Information technology at the Library and Information Centre of the Technical University of Budapest

Pal Vasarhelyi

Technical University of Budapest
The strategy of the Technical University of Budapest (TUB) is to develop its library to become a major information centre, providing, in addition to the traditional library services, information support to problem solving and decision making.

1. **State and trends of development**

   As a result of the political changes, and the increased co-operation with Europe, the university libraries in Hungary now have the chance to introduce up-to-date computer and library technology. The export restrictions imposed by the Western European countries have gradually been lifted and financial assistance provided by the European Communities facilitates the solution of budgetary problems. Also many foundations consider the computerisation and up-grading of university library services a high priority; the DEC-VAX hardware and the integrated library software used by the Library of the Technical University could be acquired only with the assistance of government finance and private sponsorship.
The application of modern technology in our library is characterised by the following:

- the system supports, first of all, the provision of bibliographic data, but the management of factual, non-bibliographic data is also being computerised gradually, in particular regarding the data on on-going research, the innovations resulting from this research, the professional background and experience of the university staff, etc.;

- the system covers all stages of library processes, starting from the placement of orders, through all steps of processing, concluding with the registration of loans. In addition it covers also all kinds of information/documentation services, such as information retrieval, selective dissemination of information, etc.;

- the storage and provision of information on the document collection available at the library has been completed with systems which manage external information, in particular CD-ROM based international information retrieval services and online connection to major international hosts. The library of the TUB is the national point of contact for the European Space Agency's information retrieval services, promoting the efficient use of more than 200 databases accessible through this host.

- last, the bibliographic information services are being extended gradually to allow the provision of full-text information recorded on electronic media.
2. Processing and providing bibliographic information

The integrated library system of the Technical University of Budapest includes the following modules:

Acquisitions:
- orders
- vendors
- budget control
- invoice management

Cataloging:
- creation and update of document records
- free form or formatted data entry, or full screen editor
- record duplication and merge
- authorities search and control

Holdings management:
- item registration per sub-library
- volumes, copies, volume notes

Search:
- catalog browse
- Boolean retrieval in free format or in a guided form
- three levels of display:
  - alphabetised lists of entries
  - short bibliographic display
  - full bibliographic display
  - holdings display

Loans:
- reservation of items for loan
- renewal of loaned items.

An important feature of the system is that it supports an OPAC.
In the OPAC the user can:
- locate a specific item, according to certain search criteria;
- locate a group of items sharing common characteristics;
- request additional information on the items located, such as copies, references, notes, issues, full bibliographic record, etc.;
- request information on the borrower's loans and requests;
- renew items on loan;
- place loan or photocopy requests for items found in the catalog.

The library services supported by the integrated, computerised library system cover all Hungarian and foreign language documents acquired by the central library, in particular books, monographs, technical standards, and Hungarian and foreign dissertations.

Additional bibliographic information is provided on all publications of the university staff, covering, in particular, gray literature, and documents available in English for international co-operation. Dissertations accepted in the field of technical sciences in Hungary are abstracted in English and a foreign language database is being established. The latter two databases are offered under UNESCO's micro-CDS-ISIS.

Our bibliographic databases are now accessible through the X.25 public packet-switched data communication network, as well as via Internet, both from other institutions in the country and abroad. This allows also the implementation of shared catalog
system with the National Technical Library and Information Centre. Co-operation has been developed with a number of countries, with a view to accessing via Internet each others university databases. In this connection decisions were made to implement online access between Bratislava and Budapest, as well as Austrian, Hungarian and Slovenian university libraries. The introduction of a common software system will facilitate very much, in the near future, the co-operation among Czech, Slovak and Hungarian libraries.

The central library of the TUB introduced erasable, optical disks to store less frequently used periodical literature as well as historical documents. A complete page of text can be displayed on the large-scale screen and the system is linked to the integrated library management system for information retrieval purposes.

3. Providing factual information

An important task of the Library and Information Centre is to promote the technology transfer from the university to industry. In order to facilitate such transfer, industry should be informed regularly, in appropriate forms, on the content and results of university research. Our Library and Information Centre contributes to this objective by the means of establishing a Project and an Innovation databank.

The Project databank is being established in harmony with the relevant recommendations of the European Communities. The EC defined the ways in which information on current research should
be registered and processed. It identifies as mandatory the data elements to be collected and stored: the title, the objectives, the institution and person in charge, along with basic information on the staff involved, financial resources available, etc.

We consider that this project information could be extended to cover the topics of theses in process of preparation by our undergraduate and postgraduate students. This would facilitate the establishment of preliminary contacts between enterprises looking for young specialists in a particular field and students looking for employment.

The Innovation databank contains information on the summary of the results of research work conducted by University staff, with reference to publications, patents, prototypes, etc. resulting from such activities.

Another way of promoting the flow of technology information from the university to industry is the involvement of university professors, etc. in industrial research as consultants. This will be facilitated by a database providing information on the background and experience of the university research staff for consultation by industrial companies.

The above databases are interlinked so that related project, product and personal information can be easily combined.

Noting the importance of international co-operation the databases will be available both in Hungarian and English, via the public packet-switched data transmission network.