

A Study on consortium to access E-Journals to meet the information needs of the academics in Sri Lankan universities

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Abstract

This study is an attempt to investigate how far the consortia can provide access to e-journals to satisfy needs of academics in Sri Lankan universities. This study was focused only on Science and Engineering faculties. It was revealed that 75% of the university librarians have accepted e-journal consortia, as a useful effort for the information needs of their universities and 31.3% of them have affirmed that this great effort of e-journal consortia is an essential to overcome the budgetary problems of the universities regarding journal acquisition. The special feature of the study revealed were all most all the (97.63%) university academics were interested in more specific as well as subject related information through the consortia as online databases in the future than present. Therefore the recommendations should be directed to the academic's requirements in e-journal acquisition.

Keywords: *E-journals, online journals, consortia*

Introduction

Libraries are increasingly being called upon to provide more relevant, current and timely information to a wide range of users. Users require availability and accessibility to a variety of information resources and formats (such as digital full text, sound, graphic, multimedia and hypertext) to satisfy their information needs. The libraries in Sri Lanka, like in most developing countries suffer from inadequate funding and/ or stringent budget cuts. This has affected the level of services offered to both in terms of quality of collection and the degree of staff support provided. In this kind of situation only a few libraries can afford to have a wide range of information resources within their budget.

It is equally true and applicable, for all types of libraries cannot hold the full stock of information resources or to procure all information that may be in demand by its readers. None of the libraries can meet the thrust and demand for knowledge of all readers through its collection even if information is up to date to the fullest extent. To solve this problem library cooperation came into being. For example, Library Networks, ILL, Document Delivery and Library Consortium etc. They are internationally accepted resource sharing practices. At present the mostly accepted system of resource sharing is library consortia that have come into existence with wider coverage. The main purpose of library consortia is to facilitate easy access to available resources and services to a wider category of users while sharing costs among them.

Library consortia have existed for decades and have fulfilled multiple tasks. Historically, the common form of library cooperation was the sharing of union catalogue information, storage facilities, collection development, and human resources at local, national and regional levels (Henty, 1993; Payne, 1998).

The information revolution and proliferation of information have brought about drastic changes to the functions and services in all types of libraries in Sri Lanka. None of the libraries in Sri Lanka today are in a position to afford to procure all documents and subscribe to all core journals in major disciplines or CD-ROM databases due to the financial and other constraints. Librarians experience that their budgets are shrinking yearly and at the same time the prices of journals are increasing. As a result, in Sri Lanka, library networks started to share resources among them.

More recently advancement in digital information and telecommunication technologies has dramatically revolutionized the way in which information is acquired, stored, accessed and transferred. Sharing electronic resources has rapidly become another important goal for library consortia.

Currently, most scholarly e-journals are available through packages. This means that a large number of journal titles are included in full text databases. Access to the databases is obtained via licenses and favorable prices are offered if many institutions come as one customer through a consortium. The proliferation of World Wide Web-based e-journals and the development of more sophisticated retrieval tools on the web have undoubtedly ensured that these journals are more easily accessible to academics.

Objectives

To investigate into the extent to which the "Consortium to access e-journals" established by Sri Lankan Universities, could overcome the problems of journal acquisition and to satisfy the information needs of academics.

Specific objectives of the study are given below.

1. To find out the journal acquisition process in university libraries in Sri Lanka.
2. To find out the problems faced in journal acquisition in Sri Lankan universities.
3. To identify the journal needs of academics in the universities.
4. To investigate the present status that has been adopted to introduce e-journals by universities.
5. To investigate the current situation of using e-journals and tendency of acceptance of the e-journals by academics in Sri Lankan universities.
6. To investigate into the current status and the future trend of presently available "consortia to access e-journals" to fulfill the information needs of university academics.

Survey methodology

Researcher adopted survey method to conduct this study. The teaching community in Faculties of Science and Engineering and all the librarians who are in charge of journal acquisition in 13 national universities were considered as population for this particular study. Sample from the university academic community

was drawn using stratified random sampling method in which the population was subdivided in to strata, which are not overlap by one another. It was carried out before selecting the sample. "University" and "Major Subject Areas" in Science and Engineering Faculties were identified as the criterions for the stratification. The sample was selected to represent each stratum proportionately. 30% of each stratum was taken into account. The academics to be surveyed were chosen randomly from within each "Major Subject Areas".

Analysis of responses

In August 2005, 281 questionnaires were distributed over Science and Engineering faculties of 13 Sri Lankan national universities to collect data from the academics. The response rate was 87.9%. (247). Respondents according to the faculties was as Table 1.

Table1: Response rates as faculties

Faculty	Count	Percentage (%)
Engineering	91	36.8
Science	156	63.2
Total = 247		

Table shows that the largest percentage (63.2%) of respondents is from Science faculties and 36.8% is from Engineering Faculties. It is because the largest number of users in the population was from Science faculties. Majority of the respondents (65.6%) were senior lecturers and the lowest percentage (8.5%) was professors and there were 25.9% lecturers. 31.98% were females and 68.0% were males out of the respondents of the survey.

At the same time data collected from all serial control librarians within these 13 universities in order to find the information on printed and electronic journal acquisition process. Faculty libraries were contacted when they are separated from main library. All the libraries contacted were responded. Therefore, a response rate of 100% could be achieved.

Journal acquisition process of university libraries

Sri Lankan universities subscribe to journals through local agents, foreign agents, directly from publishers and other ways such as through consortia. Librarians were asked the way that they adopted in subscribing to print as well as electronic journals. Results are given in Figure1.

Figure1: Distribution of methods adopted by libraries to subscribe journals

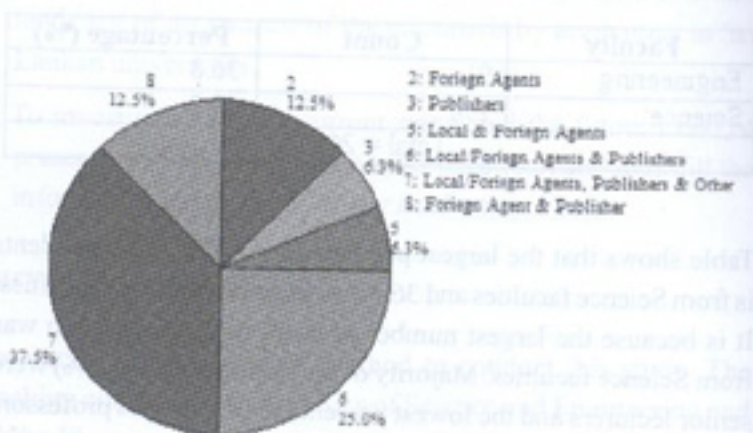


Figure shows the largest percentage (37.5%) of university libraries subscribe to journals through local agents, foreign agents, directly from publishers and using other ways such as consortia. Further, it revealed that they have subscribed to electronic journals mainly through the consortia.

The mean budget spent on Science and Engineering journals during the period of 2000-2004 by Sri Lankan universities shows in Figure2.

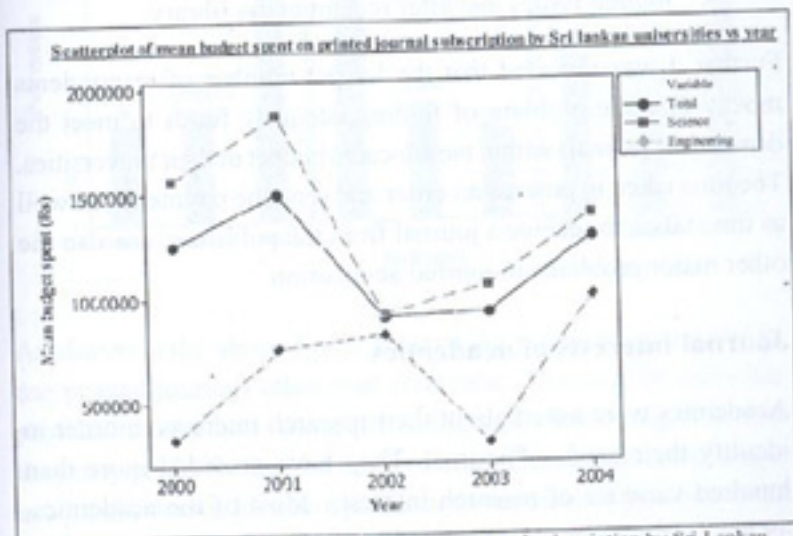


Figure 2 : Scatter plot of mean budget spent on journal subscription by Sri Lankan universities Vs year

It shows that the mean budget spent on Science journals is higher than Engineering. Further it shows that the mean budget for Science and for total mean budget (Science & Engineering) rapidly decreased at the year 2002. It may be because the Sri Lankan government at that year cut down the university budgets. But the mean budget spent for engineering titles has rapidly gone down at the year 2003.

Problems faced in journal acquisition

Problems faced in acquisition of printed as well as electronic journals were asked from the responded main libraries and the faculty libraries. The major problems they indicated were,

- Unable to meet the demand within the allocated budget
- Time taken to process an order and send the payments
- Time taken to receive a journal from the publisher
- Percentage of missing issues
- Journal issues lost after receipt at the library

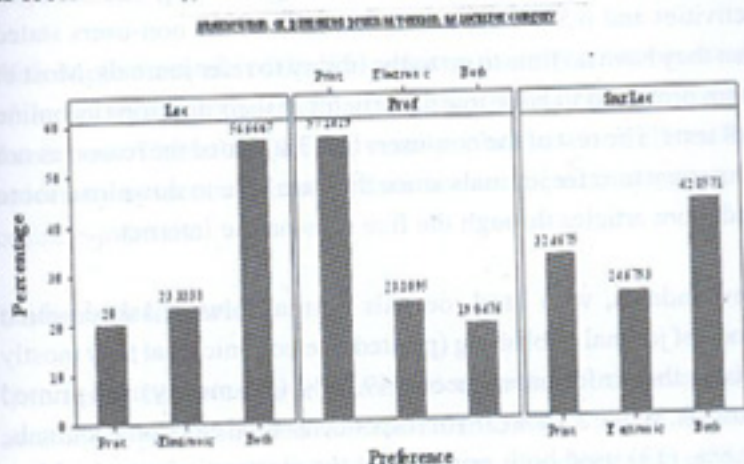
Further it was revealed that the largest number of respondents mostly face the problem of finding adequate funds to meet the demand for journals within the allocated budget of their universities. The time taken to process an order and send the payments, as well as time taken to receive a journal from the publisher, are also the other major problems in journal acquisition.

Journal interests of academics

Academics were asked about their research interests in order to identify their needs of journal. They have provided more than hundred varieties of research interests. Most of the academics, 49.6% (116) prefer to use printed journals rather than electronic journals. They have stated that the reason as the readability. It is more convenient in printed form and they are available continuously in their libraries with less interruption. Only 12.8% (30) prefers both versions equally and 37.6% (88) prefers electronic journals more. Most of them stated that they favor electronic version as they can have e-journals at their desktops without walking to the university library and it saves their time for other academic activities.

The preferred journal version differs as lecturer categories.

Figure 3: Distribution of preferred mode of journal publishing as lecturer categories



As shown in the above figure most of the professors preferred to use printed journals other than electronic. This may be since the professors have been using printed journals for a long time and they may prefer further the same version. The relevant percentage is 57.14%. Junior lecturers prefer both versions of journals. That may be because according to the availability of them.

The preferred mode of journal publishing differs as age groups of academics. Young aged lecturers mostly prefer to both printed and electronic versions. The interesting feature of the figure is 100% of above 60 aged academics preferred only to refer printed journals. Reason may be since aged persons are not mostly familiar with the novel technologies.

Journal usage of academics

Most of the academics, 93.5% (231) normally use printed as well as electronic journals for their teaching, learning and research activities and 6.5% were non users. 25% of the non-users stated that they have no time to go to the library to refer journals. Most of them preferred to have journal articles at their desktops as online full texts. The rest of the non-users (16.7%) stated the reason as not necessary to refer journals since they are able to download more and more articles through the free sites on the Internet.

Respondents, who used journals normally, were asked which mode of journal publishing (printed or electronic) that they mostly used in their information needs. 49.57%, (50) mostly used printed journals. While 37.6% (38) of respondents used electronic journals, 12.8%, (13) used both printed and the electronic journals. Most of the university academics prefer to printed journals for their journal needs. That may be the reason to use more printed journals than electronic versions. The academics that are equipped with IT facilities in their universities have mostly used electronic journals than printed.

In addition to that, libraries were asked their views on the usage of printed journals by academics in their libraries in order to identify further the journal needs of academics. Librarians were asked whether the printed journal usage is high, moderate or low. The printed journal usage is moderate for 42.85% of university libraries. It is high for only 21.42% of libraries and low for 35.715 libraries. According to these results it is clear that there is only a moderate usage of printed journals in Sri Lankan university libraries and the

invention of the online e-journals seemed to make a difference on the usage of journals.

E- journal consortia in universities - present situation

With implementation of the Sri Lankan university consortia, most of the university libraries joined to subscribe to electronic journal databases. Therefore the university libraries as well as the university academics changed their environments in adopting to online e-journals.

University libraries

University libraries have increased their facilities, made the awareness programs and service enhancements etc. Libraries were asked whether they have access to free electronic journal databases through Program for Enhancement of Research Information (PERI) of International Network for the Availability of Scientific Publications (INASP). Five universities out of 13 were not providing access to these online journal databases. They stated that they do not have access, they are not aware about these resources; they do not have sufficient infrastructure facilities and insufficient trained staff as reasons for not having access to electronic journals.

University of Colombo which is one of the oldest and a traditional university in Sri Lanka and the University of Moratuwa which is a famous university especially for its developed infrastructure facilities, reported a higher usage of access to electronic journal databases provided through PERI project. University of Colombo conducts a vast range of postgraduate courses. Therefore the

number of users enrolled in the university is high. That may be the reason for its high usage of electronic journal databases. University of Colombo has allocated the maximum number of computers for the users in accessing e-journals. These libraries have exploited four ways to make their users aware of these resources. These are conducting orientation programs and user seminars/ workshops, circulating leaflets/ brochures and notices.

Most of the university libraries (64.28%) have no sufficient facilities to provide access to e-journals for their users. They were specifically asked the reasons for the absence of e-journals in their libraries and whether they plan to implement access to e-journals in near future. Financial problems, lack of sufficient knowledge, Infrastructure facilities/ technological issues and lack of human resources were the major reasons they recorded.

University libraries were asked whether they have provided access to e-journals through their library websites and given facilities on the web pages. 90% of the university libraries have provided access to e-journals through their library websites. All of them have provided URLs of e-journal databases, which were provided through PERI project.

The libraries, which provide access to e-journals, were asked whether they are planning to enhance their service in the near future. 100% of them have already planned to enhance this special service in the future.

Academic staff of universities

University academics have changed their scenarios in adopting electronic journals. They were asked whether they were alert

about free access to electronic journals provided through the 'consortia to access e-journals' of PERI project. 72% of them have known that they can access to free e-journals provided through their libraries. Other 28% of university academics have not known about that service.

Academics were asked the way that they got to know about these free access electronic journals provided through PERI project. The largest percentage of respondents has got to know about e-journals through their libraries. The percentage is 89.84%. They have attended to the workshops/training sessions held by libraries or received the notices/ handouts as well as e-mails from their libraries and a few have got to know through their library websites. This may be reasonable since university libraries disseminated an immense range of programs to inform about e-journal databases. Most of the academics (58.59%) have used free trials or e-journals accessible through Internet. Other 41.41% of academics had not used them because they are heavily used to refer textbooks other than journals; time taken to download e-journals since slow downloading (low bandwidth), non-availability of subject related journals, satisfied with printed media, lack of awareness and not having facilities in the departments. Out of these non-users the largest percentage (39.2%) stated that they have no facilities in their departments to access e-journals.

Further the e-journal users were asked to indicate the databases, which they browse mostly. Results were as Table2.

Table 2: Number of specific e-journal users

E-journal Database	Number of users (Percentage from the total)
JSTOR	1 (0.4%)
Medline/ Pubmed	1 (0.4%)
IMech	4 (1.6%)
CABI	5 (2.0%)
IEEE	10 (4.0%)
H W Wilson	20 (8.1%)
EBSCOhost	21 (8.5%)
ScienceDirect	29 (11.7%)
Emerald	32 (13.0%)
John Wiley	46 (18.6%)
Blackwell-Synergy	61 (24.7%)

Table 2: Number of specific e-journal users

Table shows that the largest percentage of respondents in Science and Engineering field has used the Blackwell-synergy e-journals database. 18.6% of academics in Science and Engineering field has used John Wiley database.

Problems faced in accessing e-journals

The largest percentage (66.07%) of users faced the problem, lack of Internet facilities to access these e-journals at their universities. The facilities cover elementary computer labs, virtual spaces, student computer launches etc. The next major problem is not having sufficient number of computer terminals at their departments where they have Internet facilities.

- **Main advantages of e-journals**

The largest number of respondents mostly ranks the benefits by timeless availability of e-journals. Availability before print version is also a major advantage of e-journals.

- **Main disadvantages of e-journals**

The largest number of respondents mostly faced the disadvantage of slow download of e-journals. Most of the lecturers stated that the downloading speed of articles have become a major disadvantage regarding e-journals. Further it was revealed that the additional payment for the electronic version of journals has also become a major disadvantage.

Current status and future trends towards e-journal consortia

Views towards current status of the e-journal consortia

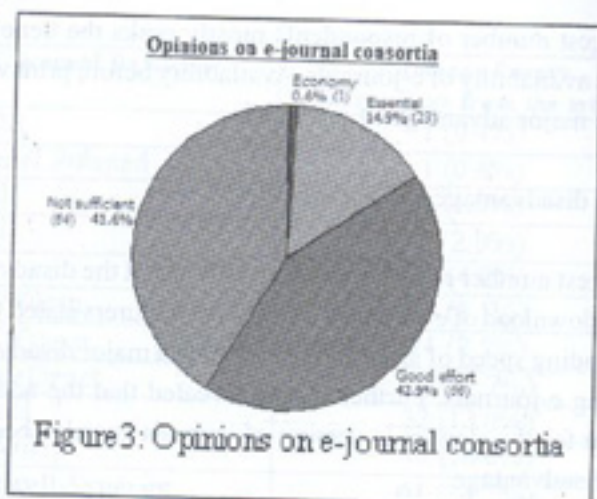
- **As university Librarians**

Librarians were asked whether the access to electronic journals through the consortia is useful or not fulfill the information needs of their users. 75% of the university librarians have accepted e-journal consortia, as a useful one for the information needs of their users.

- **As university academics**

University academics were asked their opinions on e-journals consortia in fulfilling their information needs.

Figure 4: Opinions on e-journal consortia



According to the figure, the largest percentage (42.9%) of academics has stated that the e-journal consortia as a good effort for their current information needs. But a closer percentage of users (41.6%) have reported that the e-journal consortia effort is not sufficient for their heavy information needs.

Future trends towards e-journal consortia

University librarians as well as the academics were asked for their views on the future trend of this e-journal consortium.

- University Librarians

The largest percentage (31.3%) of university librarians has affirmed that this great effort of e-journal consortia is essential to overcome budgetary problems of the universities regarding journal acquiring. 12.5% percentage of librarians stated that the bargaining power

is high for the e-journal databases through the consortia. 6.3% percentage of librarians has given their views as the e-journal consortia could be targeted for expensive titles. 6.3% of librarians' view was to have more awareness programs regarding this e-journal consortium as well as the online journal databases acquired through consortia to be able to get much and more benefits.

- University Academics

All most all the (97.63%) university academics were interested in more specific information through the consortia as online databases than present. Most of them were interested in more specific information related to their specific subject and research interests. Only a small percentage of users (2.36%) were not interested in having more specific information through online databases than present. They were senior lecturers and professors. Most of them are very much satisfied with the existing e-journal databases. These online journal databases has already been fulfilled their information needs. Also a few respondents didn't like to have more information in electronic form any more. Further academics' special views on future of these e-journal databases and the consortia effort were investigated. Their views have been categorized as follows.

Table 3 shows the largest percentage of academics (56.2%) expected to have much more subjects' related e-journal databases through consortia. The next larger percentage of users (21.9%) requested to enhance the service by increasing the download speed, user-friendly menus and frames as well as their own infrastructure facilities. While 8.76% of academics asked for improving the awareness programs regarding e-journal databases

and 8.03% requested for full text access for all databases in the future. The remaining has affirmed to have evaluations for academic requirements before purchasing e-journal databases and to try to get free access for more journals.

Table 3: Frequency table for future views on e-journal consortia

View	Count & Percentage
Purchase related database with reference to relevant subjects	77 (56.2%)
Evaluate academic requirements before purchasing databases	5 (3.65%)
Enhance the service and the infrastructure	30 (21.9%)
Full text access for all databases	11 (8.03%)
Free access for more journals	2 (1.46%)
Improve the awareness programs	12 (8.76)
N= 137	

Table4: Frequency table for future views on e-journal consortia

Most of the e-journal using academics have stated that to purchase e-journal databases specifically related to their subject and research interests. Further 9.82% users mostly prefer to have full text e-journal databases. 65.93% of users who accessed free trials or e-journal databases subscribed by the university affirmed that they need to purchase more subject related e-journal databases.

Conclusions and recommendations

Acquiring e-journal databases through consortia is a major step taken in meeting information needs of academics under a controlled budget and with other limited facilities. But the usage of electronic journal databases provided through consortia to access e-journals were low for the largest percentage of universities as observed. It was high only for a few universities and a moderate usage was reported by about 1/3 of universities.

However 90% of the university libraries have provided access to e-journals through their libraries. All of them have provided URLs of e-journal databases provided through PERI project. A larger percentage, of university libraries have no sufficient infrastructure facilities to provide access to e-journals for the users. The largest number of respondents mostly faced to the disadvantage of slow process in downloading of e-journals. All the university libraries, which provided access to e-journals, have already planned to enhance this special service in the future.

Besides many a problem the academic face in accessing e-journals, 75% of the university librarians have accepted e-journal consortia, as a strong source to fulfill the information needs of their users. But around half of the responded librarians have reported that the e-journal consortia effort is not sufficient for their heavy information needs. A largest percentage of university librarians have affirmed that this great effort of e-journal consortia is essential to overcome budgetary problems of the universities regarding journal acquisition.

All most all the users were interested in more specific information in the future through the consortia as online databases than the present. Most of them were interested in more specific information related to their specific subject and research interests.

The study clearly revealed that university academics mostly search for the very specific information, which is directly related to their subjects and research interests. Therefore the e-journal acquisition should take place by considering the academic's requirements. It was also revealed that the academics are to be provided with more infrastructure facilities to access e-resources with more privacy access.

Implication for future research

Major conclusions of the study are directed to the other research areas. One of the major conclusions drawn from this study is the neediness of more specific information related to their specific subject areas through consortia in the future. Therefore one can launch an evaluation of academics specific information needs through their e-journals interests.

Further one can study the way of e-journals accommodated to the academics' as well as librarians' in terms of budgetary allocations and adoption future separately for e-journals.

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