) Public interface (OPAC). Data is being entered through the librarian interface and output can be viewed in both the interfaces. All the modules are integrated with the catalogue and thesauri, so that data entered is immediately available across the whole system. These are the some important points which have been discuss in their paper and give some suggestion for improvements. Joy (2014) <sup>[3]</sup> “koha and libsys: a comparative study” in his study the important challenges before the librarians for automating the library is the selection of good integrated library system, which cater the needs of the library. It is to develop a checklist for the evaluation of software packages. The objective of the study is to evaluate the LibSys and Koha on the data collected and to find out the librarian opinion about the most desired and needed features of the integrated library system, the five requirements are considered. They are acquisition, cataloguing, circulation, serial control module and search facility. Singh and Sanaman (2012) <sup>[5]</sup> “Open source integrated library management systems Comparative analysis of Koha and NewGenLib” in their study open source software is software licensed to users with freedom to run the program for any purpose, to study and modify the program and to freely redistribute copies of either the original or modified program (without royalties, etc.). To evaluate the selected ILM software efficiently, a structured framework is important to direct the planned, qualitative and controlled evaluation of software completely. The ILM evaluation checklist consists of ten categories of items (not equal in significance) which includes the following: characteristics of ILMs; general features of ILMs; technology in design and architecture; database features; core modules functionalities; format and standard implementation; software and digital content; ease to use and updates; downloads and documentation; other enhanced features.

## 5. Library Automation

Library automation is the process of working machines, easy to access, save the time of the users required. Libraries automation process are circulation, cataloguing, acquisition, serial controls etc. Automation is a technique to make a system automating activities and services into the library. Library automation is the application of information communication technology to library operations and services. According to Salmon, “library automation is the use of automatic and semiautomatic data processing machines to perform such traditional library activities as acquisition, cataloguing and circulation. Although these activities are not necessarily performed in traditional ways, the activities themselves are those traditionally associated with libraries”.

### 5.1 What is koha

Koha is a type of an Integrated Library System (ILS) used as operating system. Koha is the first choice of the librarian who wants to automate library with open source software the name comes from a Maori terms for a gift or

donation. The software was developed in New Zealand by Katipo Communications. Koha was created in 1999 by Katipo Communication for Horowhenua Library Trust in New Zealand and the first installation went live in January, 2000. Koha software was released under the GNU General Public License and in 2010, koha has been translated its original English to French, Chinese, Arabic and several other languages. Koha supports search standards of MARC and Z39.50 in 2002 by the Athens County Public Libraries and the basic modules available in Koha are Administration, Acquisition, Cataloging, Circulation, Serial control, Members, Authorities, Report, and OPAC so on. Koha software has an extremely user-friendly interface and it is cost effective which makes more challenging to the traditional LMS software like LibSys.

### 5.2 Libsys

Libsys is an integrated library management software package designed and developed by Libsys Corporation, New Delhi. Libsys, it is engaged in providing software solution since 1984. The company has its headquarters in Gurgaon and extends its reach nationwide with regional commercial office in Kolkata and Bangalore. LibSys is highly committed in complemented product with reliable and supports. LibSys is completely a menu driven system in all of its functions. LibSys is easy to operate and the library staff can begin to use it quickly without any prerequisites programming skills, it ensures high productivity because of minimal data entry requirement, maximum possible integration of functions and powerful search and query facilities. It was initially developed in COBOL language but now it is converted into C language and covers all the activities of library related to acquisition, circulation, cataloguing, serial control, articles indexing, abstracting, OPAC, so on. LibSys follows international standards such as CCF, MARC, etc. It has some special characteristics, viz. interactive and screen oriented, menu driven, user defined security, multilingual and powerful editing facilities. LibSys supports almost all activities relating to acquisition, cataloguing, circulation, serial system, readers service, article indexing system, OPAC System.

## 6. Different Search Strategies

There are several search methods in order to precisely search the documents. With the help of these methods one can easily search the documents they really want. As it was mentioned that there are several methods so it is not possible to discuss all the strategies, some of the important strategies are as follows:

- a) Boolean search operators.
- b) Truncation search.
- c) Proximity search.
- d) Exact search.
- e) Free-text search.

### 6.1 Boolean operators

Boolean search is the method of logic developed by George Boole, a 19<sup>th</sup> century English mathematician. It supports most of the online databases and internet search engines. It allows us to do effective searches by cutting

out many unrelated documents. Boolean search works mainly with the three operators, namely; ‘AND’, ‘OR’ and ‘NOT’.

Following are the examples of the three operators:

i) **AND** operator mainly narrows the search. It retrieves documents that contain both of the search terms or keywords that we specify. The more terms we connect with AND the fewer results we will find. Example of AND operator is;

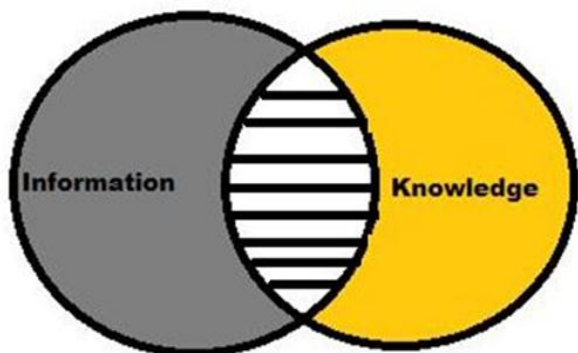


Fig 1: (i) Information AND Knowledge

Here, in this fig 1(i) it retrieves the documents containing both the word ‘information’ and ‘knowledge’. The grey portion of the side of the figure indicates the result about ‘information’ and the yellow side indicates about ‘knowledge’ and the white area is the result containing both words. So, here we can see that after using AND operator we got more precise result.

ii) **OR** operator mainly broadens the search. It retrieves document either of the search term or keywords that we specify, but not necessarily both. The more terms we connect with OR the more results we will find. It gives more results compare to other two operators. example of OR operator is;

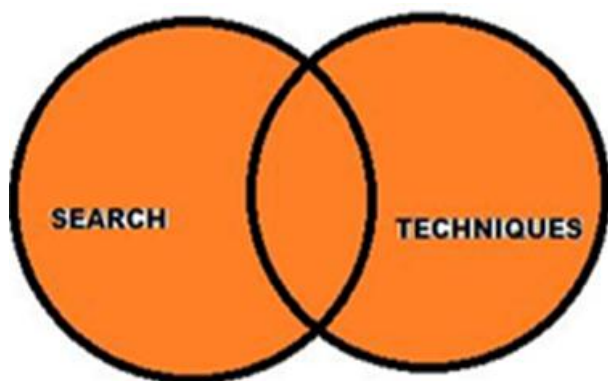


Fig 2: (ii) Search OR Techniques

Here, in this above figure it retrieves the documents

containing all the information regarding search, techniques and both the search and techniques. So, this shows that OR operator gives more results.

iii) **NOT** operator mainly narrows the search term. It retrieves the documents that do not contain a search term in our search. NOT is used to exclude a term from our search and to find fewer results. Example of NOT operator is;

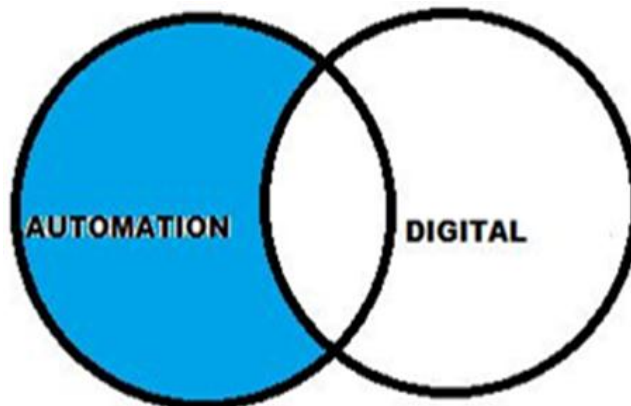


Fig 3: (iii) Automation NOT Digital

Here, as we can see in the above figure it retrieves the documents containing the word automation but not digital. So we can understand that NOT operator shows only the word that we really require by omitting all other unwanted materials. When these operators are used to find any documents using OPAC, it looks like the following Figure 3 (iii)

## 7. The differences in the search techniques of Koha and Libsys

There are various numbers of searches in both the software (Koha and Libsys) but the information that the users get after using those techniques in Koha and Libsys are different from each other. After searching with any keyword, author’s name, title, etc of a document these software’s display different results.

### 7.1 Search facilities provided by KOHA

There are different search facilities provided by KOHA to the users so that they can search their accurate and relevant documents. The search strategies in KOHA are discussed below.

#### 7.1.1 Simple search

In this search the users can search there documents by simply entering the information that they know about the particular document. They can browse the documents by entering the keywords or title, name of the author, etc.The screen shot of Simple search in Koha has been shown in the figure:

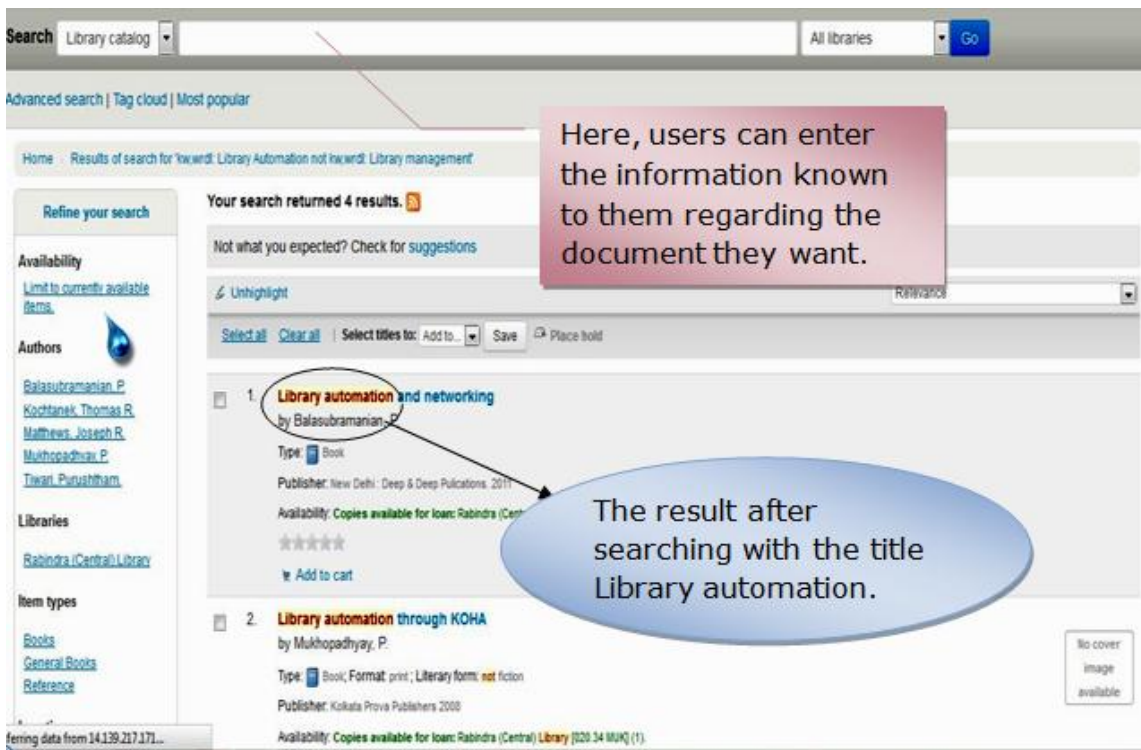


Fig 4: Simple search in KOHA

In the above figure it was shown that the users can enter the information known to them regarding the document that they want in the search box. When the users search the with the title “Library automation” by using the technique of simple search, the results displayed immediately as shown in the Figure 4.

**7.1.2 Advance search**

This search is based on Boolean search. With the help of this search the users can find there materials by using the three operators, namely, AND, OR and NOT. The screen shot of Advance search in KOHA has been shown in the figure:

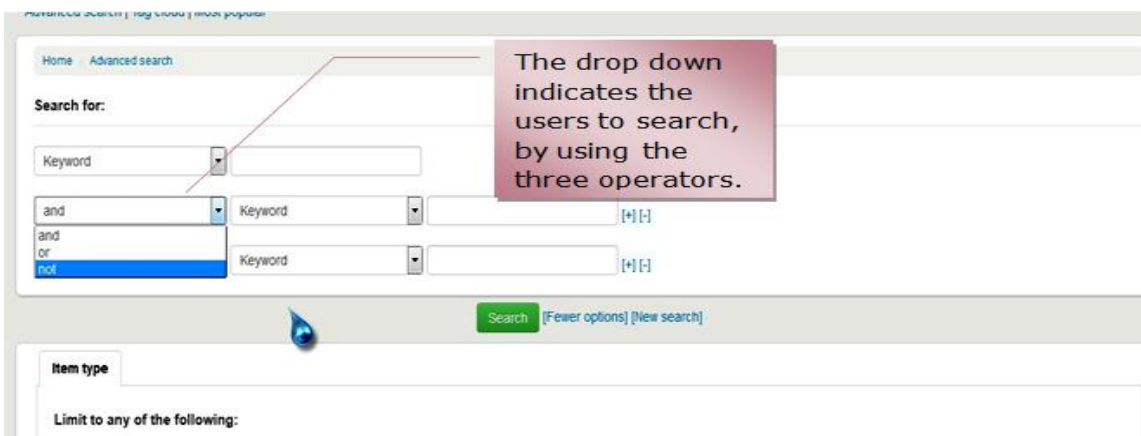


Fig 5: Advance search in Koha

In the above figure the drop down indicates the users to search their documents with the help of the three operators AND, OR and NOT.

**7.1.3 Tag cloud**

In this type of search users give some tags against the

name of the author, title or any other information of the document. At the time of searching the documents they can search directly with the tag given and saved by them. The screen shot of Tag cloud in Koha has been shown in the figure:



Fig 6: Tag Cloud

In the above Figure 6 the users can put the tag that was saved by them in order to search their document and after putting the tag number the users should on “ok” to display the result.

**7.2 Search facilities provided by LibSys**

There are numerous search facilities provided by LibSys. It depends on the different version of the software that what types of searches they are providing for the users. In this study LibSys 4 has been taken to show the

comparison. Following are the searches provided by Libsys 4.

**7.2.1 Simple search**

In this search the users can search there documents by simply entering the information that they know about the particular document. They can browse the documents by entering the keywords or title, name of the author, etc. The screen shot of Simple search in LibSys has been shown in the figure:

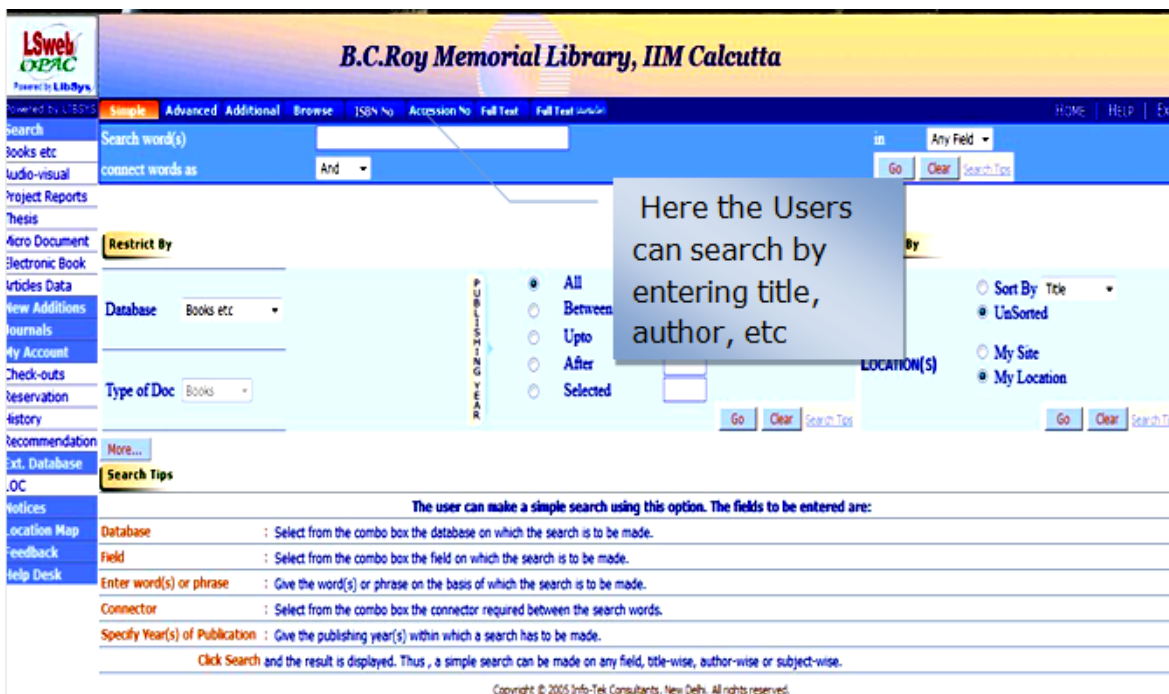


Fig 7: Simple Search in LibSys

In the above figure the users can enter the name of the title, author or any other information of the book in order to search the document through using the technique of simple search.

**7.2.2 Advance search**

This search is based on the Boolean operators. With the

help of this search the users can find the materials by using the three operators, namely, AND, OR and NOT, which is known as the operators of Boolean search. The screen shot of Advance search in LibSys has been shown in the figure:

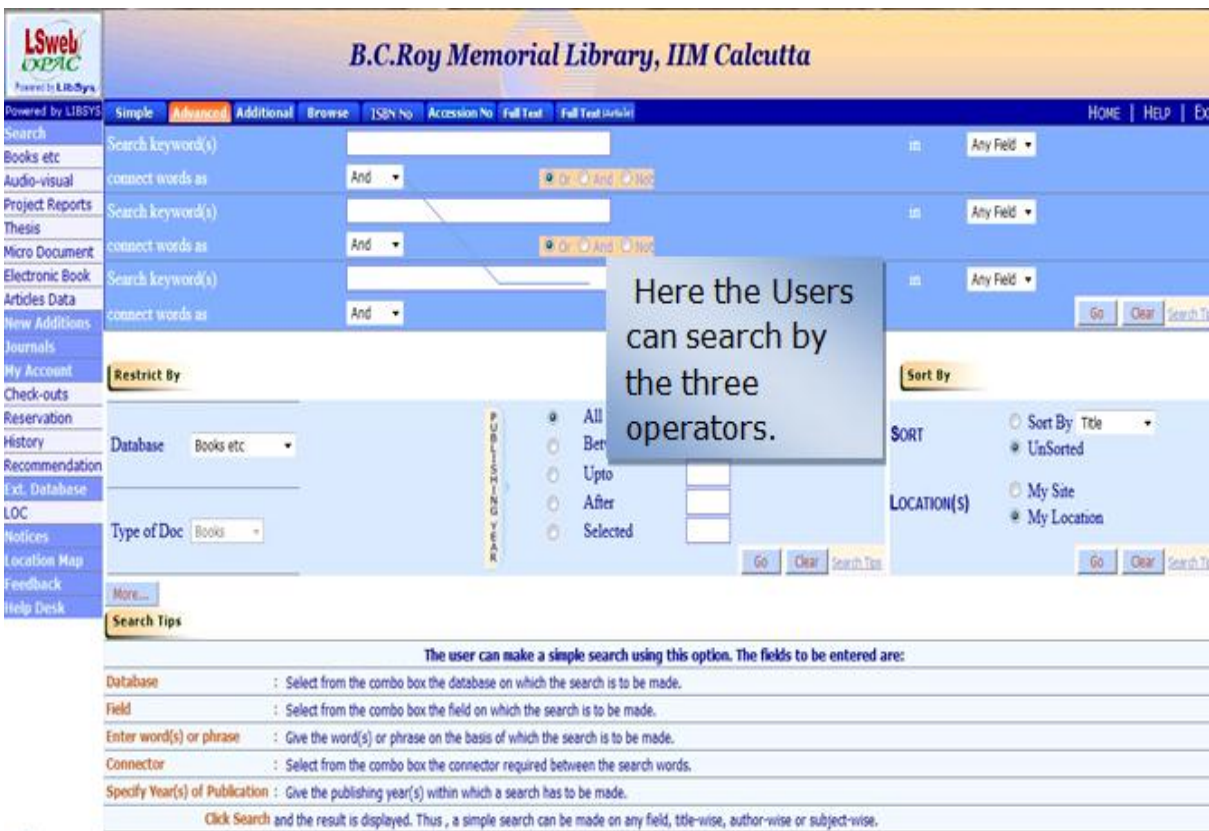


Fig 8: Advance Search in LibSys

7.2.3 Additional search

In this search type the users can search by choosing authors, titles, subjects or any other fields as given in the

page. The screen shot of Additional search in LibSys has been shown in the figure:

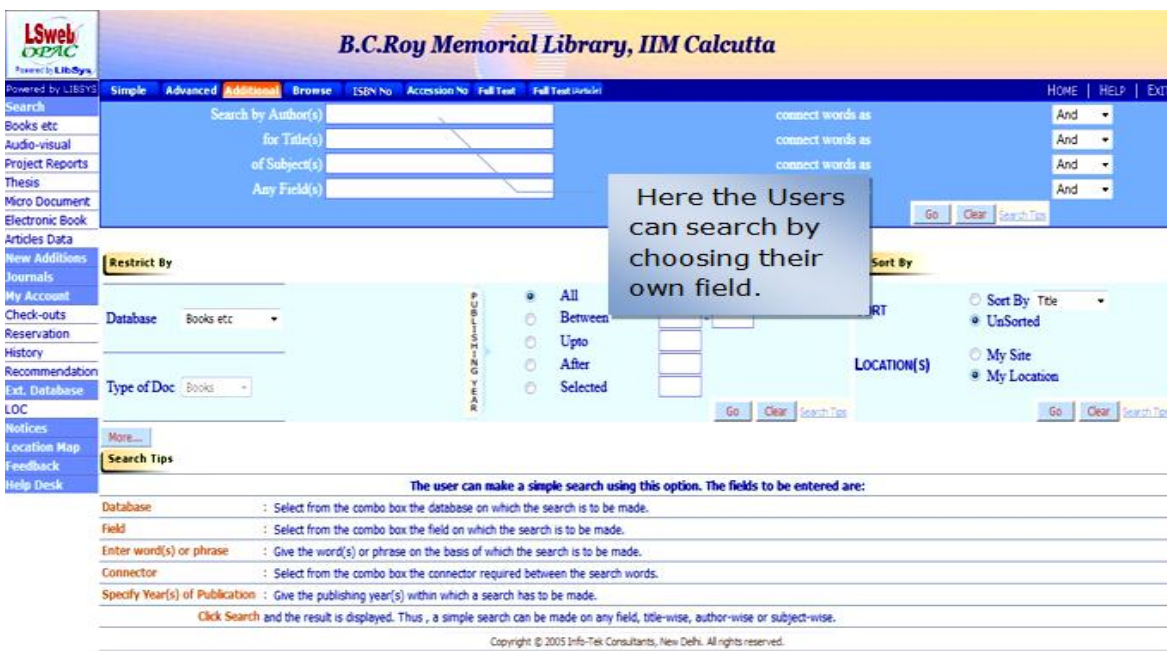


Fig 9: Additional Search in Libsys

In the above figure the users can search by choosing their own field. The users can search through author, for title, of subjects and any fields as shown in the Figure 9.

7.2.4 Browse

With the help of this browse technique, the users can browse their search by choosing their respective field. The screen shot of browse in LibSys has been shown in the figure:



Fig 10: Browse Techniques

In the above it was shown that the users can search their document by books etc, audio-visual, project reports, thesis, micro document, electronic book and article data as shown in the above.

## 8. Suggestions

- From the side of the library staff, it is necessary for them to organize awareness program to the library staff regarding the type and nature of the automation software used.
- Every library should also identify the non-users of electronic resources and proper steps should be taken to convert them into potential users of the resources
- User training is essential for better use of electronic resources in library since a good number of users are searching electronic literature on their own.

## 9. Conclusion

Therefore, Library automation is one of the major applications of IT implies the change from manual system to the application of computers and other modern equipment to library operation and services. It is clearly indicates that electronic sources of information are highly useful for the research, teaching and learning processes. Now a day's students and faculties are expecting that the libraries are fully computerized. Automation is to provide the right information, to right person, in right manner, in right time. While justifying need of library automation more than cost-effectiveness the benefits derived by the library users become the major consideration. Thus, the Koha software has an extremely user-friendly interface Web OPAC and it is cost effective which makes more challenging to the traditional LMS software like LibSys. Koha is a free of cost software, which seems to be in first place according to the librarians opinions. It is gaining popularity among librarians due to the availability of all the desired modules and search functions. That is the reason why most of the libraries are switching to Koha. Whereas LibSys is highly committed in complemented product with reliable and supports. LibSys is completely a menu driven system in all of its functions. LibSys is easy to operate and the library staff can begin to use it quickly without any prerequisites

programming skills, we it ensures high productivity because of minimal data entry requirement, maximum possible integration of functions and powerful search and query facilities.

## Reference

- Archana SN, Padmakumar PK, Beena C. Catalogue Interfaces of Integrated Library Management Systems (ILMS): Experiences in a Proprietary and Open Source Software. *DESIDOC Journal of Library & Information Technology*. 2014; 34(1):16-22. *DESIDOC* Retrieved May29, 2017, from <https://www.dyuthi.cusat.ac.in/xmlui/handle/purl/4469>
- Aute Govardhan, Ghumare Shivshankar. *Library Management Software's Libsys7&Koha" 9th Convention PLANNER-2014 Dibrugarh University, Assam, September 25-27, 2014* © INFLIBNET Centre, Gandhinagar, 2014; Pp. 319-324. Retrieved May20/05/17, from [https://www.researchgate.net/.../289649229\\_LIBRARY\\_MANAGEMENT\\_SOFTWARE](https://www.researchgate.net/.../289649229_LIBRARY_MANAGEMENT_SOFTWARE)
- Joy Baiju. *Koha and libsys: a comparative study"* *Journal of Advances in Library and Information Science* ISSN: 2277-2219; 2014; 3(4):350-354. Retrieved May 15/05/17 <http://www.jalis.in/pdf/pdf3-4/Baiju.pdf>
- Mama Abubakar S. *Perceived Impact on the Adoption of Koha on the State University Library's Management System. International Conference on Research in Social Sciences, Humanities and Education. (SSHE-2016), (Philippines), 2016; p74-78* <http://uruae.org/siteadm/in/upload/8346UH0516070.pdf>
- Singh Manisha, Sanaman Gareema. *Open source integrated library management systems Comparative analysis of Koha and New GenLib. The Electronic Library, Emerald Group Publishing Limited. 2012; 30(6):809-832. 0264-0473 DOI 10.1108/02640471211282127, 30. Retrieved May 15/05/17 Retrieved from http://www.emeraldinsight.com/0264-0473.htm.*