

Role of document delivery service in an evolving library collection: lessons from a three year old research library in Saudi Arabia.

Dr. J. K. Vijayakumar,

Acting Manager, Library Research and References,
King Abdullah University of Science & Technology,
Thuwal 23955-6900, Jeddah,
Saudi Arabia.

Faten Al Barayyan

Coordinator, Document Delivery Services.
King Abdullah University of Science & Technology,
Thuwal 23955-6900, Jeddah,
Saudi Arabia.

1. Introduction:

Individual libraries provide electronic document delivery services to supply the documents from non-subscribed journals and other materials, where customers rate the service for quick delivery of quality, like color copy, documents (Hill and Roth, 2009). Even today's digital world, McGrath (2012) through his series of literature surveys, says that as long as publishers stick to the DRM and Open Access scholarly publishing models continues to be a meager part, resource sharing and document supply is a costly affair to libraries. The unavailability of library cooperation and resources sharing in the Middle East countries generally, private sector companies taking their place as the principal agents of document supply (Al Fadhli and Johnson, 2006; Al-Harrasi & Al-Aufi, 2012; Arif, Sibai, and Sulaiman, 1998; Shabani, Tabbakhan and Naderikharaji, 2012; Biranvand and Moghaddam, 2013) or to focus on article on demand delivery services by various publishers or platforms.

KAUST is a brand new research University started in Saudi Arabia functional since September 2009 with a vision on excelling in science and technology research and become one of the top ranking University by 2020. The library collections group continually monitors the relevance of our e-resources in support of teaching and learning and also provides an effective document delivery service to provide quick on-demand service for needed resources not in available in the electronic or print collection (Al Zahrani, Branin and Yu, 2012). A born digital library with hybrid nature, ninety percent of the collection is online; they are purchased, organized and accessed online, like any other brand new academic research libraries (Vijayakumar, 2012). Due to 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 usage of document delivery order statistics in deciding on new subscriptions. This is an interesting activity in collection building and refining, especially in a high caliber research community, where the usage, interests and research groups and disciplines are still evolving.

2. About the study

Access to journals and databases, interlibrary loan, document delivery, e-books, extended borrowing privileges, and library space are important to these libraries (Tomaszewski, 2012). Being a brand new set-up, the users demands were evolving along with new faculties joining, new research group establishment, and collections were always re-looked at on its usage and demand for new materials. The document delivery service at KAUST is a mediated service, and evaluated annually by the community, to provide a high level of user satisfaction. The document delivery order statistics were also evaluated continuously to start new annual subscriptions for the highly demanding resources. Vice versa, usage statistics of already subscribed resources were also analyzed and several less used subscriptions were discontinued and filled the gap with document delivery services (Orr and Dennis, 1996). This study was required not only to analyse the satisfaction level of customers (Yang, Hahn and Thornton, 2012), or the value of 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 to find out any issues in the workflow of this service (Deschenes, 2012).

2.1 Methodology

To collect the responses of document delivery service users, we have used online questionnaire method with 12 multiple choice questions and 2 open ended questions. The questionnaires were sent only to the users of this service and the responses were collected anonymously. There were two surveys made, one in 2010 and another one in 2013, with same questions. The responses are grouped in to spreadsheets and histograms and charts were prepared to compare the results. There were 71 users responded in 2010 and 95 in 2013.

3. Survey Findings:

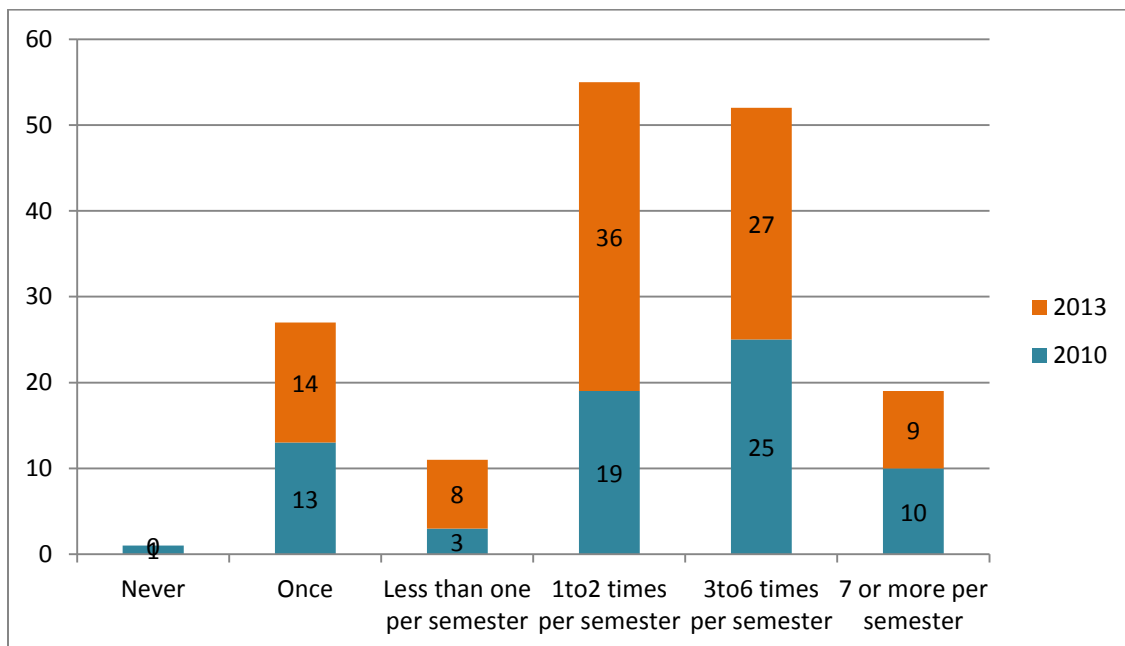
3.1 Category of responders.

Library users are categorized as Students (including MSc and PhD), Faculty, Research Scientist, Post-Doctoral researchers and Staff, who are the main users of this service. Post Docs and Students use this service more and thus they have responded highly toward this survey. There were 71 users responded in 2010 and 95 in 2013.

User Category	2010	2013	Total
Students (MSc & 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

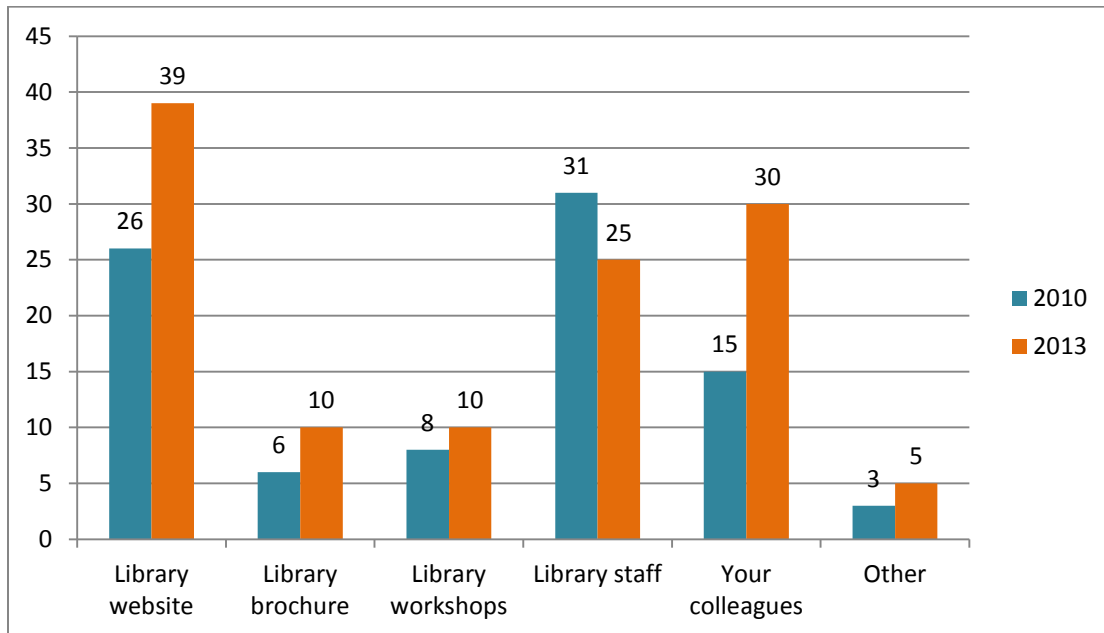
3.2 Frequency of use

Below graph shows that, the usage of this service in terms of the frequency of ordering items are high, especially it is increased in 2013 compare to 2010. But still the frequency of usage is low compared to many Institutions, because of good coverage of resources in the library collection.



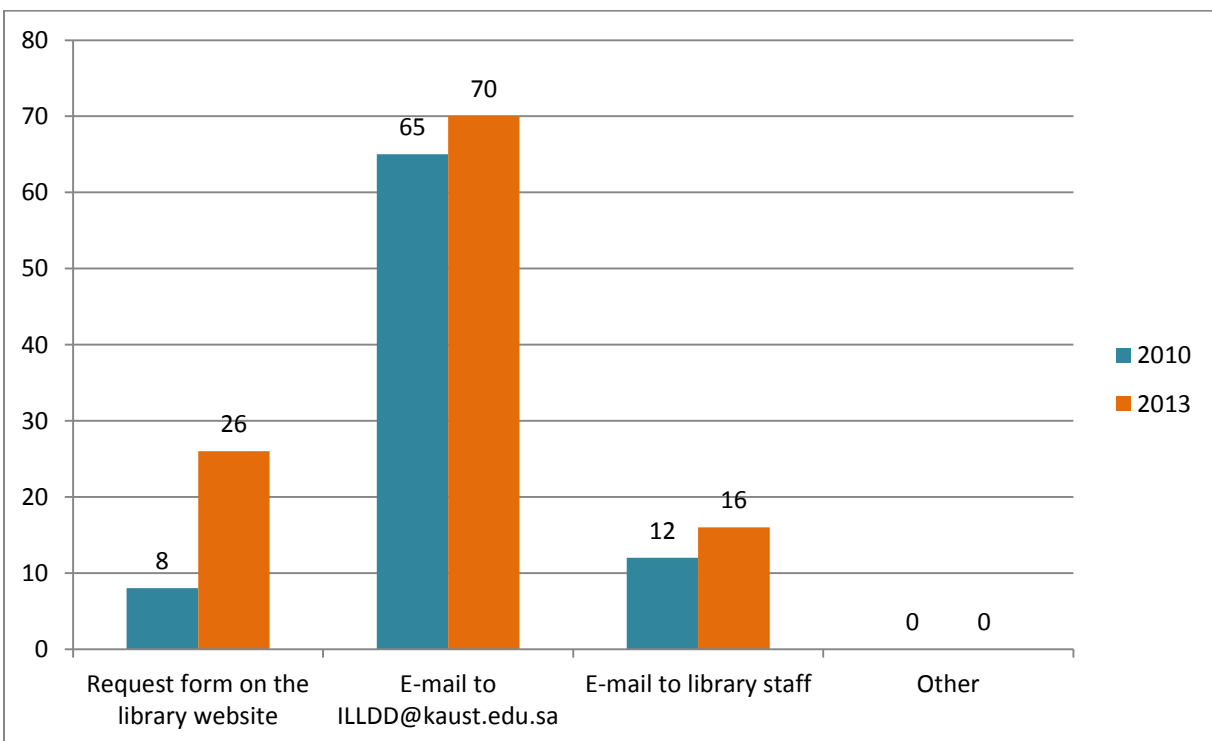
3.3 Effectiveness of various marketing services.

Library has established different marketing tools to publicize the collections and services, and below graph 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 (a word - mouth to mouth) in making their colleagues aware about this service.



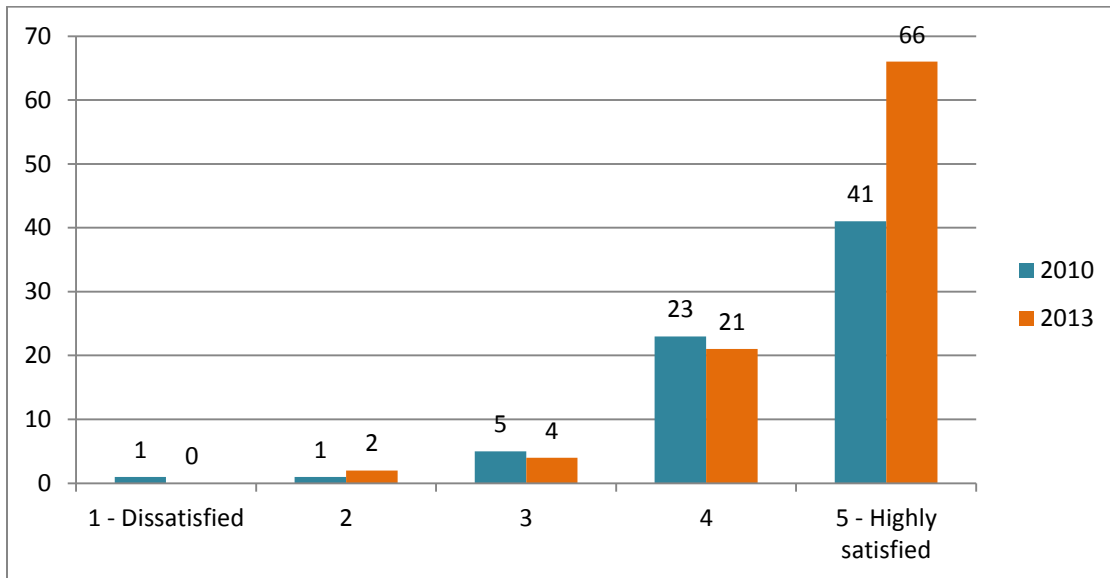
3.4 Document Requesting methods

Even though we prefer the requesting method as the online form from the Library website, which then connects to our ILMS system (Millennium), e-mail ID of this service is highly used to order the documents. The speed of response and the preference over direct contact method may be the reasons for this preference.



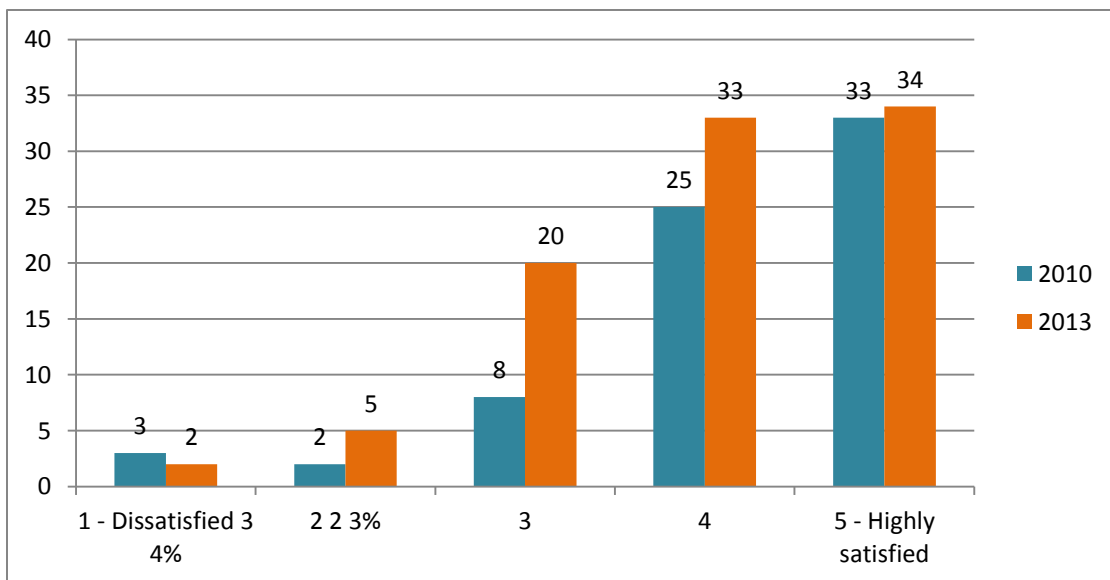
3.5 Satisfaction level of the ordering process

It shows that whether it is online form filling, direct e-mailing to staff, the ordering process works smoothly with high rate of satisfaction.



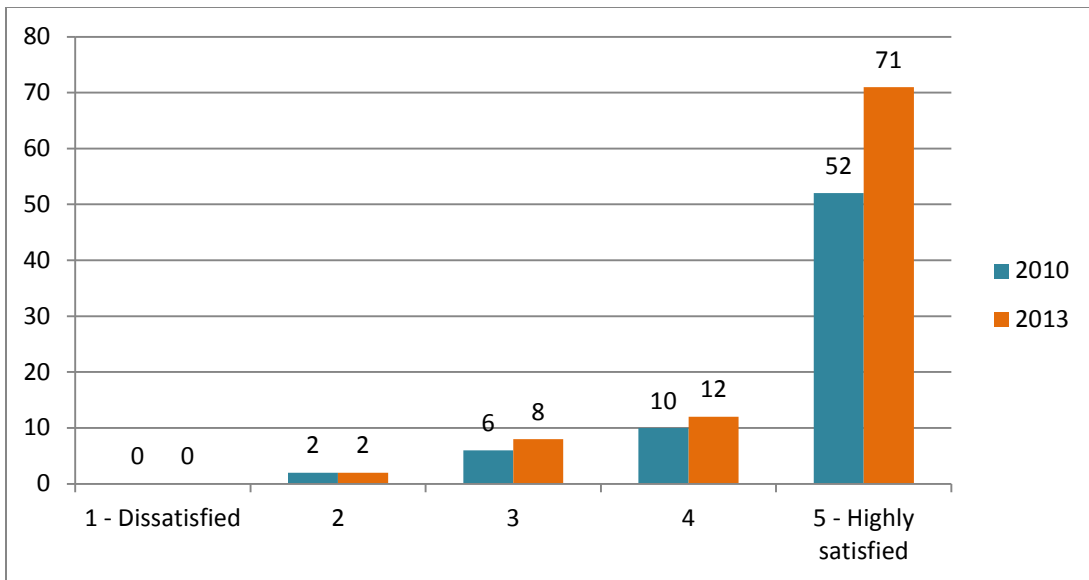
3.6 Satisfaction level of timeliness in the delivery

We have found some major issues in the time duration required to fulfill some of the requests, mainly for old documents, print only theses/dissertations, chapters from out of stock books and proceedings. Some orders were cancelled due to unavailability. Sometimes international librarian mailing forums were helpful in these scenarios, but this delay makes users unhappy.



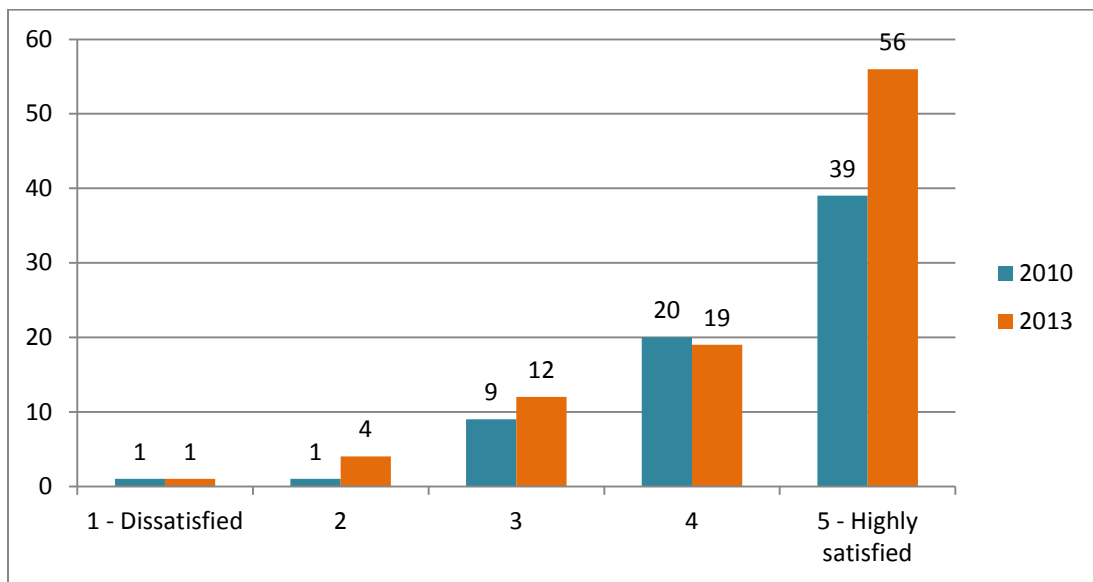
3.7 Satisfaction level of the accuracy and completeness of documents

It is satisfactory to note that requesters receive accurate documents, without duplications or wrong supply. Document delivery staff and the commercial vendor's reference department always pay attention in accuracy and completeness of documents.



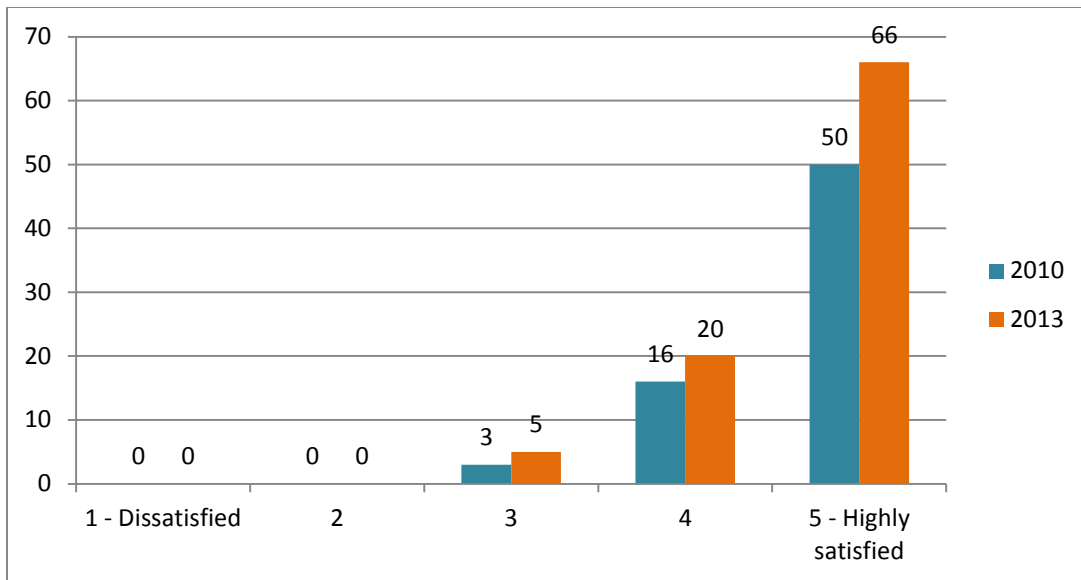
3.8 Satisfaction level of the quality of the copies

We have found some issues in quality of the documents, especially some old documents or photocopied prints. Eventhough we go back and forth with the commercial vendor, still in some cases, good quality documents are not available at all.



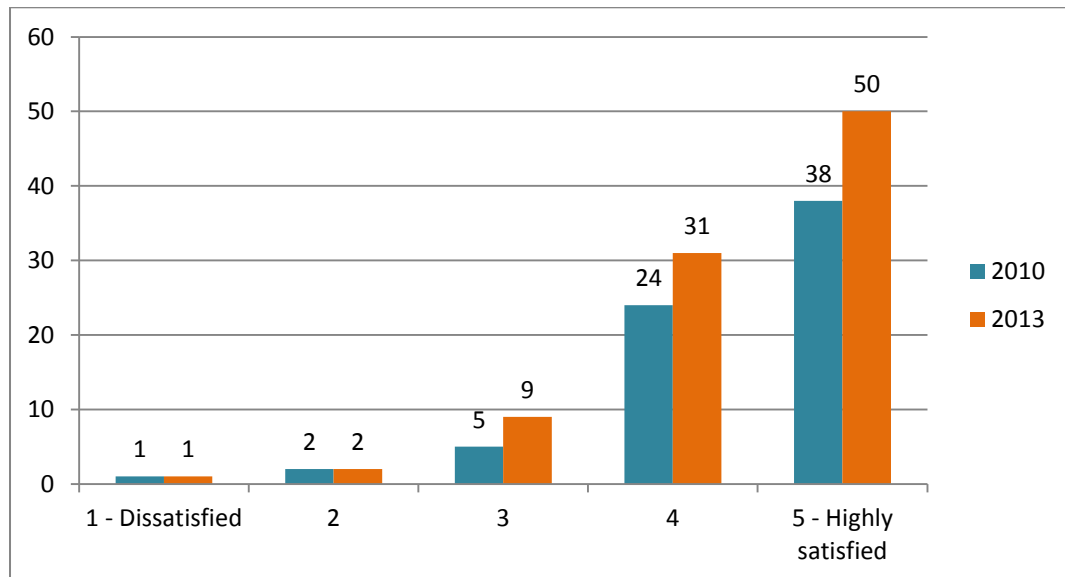
3.9 Satisfaction level on the attitude and helpfulness of the document delivery staff.

Since starting of this service the staff pay attention in effectively searching for documents, ordering documents with accuracy and continuously communicate with requesters. The staff's professionalism is well acknowledged by this survey.



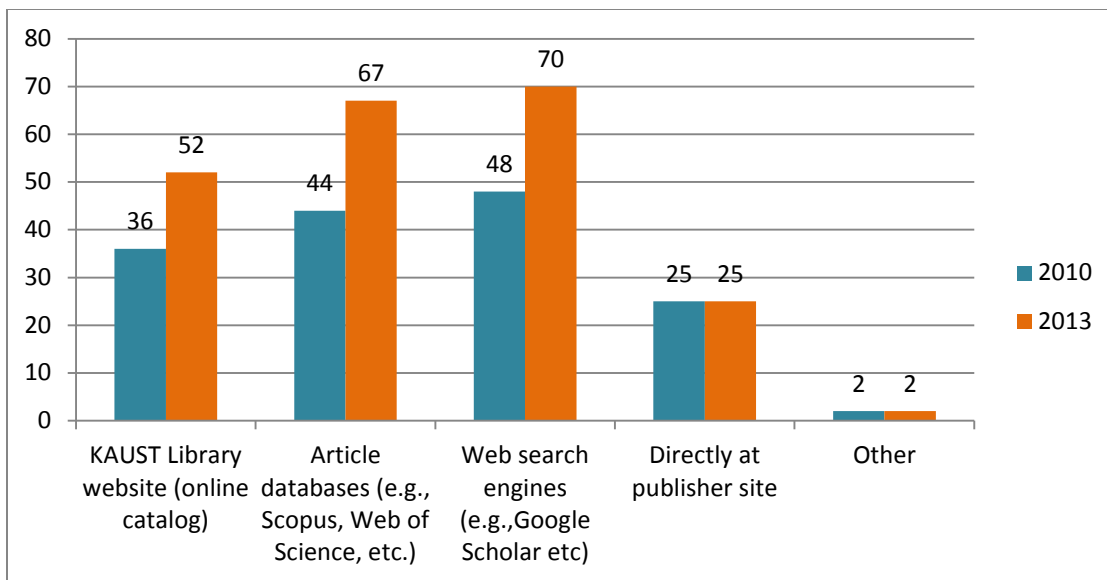
3.10 Overall satisfaction level of the document delivery service

In both surveys majority of the users (87%) rated this service with high satisfaction level.



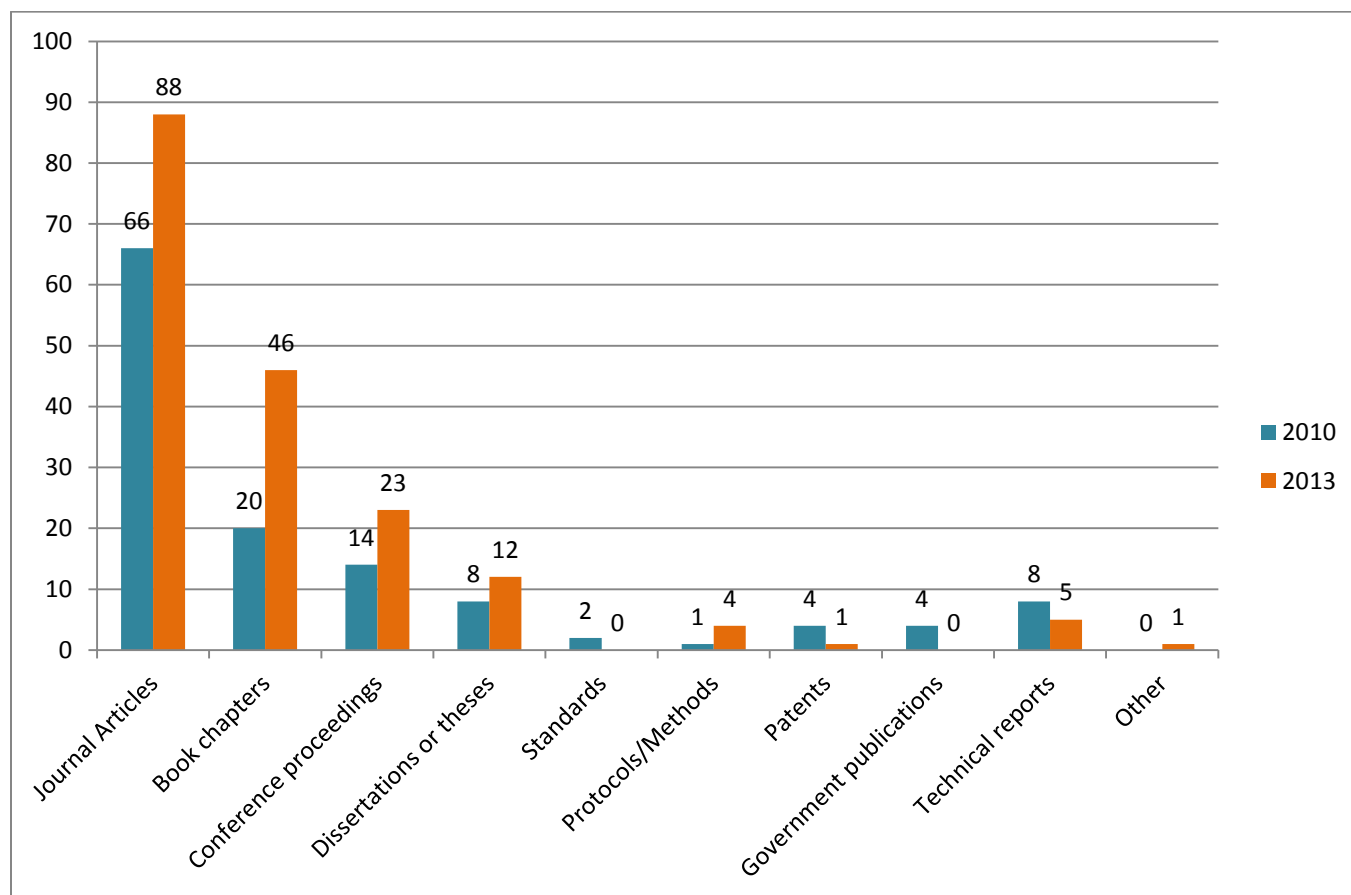
3.11 User search behavior: where do they search for full texts, before placing the document delivery orders?

It is found that users search different places to find the full-text before ordering them. The usage of citation databases and library websites is almost close to the use of Web search engines, which is a good sign that a research based University still uses specialized databases heavily.



3.12 Types of documents required / ordered

Journal articles are the mostly ordered type of documents followed by book chapters, then by conference proceedings. Being a research university, journal articles are the main source of research information for the users, and this is evident by this behavior.



4 Documents Delivery and Collection Development

In an age when librarians are held accountable for how they spend limited resources, and when faculty press for many 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).

Interlibrary loan and document delivery services provide a wealth of information for collection development decisions; if effectively utilize it (New and Ott, 1974; Etschmaier and Bustion, 1997; Murphy and Rupp-Serrano, 1999). There are many reports and studies in these directions. One study from Canada (Ireland and Brown, 2006) reports that CISTI purchased 135 new medical serial subscriptions and updated its collection development policy to allow for a broader collection in medicine and business, after undertaking an in-depth analysis of its current serial subscriptions and document delivery clients.

We have used document delivery statistics to start new subscriptions and also used journal usage analysis to discontinue resources very less used and covered them via document delivery. Below table will describe some of the examples from our many decisions;

Resource	Discussion
American Institute of Aeronautics and Astronautics (AIAA)	Decided to discontinue from 2011 due to its low usage. Towards 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 due to low usage and covered via document delivery service.
World Scientific journals	This resource is discontinued due to 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.

Based on document delivery requests, there are many journal archives are considered for subscription in addition to some special databases like materials and protocols, which publishers do not permit interlibrary loan or documents delivery. Our experience shows document delivery order statistics is a major decision making tool, in addition to usage analysis, for developing a better, economical and highly utilized collection in brand new libraries.

5 Conclusion:

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

Arif, Sibai, and Sulaiman (1998) identified the unavailability of strong library cooperation and progress in inter-library loan services in Saudi Arabia as well as in other GCC 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 receive quality services, the cost is very high which force us to support the idea of library cooperation in the region. Library associations in the region and regional offices of International library cooperatives like OCLC may come up with services which fit in to the special needs of the library community in the region.

References:

Al Fadhli, Meshal Shehab and Johnson, Ian M (2006). Electronic Document Delivery in Academic and Research Organizations in the Gulf States: a case study in Kuwait, *Information Development*, 2006; 22; 32-47.

- Al Zahrani, Rashed; Branin, Joseph and Yu, Yi (2012). Building a New Generation Science Library: The KAUST Story. *Proceedings of the IATUL Conferences*. Paper 4. Retrieved from <http://docs.lib.purdue.edu/iatul/2012/papers/4>
- Al-Harrasi, Nabhan and Al-Aufi, Ali (2012). The potential of inter-state collaboration for Omani academic libraries, *Library Review*, 61(4), 240 – 260.
- Arif, Mohammed J; Sibai, Mohammed Makki and Sulaiman, Mubarak Saad (1998). Inter-Library Loan Service in the Kingdom of Saudi Arabia: A Case Study of Medical Libraries, *Intl. Inform.& Libr. Rev.*, 30, 341-365.
- Biranvand, Ali and Moghaddam, Hadi Sharif (2013). Feasibility assessment of creating an inter-library loan system and document delivery services in public libraries of Fars Province (Iran), *The Electronic Library*, 31(1), pp. 24 – 35.
- Deschenes, Amy (2012). Optimizing Document Delivery at Simmons College Beatley Library, *Journal of Interlibrary Loan, Document Delivery & Electronic Reserve*, 22(5), Pp 235-253.
- Etschmaier G, Bustion M (1997). Document Delivery and Collection Development. *The Serials Librarian*. 31(3):13-27.
- Hill, T. W and Roth, K. L (2009). Electronic document delivery; a six-year study to benchmark the shift to electronic interlibrary loan in two hospital libraries. *Journal of the Medical Library Association: JMLA*, 97(1), 54.
- Ireland, Michael and Brown, Beverly (2006). Using document delivery data for selecting medical titles in a large STM library: the experience of CISTI, *Interlending & Document Supply*, 34(1), pp.29 – 35
- Litsey, Ryan and Daniel, Kaley (2013). Resources—Anytime, Anywhere: Branding Library Services, A Case Study of Texas Tech's Document Delivery Department, *Journal of Interlibrary Loan, Document Delivery & Electronic Reserve*, 23(1), 20, pp 19-34
- McGrath, Mike (2012). Interlending and document supply: a review of the recent literature: 80, *Interlending & Document Supply*, 40(4). 172 – 177.
- Murphy, Molly and Rupp-Serrano Karen (1999). Interlibrary Loan and Document Delivery Lessons to Be Learned, *Journal of Library Administration*, 28(2), Pp 15-24
- New, Doris E and Ott, Retha Stone (1974), *Interlibrary Loan Analysis as a Collection Development Tool, Library Resources & Technical Services*, 18: pp 275–83
- Orr, D., & Dennis, C. (1996). Unmediated document delivery and academic staff at Central Queensland University. *Interlending & Document Supply*, 24(4), 25-31
- Shabani, Ahmad; Tabbakhan, Mansoureh and Naderikharaji, Fatemeh (2012). Feasibility study of digital document supply services in Iranian research institutes and academic libraries, *Interlending & Document Supply*, 40(4), 192 – 196.
- Tomaszewski, R (2012). Information Needs and Library Services for Doctoral Students and Postdoctoral Scholars at Georgia State University, *Science & Technology Libraries*, 31(4), Pp 442-462.
- Vijayakumar, J K (2012). Seamless user experiences in a brand new library. Presented at the *Internet Librarian International*, London, UK on October 30th 2012.
- Walker, M.J (2012). The Value of Document Delivery: Where We Are 15 Years Later, *Journal of Interlibrary Loan, Document Delivery and Electronic Reserve* 22 (2) , pp. 83-93.
- Wilson, M.D., Alexander, W (1999). Automated interlibrary loan/document delivery data applications for serials collection development, *Serials Review* 25 (4) , pp. 11-19
- Yang, Z.Y.(Lan), Hahn, D and Thornton, E (2012). Meeting Our Customers' Expectations: A Follow-Up Customer Satisfaction Survey After 10 Years of Free Document Delivery and Interlibrary Loan Services at

Authors brief bio

Dr. J. K. Vijayakumar carries 15 years of leadership experience in library management, information technology and teaching from different countries. He worked with INFLIBNET Centre in India as a Scientist, with American University of Antigua in West Indies as Library Associate Director, and presently with the brand new research University KAUST in Saudi Arabia. He is the Acting Manager of Research and References at KAUST Library and heads the collections, instructions, reference, research services, digital repository, and faculty liaisons team; also oversees the document delivery service. He has received his professional qualifications from the Robert Gordon (UK), Bundelkhand, Annamalai and Kerala Universities. He is a standing committee member of IFLA Acquisitions and Collections Standing Committee, member of IATUL SIG on Information Literacy, member of international associations including CILIP; editorial boards of many journals/conferences. He has authored/edited 4 books and around 30 articles in leading journals and conference proceedings.

Faten Ba-Rayyan is with the KAUST Library since 2009 and coordinator of document delivery service and also worked in various assignments. She holds B.A. in Economics & Management and Diploma in Computer Programming. Previously she worked with Al Juffali Company Information Department as a coordinator and also as Computer teacher for Windows Basics and Data Entry- in the summer course from 1999-2001.