# Use of Online Public Access Catalogue (OPAC) in Sri Lankan national university libraries

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#### Abstract

The OPAC is an integrated part of a total library system including acquisition, cataloguing, circulation and other auxiliary services. The OPAC can provide facilities such as high quality bibliographic data, a greater number of access points, interactive searching, online training, backup facilities, rapid database management, authority control files etc. However most Sri Lankan libraries do not use this facility which is the problem the study examined. Sri Lankan university library system entered the automation scenario in 1986. CDS/ISIS was used to create their bibliographical databases. Apart from CDS/ISIS, the university libraries gradually adopted other library software packages such as Purna, Libsys, Libsuite, Alice for windows and locally developed software using Koha, named ISURU to automate their library functions. The main objectives of this research were the identification of user bibliographical information needs, identification of problems related to library automation software and the identification of problems of user and those of the library staff adopting OPAC system. Primary data was collected using questionnaires and through interviews. Data collected in this research identified 13 issues related to OPAC. Inadequate computer literacy and non-familiarity with OPAC are the major causes of the issue. Selecting a suitable library automation software and promoting uniformity in university library automation activities are the other reforms necessary in this regard.

#### Introduction

The catalogue is one of the most important and useful information retrieval tools in the library. The main purpose of a catalogue is to facilitate the retrieval of items in a collection through searching by appropriate access points. The library catalogue has taken many physical forms from simple inventory lists of books and manuscripts, elaborated in the nineteenth century manifestations such as printed catalogue, guard book catalogue with entries for individual items pasted into folders, card catalogue traditionally consisting of cabinets with entries on 3 x 5 inch cards, sheaf catalogue with entries on slips held in a loose-leaf binder, micro form catalogue and since the late 1960s OPAC, which stand for On-line Public Access Catalogue. Among these different physical forms of the catalogue OPAC is the newest and the most sophisticated catalogue format. The ALA glossary of library and information science (1983) defined OPAC as a computer based and supported library catalogue. It is designed to be accessed via terminals, so that library users may directly and effectively search for and retrieve bibliographical records without the assistance of a human intermediary. Among the other catalogue formats, major features of OPAC, are listed below:

- (1) OPACs are available through the web
- (2) It allows users to search by any bibliographic record contained within a library's collection.
- (3) It can provide access to traditional bibliographic record as well as electronic resources and databases.
- (4) Sometimes users can search more than one collection at a time effectively by OPAC.
- (5) It provides simple and advanced search interfaces.(Chaudhury and Chaudhury, 2003)

Following retrieval features are also commonly available in OPACs.

- (1) Browse and search facilities.
- (2) Keyword and phrase search.
- Subject headings assigned to the records by using a subject headings list like Library of Congress Subject Headings (LCSH). Users can search by these assigned headings.
- (4) Boolean searching, usually limits to the keywords search option. In other words only keywords can be combined with Boolean operators.
- (5) Proximity searching, also limited to the key word search option.
- (6) Unranked search results.
- (7) The ability to search records through selected keys as author title, ISBN or call number which are searched as phrases and are usually automatically right –hand truncated.
- (8) The ability to limit searches by date, collection, language etc. (Chaudhury and Chaudhury, 2001)

An OPAC database normally consists of bibliographic records of library materials, compiled according to international standards such as ISBD (International Standard Bibliographic Description), MARC (MAchine Cataloguing), CCF(Common Communication Format), DC (Dublin Core) and FRBR (Functional Requirements for Bibliographic Records). OPAC databases are developed more on ISBD and MARC, because of these standards which exchange the data easily and across the countries.

## Background of the study

Sri Lanka is a developing country with a population of 190 million people, (Department of Census and Statistics, 2001). The country's adult literacy rate exceeds 90 %, which is one of the highest among developing countries in Asia.

Over 4.1 million students attended the county's 9,887 government schools in 2006. Its 15 universities could only absorb 16% of students who qualified for university admission (Central Bank, 2006). Within the 25000 square km of the country there are more than 6557 libraries. These libraries can be categorized into the following four basic types.

- (1.) National libraries
  - (2.) Academic libraries
  - (3.) Special libraries
  - (4.) Public libraries

The research focuses on academic libraries which denotes libraries of higher educational institutions such as an academic research and vocational training institutions etc. In this context the account of the providered as the highest level educational institutions in which such as the providered as the highest level educational institutions in which such as the providered as the highest level educational institutions in which such as the providered as the highest level educational institutions in which such as the providered and academic research are being done (OED, 1998). The university are come of learning for higher education, providing facilities for graduates and providered and specialization. Sharma (1978) described a university as a common of scholars and students engaged in the pursuit of seeking truth. Apart from the providered are engaged in the dissemination of newly developed knowledge to the providered as the university is a centre of excellence for knowledge and libraries have been integral part of them. No teaching or research is possible without well organized except libraries. Hence, the library in a university has been invariably named as the learn of all university functions.

University libraries entered to each of the state of the

Table 1: Availability of the OPAC in Sri Lankan University Libraries

| Name of University                               | Year of establishment | Available catalogue formats |                                   |       | is psodujus i<br>n Sri Lanke<br>University<br>near save m | peration                                       | lishment of<br>orary                                 |
|--|-----------------------|-----------------------------|-----------------------------------|-------|---|--|--|
|  |                       | Card<br>catalogue           | Computer                          | OPAC  | Software  | Modules in operation                           | Year of establishment of automated library catalogue |
| Colombo  | 1942                  | 1                           | 1                                 | 1     | Alice for<br>Windows                                      | catalog<br>uing                                | 2002   |
| Peradeniya                                       | 1942                  | 1                           | 1                                 | 1     | Alice for<br>Windows                                      | catalog<br>uing                                | 2002   |
| Sri Ja'pura                                      | 1959                  | 1                           | 1                                 | 1     | Alice for<br>Windows                                      | catalog<br>uing                                | 2002   |
| Kelaniya   | 1959                  | 1                           | 1                                 | singo | LIBSYS  | catalog<br>uing                                | 2008   |
| Moratuwa   | 1972                  | 1                           | 1                                 | 1     | LIBSYS  | All modules                                    | 2000   |
| Jaffna   | 1974                  | V                           | -                                 | -     | -   | -  | -  |
| Ruhuna   | 1979                  | 1                           | 1                                 | 1     | ISURU   | All modules                                    | 2002   |
| Eastern  | 1980                  | 1                           | -                                 | -     | -   | -  | -  |
| Open   | 1986                  | 1                           | 1                                 | 1     | Alice for<br>Windows                                      | All<br>modules                                 | 2001   |
| Rajarata   | 1995                  | 1                           | √                                 | 210   | WINISIS   | lacs:A.s                                       |  |
| Sabaragamuwa                                     | 1995                  | 1                           | 1                                 |       | Purna   | Ja 3/90  |  |
| South Eastern                                    | 1996                  | 1                           | 1                                 | - 9   | WINISIS   | e-to coalea                                    | or boilage   |
| Wayamba  | 1999                  | 1                           | 1                                 | - 1   | WINISIS   |  |  |
| University of<br>the Visual &<br>Performing Arts | 2006                  | <b>√</b>                    | Lead old<br>redd 6 be<br>old cion |       | nacolugação<br>Se e refleje<br>Acos confl                 | guera, boso<br>gueras (g. Q.<br>gueras (g. Q.) | - Accordance   |
| Uva Wellassa                                     | 2006                  | 1                           | orak tali                         | 291   | a_erodmom   | futs year                                      | L UE bris  |

Table 1 shows the present usage of various library software in Sri Lankan university libraries for automation of their activities. It also shows the availability of types of catalogues and the modules that are in operation. Library automation in most university libraries in Sri Lanka is limited only to the creation of bibliographical databases. Only the University of Moratuwa, University of Ruhuna and Open University of Sri Lanka have modules in operation. All university libraries have card catalogues and computer catalogues operating simultaneously and only some of them have OPACs.

## Objectives of the study

- Identification of bibliographical information needs of users.
- Identification of problems related to OPACs in Sri Lankan university libraries.
- Identification of problems of user and those of the library staff adopting OPAC system.
- Making new proposals to upgrade the OPACs in university libraries in Sri Lanka.

## Methodology

The population of this research was all university libraries in Sri Lanka. There are main libraries and a number of faculty and departmental libraries attached to the universities. According to UGC annual statistics report for the year 2006 there are fifteen university libraries in Sri Lanka. Among them only six university libraries indicate OPAC availability. Non probability purposive sampling method was applied to select the above sample.

The structured questionnaires and face to face interviews were administered for 25 students, 10 academic staff members and 5 library administrative department heads (including librarian) from each university. Thus 150 students and 60 academics and 30 library staff members altogether were provided with the questionnaire. Interviews were conducted between 18.09.2006 to 23.10.2006 on Tuesdays and

Thursdays of selected weeks. 10.00 am to 2.00 pm of the day was selected as most appropriate peak hours. An inquiry was made before the survey of the students and academic staff in order to represent the different academic years and faculties in the universities. Irrespective of their affiliation to faculties, the first ten academic staff members and 25 undergraduates who visited the libraries during that period were selected for the survey. Collected data were analyzed using SPSS package.

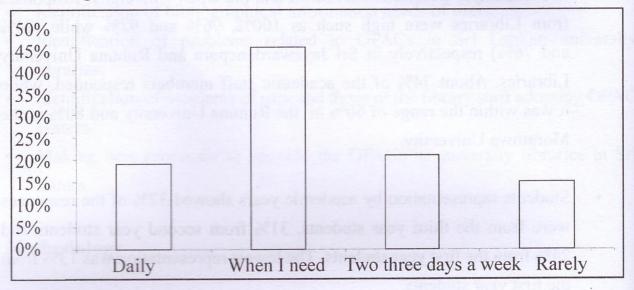
### **Findings**

- Total responses were quite satisfactory, since 90% of the students responded in Peradeniya, Colombo, Moratuwa and the Open University. Responses from Libraries were high such as 100%, 96% and 92% while (84% and 76%) respectively in Sri Jayewardenepura and Ruhuna University Libraries. About 74% of the academic staff members responded, while it was within the range of 60% in the Ruhuna University and 80% in the Moratuwa University.
- Students representation by academic years showed 32% of the responses were from the third year students, 31% from second year students and 24% from the first year students. The lowest representation was 13% from the first year students.
- According to the professional status of the academic staff, respondents
  were classified as temporary and permanent staff, from demonstrators
  to professors. Highest representation was from the senior lecturer and
  lecturer category which was 32% of the academics. Lowest responses 7%
  were from professors and assistant lecturers.

Age profile of the respondents presents the relationship between age and use of computerized devices in the libraries. According to the predetermined age groups respondents were classified. 81% of them were between 20-30 years, 10% were in the age group of 31-40 years. The lowest representation 7% was in the age group of 41-50 years.

• Access and use of the libraries depended on different constraints and also on the personal behavior of the user. It was revealed that the libraries under the survey, remained under utilized, though they have modern information sources like the internet. Survey data revealed that respondents use the libraries when the need arises (45%), rather than as a regular habit. Discussions with the library users revealed that such occasions arise when there is a need for information or for quick references, producing teaching materials, compilation of assignments etc. Figure 1 presents the frequency of visits to libraries.

Figure 1: Library Usage



Source: Field Survey 2008

- In the survey, respondents were asked for their first preference for searching books/ information from the library. The survey found that, 29.31% of users found book/information by browsing book shelves. 21.03% of users actually accessed the collection by OPAC,19.46% of users made inquiries from the library staff, 10.96% inquired from friends, 4.47% inquired from the teaching staff and still 8.72% of them utilized the card catalogue.
- According to the survey a high degree of using OPAC (29.27) is reported
  in the University of Moratuwa. University of Peradeniya and Open
  University of Sri Lanka have the second place in OPAC usage (22.34%).

In the University of Ruhuna, the OPAC usage is 11.7% and at University of Sri Jayewardenepura it is 10.64%. The lowest OPAC usage was indicated in the University of Colombo.

- Awareness of bibliographical information is a prerequisite for an effective searching of books/ information. According to the survey 72.63 % of the respondents have understood the value of bibliographic information. But 47% of the total had no knowledge about bibliographical information. The lowest percentage figure reported as those who had no idea about bibliographic information was 1.12%.
- The most frequent method applied by the users in searching library resources, was the interview. In the questionnaire the users were asked to select one of the questions, their preference for information/books searching. About 26.39% had browsed by title of the book while another 25.06% by the author's name. It was revealed that readers are not using the edition, publisher or key word in searching books. The table 5.9 gives the breakdown of responses. Second preference goes to title, author and subject by 38.3%, 23.40% and 17.02% respectively. The third preference does not differ from the above information/books searching method. Table 1 shows the Information/books searching methods of users.

Table 1: Information / Books searching method

|                     | 1  | Qty    | 2  | Qty    | 3  | Qty   |
|---------------------|----|--------|----|--------|----|-------|
| Author              | 24 | 29.27  | 22 | 23.40  | 16 | 25.00 |
| Title               | 23 | 28.05  | 36 | 38.30  | 7  | 10.94 |
| Key Words           | 7  | 8.54   | 12 | 12.77  | 6  | 9.38  |
| Subject             | 22 | 26.83  | 16 | 17.02  | 17 | 26.56 |
| Publisher           | 4  | 4.88   | 2  | 2.13   | 7  | 10.94 |
| Date of Publication | 1  | 1.22   | 3  | 3.19   | 7  | 10.94 |
| Author+ title       | 1  | 1.22   | 3  | 3.19   | 4  | 6.25  |
| Total               | 82 | 100.00 | 94 | 100.00 | 64 | 100   |

Source: Field Survey 2008

 The users consider the OPAC similar to the card catalogue as both could only be used within the library itself. Only 41.49% knew that OPAC has remote access too. Therefore the knowledge about online access to OPAC is not known to the majority of users.

Accessibility to OPAC everyday and any time is an important factor for users to fulfill their bibliographical information needs. The researcher has done a one month survey from 1° of March 2008 to 1st April 2008 to find out OPAC: accessibility in university libraries in Sri Lanka. Table 2 shows that only one university bas every day OPAC accessibility. It was the University of Moratuma. The lowest accessibilities are recorded in the Open University of Sri Lanka.

Table 2: OPAC Accessibility

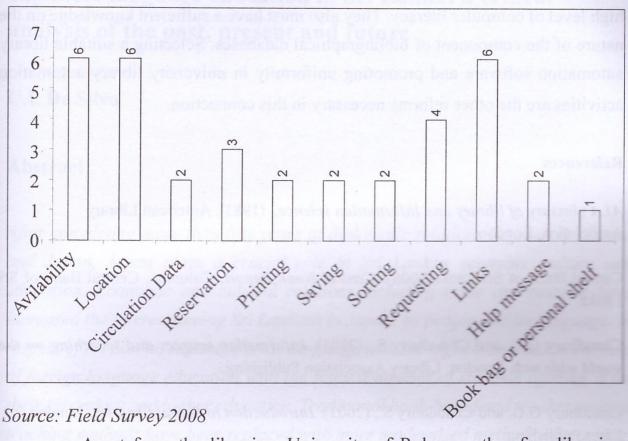
| University | Days accessible | Percentage % |
|------------|-----------------|--------------|
| UPL        | 15              | 46.88        |
| UCL        | 22 - 22         | 68.75        |
| UJL        | 17              | 53.13        |
| UML        | 32              | 100.00       |
| URL        | 28              | 87.50        |
| OUL        | 3               | 9.38         |

Source: Field Survey 2008

Eleven facilities were noticed as seen from Figure 2. Availability location and links for relevant information (author, subject, publisher, year of publication...) are offered in the OPACs in all university libraries, On the other hand reservation and requesting facilities are provided in 3 university libraries, and circulation, printing, saving, sorting, and help massages are provided in two university libraries. The University of Ruhuna is the

only university that provides this facility and also it provides Dictionary Facility (The spell checker) for the incorrect search words.

Figure 2: Facilities provided by OPAC in university libraries



- - Apart from the librarian, University of Ruhuna, other five librarians replied that both software (Alice, Libsys) do not have facilities to enter data by Sinhala or Tamil language and search by Sinhala and Tamil keywords. But the University of Ruhuna supported data entering and searching by own language. If a user searched by English key words for information, OPAC display all the Sinhala books which are related to the above inquiry as well. The University of Ruhuna is in the planning stage in providing a Sinhala vocabulary control system.
  - In effective education programmes, lack of written authority control for author or title, lack of a suitable vocabulary control standard, no direct link for the OPAC from the university home page, lack of terminals were the other main issues identified by this research

#### Conclusion

The study on the Use of Online Public Access Catalogue (OPAC), in the national university libraries of Sri Lanka has revealed that there are issues related to the OPAC system currently. To overcome these problems the users need to have a high level of computer literacy. They also must have a sufficient knowledge on the nature of the component of bibliographical databases. Selecting a suitable library automation software and promoting uniformity in university library automation activities are the other reforms necessary in this connection.

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