

# Library leadership and re-engineering - an Israeli experience

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## **LIBRARY LEADERSHIP AND RE-ENGINEERING - AN ISRAELI EXPERIENCE**

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### **Introduction**

Re-engineering means leaving the old system and creating a new one with new concepts and rules. Leadership is needed to initiate, convince and take actual steps towards fulfilling such new targets. Leadership and creative thinking are required on an institutional and on a national level. Today, in Israel, the university libraries are leading the change in information services. Not all the university libraries are at the same stage of change but none of them is afraid of being bypassed.

### **Changing concept on an institutional level**

The main component of leadership is the ability to create a new vision or to revise an existing one and to link it to a strategic plan for implementation. A change of concept or vision in an academic institution is a long and difficult process, but when the new concept is attained and serves as a long-term aim, it has a chance of success. At the Technion, the vision of one library system and not twenty independent libraries dictated the actions taken by the central library during the past years. The central library defined its vision almost twenty years ago and although it has been revised during the years, basically it remained the same. Combining the Technion libraries into one system meant using all campus resources for better bibliographic services to students and researchers. It was clear from the beginning that radical physical change was not applicable. Computerization was used to overcome physical barriers and to force the departmental libraries to accept the same working procedures. It was difficult to implement this vision without full administrative authority over the departmental libraries, but today it is definite that the central library has the professional authority over the Technion libraries. The success of computerizing the traditional library system was the basis of the change of concept from decentralized system to a one centralized electronic library.

Five out of seven universities in Israel including the Technion have decentralized library systems. Such a system is convenient to the faculty members because the library is located close to their offices. In many cases this situation is an obstacle to a

modern library organization especially when the departmental libraries does not report administratively to the central library, but to their faculty deans.

At the Technion there is a central library and twenty departmental libraries. Even twenty years ago it was clear that controlling the departmental libraries is the key to professional progress. A major part of the literature budget was allocated by the Technion management to the departmental libraries and the central library was expected to supply technical services to them. Today the Technion departmental libraries still do not report to the central library but they are obliged to work according to the same set of professional rules and are part of one bibliographic system.

The departmental libraries have been lead step by step to work as a system and not individually. They lost a big part of their independence and influence, but their profit was in the professional and bibliographic area. The improvement in their services was worth the price for they could not have reached the same achievements by themselves. The process was presented to them as cooperation. Problems were discussed together with the departmental librarians and part of the new rules were defined together with them. Some areas were left where the departmental libraries can continue to work independently according to their local needs. The central library was always aware that it must give satisfactory service to the departmental libraries and not avoiding problems raised by them.

Parallel to this process the central library invested efforts in building its status as the libraries' leader in the eyes of the Technion's management. It is important to remember that influence is acquired not necessarily by authority but also by being professionally respected. These efforts led to receiving responsibility on central resources especially in the computerization areas.

### **The traditional integrated library system**

Today, the books and journals available in all of the Technion's libraries are included in one unified catalog maintained by the Central Library. This catalog is linked to the campus network and is also available in WWW version, with access via the library homepage on the internet. All of the Technion's libraries use the same computerized circulation system based on one common readers' file. The public catalog and circulation are parts of the "Aleph" integrated system. The cataloging and classification of books and journals, the acquisition of all library materials, as well as acquisitions' budget control, are handled by the central library for all of the Technion libraries, using the same "Aleph" system. Inter-library loans are done by the central library for all Technion's customers. The central library is responsible for introducing, upgrading and maintaining computerized systems for all the libraries on the campus.

### **The electronic library - a revolutionary change of concept**

Today, it is accepted that both the traditional and the electronic library will exist together in the near future. It is predicted that the balance between the electronic and the traditional library will change gradually, but in the meantime investments of budgets and manpower are required in both. The electronic library is an excellent chance for library re-engineering as it is a new system which can work parallel to the traditional library. Re-engineering creates the opportunity to change old concepts, to

define new rules and to introduce changes in librarians' duties, in readers' services, in budgeting , or in other words in all areas of library activity.

A university library which wishes to offer modern services and to keep its respected status must invest continuing efforts in adopting new technologies. It is also important to convince the university management of the new concepts and needs. At the Technion, the central library took the responsibility for the development of the electronic library. Eventually this was a relief for most departmental libraries which could not compete with new technologies by themselves. The central library also took upon itself the responsibility of teaching and guiding all the librarians in how to use the new systems. This is being done continuously on a permanent basis.

The Technion library system is still physically decentralized. It was a long way to create one bibliographic system with one computerized networked catalog and unified rules for professional work. Following this, full centralization of the electronic library was a logical step ahead. As the electronic library has no walls or physical location it was decided by the central library to develop it centrally according to the needs of the entire campus. This was the chance to change the old concept of decentralization. The central library used its experience in computerized systems, its control on the technical services given to all campus libraries and its respected professional status in the eyes of the departmental librarians and the Technion's management.

### **The electronic library at the Technion**

The beginning was with major databases on the Novell network several years ago. The Novell network was accessible via the campus network by PC's only. At that stage some of the departmental libraries purchased databases on stand-alone workstations. With the advancement of technology, better solutions were offered in the market. The central library created its homepage and started to connect databases to it. The homepage is accessible from all types of computers connected to the campus network. Wherever possible it was decided to choose the Web version of the databases which is based on Netscape and users find it easy to deal with. Netscape browser is supported by the Technion's computer center and most potential library clients know how to use it. It was decided to use an IP access to the databases where possible and not passwords which are an administrative burden to the library and to the readers. An IP access means that a simple click on the database name in the library homepage menu, brings the reader directly into the search. It also means that the location of the database, on a local server or on a remote computer abroad is transparent to the user. The library uses a special proxy to prevent non-Technion users to reach the databases. This proxy allows all Technion users to reach the databases without using password or identification number. This arrangement works very well. Only one IP number identifies the Technion at the vendors' computers and all computers having Technion's IP number, even if they are at faculty members homes can reach these databases. The library acquired special faster internet lines for the use of remote databases and electronic journals via this proxy.

### **Centralizing the electronic journals collection**

Electronic journals are connected to the library homepage according to the same principles as above. All of them are located on remote computers and available via

internet. Netscape and Acrobat Reader (software needed for unzip full-text) are common tools for using them.

The Central library used administrative power where possible to impose the change of concept especially in the area of e-journals. This was possible because the electronic subscriptions are usually based on the paper subscriptions and these were traditionally under the acquisitions' responsibility of the central library. In order to develop one e-journal collection at the Technion, the central library announced that all electronic subscriptions should be done centrally. The purpose behind this was to enable all campus users to use the e-journals, although the paper edition is usually available in only one or two departmental libraries. The departmental libraries were not allowed to contact the journals' agents directly. They could not do it without commercial details available at the central library only. Also, the special proxy is controlled by the central library. After a few experiments were done without success, by departmental librarians to connect e-journals to their faculty network, they understood the amount of knowledge and technical work needed and began to cooperate with the central library. The central library took the mission of linking e-journal to the campus network despite all the difficulties, absorbing the costs and the technical work.. The result is one system available everywhere on the campus network.

### **The electronic library - more administrative aspects**

Today hundreds of databases and e-journals are available via the library homepage on the campus network. They serve all departmental libraries, students, researches, laboratories etc. This change from a decentralized physical library system to one centralized virtual library was a change of concept dictated by the Central library and accepted by the departmental libraries who understood or were convinced that building an university electronic library is beyond the ability of one single library. Not all the departmental libraries agreed to it easily. Some of them tried to resist and develop parallel systems with the help of faculty members who understood the glory of having their own site of the electronic library. Finally they had to accept the central control on the electronic library whose benefit is enormous. Also the cost was beyond the ability of one departmental library. The faculty libraries were encouraged to add their contributions to the main system by collecting free electronic information in their areas and arranging it in a secondary homepage which is connected to the central library homepage.

Another partner in this field which should be mentioned is the Technion computer center that helps in advising and supporting library systems, but does not enjoy in the glory of the achievements. As a result when it comes to investing more technical work on a local server, the library realized that it cannot always rely on the computer center which has other priorities. Sometimes it is necessary to buy support services from other sources and to rely more on library staff.

The library used its achievement in the field of the electronic library to convince the Technion management to adopt the concept of centralization of the virtual library also from the budgetary point of view. According to the library policy, electronic information is free to all of the Technion's users. Site licenses are paid from the central library budget. This policy is supported by the Technion's management. The results will be seen in greater budgets for equipment and databases licenses' fees

allocated to the central library. As a result of its activities the central library received a donation for renovating its building. The main purpose was for the creation of a new computer-cluster (50 PC's) in the library. Via these computers all electronic resources can be reached. This cluster is mainly for the use of students.

### **Centralization - future plans**

After the concept of centralization has been accepted in the area of the electronic library, further thoughts led back to physical centralization. The direct reason for this was the expensive cost of manpower needed for keeping twenty libraries open at the same time. Also, faculty demands for building additions to existing libraries led to a discussion on limiting the number of libraries in the campus. One possibility which has already been considered in the past was combining two or three adjacent libraries together. This solution failed in the past mainly because of faculty resistance.

A new idea was brought up this time by the central library. The idea was based on the availability of the electronic library which is the new research library on the campus network. The aim of the new idea was to save manpower and to improve the service to students. The central library suggested to relate to the departmental libraries as the "paper" research libraries and to open them only during one working shift. Their main clients, faculty and researchers will use keys or magnetic cards to enter the library in the afternoon if needed, the same as many of them already do today. Most researchers do not sit in the library but enter it in order to take a book or journal to their offices. According to the offered plan most students services will be transferred to the central library which gives about 40 percents of these services today. Limited opening hours and less services will curtail manpower in the departmental libraries significantly. Only part of this manpower will be needed in the central library in order to give modern services and guidance to the students. The main expense needed to perform the change is the cost of a new wing to be added to the central library building.

This proposal is under consideration at the Technion academic management. It is a revolutionary proposal, and it is too early to predict if it will be adopted. Two or three years ago, there were not any chances that the Technion administration would listen or consider such a plan. Only now when the concept of centralization is accepted and the results are positive, further steps in this direction can be made.

### **The Israeli University Libraries' Consortium**

There are seven major university libraries in Israel. During the last years quite a number of new colleges have been founded, but their libraries cannot compare in size and contents to the universities. Many of the new colleges would like to rely on services given by the university libraries, which raises the problem, due to budgetary reasons, how and on what scale to cooperate with them. Only two Israeli universities have one centralized library. The other five universities including the Technion have a physically decentralized library system. Out of these five only the Technion libraries are working as one system, but at the rest, higher level of cooperation has been achieved among the libraries of each university. Part of it is the result of the decision made in the mid-eighties to introduce the same computerized system, "Aleph", to all Israeli university libraries. So, even though there are several separate catalogs within

one university with several libraries, the catalogs are easily accessible. All the catalogs are connected to the campus networks and to the national academic network. In addition there are national catalogs of books and periodicals. The computerization of the traditional library services in Israeli university libraries using "Aleph" software was a result of an initiative taken by the library directors and supported financially by the Council of Higher education.

During the last two years a new initiative has been taken by the library directors in order to cooperate in acquiring and installing databases and e-journals on a national basis. The libraries realized that developing a large scale electronic library requires resources that are beyond the ability of one library. Furthermore, there are packages like ISI databases or Academic Press journals which are not offered to individual libraries but to consortia only.

A proposal on this subject was brought to the Israel Association of University Heads, and it was recently decided to establish a framework for joint activities relating to digital information services. The Israeli Council for Higher Education will again support financially the planned projects. Other budgetary sources are the universities themselves and donations. The new consortium services will be based on local servers and on access to remote computers abroad. ISI Web of Science which is located on a local server, already serves the Israeli academic community. A major project planned by the consortium is joint access to electronic editions of scholarly journals. Negotiations are underway with several publishers and suppliers. The next contract is going to be signed with Academic Press. The Israeli academic consortium cooperates with other consortia of libraries.

## **Conclusion**

The developments in electronic publishing, electronic information and the electronic library has a tremendous affect on libraries' organization and administration. Libraries should use the technological change for the benefit of their readers and parent institutions. They should lead the change, use their growing power, initiate new concepts if needed and beware of being led by others. This is true on an institutional basis as well as on a national basis.

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