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The role of the document delivery service at an evolving research library in Saudi Arabia

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Abstract

Purpose – This purpose of this study was to assess the effectiveness of the document delivery service according to user perception, and a usage analysis was done to inform collection building and refining. This is especially important in a high-calibre research community, where the usage, interests and research groups and disciplines are still evolving.

Design/methodology/approach – To collect the responses of document delivery service users, an online questionnaire was used with 12 multiple-choice questions and two open-ended questions. The questionnaires were sent only to the users of this service, and the responses were collected anonymously. Two surveys were conducted, in 2010 and 2013, with the same questions. The responses are displayed graphically prepared to compare the results. There were 71 responses in 2010 and 95 in 2013.

Findings – In both surveys, the majority of users rated the service, staff behaviour, speed, quality, etc. with a high satisfaction level. Document delivery order statistics are a major decision-making tool, in addition to usage analysis, for developing a better, economical and highly utilized collection in brand new libraries.

Originality/value – This is the first published study of user perception of document delivery in Saudi Arabia.

Keywords User studies, Document delivery, Collection development, Academic libraries, University libraries

Paper type Case study

Introduction

Libraries provide electronic document delivery services to supply documents from their subscribed journals and other materials to customers who often rate the service highly for the speedy delivery of high-quality copies, including colour (Hill and Roth, 2009). But even in today's digital world, resource sharing and document supply is a costly affair to libraries because, as McGrath (2012) notes, publishers continue to strictly control access via Digital Rights management techniques and fully Open Access scholarly publishing models continue to be a small part of research outputs. This is especially the case in Middle East countries generally because of the lack of library cooperation and resource sharing. Thus, private sector companies take their place as the principal agents of document supply (Al Fadhli and Johnson, 2006; Al-Harrasi and Al-Aufi, 2012; Arif et al., 1998; Shabani et al., 2012; Biranvand and Moghaddam, 2013) including article-on-demand delivery services from various publishers or platforms.

KAUST is a new research university in Saudi Arabia which opened in 2009 with a vision of excelling in science and technology research and becoming one of the top-ranking universities globally by 2020. The library collections group continually monitors the relevance of our e-resources in support of teaching, research and learning; it also provides an effective document delivery service providing a speedy on-demand service for resources not available in the electronic or print collection (Al Zahrani et al., 2012). We have a born-digital hybrid library in which 90 per cent of the collection is online; the collection is purchased, organized and accessed online, like any other academic research library (Vijayakumar, 2012). As mentioned above, owing to the lack of interlibrary loan and resources-sharing systems in the region, the services of commercial providers are utilized.

This paper provides the findings of two surveys carried out among the users and examples of the use of document delivery order statistics in deciding on new subscriptions. This is an interesting activity in collection building and refining, especially in a high-calibre research community, where the usage, interests and research groups and disciplines are still evolving.

About the study

Access to journals and databases, interlibrary loan, document delivery, e-books, extended borrowing privileges and library space is especially important to research libraries (Tomaszewski, 2012). As we are new, the demands of our users are evolving along with new faculties joining, new research groups being established and the usage of the

collections, as well as the demand for new materials, are being continually reviewed. The document delivery service at KAUST is a mediated service, and it is evaluated annually by the community, with the aim of providing a high level of user satisfaction. The document delivery order statistics are also continuously evaluated to select new annual subscriptions for the highly demanded resources. Conversely, the usage statistics of already subscribed resources were also analyzed, and several less-used subscriptions have been discontinued and the gap filled by the document delivery services (Orr and Dennis, 1996). This study of document delivery activity was required not only to analyze the satisfaction level of customers (Yang *et al.*, 2012) and the value of the document delivery service in the campus (Walker, 2012) but also to increase the awareness of this service among the community as a marketing tool (Litsey and Daniel, 2013) and finally to identify any issues in the workflow of this service (Deschenes, 2012).

Methodology

To collect the responses of document delivery service users, we used an online questionnaire with 12 multiple-choice questions and two open-ended questions – see Appendix. The questionnaires were sent only to the users of this service, and the responses were collected anonymously. There were two surveys, the first in 2010 and the second in 2013, with the same questions. The responses are grouped into spreadsheets and histograms and charts were prepared to compare the results. One hundred thirty-two users were contacted in 2010 and 71 (54 per cent) responded; 178 were contacted in 2013 and 95 (53 per cent) responded.

Survey findings
Category of responders
Library users are categorized as Students (including MSc and PhD), Faculty, Research Scientist, Post-Doctoral researchers and Staff. Post-Docs and Students use this service more and thus they have responded highly to this survey as indicated in Table I below.

Frequency of use
Figure 1 below shows that the frequency of use of this service is high; in particular, it is increasing over time when one compares 2010 to 2013. However, the frequency of use is low compared to many institutions, partly because of the good coverage of resources in the library collection.

Effectiveness of various marketing services
The library has established a number of marketing tools to publicize the collections and services, and Figure 2 below

Table I Survey responses

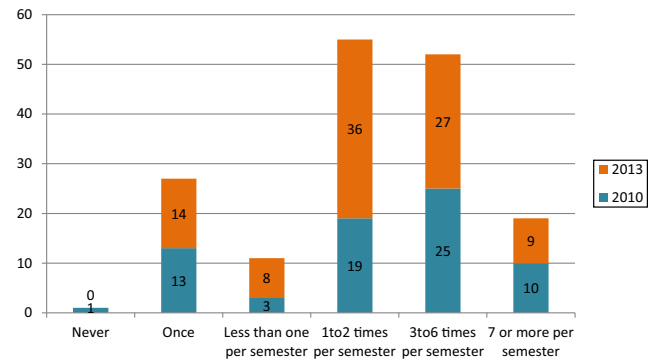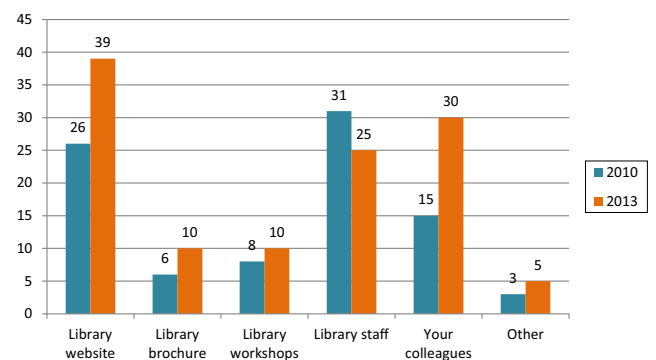| User category	2010	2013	Total
Students (MSc and PhD)	37	53	90
Faculty	6	6	12
Research Scientist	7	9	16
Post-Doctoral Researchers	16	21	37
Staff	3	3	6
Others	2	3	5
Total respondents by year	71	95	166

Figure 1 Frequency of use in 2010 and 2013

**Figure 2** Effectiveness of marketing tools

shows that the library website and the library staff are the main points of awareness for the users. The users of this service are also good advocates in making their colleagues aware of this service; "word of mouth" is generally seen to be the most cost-effective method of promoting goods and services.

Document-requesting methods
We prefer requests to be made via the online form from the Library website, which then connects directly to our ILMS system (Millennium), but as Figure 3 shows, e-mail requesting to the service is used more frequently to order the documents. The speed of response and the preference over direct contact method may be the reasons for this preference.

Figure 3 Document requesting methods
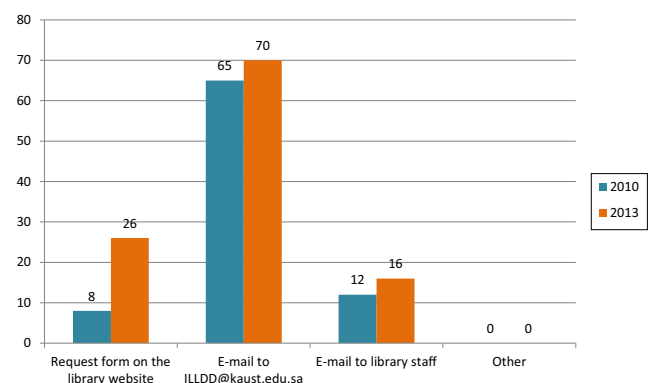
Satisfaction with the ordering process

Figure 4 shows that whichever method is used, the satisfaction rate was rated highly in 2010 by 57 per cent and had increased significantly by 2013 to 71 per cent.

Satisfaction with the speed of delivery

We have found some major issues in the speed required to fulfil some requests, mainly for old documents, print-only theses/dissertations, chapters from out-of-stock books and conference proceedings. Some requests were cancelled because of unavailability. Sometimes, international librarian mailing forums were helpful in these scenarios, but this delay makes some users unhappy –Figure 5.

Satisfaction level of the accuracy and completeness of documents

Figure 6 shows the high satisfaction rate with the accurate fulfilment of requests. This shows that document delivery staff and the commercial vendor's reference department always pay strict attention to the accuracy and completeness of documents.

Satisfaction with the quality of copies

Figure 7 shows that although overall satisfaction is good, we have found some issues in the quality of documents, especially some old documents and photocopied prints. Even though we go back and forth with the commercial vendor, in some cases, good quality documents are not available.

Satisfaction with the attitude and helpfulness of the document delivery staff

Figure 8 shows that since starting this service, the staff have paid attention to effectively searching for documents, ordering

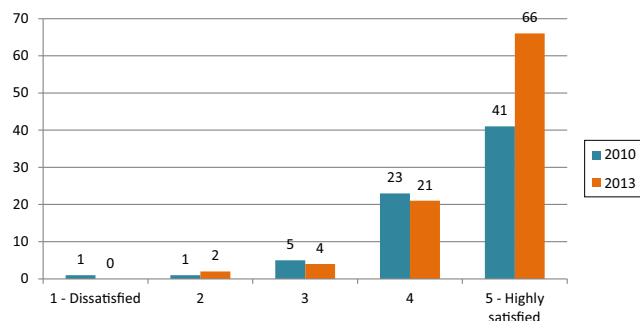**Figure 4** Satisfaction rate of the ordering process
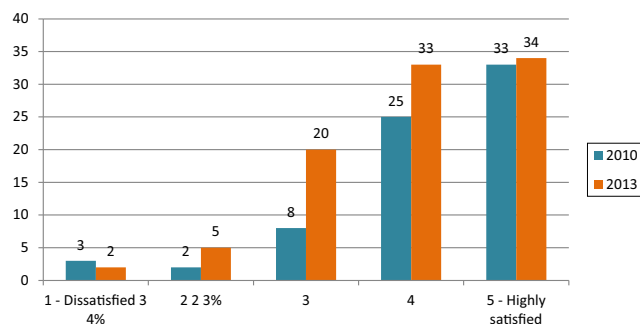

Figure 5 Satisfaction with the speed of delivery

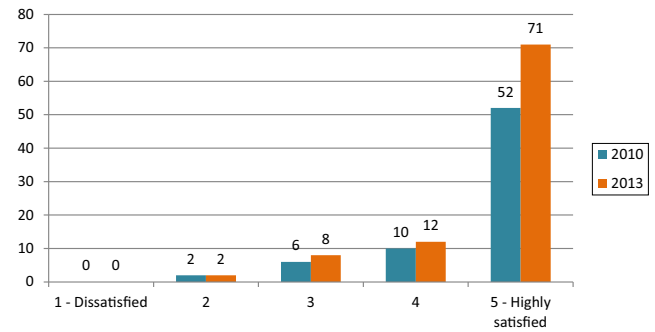**Figure 6** Satisfaction with the accuracy of fulfilment

Figure 7 Satisfaction with copy quality
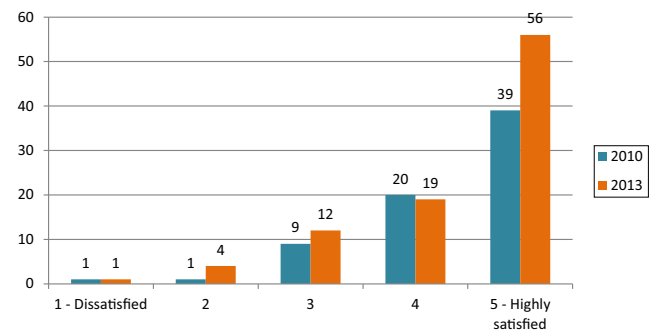
Figure 8 Satisfaction with the document delivery staff
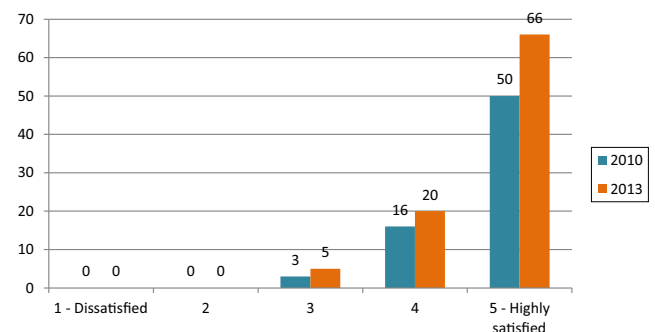
documents with accuracy and continuously communicating with requesters. The staff's professionalism is well acknowledged by this survey.

Overall satisfaction with the document delivery service

Figure 9 shows that, in both 2010 and 2013, the majority of users (87 per cent) rated the service highly.

User search behaviour: where do they search for full texts, before placing the document delivery orders?

We found that users searched different places to find the full text before ordering them (Figure 10). The usage of citation databases and the library website was comparable to web search engines, which is a good sign that this research-based university still uses specialized databases heavily.

Figure 9 Satisfaction with the document delivery staff

Figure 10 User search behaviour

Types of documents required/ordered

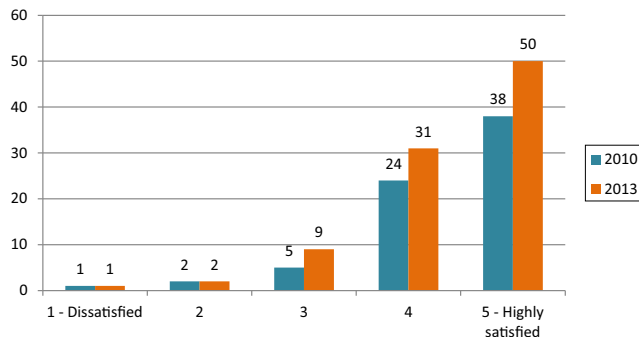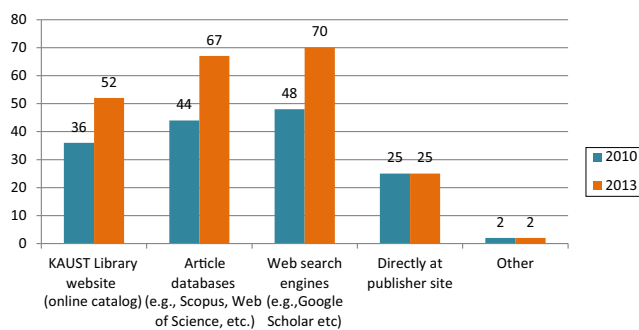Figure 11 shows that journal articles were the most ordered type of documents followed by book chapters, then by conference proceedings. This is not surprising because being a research university, journal articles are the main source of research information for the users.

Document delivery and collection development

In an age when librarians are held accountable for how they spend limited resources, and when faculty press for more new subscriptions than a library can afford, interlibrary loan and document delivery data can be used effectively to evaluate requests for additional subscriptions and to determine which titles are most likely to be cost effective for a library to purchase (Wilson and Alexander, 1999).

Figure 11 Types of documents ordered
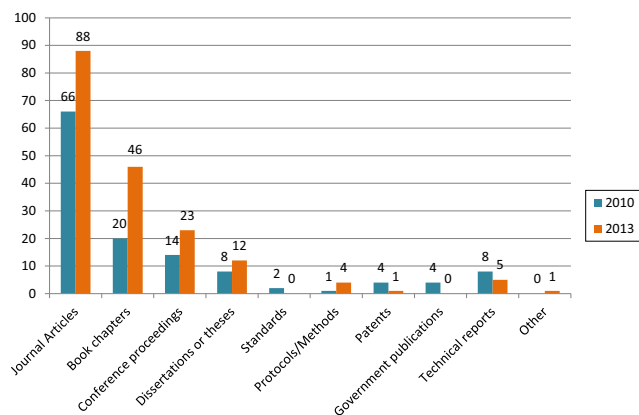
Interlibrary loan and document delivery services provide a wealth of information for collection development decisions, if effectively utilized (New and Ott, 1974; Etschmaier and Bustion, 1997; Murphy and Rupp-Serrano, 1999). One of many studies is from Canada (Ireland and Brown, 2006) which describes that after undertaking an in-depth analysis of its current serial subscriptions and document delivery clients, CISTI purchased 135 new medical serial subscriptions and updated its collection development policy to allow for a broader collection in medicine and business. Similarly, we have used document delivery statistics to start new subscriptions and also used journal usage analysis to discontinue resources less well used and to satisfy requests for them via document delivery. Table II shows some of the examples of our many decisions.

Based on document delivery requests, there are many journal archives that we consider for subscription in addition to some special databases such as Springer's "Materials and Protocols", for which publishers do not permit interlibrary loan or document delivery. Our experience shows that, in addition to usage analysis, document delivery statistics are a major decision-making tool for developing a better, economical and highly utilized collection in our new and developing library.

Conclusion

KAUST library will be establishing Patron-Driven Acquisition very soon, which will help us to reduce document delivery requests for book chapters. We are also analyzing the options to experiment with "articles on demand" services with some publishers, in addition to starting with the ingentaconnect service. By looking at cost effectiveness of these services, we will continue to use a mix of document delivery options, and always pay attention to maintaining a high level of user satisfaction.

Arif et al. (1998) identified the lack of strong library cooperation and progress in interlibrary loan services in Saudi Arabia, as well as in other Gulf Cooperation Council

Table II Examples of decisions

Resource	Discussion
American Institute of Aeronautics and Astronautics (AIAA)	Decided to discontinue from 2011 because of its low usage. Towards the end of 2012, it started receiving many document delivery requests. Faculty members from this discipline were consulted and found that there are few new faculties joined and started using this resource. Finally, we have restarted annual subscription to AIAA from middle of this year
Institution of Mechanical Engineers (I.Mech E) journals	This resource is discontinued because of low usage and covered via document delivery service
World Scientific journals	This resource is discontinued because of low usage vs high price and is covered via document delivery service
Trans Tech journals (Scientific.net)	Documents requests were high from these journals and decided to subscribe from 2013

countries. (Al Fadhli and Johnson, 2006) clearly pointed out that libraries in the Arab Gulf States face a choice between establishing an interlibrary loan network based on electronic document delivery or being marginalized by private companies becoming the agents of document supply. Based on our experiences with commercial vendors, even though we received quality services, the cost is very high which compels us to support the idea of library cooperation in the region. Library associations in the region and regional offices of international library cooperatives such as OCLC may come up with services which fit the special needs of the library community in the region.

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Appendix

KAUST Library • Document Delivery Service
User Satisfaction Survey

Our records indicate you have used the KAUST Library's *Document Delivery Service* at least once in the past. This service, provided free to KAUST students and employees, supplies journal articles, book chapters, conference papers, and other materials that are not available in the library's collection.

KAUST library would like to know about your satisfaction with the service. Please help us improve by completing this survey. Your response will be kept anonymous.

1. Your role:
   - Student
   - Faculty
   - Research scientist
   - Post Doc
   - Staff
   - Other (Specify): _____

2. How often do you use the *Document Delivery Service*?
   - Never
   - Once
   - Less than once per semester
   - 1 to 2 times per semester
   - 3 to 6 times per semester
   - 7 or more times per semester

3. How did you come to know about this service?
   - Library website
   - Library brochure
   - Library workshop
   - Library staff
   - Your colleagues
   - Other (specify): _____

4. How do you request documents?
   - Request form on the library website
   - E-mail to ILLDD@kaust.edu.sa
   - E-mail to library staff
   - Other (Specify): _____

(*continued*)

5. Rank your satisfaction on a scale of 1 to 5 (1 indicates the lowest and 5 indicates the highest):

a.	Ease of ordering	Difficult	1	2	3	4	5	Easy
b.	Timeliness of delivery	Slow	1	2	3	4	5	Fast
c.	Accuracy and completeness of documents received	Poor	1	2	3	4	5	Excellent
d.	Quality of the copies received	Poor	1	2	3	4	5	Excellent
e.	Staff attitude and helpfulness	Unhelpful	1	2	3	4	5	Very helpful
f.	Overall satisfaction on the service	Dissatisfied	1	2	3	4	5	Highly satisfied

6. Where do you search the availability of articles/books chapters, before placing the orders?
   - Library website (online catalog)
   - Article databases (e.g., Scopus, Web of Science, etc.)
   - Web search engines (e.g.,Google Scholar etc)
   - Directly at publisher site
   - Others (specify): _____

7. What types of documents you have ordered?
   - Journal Articles
   - Book chapters
   - Conference proceedings
   - Dissertations or theses
   - Standards
   - Protocols/Methods
   - Patents
   - Government publications
   - Technical reports
   - Others (specify): _____

8. Are there materials you have needed or expect to need that you cannot get in the library collection or through the *Document Delivery Service*? If so, please describe:

9. Please provide your suggestions to improve this service.

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