# Developing an Online Public Access Catalogue: a case study of Mangalore University Library

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### ABSTRACT

The paper describes the efforts made by Mangalore University Library in developing the Web OPAC. The re-cataloguing process carried out by the staff due to the policy decision to change the catalogue code from CCC to AACR-II was mentioned. The process of preparing the collection for library automation was explained. Difficulties faced while creating catalogue database using LIBSYS have been mentioned. The utility of the Web OPAC for the users have been stated. The impact of web technologies on the user needs have been identified. It was suggested for augmenting the web technologies for designing the future OPACs keeping in mind the changes in the user expectations. Finally the paper stressed the need for maintaining the regular backup of the entire database.

Key words: OPAC 2.0, Web OPAC

### INTRODUCTION

Library catalogue has been considered as an ultimate tool for identifying and locating the sources of information available at the library. At the beginning of the twentieth century Cutter (1953) [1] stated three basic purposes of a library catalogue. They are -i) to enable a person to find a book of which the author or the title or the subject is known; ii) to show what the library has by given author, on a given subject, in a given kind of literature; and iii) to assist in the choice of a book -as to its edition (bibliographically) and -as to its character (literary or topical). In addition to its functions as bibliographical tool, the catalogue may also serve as inventory and finding lists for the library collection.

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The users needs are varied and ever changing they expect the library catalogue to be more convenient to use, easy to access and a tool for the retrieval of accurate information with greater speed. This has necessitated the librarians to adopt new technologies and make the library catalogue as much user friendly as possible. This has brought in revolutionary changes in the physical as well as inner forms of the library catalogue over the years.

The change in the physical form could be noticed very early in the history of library catalogues. It started from the book form of catalogue to loose leaf form, later the card catalogue. The card form of catalogue seems to be a longstanding one which has had greater impact on the users compared to the other two. However, University of California Bibliography Services Task Force (2005:1) [2] reported that, the current library catalog is poorly designed for the tasks of finding, discovering and selecting the growing set of resources available in our libraries. Similarly, the Resource discovery exploratory taskforce of the University of Wisconsin-Madison Libraries (2008:6) [3] also in its final report stated that

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resource discovery with traditional library tools is a frustrating and time-consuming process for many researchers.

The advancements in the field of information technology changed the entire scenario of library services and facilities. Automation of library housekeeping operations has changed the library catalogue into a database of library holdings and helped to provide the online search facility through OPACs. The networking of libraries made the catalogue as a tool for remote access known as Web OPAC. With the integrated library automation programmes used for circulation of documents, the catalogue helped the users not only to find out the documents owned by the library but also to understand the status of a particular document. The developments leading to the standard formats for sharing the bibliographic information have helped in building the union catalogues, and completing the process of automation at a short span of time.

Present era has been considered to be the era of internet. The web technology has not only had its impact on the libraries but also on the user needs. The users are more interested in interactive information systems rather than static or one way information providers. Therefore we are noticing the improvements in library services and facilities using web technologies. In the present paper an attempt has been made to describe the efforts of Mangalore University Library in developing its online public access catalogue in order to serve its users with improved services.

#### Mangalore University: A Brief Profile

Mangalore University Library came in to existence in the year 1980. Prior to this it served as the library of post graduate centre of the University of Mysore. Initially the library had 40,000 documents in its collection. It served the 362 users belonging to the five academic departments existed at that time. The year 1993 is a mile stone in the history of Mangalore University Library for having an independent building.

At present the library has 1,78,000 documents and is serving the needs of 2500 users belonging to 34 courses run by 24 departments. The library documents have been classified using DDC 19th edition. In order to help the users in getting acquainted with the library resources, services and facilities, it has the practice of conducting library orientation programme at the beginning of every academic year. To maintain proper order of the documents the library has a practice of thorough shelf reading activity twice a year. In the present era a library working on traditional lines without automation activity would not succeed in meeting the user needs. Therefore an automation programme was felt necessary. Library catalogue forms the backbone of library automation as every library transaction depends on the up to date bibliographical database of its holdings. The steps for the creation of catalogue database were initiated. The process has been described in the succeeding paragraphs.

#### The process of creating user friendly catalogue

The library catalogue was in card form having the entries being prepared using Classified Catalogue Code. Therefore many of the users were reluctant in using it. To make it more users friendly and amenable to automation the process the entire collection of about 42000 was re-catalogued according to AACR-II in the year 1985. This task was carried out systematically using the entire team of professionals working in the library. The principle of division of labor was adopted accordingly the professionals were involved in preparing the catalogue entries, the clerical staff were assigned the job of typing catalogue cards and the semiprofessionals were assigned the job of checking the typographical errors and finally filing the cards in the card cabinet.

# Efforts made for the development of Catalogue Database

After re-cataloguing the collection the next step was creation of bibliographical database of the library holdings. Before starting the actual process of database creation the entire library collection was verified physically and a process of weeding out of the less used and unused collection was carried out in consultation with the faculty members. Based on the recommendations of the concerned faculty the unused books were separated from the active collection. The catalogue was updated by separating the entries pertaining to these documents.

Steps for creation of catalogue database were initiated in the year 1989 using dbaseIII+. For this purpose a data sheet was developed with fixed length fields. About 40% of the records were created. As it was not a versatile library automation software, many difficulties were faced. Important among them was difficulty in entering data beyond the limited field length. Therefore, the library purchased LIB-SYS Software during 1993-94. This software was in DOS version, and was loaded on Netware platform. The records created using dbaseIII+ package were imported into LIBSYS software. It was having the facility of varying field length and helped in entering the maximum required information in the catalogue records. Hence, the work was further continued using LIBSYS.

During this process the problem of duplicate accession numbers was faced for a few documents. This was resolved by consulting the accession register and making alternative arrangement by using alphanumeric accession numbers. After entering the catalogue data, the next step was editing and data validation by cross checking with the classified part of the catalogue. During this process, it was required to switch over from OPAC to cataloguing module again and again for correcting the typographical errors traced while searching the database using classified search option in the OPAC. It was because, the software did have no provision to search the database in classified order in the cataloguing module itself for cross checking purpose. With great difficulty the editing work was completed.

After creating the database a server and five nodes were installed in the library for making provision for online access to the same through local area network

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within the library. The LIBSYS software was loaded in the WindowsNT server and the nodes were connected to it. Simultaneously implementing the online circulation service was initiated. However, the problem faced often was server failure due to virus attack, and lack of adequate trained manpower. This necessitated the purchasing of the upgraded LINUX version of the software, i.e. LIBSYS 4 and training the library staff. At present the library has LIBSYS 4 software. With the initial training given by the software vendors the staff members got acquainted with the working of the software through daily practice. The present software is having web OPAC and Web client facility. It has been installed on the LINUX server. Now the software is supporting the entire library housekeeping operation without much difficulty. The server is connected with 13 nodes within the library, out of these two systems were spared mainly for OPAC search. In addition, a link to the OPAC was created in the Mangalore University Home page; this has helped the users for accessing the library database from any corner of the world.

# Features of On-line Public Access Catalogue (OPAC) and user expectations

OPAC has broken the physical boundaries of the library. Compared to card catalogue it has more access points from which any number of users can access at a time. It has options for carrying out simple 'author', 'title', 'subject', 'classified' and 'Key word in title' searches. Advance search option helps to search using 'Boolean operators'. Further the 'patron' option helps the users to check how many books are due to the library. With the help of catalogue database, generation of new additions list, compilation of bibliographies, compilation of list of theses etc., have become easy. This has saved a lot of time for the library staff as well as for the users. Further the catalogue database helped in implementing the online circulation service. This helped the users to know the status of each and every document of the library i.e. as whether the particular document

is already issued out, or available at new arrivals display, or sent for binding, or withdrawn, etc. This has resulted in reduction in the catalogue based enquiries at the library circulation desk. Chalon and others (2008:1) [4] stated that the OPAC presents the collection of a library to its users, usually through searching or browsing. It may be an extension of the integrated library management system (ILS) or independent software.

However, the investigators have come across a new phenomenon of user expectations about the library catalogue during an informal discussions held with the users of online catalogue. Mainly teachers and research scholars expressed that the present OPAC does not disclose all the information contained in the online databases for which the library has permission to access through consortium and institutional subscription. Further it does not reveal the details of CD-ROMs and DVDs that the library has in its collection. They expressed that the catalogue should be efficient enough to retrieve all the documents available on a particular query irrespective of their physical form and place of availability. This clearly shows that the users are expecting the library catalogue to function like internet search engine for retrieving the pertinent information. Further they desire to have results displayed as per their order of preference, such as latest first and expect the options for search within results. They also expect to provide them the online reservation facility for those documents that are already issued out to some one else. This necessitates the joint efforts of library staff and software engineers in improving the situation to meet the user expectations. The study clearly shows the changing pattern of user expectations about the library catalogue and library services. Therefore, it is suggested to include the bibliographical details of all the existing CD-ROMs, DVDs and other electronic sources of information in its on-line public access catalogue; prepare an index of all the journal articles available in the library collection; create an institutional repository and provide proper hyperlinks in the on-line catalogue. Further the users are expecting the e-mail alerts as and when the titles of their in-

terest are added to the library holdings. The faculty members desire to have the option for creating the reading lists without much difficulty while designing the syllabus for various courses. In the present scenario most of the users are using Amazon and other sites for identifying the latest documents. Such users expect the same facilities in the library OPACs such as the display of the images of the book jackets and fields for adding comments about the book and facility for viewing the opinions of other users expressed about the documents they have used. The users also expect to find out the other titles read by the users of a particular document. Breeding (2007) [5] reported that the content of OPACs can also be enriched by adding a table of contents and summary of the book and also visual displays.

The library professionals involved in automation activities expect the facility to download and import the records from the OPACs directly to their databases in order to achieve speed accuracy, uniformity in the catalogue entries and also to save the time and energy while creating an entry in their system for similar documents held by other libraries.

Looking at the changing pattern of user expectations it is observed that the libraries in India are slow in augmenting the advanced technologies in designing their catalogues according to the needs of the users compared to the advanced countries. This is the real challenge before us in the present era.

#### CONCLUSION

Creation of catalogue database is the important task in the process of library automation. Further it is very much essential to maintain regular and proper data backup otherwise the entire efforts will be futile incase of computer hardware problems occur due to lightning and other such causes. At present Mangalore University Library has maintained the conventional card catalogue parallel to the OPAC. And the staff members have been trained to take care of regular updation of the database and maintaining the regular backup. The result of the study would, therefore, help not only to strengthen the library catalogue on the basis of the user needs and preferences but also act as a guide to proceed in the right direction in future. It is hoped that the present study would also help the librarians in planning for the creation of library database.

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