Re-engineering user services in physics libraries: a transition phase between old expectations and new opportunities.
Part one: organisation

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Abstract

Susanna Mornati reports on an effort of transition from a traditional library service, mainly relying on paper preservation and local diffusion, to a modern information centre, whose main goal is putting final users in contact with the information needed, wherever it is, either local or remote, on paper or digitally stored. The author describes how this transition may be achieved through a process of re-engineering that involves staff tasks, available space, choice of tools.

Introduction: good old times

In 1992 I was appointed Head Librarian at the Physics Department Library of the University of Milan. I came from the Faculty of Law and Humanities and had to adjust myself to the new environment, which was a very different one. On the one hand, the Library was very traditional: a large reading room, the walls covered with high book shelves, a store for journals downstairs, a small exhibition for latest issues. Paper was still the only information source. The main library activities were purchase, cataloguing, shelving, and lending books and journals. On the other hand, working with the physicists meant meetingthe Internet: VT100s scattered on the site enabled one to connect to personal accounts on VMS machines, communicate via email, exchange documents via ftp, read preprints received from the first BBSs, access gophers - a primitive attempt to organize lists of Internet resources. The Physics Library had a simple online catalogue accessible via telnet, provided with a characted-based user interface.

At that time, even staff tasks were predictable: the Physics Library had 5 FTE librarians of different levels, that I will call with alphabet letters. "A" was in charge of cataloguing books and maintaining the card catalogue. "B" catalogued journals, dissertations and helped with books. "C" dealt with journals subscriptions and issues registration and binding. "D" and "E" shared loan desk attendance and administrative tasks. The library was closed at lunch time, and all staff shared book reshelving before the afternoon reopening. Reference and document delivery services were not activated, and apart from the catalogue, nothing else was automated.

This is not a grandmother's tale: it was just 8 years ago. No WWW yet, no hypertexts, neither icons nor links, no GUIs, no virtual reality. Even most PCs still ran DOS, and the most exciting computer game was bi-dimensional TETRIS. To say it with a famous MIT researcher, information was still made more of atoms than of bits, but a relentless transition was starting towards "being digital" [1].

Our private life has changed very much since then: from mobile phones to e-business, being digital has become a necessity more than a style. But library organisation has changed even more dramatically, old tasks are disappearing and new ones are being created by the hurricane that the WWW has thrown in our honest, quiet, and silent profession.

To face the challenge of this transition, and the special pressure of physicists towards it, it was necessary to undertake a demanding work on several fronts: reallocate physical space, reengineer work procedures, reassign staff tasks, implement new services, choose and install an automation system, find external resources to compensate inadequacies. In a word: modernize.

Towards the change

Maybe the most urgent thing to be done was space reallocation. Books were scattered all over the place due to lack of space in the reading room: seats were reduced to find more space for the collection, so that books could be placed in a consistent progressive order that made it easier to retrieve and reshelve them, and with 30% empty shelves for collection development. The entrance upstairs was removed, a tv-control and an anti-theft system were installed, and the seats left for consultation gained a quieter arrangement. Downstairs, close to the only entrance left, several functions shared space with the new loan desk: the small reference collection was moved in front of it, new terminals and photocopying machines were installed, and staff desks were placed nearby. This concentration resulted in a better user assistance capability and raised interesting opportunities.

Desk shifts were extended to expert librarians, and reduced from four to two hours each. Librarians at the loan desk had less time for technical work, but a reference service could be put up. They also trained colleagues on how to solve most problems, where to look for solutions, and when to address other staff. Sharing desk responsibility encouraged high-level staff to transfer their knowledge, and low-level staff to make an effort to raise the whole standard of the service. Reduction of shift duration also contributed to a better performance, since no one felt ever too pressed and still had enough time to organise one's back-office work. A couple of students were hired for part-time collaboration to perform simple tasks like book reshelving and dissertation cataloguing, and to help with lunch-time desk, so that opening time could be extended from 9.00h a.m. to 7.00h p.m. uninterruptedly. Low-cost outsourcing of simple or repetitive tasks allowed a more efficient investment of permanent staff resources, including training for new skills [2].

In 1994-1996 I had the chance to be detached at CERN, the European Laboratory for Particle Physics. During my appointment there, I learnt how to work with new technologies and drive more changes at the Physics Library. ALEPH, in its current version 3_2_5, an advanced library automation system, was chosen and installed. It allowed a better control of the catalogue, the implementation of a WWW OPAC, and the discontinuing of the card catalogue. Web pages were created for the library information services, and links to the first electronic journals established. Computer facilities had to be completely replanned, UNIX platforms replaced VMS machines, and PCs and X-terminals took the place of character-based VT100s. A contract with BLDSC was signed for document delivery. In a couple of years, most library staff acquired the experience needed for reference and document delivery, but also less traditional knowledge, such as HTML writing skills, UNIX and Windows user's capabilities, and library system administration fundamentals.

At the end of this major reengineering work, staff duties experienced a significant change [3], at least for those who were more inclined to accept innovations and willing to contribute. During this process, they also learned how to manage change, a very precious competence in this age of transition. They all shared desk assistance and some of their tasks, in order to guarantee a some back-up in case of absence. The same number of people could perform new tasks and add more

quality to the old ones. "A" could access the Library of Congress Online Catalogue, saving much time previously spent in cataloguing. Instead of maintaining the card catalogue, he could devote his attention to authority control of headings. "B" was charged with electronic journals and web pages. "D" had more time for administration, that could be concentrated, and "E" was converted to the new users' services: document delivery, bibliographic searches, and off-line reference questions.

Honestly, none of this went completely smoothly. "C's" job of registering journals issues could not be improved, and complete task sharing among staff could not be obtained. Most people prefer to get an exclusive duty and carry it on without too much interference. Team work is often seen as a way to lay responsibilities upon someone else, instead of an opportunity for sharing them. Some dislike changes, or are unable to undertake further education. Anxiety is raised by changes, and transition is felt as a period to get through quickly, in order to obtain as soon as possible a new firmly established procedure [4]: this may compromise the test phase and the pursuit of the best solution. Moreover, salaries for university staff are among the lowest in Italy, and it is extremely difficult to find any form of incentive.

Cooperation as a further solution

Results from this reorganisation were immediate and satisfactory. A tangible change of philosophy had been achieved. The library was no longer an independent body, an end in itself, but it was and was perceived as a new user-oriented living structure. Nonetheless, some inadequacies were left. Budget and staff restrictions, the need for extensive computer support, high prices for digital resources such as online databases, prevent a small-sized library from further expansion of services. At the University of Milan, science libraries have always been separated, a choice with some advantages (extreme specialisation of the collection) but many disadvantages (scattering of small structures, lack of coordination, waste of resources). Along with new management needs, growing interdisciplinarity in academic research is pushing towards more coordination. Three years ago some collaboration started: spontaneous meetings took place among science librarians on the site, and this slowly led to a new policy of resource sharing. At present several projects are being implemented, from common access to electronic journals to deals with publishers and suppliers, to a unified management of the automation system. A project for the physical unification of the Biology, Chemistry and Physics libraries in a new building has been proposed to the academic authorities and accepted with enthusiasm by the whole scientific community. Consortia have been proposed to other university sites for expensive journals subscriptions, and may be extended to many other issues. Budget savings and reallocation may lead to optimize costs and benefits of libraries [5].

Conclusion

More efforts still need to be made, mainly in two directions: traditional library procedures have to undergo a complete automation process. Loans, acquisitions, document delivery services still play an important role in users' expectations and have to be properly managed. Seeking quality in every aspect of library organisation has to become a permanent goal in order to keep a main role as information providers for our users [6]. One the other hand, pressure for new services is forcing us to keep the rapid pace of change in the information world. Libraries have to join resources and to cooperate to be able to face the challenge of digital information and "globalisation".

(End of Part I)

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