The impact of e-journal access on DocDel Service activities.

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The rise of the first e-journal is a much debated question, however it is placed around 1990. They originally started as products in textual format sent by e-mail by specialised newsgroups in the technical-scientific field and in the biomedical area. In 1992, the first e-journal appeared on the Web and in 1997 publishers began to issue them at first in the Postscript or PCI formats and then in the more practical PDF format [1]. Over last few years electronic journals have become an important tool for scientists and medical practitioners. About 95% of biomedical journals is now available both electronically and/or in print [2]. Internet growth and spreading and the availability of full text e-journals have contributed to increase patron expectations of instant retrieval of documents.

In the summer 2003, an agreement with CILEA has provided Biblioteca Centrale dell'Area Biomedica with access to a wide range of journals in electronic format through Elsevier ScienceDirect.

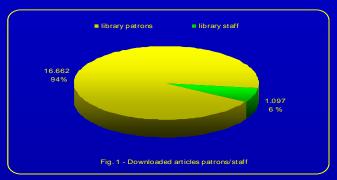
The Library need to consider several issues when making this service available: providing access (user registration and authentication), user training and education, promotion of the service, usage statistic evaluation. Several departments of the University of Cagliari were targeted for an early introduction to the service. The "potential users" of Elsevier ScienceDirect consisted of people relatively familiar with using online version of scientific journals and retrieving articles. They were researchers belonging to the fields of biological sciences, medicine and other research fields related to life sciences.

Library management decided to conduct a six months survey (July/December 2003) to assess the extent of e-journals use and in particular to determine their effects on DocDel Service activities. Aim of the study was also to consider the cost-benefit aspects of the direct access to biomedical literature by library patrons. Our expectation was that we would have a decrease in user requests for journals articles via our DocDel Service.

Up to that time, DocDel activities have been very expensive and time consuming for Library staff, taking away human resources from other Library activities

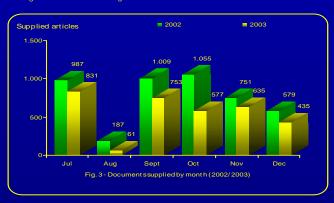
We have studied two typologies of data and compared them to the data of a corresponding period in the year 2002:

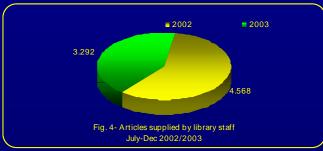
- 1.Data provided by monthly statistical CILEA reports to determine e-journals use by Library patrons and staff.
- 2.Data relating monthly supplied documents by our DocDel Service to evaluate its performance after CILEA agreement.



Comparing data concerning DocDel Service (July/December 2003) with statistical findings of a corresponding period in the year 2002 [3], we experienced a decrease by 27,98% in the number of requested and supplied documents. The requests were mainly restricted to older materials.

Findings are shown in the Figures 3 and 4.





Acknowledgements

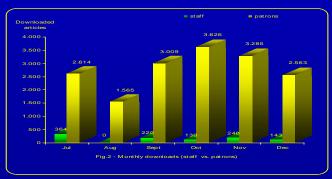
The authors thank the Biblioteca Centrale dell'Area Biomedica colleagues for their helpful support in DocDel Service.

References

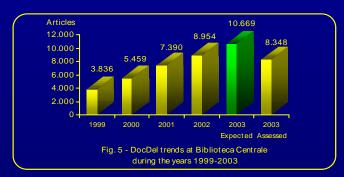
- [1] Badoer R., De Robbio A. (1999) On the road of e-journals. Paesaggi in movimento nell'evoluzione dei periodici elettronici. Bibliotime < http://www.spbo.unibo.it/bibliotime/num-ii-3/badodero.htm>
- [2] Conference of Italian University Rectors (CRUI) (2002) Unpublished data
- [3] Spina B. Statistiche Document Delivery 2002 http://pacs.unica.it/biblio/docdel2002.ppt

The results of the study show that the total number of downloaded articles amounts to 17.759, with an average of 2959,83 downloaded fulltext per month. Users have responded positively to the offered service. They have appreciated the convenience of desktop availability of biomedical literature and the possibility of retrieving documents twenty-four hours a day by-passing librarian intermediation.

This is confirmed, as shown in Figures 1 and 2 by the fact that Library patrons have retrieved 16.662 (94%) of the total downloaded articles and Library staff has retrieved only 1.097 (6%) articles. These findings point out a well done promotion of the service and the good results of our user's education efforts. To achieve this goal the Library organizes periodically training sessions on its services and how to use them, especially about the use of electronic resources.



The survey demonstrates that the availability of electronic journals has modified the evolution of Library DocDel Service. As a matter of fact the exponential growing that marked DocDel from 1999 to 2002 make us expect for 2003 an increase by 16% in the request and supply of documents both in print and in electronic format. On the contrary, results show that the number of articles supplied has gone down by 21,69% compared to the expected value (Fig. 5). The most significant benefits experienced during the study period were a reduction in DocDel Staff workload, a reduction of direct cost of documents (borrowing, lending, copying, etc.), an increased fill rate and user satisfaction.



The main difficulties we faced with were to handle technical problems and to make end users realised that not all journals are available electronically. The findings let us make some considerations about end user behaviour. Due to

higher availability of online documents, our patrons generally broaden the range of articles read and retrieve a number of documents greater than that usually requested to the Library. In 2004, on the basis of aforesaid data and with the financial support of the "Fondazione Banco di Sardegna", the Biblioteca Centrale dell'Area Biomedica decided to improve e-journals range gathering access to some other publishers

Our expectation for 2004 is a further decrease in DocDel requests related to a wider availability of electronic resources.

We are now studying the correlation between the most downloaded journals

and the rank reached by the same journals in ISI Impact Factor