FUTURE OF DOCUMENT DELIVERY SERVICES AND INFORMATION SHARING AMONG SRI LANKAN LIBRARIES THROUGH OUSL EXPERIENCE

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Abstract

This article discusses the process and outcomes of the document delivery (DD) service that has been re-launched in March 2010 at the Open University of Sri Lanka (OUSL) Library; and illustrates the developments of DD services at international level. Further, it highlishts the need of establishing a proper mechanism of sharing information among the Sri Lankan libraries to go par with the impending E-journal Consortium in order to maximise the usage of materials that would be purchased out of the tax payers' money. The article also aims at opening a dialog among Sri Lankan librarians on enhancing access to materials for the Sri Lankan users by utilizing technological advancements and following good practices of modern DD services and information sharing platforms through a collaborative approach.

Introduction

In this day of 'information overload' with huge amount of information products adding to the collection through a range of channels, particularly from electronic media, librarians are under immense pressure to link the users with the information products that they wish to gain access to. In doing so librarians have to struggle with locating documents, identifying access options, costs of documents and more over the 'on time' delivery of documents without failing to meet the user expectations. Since the knowledge production today is too huge to stock within an individual library, librarians worldwide are exploring possibilities of strengthening the DD services at their institutions in order to maximize the productivity of the service. As a result, DD service has become a regular library service in university libraries and in special libraries throughout the world.

Literature Review

DD literature is abundant with publications that illustrate lessons learnt and discuss the professional experiences of librarians and DD specialists. Several scholars (Crowley, 1999; Siddiqui, 2000; Baker, 2003; Jackson, 2004; Bower, 2005; Dehlez, Leeuwe & Dekker, 2005; Patterson, 2008; Walton, 2008; Yang & Gyeszly, 2009) have discussed their experiences in handling large scale DD services at leading libraries together with innovative models to enhance speed of delivery, reduce the turnaround time, minimize the staff

time in processing document requests, cut down the costs and maximize the fulfillment rates.

As in many other library functions, the technology is highly used in streamlining DD activities and the literature is enriched with publications (Burrows, McDonald & Archibald, 2004; Mangiaracina, et al., 2008; Moreno, 2012; Lee, 2013) that discuss numerous software solutions that deal with DD related issues. Out of them the functionalities of DD management software systems (i.e. OCLC-ILLiad, Relais ILL management system, KERIS ILL/DDS, VDX) and document transmission software systems (i.e. Ariel, Odyssey and dCube) have been well presented in the literature.

The impact of electronic publications on DD services is another factor that has drawn attention of librarians with increasing amount of electronic publications, particularly e-journals. Several authors (Braid, 2003; Kidd, 2003, Echeverria & Barredo, 2005) have pointed out that the general trend towards requesting articles through document delivery services is downward due to the increased access to electronic materials.

With the introduction of electronic document delivery services and recent demand for desktop delivery through unmediated document delivery schemes, copyright has attracted a special attention of DD librarians. Authors such as Rosemann (2003), Titley (2007), Yoo and Kim (2013) have discussed the copyright related issues in maintaining electronic document delivery services within different information environments and highlighted the possibility of making use of electronic signatures for the copyright statements.

Commercial document delivery agencies such as British Library Document Supply Service, Infotrieve, CISTI and INIST, OCLC WorldShare Interlibrary Loan, ArticleChoice of ScienceDirect are playing a key role in today's information business. Majority of individual libraries heavily depend on such agencies for acquiring materials for DD services in their institutions. Brown (2003), Labriga (2004) and Gillet (2008) have put forward descriptive accounts on these major document delivery agencies together with customer information that would be of help to potential customers in selecting an agent that best suits their institutional needs.

Present DD Environment in Sri Lanka

DD service has been practiced over the years, mostly in traditional form, in Sri Lankan University libraries with the intention of expanding access to materials. However, in recent years, Sri Lankan university library system experienced a sudden growth in document requests that is too much for a traditional system to withstand. The growing fashion on knowledge production among teaching staff and the increased enthusiasm in joining postgraduate study programs in universities may have had a significant influence on the demand for scholarly publications. Besides, huge growth of publications and at the same time free and easy access to bibliographic information through online catalogues and publishers' sites have caused an increased number of requests for materials that are not available in library collections. It is true that librarians of developed countries, as Kidd (2003) and Patterson (2008) have declared that they are experiencing a declining demand for DD services at their institutions, due to the increased access to electronic materials. However, situation in the developing countries might be different because the majority of libraries in this part of the world are unable to afford the high subscription fees of such publications. Therefore, the portion of electronic publications that could be accessed by the clientele of these libraries is comparatively very low. Nevertheless, as Echeverria and Barredo (2005) pointed out that need for document delivery services will remain in both parts of the world for many more years to come.

Although, the world outside is using technology in managing DD services at individual libraries as well as in information sharing library networks, there exists only a few examples in Sri Lankan context. The only paradigm known to the author is the 'Voluntary Document Exchange (VDeX)' service introduced by Dr. Ruwan Gamage in order to facilitate and streamline the document sharing movements going through his "Library Friends" e-mail group. Unfortunately, VDeX, which used an open source ticket based request system called 'OSTicket', has become inactive by now due to the drop in participation.

Sharing information is going hand to hand with document delivery since it is the most cost effective solution for getting materials that are not available in individual collections. However, there are not much options, other than the "Library Friends" web platform along with occasional professional gatherings, for Sri Lankan librarians to communicate with each other in a community platform. Sharing of information is taking place among Sri Lankan libraries, primarily on mutual understating of the librarians, but at a rate that is far below the optimum. Therefore, a collaborative approach to minimize the unnecessary duplications and a mechanism to facilitate exchange of materials are essential for survival of libraries, at the current rate of escalating costs of journals, as Walton (2008) pointed out, which is several times above inflation. This issue has been widely discussed at numerous forums in Sri Lankan context over a period of a decade without much outcomes. The E-journal Consortium, proposed and facilitated by the SCOLIS, is the most stimulating venture of the recent times that is aimed at establishing a collaborative platform for a selected set of Sri Lankan libraries including university libraries for negotiating and subscribing e-journals with high demanding power over commercial publishers. As a result, it is hoped that each library will be able to access a wider range of resources than they could individually afford for subscription.

However, it is totally unrealistic, even after it reaches the full potential, to expect that proposed consortium will facilitate all the different kinds of information needs of the users from a wide-array of disciplines. At a time like this, with the hope of a consortium coming up, Sri Lankan librarians should think of establishing a proper mechanism of sharing information among the libraries as well as re-designing the DD services at libraries to ensure the maximum usage of materials that would be purchased out of the tax payers' money.

University Profile - The Open University of Sri Lanka

Open University of Sri Lanka (OUSL) was established 1980 as the first distance education institution of the country with a small number of students and staff. Over the years, the University has progressed impressively and at present studentship is closer to thirty thousand; registered in the main campus, regional and study centres throughout the island. However, both the number of teaching staff of OUSL (around 300) and current student enrolment for postgraduate programs with a major research component (around 900) is much less than that of the rest of Sri Lanka's premier conventional universities such as University of Peradeniya, University of Colombo or University of Jaffna. Within the concept of distance education, self learning system is guided and resourced by the course materials and occasional face to face sessions called dayschools. Hence, only a small percentage of undergraduate students look for additional reading materials other than the recommended texts available in the library collection. As a result, the clientele of OUSL Library's DD service is not too much to handle manually at this point.

DD Service at OUSL

As all other university libraries in Sri Lanka, the OUSL Library from the very beginning, had initiated a service to supply books and articles that are unavailable in the library stock, on request of the users. In 2001, the Library became a member of the British Library Document Supply Service (BLDSS) in order to improve the fulfillment rate by fulfilling the requests for materials that cannot be acquired through existing channels. In addition, all these years, the OUSL Library does not show any hesitation in lending materials to fellow Sri Lankan libraries.

In March 2010, the DD service was re-launched with a new face in order to make the service more visible and approachable for the potential customers and to enhance the efficacy of the service. The terms 'Request Articles' and 'Request Books' have been selected to denote the DD service based on a cardsort protocol test that was carried out to identify the user-prefered terminiology. Besides, for the time being, it was decided to carry out the service manually before going for a DD management software system. It was also decided to open up the service for all registered students of OUSL and not to impose any restrictions on the number of articles as an introductory measure to monitor the process before deciding on a policy.

What has been added to the service?

Changes have been done both in physical space and virtual interface (library website). A special inquiry desk with a well-trained staff member has been positioned in the ground floor of the main library under the supervision of a Senior Assistant Librarian. Meanwhile, two new pages; titled "Request articles" and "Request books" have been added to the library website. The web pages contain all the necessary information under 6 topics namely, 'What is Article Request/ Book Request', 'To Whom', 'What Materials', 'Turnaround Time', 'Requesting Options' and 'Delivery Options'. Besides, a prominent space in library promotional materials has been assigned to introduce the DD service. Further, the DD service has been highlighted as a practice, during orientation sessions and Faculty presentations.

Requesting options and delivery options

Under the new developments, users are given 2 additional requesting options namely, e-mail with a dedicated e-mail address (<u>inquiries@ou.ac.lk</u>) and web forms (book request form and article request form) that could be submitted

online. Hence, there are altogether 5 options with 3 existing requesting options namely telephone, post, and face to face.

The delivery options also have been expanded (for articles only) by introducing the option of e-mailing the softcopy as an attachment. Collecting the hardcopy from the counter and posting the hardcopy were the 2 existing delivery options for articles. However, the delivering practice for books has not been altered. Users should come to the library to collect the book within 5 working days from the date that they have been informed to collect it.

Requesting forms

Requesting forms were redesigned to collect all the necessary information to identify the specific needs of individual users and the services have been adapted accordingly. In addition to the basic bibliographic information and the member details, three fields have been inserted for users to indicate the preferable delivery option (Pl. post the hardcopy, I'll collect the hardcopy from the counter, Pl. email the softcopy as an attachment) and the level of urgency (Within 2-3 days, Within a week, Within 2-3 weeks, No time limit). Further, a field to specify the place/s that material may be available (if known to the user) was added to the form to speed up the process of locating the material.

Data management tool

A carefully devised spreadsheet is being used to manage the DD data. The spreadsheet has separate columns for details of the requested material (article title/ book title, author/s, journal title/ publisher, volume/ issue/ edition, year of publication); details of the person making the request (name, member no., faculty, e-mail, telephone, postal address); delivery format requested; level of urgency; status of the request (under locating, placed a order, document received and waiting to be collected, document delivered); date of receipt of request; date of final turnaround; Final outcome (fulfilled, unable to fulfill); source (in case of fulfillment); reasons (in case of fail to fulfill); and remarks. Besides, a colour code (i.e. yellow for under processing, green for fulfilled, red for failed to fulfill) has been introduced for easy tracing.

Working process

All the requests coming through all 5 requesting channels are forwarded to the Library Assistant-Inquiries and entered to the spreadsheet immediately. The first step is to send an e-mail with the subject heading "Document Delivery service at OUSL", acknowledging the receipt of request and being processed, to the users who have made their requests via e-mail or web form. The users are asked to contact the Inquiry Division if they did not receive this mail within 2-3 working days to make sure that all requests have been properly entered to the system.

Locating of materials starts with the running of a web search to check the accuracy of bibliographical information and see whether there are any free downloadable options. The OUSL catalogue and the document delivery data are also checked to confirm the material is not in the Library's holdings. Then catalogues of local libraries, particularly university libraries and the union catalogue of National Library Services Board are browsed to check the availability of the material locally. In some cases, requests are posted on the 'Library Friends' web platform. If all above attempts fail, the material is sought from the BLDSS. In addition, relationships with local and international colleagues and contacts with agents of publishers too are used from time to time for getting documents. In several occasions, OUSL has obtained materials through contacting the authors of the requested publications.

If the material is needed urgently within 2-3 days, the normal procedure is adhered to, and the document is ordered directly from BLDSS through its secure electronic delivery scheme, which is more expensive than the postal delivery. For users who prefer the delivery option "email the softcopy as an attachment", library does the scanning to make a digitized copy, if the original document is in the print format.

Developing an archive for documents delivered through the service

Library has collected copies of all documents purchased from BLDSS from 2001. The copies are filed according to the date of receipt and placed in a filing cabinet. Since the re-launch of the service in March 2010, copies of the materials collected through all different channels are saved separately. Hardcopies are filed within properly tagged box-files and softcopies in an external hard disk. It is quite possible that a second user may need an article that has already been acquired. Besides, there will be users who may be interested in referring materials that have been used by their colleagues or teachers, if given a chance to browse through them. At present, it is a time consuming effort to trace the original document, particularly, since there is no searchable list of bibliographical information of documents prior to 2010. Therefore, it is decided to build a digital archive on this stock of over 2500 documents. Currently, the materials are being entering into a spreadsheet

with the intention of shifting them later to the DSpace platform and hardcopies are being scanned in order to upload to the system. Once the repository is ready; the users will be given access via the local area network or secure online access.

Outcomes of the service

The total number of articles delivered during the period from March 2010 to August 2013 (42 months) is 1356 for 1414 requests. The average number of articles per month is 32.3. The highest rate of articles supplied per month is 45.1, which is in 2010 and the lowest rate per month reported is 23.7 in 2012. Similarly, the highest rate of the request per month (46.3) was reported in 2010 while the lowest rate of the request per month (24.8) reported in 2012. Table 1 shows the results.

Table 1 Rate of request and rate of delivery with access to electronic and printed journals

Year	Rate of	Rate of	No. of electronic	No. of printed
	requests	delivery	journal databases	journal titles
	per month	per month	subscribed	subscribed
2010	46.3	45.1	0	57
2011	35.5	34.3	1	29
2012	24.8	23.7	6	79
2013	28.5	26.3	2	71
Total	33.7	32.3		

It is clear from the data shown in Table 1 that the number of requests for documents has a direct influence on the level of availability of full text access to electronic journals. During the year 2012, which had the highest number of access to electronic journals, the rate of the requests reduced significantly. It is the year that had the highest number of printed journals as well. However, it may be accurate to assume that access to electronic journals have a higher impact on request rate of documents than printed journals since the usage statistics of printed journals for all these years.

The unfulfilled rate of request per month for the 42 month time period was below 2 from 2010 to 2012. However, the figure goes up to 2.25 in 2013. This increment in unfilled rate was caused by a request made by a user for a set of articles from IEEE conference proceedings. BLDSS too rejected the order for this set of documents.

Maintaining an efficient DD service is always a costly process. The copyright fees of some articles are very high and the BLDSS's secure electronic delivery is also very expensive. In the case of urgently needed articles, electronic delivery is the only viable option. For total of 135 articles purchased during the 42 month period, library has paid nearly four hundred thousand Rupees. The data is given in Table 2.

Year	Cost of	No. of	% of articles	Cost per
	documents	articles	purchased out of	articles
	purchased	purchased	the total no. of	Rs. (approx.)
	Rs. (approx.)		articles delivered	
2010	53,855.50	25	5.54	2154.22
2011	65,844.50	28	6.81	2351.59
2012	235,746.30	76	26.76	3101.93
2013	26,662.70	6	2.86	4443.78
Total	382,109.00	135	9.96	2830.44

Table 2 Cost of documents delivered for 42 month period

It is true that Rs. 382,109.00 for a period of over three and a half years is not very much when compared to prices of serials today. However, the above cost is calculated only for the 9.96% of articles delivered during the above time period. In addition, the staff time spent throughout the process should also to be included to the cost calculation of the service. As Crowley (1999) pointed out the staffing cost of processing requests is significantly more than the borrowing fee. In that sense, the cost of DD service might be closer to one million rupees.

Concluding Remarks

Difficulty in developing a collection to cater for the user needs is quite clear; when considering the diversity of requests - articles from 415 different journal titles published by 30 plus different publishers – received during the 42 month time period discussed above. Besides, OUSL administrators are always concerned with the high prices of international journals since the usage statistics are nowhere near in justifying the costs borne by the University to purchase them. Hence, the Library was advised many times to evaluate subscribing to journals as opposed to purchasing individual articles on request. As a result, the journal titles that do not reach a satisfactory usage level will not be subscribed for 2014. Reducing the number of printed journals may increase the DD volume. Hence, as Patterson (2008) pointed

out repositioning document supply to its central role in facilitating access to material seems to be the only viable solution to meet the user demands in this increasingly complex information environment. The OUSL library has certain plans for the future including automating the DD service, developing a policy document and conducting a survey to discover attitudes of users towards the DD service. However, it is very much easier and highly fruitful if libraries work cooperatively according to a national level agreement since sharing of information and document delivery is very much a collaborative venture.

The world literature has a series of models for successful information sharing platforms. The Western Australian Group of University Librarians (WAGUL) has a well-established cooperative inter-lending agreement that has operated successfully over 20 years. In addition to the lack of national level projects for accelerating the procedure; the information sharing process of Sri Lanka has been significantly retarded by the absence of a properly maintained Union Catalogue. One of the good examples for such catalogue, that stimulates the document supply chain in UK and Ireland, is COPAC (http://copac.ac.uk/) that combines over 70 UK and Irish academic, national and special library catalogues.

Although, there are plenty of free and open source applications to automate various other library functions, there are no widely used open source applications for DD management. However, there are number of commercial DD management software systems that have been tested in modern libraries and are capable of facilitating and streamlining the entire DD process. Using a common application in all libraries in a document supply network is always helpful for an uninterrupted and speedy service. Gillet (2008) has explained the high functionality of an ILL and document supply network in France, which uses the same application (OCLC PICA) to automate request transfers and supply statistics. It will be ideal if Sri Lanka also could go for a common platform right from the beginning.

The world today is moving towards the unmediated electronic delivery model that allows users to place orders, at least for selected types of materials, with commercial document supply agents without going through the library. The model is becoming popular since it reduces the staff time spent on processing DD requests and grants a speedy desktop delivery of documents for users. Walton (2008) declared that academic users appreciate the move to desktop delivery and the trend towards electronic delivery of articles is expected to grow in the future. Although, Sri Lankan librarians have to overcome several

hurdles in order to attain the full potential of DD services practiced in libraries in the developed countries, they are quite capable of achieving goals if necessary backing is provided and when the need arises. The coming up Ejournal Consortium has provided a good opportunity and a perfect platform for Sri Lankan librarians to review the status of the information sharing and document delivery of the country and to establish a mechanism to empower this vital link in the information chain.

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