

The Library in the card: results from DECOMATE project and current developments at UAB

Nuria Gallart

Universitat Autònoma de Barcelona Library Service (SBUAB),
Bellaterra, Barcelona, Spain.

Abstract

The Library in the card is the slogan which would summarize the aims of the Universitat Autònoma de Barcelona (UAB) Library Service in its involvement in several EC Libraries Programme projects. It refers to the possibility of a member of the UAB community to accessing whatever document he/she needs from his/her desktop on time. The identity card should be the key which opens his/her library without hours and place constraints.

This paper explains the results from the DECOMATE project one year after its completion, looks into UAB usage studies and further conclusions and makes the audience aware of planned work in the follow up project DECOMATE II.

In a summary UAB Library Service is currently offering the UAB community (35,000 students, 2,500 academic staff and 1,500 administrative staff) access to 267 scientific journals at their wish.

Articles are provided by three publishers (Elsevier Science, Kluwer Academic Publishers and our own UAB Publications Service) directly in electronic form, including bibliographic data.

DECOMATE is the modular and generic system which allows the management of authorization/identification of users, encryption of transactions, searches in the bibliographical database using the Z39.50 standard, retrieval of articles' PDF files, and extraction of statistical usage data for postprocessing purposes.

This service became operational on October 1996 with a small set of titles and, after the pilot phase and optimal results, it was enlarged with many more titles in order to cover far more scientific areas.

The partners in DECOMATE project, namely Tilburg University, London School of Economics and Universitat Autònoma de Barcelona, with the additional collaboration of the European University Institute and the SilverPlatter company, submitted a proposal for a follow up project to the 1997 Call of Proposals of the EC Libraries Programme which has been approved. The project's work started in February 1998.

DECOMATE II is a short name for Developing the European Digital Library for Economics, which builds on the former experience of DECOMATE project and aims to enhance its features with the addition of:

- . distributed searching of heterogeneous information resources within a specific scientific area, economics,
- . access to services provided by different libraries in Europe through a single uniform interface,
- . integration of current awareness services,
- . development of an information broker module with advanced capabilities for deduplication, ranking, tracing of documents, implementation of thesauri and subject matching algorithms,
- . integration of an accounting module which allows the library to extend its services to external users while complying with commercial providers' conditions.

The Library in the card: working on it at a Spanish university library

Universitat Autònoma de Barcelona is a medium-sized Spanish university located about 20 km away from the city of Barcelona. It comprises some 32,500 undergraduate students in almost all scientific fields, 3,000 postgraduates and 2,500 lecturers. These are organized in 46 academic departments and 15 research centres.

The UAB Library Service (SBUAB) has the mission to serve the information needs of this whole community by the most cost-efficient means. It comprises eight area libraries in the main campus of Bellaterra, plus a library serving Sabadell Schools of Business Management and Informatics, plus four hospital unit libraries in Barcelona and Badalona. With 650,000 monograph volumes and 34,341 journal titles of which 13,000 are currently received, more than four million people entered the libraries in 1996.

In 1989 the Library Service started the automation of its catalogue through the acquisition of the VTLS package and it completed the retroconversion of its holdings in 1994. It also participated in the foundation of the Consortium of the Catalan University Libraries and the building of its collective catalogue.

In parallel SBUAB started its engagement in European projects with the aims of keeping its own staff up to date with current developments in librarianship, of developing and implementing prototypes of new applications and services which could enhance the information offer to the university community, of finding funding for new equipment, of establishing criteria for evaluation of these emerging technologies based on experience and knowledge gained through the test periods of prototypes and, last but not least, of closely cooperating with different and varied libraries all throughout Europe.

All these experiences led to the vision of a library which is integrative and flexible, which overrides space and time constraints. This should be the library in the card: the library of the institution, opened for its members 24 hours a day, 7 days a week. The identity card opens its doors for them from their desktop and offers them primary as well as secondary digital information resources, contact points and several document delivery options.

Step by step this vision becomes reality. One of these steps, an important one, is Decomate service, the local digital collection management service, the result of UAB involvement in the EC Telematics for Libraries funded project, DECOMATE. This paper will try to draw a picture of the results from one year of the full operative Decomate service in its implementation at UAB.

DECOMATE: Delivery of Copyright Materials to End-Users

The DECOMATE project was carried out from March 1995 to February 1997 under the coordination of Tilburg University (The Netherlands) and with the participation of the London School of Economics (United Kingdom) and Universitat Autònoma de Barcelona (Spain).

It intended to build a generic system which would allow the management of access to electronic commercially distributed documents. It developed such a system and tested it with scientific journals in the field of economics at all three university libraries involved.

The system's main features are:

- . Use of web browsers and PDF readers at the user's side.
- . Modular design with following characteristics:
 - Authorization through username and password combination.
 - Verification through PGP.
 - Bibliographic database accessed via Z39.50 standard.
 - Document server using HTTP protocol.
 - Statistical database based on SQL and ODBC.

Reports and software can be obtained by accessing the project's dissemination web site at <http://www.lse.ac.uk/decomate/>

Use of the Decomate service at the Universitat Autònoma de Barcelona

After the test phase and the project's end, the Decomate service prototype was found successful enough to be worth the allocation of additional resources in order to proceed to a significant expansion of the contents. During the project only 34 journals were available, half with holdings from 1995 onwards and half with holdings starting in 1996. Almost all these titles were in the Economics field. One of the main findings of all projects working in the digital library area, including Decomate, was the need to provide a critical mass of relevant content in order to really be able to evaluate the usefulness of such systems.

SBUAB decided to enter into a three years' contract with Elsevier Science which included the majority of UAB subscriptions for this publisher. Kluwer Academic Publishers and UAB Publishing Service were also providing articles to Decomate service at UAB. This allowed SBUAB to incorporate new titles during the year and to reach the number of 267 journals in all areas in December 1997. They comprised 38,349 files, including articles, editorials, reviews, etc, relating to 2,035 journal issues.

Usage during 1997 is to be summarized as follows: 1,131 distinct people accessed the system after identification in 4,099 sessions. They performed 21,568 searches, including both direct access and journal browsing databases and 4,918 articles were downloaded. An unknown

number of distinct persons entered as guests in 849 sessions, performing 3,412 bibliographic searches. Entering with this login does not entitle the user to access full texts.

Of the sessions, 54.26% came from offices connected to the UAB network, 25.95% of them accessed via Internet and 2.55% of sessions originated in connections to the UAB via PPP. The favourite access place was by far, 82.76%, from the user's desktop at his/her working place; 12.41% of sessions originated in UAB libraries, and 4.83% came from UAB computer labs.

The analysis of the impact the service had between our academic community by department, scientific areas and group categories is given in its main figures.

Data for undergraduates, postgraduates and lecturers are taken from *UAB Memoria del curs academic 1996-97*.

An active user is defined as a person who has entered the system at least once during 1997 under the personal identification procedure.

A regular user is considered as a person who has accessed the system at least in three different months during 1997¹.

Impact on UAB academic community 1/1/97-31/12/97

Scientific area	Total lecturers	Active lecturers	Impact in %	Regular users	% regulars/actives	% regulars/total
Experimental sciences and technologies	610	138	22,62	26	18,84	4,26
Health sciences	711	69	9,70	12	17,39	1,68
Human sciences	398	35	8,79	6	17,14	1,5
Social sciences	967	125	12,92	33	26,4	3,41
Impact on lecturers	2.689	367	13,64	77	20,98	2,86

Impact on postgraduates	3.313	120	3,62	21	17,5	0,63
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Scientific area	Total undergraduates	Active undergraduates	Impact in %	Regular users	% regulars/actives	% regulars/total
Experimental sciences and technologies	7.093	178	2,50	9	5,05	0,12
Health sciences	3.365	37	1,09	2	5,40	0,05
Human sciences	9.867	73	0,73	2	2,73	0,02
Social sciences	12.101	205	1,69	7	3,41	0,05
Impact on undergraduates	32.426	493	1,52	20	4,05	0,06

Impact on lecturers & postgraduates	6.002	487	8,11	98	20,12	1,63
Impact on academic community	38.428	980	2,55	118	12,04	0,30

It is quite useful to see different rates of penetration between scientific areas corresponding to the relevance and extension of the content offered, the availability of infrastructure and the level of IT literacy.

¹ Based on the TULIP project finding that "graduate students and faculty visit the library on average every two to three months". As expansion of contents to all areas at UAB just started in April 1997, accesses in three or more different months are already considered as a regular use.

Analysis of the effectiveness rate title by title was also performed by defining it as the percentage of files downloaded from the total files at a given date for every title. It gave some idea of the usage proportion of the material and it seemed more relevant than the absolute figures of downloadings. The effectiveness rate would be influenced by the initial year of subscription, by the total number of files per title and also by the timely delivery and mounting of new files into the system, especially if it is taken into account that the same titles are still available at the UAB libraries in paper edition. Distribution of reviews into several files or accumulation in only one, will also have an impact on the effectiveness rate. In the long term this rate could be a good starting point for evaluation of acquisition versus access decisions, if it is accurately measured and then combined with the subscription and article delivery prices.

Promotion of the new service

Promotion is a key issue in the introduction of a new service, as it is for a new product. For general awareness of the new service SBUAB published two posters, the first one during the project and the second one when expansion of contents was decided upon. These posters were distributed in libraries and other public spaces in the university.

A leaflet containing the full list of journal titles included in the service was published in May and sent personally to every lecturer jointly with the salary note in June. First look for many of them was to check out if their favourite journals were included in the list. A positive check resulted in active users, sometimes claiming too short covering periods.

Journal titles and electronic holdings were included in the library's catalogue. When accessing via the web gateway, the user is able to click on the service address from the electronic holdings record of each journal title.

The homepage of the SBUAB presents a link to the new service. The newsletter of SBUAB also published the list of journal titles. Repeated announcements were sent to the internal newsgroup of the university.

Contact with users

A contact point for users to ask questions, make suggestions and put claims is a must for every service. The Decomate entry page guided people to the library staff or to an e-mail address for any question.

Over 150 messages were received at the contact e-mail address. Most of the questions related to identification issues. Technical problems arose related to the use of Microsoft Explorer which does not recognize PDF files identified on header rather than on file name, and to the use of an obsolete proxy.

SBUAB chose to implement a personnel identification procedure based on the official identification chip card provided to every UAB member. This was also the system for keeping track of personal operations in the library's catalogue, like loans and reservations.

This system allowed us to provide the maximum of access facilities to UAB members and to comply with license conditions at the same time. Remote access was allowed as personnel

identification was in force. It also gave the maximum of usage data to evaluate the system, although keeping in mind that protection of personal data is guaranteed by law, measures have been taken to this end.

However, personal identification in a large community of about 40,000 people does not run without problems. Changes are frequent. Updating is a must. SBUAB relies for accuracy on the various administrative departments which provide the data for any person. Errors are unavoidable. Fast and accurate responses are needed.

DECOMATE II: Developing the European library for Economics

On February 2nd 1998 there took place the launch meeting of the DECOMATE II project. Coordinated by Tilburg University, this project builds on the previous experience of DECOMATE and aims to enlarge, enhance and complement several of its features. The London School of Economics and Universitat Autònoma de Barcelona are involved as main partners. European University Institute and SilverPlatter Information are associated partners to Tilburg University. Université Libre de Bruxelles, Erasmus University Rotterdam and Maastricht University agreed to act as test sites. Elsevier Science, Kluwer Academic Publishers and Swets & Zeitlinger, as sponsors, collaborate in content and user studies and the evaluation of the new system.

The goal of DECOMATE II is to develop an end-user service which provides access to heterogeneous information resources distributed over different libraries in Europe using a uniform interface, leading to a working demonstrator of the European digital library for Economics.

Specific objectives of the project:

- . distributed searching across different applications and locations,
- . access to heterogeneous information resources e.g. library catalogues, bibliographic databases, full text databases, Internet resources,
- . testing of different types of economic models e.g. free materials, campus/consortium licensed materials and pay-per-view distribution,
- . use of a single uniform interface,
- . integration of personalised current awareness services,
- . development of an information broker module with advanced capabilities for deduplication, ranking, tracing of documents, implementation of thesauri and subject matching algorithms,
- . integration of an accounting module which allows the library to extend its services to external users while complying with copyright holders conditions.

It will last 30 months, to July 2000, and it will comprise four phases, specification/preparation, software development and implementation of the generic release, implementation of developed software at the involved sites and, finally, a demonstration phase at sites of the consortium members and final system installation at the new test sites.

In order to carry out the project, work has been split out into eleven work packages, each one lead by one of the main partners:

WP1. Licenses, content definition and acquisition (LSE).

WP2. Systems analysis and conceptual design (TU).

- WP3. Access to multiple distributed databases (TU).
- WP4. Advanced access to information (TU).
- WP5. Current awareness services (UAB).
- WP6. Access control, accounting and document delivery (LSE).
- WP7. System assembling and library integration (TU).
- WP8. User studies (LSE).
- WP9. Software finalisation and testing/installation at test sites (TU).
- WP10. Information dissemination (UAB).
- WP11. Project management (TU).

News on current work, public reports and related information is available from the dissemination's web site at <http://www.bib.uab.es/decomat2>

Conclusion:

Results from Decomate service at UAB during 1997 show that users became interested in real digital libraries offering relevant contents. There is however a need for deep promotion and further training in order to reach the critical point of usage in a short period which ensures continuity of the service in the long term.

Users' expectations, once awoken, are very high regarding digital information and services. Ease of access and relevance of contents are more demanding in terms of implementation efforts.

There is a general feeling that digital information has no cost at all. Whether managing a centralised budget or dealing with small disseminated departmental budgets, the library must achieve to gain consent for digital resources' acquisition and management. This is only possible if content is recognised as relevant and the added value of digital files is easily perceived.

Involvement in research and application projects is an useful way for a library to enhance its services. But successful results are only possible with effective participation of its own staff being centered on its own users' expectations.

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