

A Study of Problems Faced By the Online Public Access Catalogue (OPAC), Users in Sri Lankan University Libraries.

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Introduction

A catalogue facilitates users to access to library recourses. According to Anglo-American cataloguing Rules, catalogue is (1) a list of library materials contained in a collection, a library or a group of libraries arranged according to some definite plan (2) and in a wider sense, a list of materials prepared for a particular purpose. (Ex; An exhibition catalogue, a sales catalogue) (AACR 2, 2002) As implied by above given introduction, a catalogue is a list of books, which has been arranged systematically. Main purpose of a catalogue is to facilitate the retrieval of an item/s in a collection through searching by an appropriate access points, for both known items and by subject.

The catalogue is one of the most important and useful information retrieval tools in the library. Library catalogue takes many physical forms from simple inventory lists of books and manuscripts, elaborated nineteenth – century, manifestations such as printed catalogue, guard book catalogue, with entries for individual items pasted in to 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 On-line Public Access Catalogue (OPAC). Among these different physical forms of the catalogue OPAC is the newest and 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 access via terminals, so that library users may directly and effectively search for and retrieve bibliographic records without

the assistance of a human intermediary. Harrolds (1987) defined OPAC as an automated catalogue system. The catalogue is stored in Machine-Readable form.

Background of the study

Sri Lanka is a developing country with a population of 190 million people (Department of senses and statistics, 2001). The country's adult literacy rate exceeds 90 percent, which is one of the highest among developing countries in Asia. Over 4.1 million students attended the country's 9,887 government schools in 2006. Its 15 universities could only absorb 16 percent 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 as national library, academic libraries, special libraries and public libraries.

This research focuses on academic libraries. Term "academic libraries" denote libraries belong to higher educational institution such as universities, colleges, technical and vocational training institutions etc. In the context of research the university libraries have been considered university is the highest level educational institution in which students study for degrees and academic researches are being done (OED, 1998). Hence the university is a centre of excellence for knowledge and libraries have become integral part of them. No teaching or research is possible without well organized resourceful libraries. Hence, the library in a university has been invariably named as the heart of all university fractions (Sharma, 1978).

Automation of university libraries in Sri Lanka.

It was in the year 1986 that the first meeting of university librarians, vice chancellors and the then chairman of university Grants Commission (UGC) was held to discuss the possibilities of automating university libraries (IUCL, 1987). The Inter University Committee on Librarians (IUCL) emphasized the importance of automating university libraries in order to be on a par with the technological development taking place world wide and brought out issues such as inadequate funds to purchase computers, software and insufficient trained staff etc. In 1991, UGC provided one microcomputer to each of the eight university libraries namely; Peradeniya, Colombo, Moratuwa, Sri Jayawardhanapura, Kalaniya, Jaffna, Ruhuna and open University. (Dissanayake, 1995) Freely available, UNESCO software, CDS/ ISIS were used by all the above libraries to create their bibliographical databases. In Sri Lanka, as in many countries, CDS/ISIS has been used widely as sufficient funds were not available to acquire other commercial

software. Apart from CDS/ISIS, the university libraries gradually turned to use other library software packages such as Purna, Libsys, Libsuite, Alice for Windows and ISURu to automate their library functions.

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

Table 1: Availability of OPAC in Sri Lankan university libraries.

University	Year of established	Card catalogue	Computer catalogue	OPAC	Software	Modules in operation	OPAC established year
Colombo	1942	ඒ	ඒ	ඒ	Alice	cataloguing	2002
Peradeniya	1942	ඒ	ඒ	ඒ	Alice	cataloguing	2002
Sri Ja'pura	1959	ඒ	ඒ	ඒ	Alice	cataloguing	2002
Kelaniya	1959	ඒ	-	-	-	-	-
Moratuwa	1972	ඒ	ඒ	ඒ	LIBSYS	All modules	2000
Jaffna	1974	ඒ	-	-	-	-	-
Ruhuna	1979	ඒ	ඒ	ඒ	ISURu	All modules	2002
Eastern	1980	ඒ	-	-	-	-	-
Open	1986	ඒ	ඒ	ඒ	Alice	All modules	2001
Rajarata	1995	ඒ	ඒ	-	WINISIS	-	-
Sabaragamuwa	1995	ඒ	ඒ	-	Purna	-	-
South Eastern	1996	ඒ	ඒ	-	WINISIS	-	-
Wayamba	1999	ඒ	ඒ	-	WINISIS	-	-
Visual & Perf. Arts	2006	ඒ	-	-	-	-	-
Uwa Wellassa	2006	ඒ	-	-	-	-	-

University libraries in Sri Lanka are using several well known software system in the world. ISURu is locally developed software by Mr. Nimal Hettiarachchi, senior assistant librarian of university of Ruhuna.

Objectives of the study

Objectives of the study are as follows.

- Identification to bibliographical information needs of users.
- Identification of problems related to OPAC in Sri Lankan university libraries.
- Making proposals to upgrade the OPAC in university libraries in Sri Lanka.

Methodology

Population of this study was all university libraries in Sri Lanka. There are main libraries and number of faculty and departmental libraries attach to the universities. University libraries were identified by UGC annual statistic report in year 2006. According to above report there are fifteen university libraries in Sri Lanka. Among them only six university libraries indicate OPAC availability. Non probability purposive sampling method was applied for select the University of Colombo, Peradeniya, Sri Jayewardenepura, Moratuwa, Ruhuna and Open university of Sri Lanka as 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 including 150 students and 60 academics and 30 library staff members altogether. Interviews were conducted between 18.09.2006 to 23.10.2006 on Tuesdays and Thursdays of selected weeks. Period From 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 by faculties, the first ten academic staff members and 25 undergraduates attended to the libraries during that period was selected for the survey.

Problems Faced By the OPAC Users in Sri Lankan University Libraries.

The focus of this study encompasses the libraries in the universities in Sri Lanka, and deal with an evaluation of the services provided by them to the academics and researchers. In order to highlight the validity of the survey, this section provides a brief account of the sample of respondents from selected target groups.

- **Rate of Response**

Table 2 presented the number of responses received for the questionnaire survey.

Table 2: Responses of users

Students				Staff		
University	Selected	Response	Parentage	Selected	Response	Percentage
UPL	25	25	100%	10	10	100%
UCL	25	24	96%	10	7	70%
UJL	25	21	84%	10	7	70%
UML	25	23	92%	10	8	80%
URL	25	19	76%	10	6	60%
OUL	25	23	92%	10	6	60%
TOTAL	150	135	90%	60	44	74%

Source: Field of survey 2007

Total responses were quite satisfactory, since 90% of the students responded. In Peradeniya Colombo, Moratuwa and Open university Libraries responded such as 100%, 96% and 92% , while it was 84% and 76% in Sri Jayewardenepura and Ruhuna Universities. About 74% of the academic staff members responded, while it was within the range of 60% in Ruhuna University and 80% in Moratuwa University.

- **Age profile of the library users**

Age profile of the respondents presents the relationship between age and use of computerized devices in the libraries.

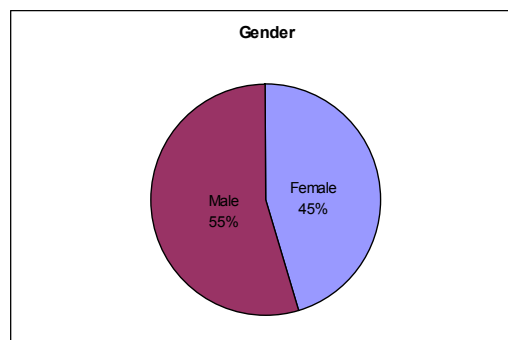
Table 4: Age profile of the respondents

Age groups	participants	Pres
20-30	145	81%
31-40	18	10%
41-50	12	7%
51-60	4	2%
Total	179	100%

Source: Field of survey 2007

There is a relationship between age of users, and their computer literacy. According to the predetermined age groups respondents were classified. 81% of them were between 20-30 years because of student target group is larger than the academic staff members, 10% were in the age group of 31-40 years. The lowest representation 7% was in the age group of 41-50 years. About 45% of the respondents were females, thus the representation of males was high.

Figure 1: Respondents by gender



The ethnicity of respondents comprises 91% Sinhalese, 5% Tamils and the rest Muslims.

- **Library Usage**

Since access and use the libraries depends on different constraint and also the personal behavior of the user. According to my observation revealed that, the libraries under the survey, remains under utilized, though they have modern information sources like internet. According to the survey data, it was revealed that of respondents use libraries when the need arises (45%), rather than as a regular habit. Discussions with library

users, revealed that such occasions arise due to search for information for quick references, producing teaching materials, compilation of assignments etc., The table 5 presents the frequency of visits to libraries.

Table 5: Library usage

	Number of users	Percentage
Daily	35	19%
When I need	80	45%
Two three days a week	37	21%
Rarely	27	15%
Total	179	100%

Source: Field of survey 2007

These data reveals that there is a high degree of demand for information through libraries; in spite of the internet facilities are available. My inquiries revealed further that there is a satisfactory level of the use of library resources by the respondents.

- **Books/Information seeking behavior**

In the survey respondents were asked their first preference for searching books/ information from the library, according to following list,

1. Ask from the librarian
2. Browsing the racks
3. Search card catalogue
4. Search OPAC
5. Ask form teaching staff
6. Ask friends
7. Search bibliography and
8. Index then go to catalogue

Figure 2: Way of book/information finding

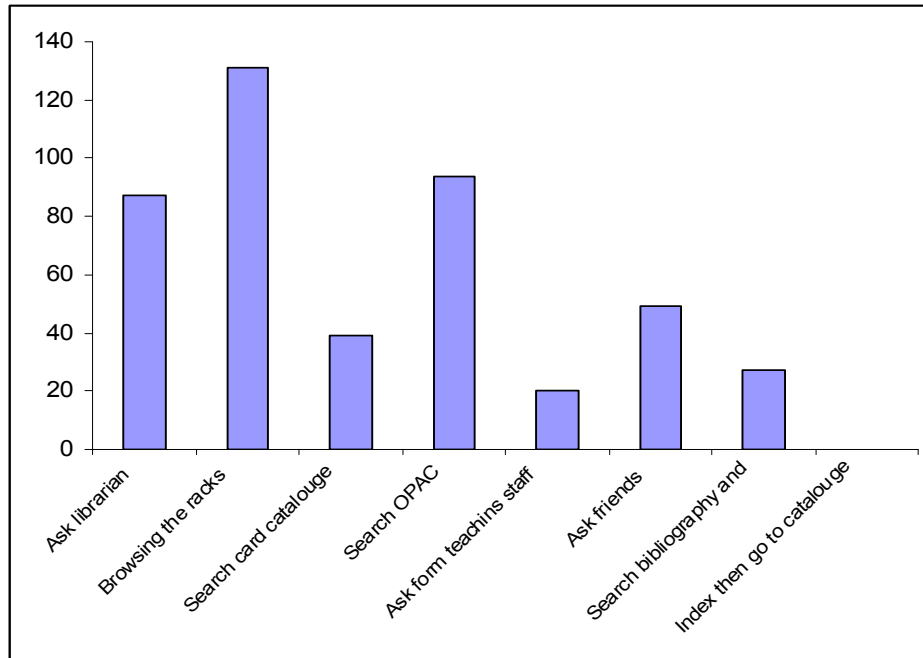
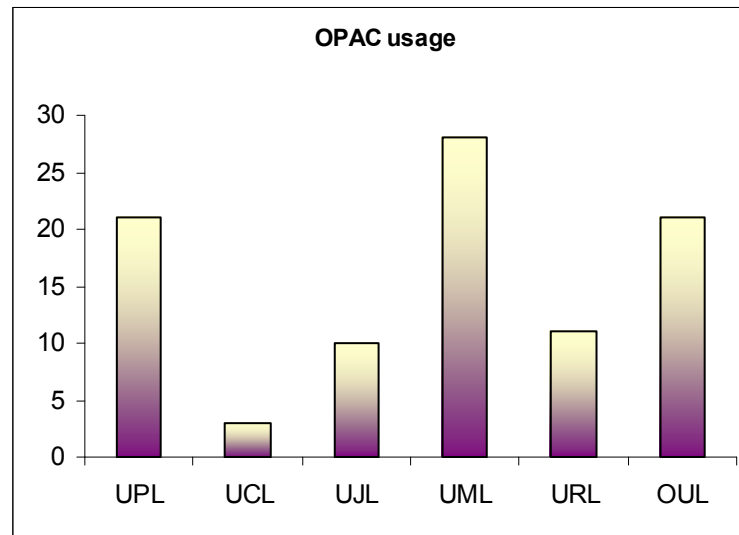


Figure 2 illustrates the pattern of search of information/books from the libraries by universities.

The survey found that, 18.6% of them find book/information by browsing book shelves. There were another 12.39% of them who actually access by OPAC. There were 12.39% them who inquire from the library staff, and 6.98% inquire from the friends, and still 5.56% of them finding book/information by card catalogue.

Therefore it proves that the OPAC is not widely used by the university community in the libraries. However according to the survey high degree of using OPAC is reported in University of Moratuwa by 29.27%. University Peradeniya and Open University of Sri Lanka have second OPAC usage rate of 22.34%. University of Ruhuna OPAC usage is 11.7% and in University of Sri Jayewardenepura it is 10.64%. Lowest OPAC usage was indicated in University of Colombo. The figure 3 presents the use of OPAC by universities.

Figure 3: OPAC usage



Being an Engineering university, both students and academic staff of university of Moratuwa were familiar and with experience of using computers; therefore a high degree of responses were reported from them on using OPAC.

My observation and personal discussions, revealed that reason for lowest usage of OPAC in university of Colombo was due to the fact that OPAC was not working regularly. Although there was misconception that students use more Sinhalese books so that OPAC does not facilitate to access, so that it was not being widely used. But at the university of Ruhuna which has facilities to search Sinhala and Tamil books by the same language the number of users has not risen significantly.

- **Problems faced by the OPAC users**

- **Accessibility**

Accessibility to OPAC everyday and any time is an important factor for users to fulfill their bibliographical information needs. Researcher has done a one month survey from 1st of March 2008 to 1st April 2008 to find out OPAC accessibility in university libraries in Sri

Lanka. Table 6 was revealing that only one university has a every day OPAC accessibility. It was university of Moratuwa. Lowest accessibility shows from the open university of Sri Lanka during the period of study due to their shifting to new library automation software.

Table 6: OPAC Accessibility

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

Source: Field of survey 2007

Other OPACs accessibility studied were not in a satisfactory level.

○ **Searching Options**

The users can have access to books / information in different ways through OPAC. Sri Lankan university library OPAC interfaces provide ten access points primarily. While search by author, subject and title offered by all the interfaces., search by acquiescing number and class number is provided by 35% and 25% libraries respectively. However it is to be noticed that the OPAC interfaces are emendable to customization. Users are not search by ISBN, ISSN, and other access points although provisions are made in the interfaces. As revealed in the table 7 most frequent access point was title for which 26.83% of the respondents explore in the libraries. Subject (26.39%) and author (25.06%) are referred respectively.

Table 7: User access points

Access points	No of respondents	Percentage %
Author	113	25.06
Title	121	26.83
Subject	119	26.39
Edition	34	7.54

Place of publication	18	3.99
Publisher	13	2.88
Date of publication	17	3.77
Key words	16	3.55
Total	451	100

Source: Field of survey 2007

Compared to the card catalogue, the OPAC has facilities for different searching strategies, such as, simple searching, Boolean searching, truncation, phrase searching etc. These searching strategies can be categorized in two types as simple searching and advanced searching or complex searching. I have been observed in the study of searching strategies in the university libraries OPAC interfaces as shown in table 6 while simple search has been provided in all OPAC interfaces in the university libraries, advanced or complex searching was provided in 83.33% of interfaces. By and large, it may be stated that the OPAC interface of any brand does provide both searchers with a little variation.

Table 8: Available searching strategies

Search strategy	Available libraries	Percentage %
Simple search	6	100
Advanced search	5	83.33

Source: Field of survey 2007

○ **Searching methods**

Four search methods were noticed as seen from table 9. While Boolean logic was offered in all libraries OPAC interfaces and phrase searching was offered in five university library OPACs, on the other hand truncation is provided in 5 OPAC interfaces. University of Ruhuna truncation symbol is quite different from the other OPAC truncation symbol (normal symbols are * or \$) it is percentage mark (%) in university of Ruhauna. The proximity search is offered in 2 university library OPAC interfaces.

Table 9: Search methods

	UPL	UCL	UJL	UML	URL	OUL	Total	Parentage %
Boolean logic	1	1	1	1	1	1	6	100.00
Truncation	1	0	1	1	1	1	5	83.33
Phrase search	1	1	1	1	1	0	5	83.33
Proximity search	0	0	0	1	1	0	2	33.33

Source: Field of survey 2007

○ **Inadequacy of facilities provided by OPAC**

Eleven facilities were noticed seen from table 10 availability , location and links for relevant information (author, subject, publisher, Year of publication..) offered in all the OPACs in university libraries, on the other hand reservation and requesting facilities are provided in 3 university libraries , and also circulation , printing , saving, sorting, and help messages are provided in 2 university library OPAC interfaces respectively, on the other hand university of Ruhuna provided book bag or create a own book shelf for the further references . university of Ruhuna is the only one university provided this facility, not only that they provided dictionary facility (Spell checker)for the incorrect search words.

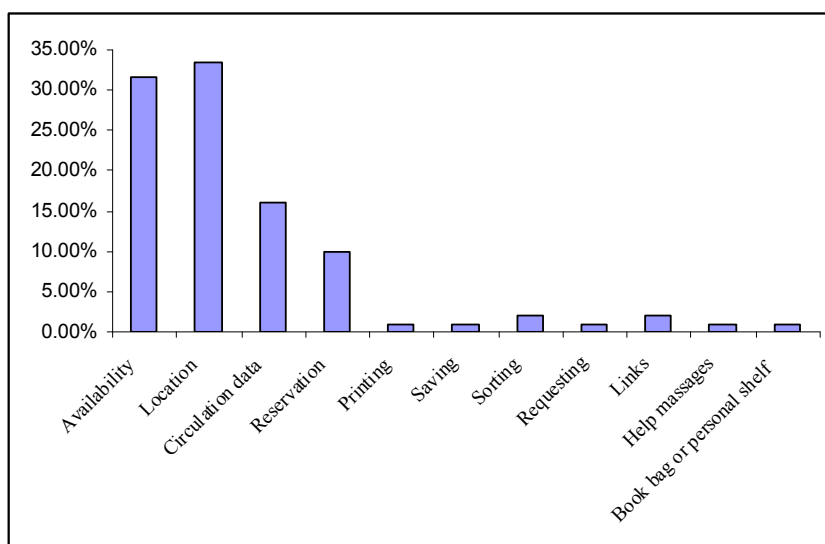
Table 10: Facilities provided by OPAC in university libraries.

	UPL	UCL	UJL	UML	URL	OUL	Total	Percentage
Availability	1	1	1	1	1	1	6	100.00
Location	1	1	1	1	1	1	6	100.00
Circulation data	0	0	0	1	1	0	2	33.33
Reservation	0	0	0	1	1	1	3	50.00
Printing	0	0	0	1	1	0	2	33.33
Saving	0	0	0	1	1	0	2	33.33
Sorting	0	0	0	1	1	0	2	33.33
Requesting	1	0	0	1	1	1	4	66.67
Links	1	1	1	1	1	1	6	100.00
Help messages	0	0	0	1	1	0	2	33.33
Book bag or personal shelf	0	0	0	0	1	0	1	16.67

Source: Field of survey 2007

The respondents were asked which of these facilities they are using in the library. Figure 3 provides the results of the survey. Most of the users wanted to know only the location of a book(33.31%) and another 31.69% use OPAC to know availability of the book, and only 16% reported that OPAC is used for retrieving information . Another 10% said that they have limited knowledge about reservation facility of OPAC. 2% of them were interested in sorting and other links available in OPAC. Other facilities are not much concerned by respondents.

Figure 3: OPAC facility



○ **Lack of facilities for Sinhala and Tamil fonts**

Apart from university of Ruhuna librarian, 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 university of Ruhuna supported for Sinhala and Tamil language data entering and searching by own language. If user search by English key word for information requirement OPAC display all the Sinhala books which related to the above inquiry as well. University of Ruhuna is in planning stage in providing to Sinhala vocabulary control system. Table 5.16 shows the languages can be worked in the software packages.

Table 11: languages can be worked in the software package

Language	Alice	Libsys	ISURu
English	✓	✓	✓
Sinhala	-	-	✓
Tamil	-	-	✓

Source: Field of survey 2007

○ **Other Problems**

The following user problems also identified through the survey when searching OPAC.

- (a) No proper user education programme for high up the OPAC usage.
- (b) No authority control for author or title
- (c) Not using vocabulary control standers
- (d) No direct link for the OPAC from the university home page
- (e) Lack of terminals

Major findings

- Library usage is quit satisfactory in the Sri Lankan university libraries. Most users used libraries when the need arises.
- Most users finding books /information by browsing the rack.
- OPAC usage is high in university of Moratuwa library.
- Every day accessibility to OPAC is available at the university of Moratuwa library.
- Sri Lankan university library OPAC interfaces provide 10 access points. But most users are searching books/information by title.
- Sri Lankan university library OPAC interfaces provide simple and advanced search facility
- Four types of search methods were provided by the OPACs. But not provided by all the interfaces.
- Eleven facilities provided by OPAC were examined by the survey. But all the facilities were not provided by the interfaces.
- Only ISURu provided Sinhala and Tamil language search ability.
- Terminals are not sufficient for the users.

Conclusion

On the study of problems faced by the OPAC users in Sri Lankan university libraries have recognized the 10 major issues. 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 the suitable library automation software and promoting uniformity between university library automation activities are the other reform necessary in this connection.

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