Tibor Koltay
Márta Virágos
Gyöngyi Karácsony

Library Automation and Networking in Hungary: an Overview

The public discussion of how the new paradigm of the " virtual " library will develop, and what roles it will play in the delivery of information, point to the many problems which will have to be resolved. What these discussions tend to share is, however, that they usually envision a bright future. This view of the future depicts an information-rich environment, it charts what that will mean to library users, and how information technology will mediate this environment. It also elaborates on the politics of change and what library managers must do to insure effective participation in this process (1).

Where is Hungary's place in this scheme of overall growth andis Hungary's place in this scheme of overall growth and development?

The history of Hungarian libraries goes back one thousand years and it is deeply rooted in what we conventionally label as Western civilization. The library that King Matthias had constructed, was worthy of his world-famed collection of Corvinas. Following Matthias's Renaissance masterpieces, several beautiful libraries were built in the 16th and 17th centuries.

It should be noted, however, that while the peak decades for university construction in the Europe of the 20th century were the 1960's and 1970's, not a single university was built in Hungary during these two decades.

Libraries have always been an integral part of higher education in Hungary, and have faced many of the resource and developmental problems of their parent institutions. The conditions and infrastructure of modern library work were not in place, particularly in the areas of interlibrary bibliographic cooperation and resource sharing.

Hungary is now committed to a major transformation and expansion of its system of higher education. This has involved institutional integration and cooperation, closer links between teaching and research, innovation in curriculum development, and fiscal and governance models. National wealth and health demand a well-developed and service-oriented

information infrastructure, and libraries are central to this capability. As emphasized in the new Higher Education Act: "our universities and colleges should get closer to the operational model in which both the teaching staff and the students are able to make use of the library's information infrastructure in the most effective way."

The Institutional Framework

The national institutional framework for networking is provided by the HUNGARNET Association, which comprises all academic, research and non-profit public sites.

Traditions in Hungarian networking are especially due to the activities of a national institution closely related to HUNGARNET, the National Information Infrastructure Development Program (NIIF). This program is the continuation of the Information Infrastructure Development Program (IIF), which has been in place since 1986.

NIIF initiated the establishment and has been supporting the use of an X.25 network and it ensures full Internet connectivity.

Internal connectivity of HUNGARNET is based partly on the public X.25 service of the Hungarian Postal Service and Telecommunication Agency (MATÁV) and partly on the community's private IP backbone network (HBONE).

The Use of Internet FacilitiesUse of Internet Facilities

Practically all Hungarian universities and most cities with important colleges have at least a gopher site and/or a WWW node and there are a number of anonymous FTP servers. Similarly to international trends the importance of the Web is growing rapidly.

The use of e-mail has become widespread. A growing number of libraries use e-mail for forwarding interlibrary loan request to other Hungarian libraries. There are more than 40 electronic discussion fora in Hungarian.

Twenty-five libraries maintain their own Web server. The majority of networked libraries pertain to the category of academic and special libraries, but already 4 public libraries are present on the Internet.

Not all Web servers pertain to libraries but many of the non-library servers contain information related to the library and there is a wide variety of relations between the parent institution's and the library's server.

As of 1 July, 1997, 41 library OPACs have been made accessible via Telnet. In addition to this 6 libraries not having accessible OPACS could

be reached on their WWW servers. From this number of libraries the OPACS of 13 can be searched via a Web-OPAC. Some of these are due to a project supported by NIIF and partially by a TEMPUS grant. This project aims the development Web-OPACs, that is tools that enable direct WWW access to OPACs. This direct access means an easy to use interface that eliminates the necessity to telnet to different computers and does not require any knowledge of the different search systems of these OPACs.

Automation of Library Processesof Library Processes

We have a special characteristic in the process of automation and networking in Hungary, that is the relatively early implementation of CD-ROM databases via LANs and the rapid growth of fields demanding innovation rather than money like the exploration of information resources and creation of Web pages.

The implementation of integrated library systems in Hungarian academic libraries was slow until the last four to five years, which is due to the following reasons:

- The scattered nature of the stock in the system of departmental libraries
- Lack of a standard format of bibliographic description
- Lack of funds

The development of the HUNMARC format and the monetary help from the World Bank caused a rapid growth in the process of library automation and the majority of already automated academic and special libraries obtained commercially available integrated systems in the 1990s. Automation is still under way.

Corresponding to their size and possibilities, these libraries bought PC-based systems, VAX-based ones and those on UNIX hardware platforms. They are gradually replacing earlier (often home-grown) systems. Systems used in higher education libraries include Dynix (Horizon), Aleph, Oracle (OLIB), Voyager, and Tinlib.

Though an increasing number of libraries have purchased integrated library systems, current cataloging and retrospective conversion are still slow especially because of the lack of shared cataloging systems and the current system of university departmental libraries.

New Tendencies

Initiatives to diminish the absence of shared cataloging has gained momentum in Hungary with a recent drive of 15 libraries. This would hopefully cover the still existing gap in this important field. The name of this integrative venture is The Hungarian National Shared Cataloging Project (HUNCAT / MOKKA – Magyar Országos Közös Katalógus) with predecessors like OSZKÁR, the shared cataloging system of science, technology and related libraries, as well as regional and subject-oriented shared cataloging in the academic environment. The project involves libraries of all types of importance, and this diversity of the participating institutions requires careful planning, so it is still in the phase of preliminary negotiations and debates over the structure of the future database.

The first meeting point of the automation of library processes and the world of networks was the accessibility of OPACs and soon the problem of connecting these online catalogs on a single Web page was to be solved by the NIIF's Common Electronic Catalog project in 1996. At present, the KözElKat WebPac System (2) connects the catalogs of seven of the largest Hungarian academic libraries and is planning to involve the most of the electronic catalogs in Hungary.

The Integrated Library Information Service (3) by SwetScan and the Technical University of Budapest (BME) contains

- the reference database and library information of 30,000 serials of the National Serials Database (NPA)
- Swets's database of 13,000 periodicals and their tables of contents (thematic search in article titles)

The databases are interconnected and permeable.

The full-text version of more than a hundred electronic periodicals by Elsevier are on the way at Kossuth Lajos University (4) of which about seventy titles are from the field of medicine.

A pioneering project is the Hungarian Electronic Library (MEK), archiving both belles-letters and scientific texts in Hungarian and/or related to Hungary and Central Europe. MEK is meant to be a real library that is not only an archive but a cataloged library as well (5). The Hungarian Electronic Library is one of the projects of the Hungarian National Infrastructure Development Program, and it will (hopefully) be the central collection of the public-domain Hungarian electronic texts for educational, scientific research, and cultural purposes. The library collection (more than

1,200 documents) is in the "Reading room" arranged by topic, and there is the searchable catalog, too. There is a growing collection of links under the "World-wide virtual library" menu, pointing to other Hungarian and foreign servers with electronic books, journals and e-document archives, and to the most popular Internet search systems.

The Textbook and Higher Education Libraries (THEL) program provides an opportunity to refresh the vision of the future role of academic libraries in the nation. The vision of this program is that Hungarian libraries will strengthen their collective ability to build comprehensive collections in all formats and with an expanding focus on universal access to integrated electronic information. The service structure will be more user-centered, linking the various resources and expertise of the libraries. Working effectively and cooperatively with faculty and researchers, with various information agencies in the government and commercial sectors, and with national and international library consortiums will be increasingly critical to library success. This involves a change in emphasis from the library as a storehouse of information to the library as a mediator or broker of information services through a network of local and external resources.

References

1. Euster, Joanne R. The Impact on the Academic Library: Political Issues. In: Information Management and Organizational Change in Higher Education ed. by G. M. Pitkin. London: Meckler, 1992, pp. 86-99.

2. http://www.lib.klte.hu/kozelkat/

3. http://delfin.eik.bme.hu/ili-login/

4. http://www.lib.klte.hu/elib/index.html

5. http://www.mek.iif.hu/

6. Neal, James G., Textbook and Higher Education Libraries Program – Hungary. Manuscript