ABSTRACT

In this contribution the building projects of the Royal Library for the years 1990 to 2004 are described with focus on the central role of the library in the whole process of making new buildings a reality for the library.

INTRODUCTION

The Royal Library is the National Library of Denmark and the University Library for the University of Copenhagen in the fields of Theology, the Humanities, the Social sciences, and Law. It is a Culture and Museum Institution as well as a Research Institution. The library has three service centres: the main centre on Slotsholmen, located in the central and oldest part of Copenhagen, and, in addition, two service-centres in association with the University of Copenhagen, which serve the students attached to the faculties, the University Library at Amager and the University Library in Fiolstræde.

The library has approximately 159 km of books and other materials. This is the equivalent of 4.8 million boos, to which must be added manuscripts, music, maps, pictures, etc., a total of 26.7 million items. Annual usage was more than 1,800,000 items including renewals: 170,000 of these are used in reading rooms. The main building on Slotsholmen is visited annually by 450,000 people. The collections are built up through legal deposits, gifts and purchase. The total annual additions amount to about 1,600 meters.

DEVELOPMENT OF THE ROYAL LIBRARY FROM 1986 – 2004

Lines of development

The Royal Library has been in a continuous developmental process since 1986, when the present director Erland Kolding Nielsen was appointed. Our development has had three main lines of focus:

- development of the organization’s structure, performance, service and staff
- making full use of IT as the basis for service and operation
- establishing new and adequate buildings for users, materials and staff.

The organization has been remodelled a number of times in connection with applying IT-based new solutions to library operation and library services in our continuous effort to give the users a modern and efficient service and make the library still more cost-effective.

That we have had a certain success in this development can be seen from the library’s development as a hybrid library. It is a central strategic goal to make our hybrid library more digital. Therefore we have a strategic indicator expressing how digital our library is.
The hybrid indicator 1

<table>
<thead>
<tr>
<th>E-loans of primary loans (1,000)</th>
<th>1995</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-loans in % of primary loans</td>
<td>0%</td>
<td>21%</td>
<td>49%</td>
<td>51%</td>
<td>63%</td>
</tr>
<tr>
<td>Primary conventional loans</td>
<td>506</td>
<td>537</td>
<td>581</td>
<td>633</td>
<td>643</td>
</tr>
<tr>
<td>E-loans</td>
<td>0</td>
<td>140</td>
<td>551</td>
<td>664</td>
<td>1.106</td>
</tr>
<tr>
<td>Total primary loans</td>
<td>506</td>
<td>677</td>
<td>1,132</td>
<td>1,297</td>
<td>1,749</td>
</tr>
</tbody>
</table>

And by 2003 our document delivery for 2/3 took the form of digital document delivery.

The hybrid indicator 2

Even though our library and our services are becoming still more digital and our users are using our services over the net at a rapidly growing rate, the use of the library’s physical facilities is also increasing. Our new main site "The Black Diamond" on the harbour front, where the number of study places have been increased five times, is now fully occupied and under pressure for more reading places and for longer service hours. That means the Internet has not made the physical facilities of the library obsolete - people still come as physical beings requiring good and inspiring surroundings to further their work as students and as researchers.

The Building Projects of the Royal Library

In 1986 the library had very unsatisfying conditions for its buildings in almost every area of its activities. The main library at the harbour front had filled-up stacks and only meagre room for the users and staff. The University Library in Fiolstræde was an old-fashioned building with very little space for users and even a very low level of electricity and an accompanying sleepy atmosphere. The main part of the building was closed stacks, where the content did not meet the needs of the users it was supposed to serve. The University Library at Amager was, and still is, situated inside the University at Amager and is the newest library with collections on open shelves and reading places spread over the library. The library had its collection stored in more than 10 different stack buildings, most of them not well suited for preserving the Danish cultural heritage entrusted to the library.

By 1991 the library had a well-developed plan for solving its building problems and in 1992 we had indications from the Ministry of Culture, the governing body of the library, that our building projects could be realized in the near future - or a large part of them.
The concept for solving the building problems of the Royal Library was a three-pronged effort:

1. Extension on the harbour front of the main building with particular emphasis on the extension of the area for research and for the general public related to the functions of the National Library (KBH project);
2. Establishment of a new library building in close association with Copenhagen University at Amager, which would combine a modern university library for the humanities with a central stack fitted out to provide a long-term storage solution for the Royal Library’s collections (KBA project);
3. Modernization of the University Library in Fiolstræde to turn it into a modern local library for the Social Sciences and Law (KBF project).

And from 1992 to 1999 the library was at the centre of a set of coordinated building projects and large movements of collections and staff. The three main projects were simultaneous.

1. The KBA project
A new university library and new central stack buildings, which over time should be the libraries’ central stack building replacing all the other unsatisfying stack buildings, was divided into a number of phases, and phase 1 was divided into two stages; stage 1: modern climate controlled stack building with 45 kilometres of shelving and preparation for a part of the new University Library. The 2nd stage should double the stack capacity to 90 kilometres of shelves and not least finish the buildings first phase with a new university library with about 12 kilometres of open shelves for self-service and around 300 reading places. In phase 2 the stack capacity should be doubled again. With this completed the library would have solved its storage problems and got rid of its old and unsatisfying book stores.

An international competition gave us a modern building by the Danish architects Dissing and Weitling. Stage 1 was completed in 1998. Stage 2 should have followed directly after and was planned to be completed in 2004, but problems in relation to coordinating this project with the larger building projects of the University at Amager have caused a delay until now.

2. The KBH project
The choice of the building for a new open national library for research, study and experience through extension of the existing main library by a new building on the harbour front was decided by an international competition in 1993. A group of young Danish architects, Schmidt, Hammer and Lassen came up with a striking new building, now known as the Black Diamond, which fulfilled both the expectation of form and function.

A main idea in the new library was to combine the general public-oriented activities with the specialized areas for research in a new way. This would permit greatly improved service for the specialized research and a significant improvement of the general communicative and cultural activities that create a modern culture centre, where the public, as well as being able to study and read, also have the opportunity to experience the splendid collections of the library. This have been realized by combining special centres for research purposes with modern reading rooms and open public areas, which also included facilities for exhibitions, meetings and concerts. The areas for the public included the information hall, reading rooms and exhibition rooms. This made it possible to have a number of large and small exhibitions, where the rare treasures of the library could be presented in attractive and secure conditions. Another important element was a multi-functional room with a capacity of up to 600 seats for meetings, lectures and concerts. In addition there would be conference- and classrooms, a restaurant, cloakrooms and a library shop.

The special centre would have a more unobtrusive position, so that it would be possible to meet the particular needs for service and working conditions of these collections. The special centres would have the tree main elements: users, professional staff, and collections, in close physical proximity. This gave, at one and the same time, the best possible conditions for providing rapid and efficient service to users and achieves the best possible functional and secure conditions for the collections.

In connection with this project the areas around the library were also completely transformed and a new public square at the entrance to the library was built. The new library was opened to the public September 1999.

3. The KBF project
The KBF project was completed in 1997. A new open University Library for the Social sciences and Law was brought about by renovating the old building and opening the stack building for reading places and open shelves for direct access for the users.

**Status of the building projects early 2004**

It has now been decided that the second stage of the KBA project can proceed and be completed with a new University Library for the Humanities at the University at Amager and with a total stack capacity around 80 kilometres - that is less than half of what was originally planned. Prices have risen steeply in the area in connection with a successful development of the area, where we put the first new building, and the Ministry has decided that it does not want to continue the extension of our stacks further in this area.
Instead a new solution has come up. The library is going to be part of a large project for establishing a comprehensive new storage building for the national archive comprising 360 kilometres of shelving. Here the library is given a quarter. The building is just a few hundred meters down the harbour in an old railway area made redundant by container transport. The building project is scheduled to be completed in 2008.

If the plans are fulfilled the library will by 2009 have moved all its collections from all the old storage facilities outside the library to modern storage facilities either at Amager or in the just mentioned new storage facilities in the neighbourhood of the main library. And a new University Library will have been opened at the University at Amager.

THE ROLE OF THE ROYAL LIBRARY IN THE BUILDING PROJECTS

The question of influence

When the library was about to set out on its building projects, an introductory meeting was held with representatives of the Building Directorate, who had been assigned as the professional building advisors by the Ministry of Culture. Here we were informed about the phases of a building project and our role as users of the building, which was about to be built. A representative of the Building Directorate told us that up to the point where the building process begins, users are important as the ones who could explain the needs to be fulfilled and the requirements to be satisfied by the building. But when this was done, the user could withdraw from the building process - and should withdraw. When the buildings were erected, the user would enter again and be offered the key to the new building.

We did not follow that model. We wanted to take part the whole way through and wanted to stay informed on all relevant issues and to have a position that made us able to be an informed participant, and have a solid influence on all decisions, which would shape the library through the building process. What did we do?

Get your own professional advisor

We participated in the Liber Architecture Group Seminar on library building in Barcelona in April 1993. Here we met Sir Harry Faulkner-Brown, the greatest contemporary authority on library buildings and one of the lecturers. We liked his approach and had a number of conversations concerning our projects and found out that his advice was based on an outstanding set of experiences from building libraries and also that he was available as a professional consultant.

We decided shortly after to engage him as the library’s own advisor and of course financed within the library’s own ordinary budget. I don’t think that the people from the Building Directorate thought that we needed Harry Faulkner-Brown, but for us it was money well spent, because he was able to interpret our intentions and give them the proper bearing in discussions with architects and engineers and he was also a trusted critic of our own ideas. Harry Faulkner-Brown arrived at the scene so he could assist us also in the critical phase of choosing a winner from the architectural competition for the Amager project. And he participated during the whole process. It is relevant to mention, that the other advisors accepted him as a professional worth paying attention to.

According to Harry Faulkner-Brown’s "Ten Commandments” an academic library building should be:
1. flexible with a layout, structure and services which are easy to adapt
2. compact for ease of movement of readers, staff and books
3. accessible from the exterior into the building and from the entrance to all parts of the building, with an easy comprehensive plan needing minimum supplementary directions
4. extendible to permit future growth with minimum disruption
5. varied in its provision of reader spaces, to give wide freedom of choice
6. organized to impose maximum confrontation between books and readers
7. comfortable to promote efficiency of use
8. constant in environment for the preservation of library materials
9. secure to control user behaviour and loss of books
10. economic to be built and maintained with minimum resources both in finance and staff

The design of the building should contribute to the realization of these qualities. These principles were applied in our evaluation and development of the solutions in cooperation with the architects.

Starting from the library’s requirements and the winning architects’ main concept and expression of the building there was a long and creative dialogue between the libraries’ different representatives in working groups and in the building executive group. It was a really cooperation process. A smooth and friendly atmosphere was the order of the day.

This easy-going cooperation was furthered by a longer tour through Europe for the key persons from the library, the leading architects and engineers and the project advisor from the Building Directorate. The tour was arranged by Harry Faulkner-Brown, who took us to a number of interesting buildings to show us and discuss with us what to do or not to do. The tour contributed very much to making us a team.
Formal organization for running the building projects

With state building projects in Denmark such as the Royal Library, the responsible Ministry is the client, that is, the Ministry of Culture. In addition, all state building projects have a specialist building consultant. Ministries with many buildings, such as the Ministry of Education and the Ministry of Defence have their own construction services, which other ministries can use. The Ministry of Culture uses the Building Directorate of the Ministry of Education, and did so in this case too. The third partner is the institution that will use the building. The Royal Library has, with the backing of the Ministry of Culture, played a very active role during the planning and has participated in the decision making in all phases of the project.

In November 1992, when the Danish Parliament approved money for the architectural competition for a new, enlarged Royal Library on the harbour front, it was the culmination of six years’ intensive preparatory work. In continuation of the report on the physical planning of the Royal Library from 1987, further work was done, with the backing of the Ministry of Culture, on more detailed planning, leading to a thoroughly worked-out building program, where actual cost calculations by professionals were made. So we had our plans ready when the Government with broad political support, in 1992 approved funding for an international architectural competition on an extension of the harbour front.

On account of the thorough preliminary work, the Royal Library and the Building Directorate were quickly able to draw up a brief for an architectural competition in the winter of 1992/93, which could be approved by the Ministry of Culture. The international competition was won by the firm of architects, Schmidt, Hammer and Lassen in the summer 1993. After this, adaptation of the winning project began.

The organization of the building project

1. The Steering Group
The Steering Group has the overall responsibility for the time schedule, the quality and the finance of the building project. It is the leading body for implementation and finance of the building projects. It has three members: Head of Division in the Ministry of Culture (chairman), the director of the Building Directorate, and the director of The Royal Library. The three members each have two consultants. All major decisions are made in the Steering Group, and they report to the authorities. It assembles at intervals of three or four months.

2. Building Executive Group
Under the Steering Group is the Building Executive Group. The group is responsible for coordinating the decision-making in all the practical aspects of the building project, including the engineering work and design of the building, drawing up controlling budgets, and preparing time schedules. The group has eight members. Of these, The Royal Library had three members and the chairmanship, which I have the pleasure of occupying; two deputy directors and the leader of the Building Project Secretariat. The architect and the consultant engineer are part of the Building Executive Group, and the Building Directorate has two members, a lawyer and an architect, who is project leader. Finally there is a representative for the four cultural institutions that are to be housed in the harbour front project.

Each time the project faces a crucial phase, a recommendation is prepared, which is submitted to the Steering Group. The Building Executive Group meets once or twice a month. The chairman of the Building Executive Group and the leader of our building project secretariat took part in all meetings in the steering group as consultants for the director general of the Royal Library.

3. The Finance Group
The Finance Group’s task is to follow the economic development. The group refers to the Building Executive Group and consists of the head of our project secretariat and the two persons from the Building Directorate and the leader of the building project as well as 2-3 representatives from the technical supervisors.

At the meetings - once a fortnight - the leader of the building project mentions the investments, which he wants to be approved. The approval includes that the leader has given the green light for making a contract with the contractor to start the work. The leader also determines the expense, which hereafter is the upper limit, the contractor has authority to use. The summaries of investments are sent to the Building Executive Group for acceptance on the first-coming meeting as a standard issue under Finance.

The finance department of the Building Directorate primarily does the accountable registration of running contracts. The Royal Library makes the running payments to the contractors, etc.

4. Building meetings
Every week a meeting is held without participation from the Library or the Building Directorate. The summaries from these meetings are sent to members of the Building Executive Group and Finance Group. If building activities are expected to involve the running of the library, Karl Krarup or Charlotte Rohde is at once contacted.
5. The internal building organization in the library

After the architectural competition had been decided, the Ministry approved the allocation of money for a Building Project Secretariat at the library. This is a temporary administrative unit immediately under the board of directors of the library. The secretariat has a staff of three and coordinated all the library’s building projects, organizes the moving of the collections, the re-allocation of staff, etc. The secretariat also participates in all internal working groups that are concerned with the building activities, and it publishes an internal periodical with news about the building projects.

The planning work has been done by a number of working groups: a small number of primary groups and a larger number of specialized working groups who have specified the content and functional aspects of the project for each of their special areas within the library. To ensure coordination of the many working groups, the Building Project Secretariat has had members in the working groups and has handled the secretariat work. Minutes are taken of all the meetings and all have been sent round to the library staff via the internal Building News. As an important steering instrument, the Building Project Secretariat has maintained a detailed ‘room database’ with the many single rooms in the building project.

The primary working groups

Five working groups have done the primary, inter-departmental planning:
- The Royal Library construction management, which plans and coordinates all the library’s building projects. The group had five members made up of the board of directors and the leader of the Building Project Secretariat with the Director as chairman.

The other four working groups handle the following subjects seen from an overall point of view, which includes all the library functions:
- the electronic library
- preservation, security and transport
- stack planning
- work environment

Other working groups during the harbour front project

There have been eight working groups during the harbour front project. They have dealt with various subjects and areas:
- the exhibition areas
- the general areas for the public (information, reading rooms, lending, etc.)
- the special centres
- the multi-function room
- restaurant, café / canteen
- technique and operations
- administration, including conference rooms
- the library shop

The working groups have been made up of employees from the departments involved. They have prepared draft papers and reports, which have been regularly discussed with the board of directors. The working groups have had consultations with the architect and engineer and have thus had the opportunity of directly affecting the design of the various sections of the new library. In this way, the library has ensured the commitment of the staff and has been able to utilize their knowledge and expertise, while progress was strictly controlled. But the process and the good results were also highly dependent on the long cooperation and easy-going understanding between architects, engineers and the library.
DID WE MAKE A DIFFERENCE?

Did we at the Royal Library make a difference to our building projects? Yes, indeed. We did make a difference by being part of the whole development process from idea to concrete realization. We also had the pleasure that the architect had a welcoming attitude - or nearly always - to our contributions to the development of his concept of the building. Much of our effort can therefore be seen as a positive and integrated part of the realization of our program. There has also been a number of occasions where the library, because of its position, was able to intervene in such a way that we avoided getting a poorer solution than we would otherwise have got. I will just mention a few.

- Securing the cellar storage against flooding. Our rooms below water level were programmed to be secured by double walls both horizontally and vertically and draining between the walls. In time we found out that the drawings for one of the constructions lacked these double walls, they were then reinstalled. If the building process had been running a little longer, it would have been very difficult to get double walls.

- Windows that can be opened to the outside world. For almost a year we had to fight for windows that could be opened in every single office. We said we wanted to have fresh air, and the engineer told us that then we should have a fresh air system. What we wanted was outside air. Our response was that we did not want to live the rest of our working lives inside a refrigerator. We got what the architect called walking windows and almost through the whole year you can see that the windows will be opened.

- Another discussion related to the windows where the colour of the glass. At a certain point it was suggested that we should have black windows, i.e. dark-coated windows, because that would go nicely with the black stones of the building. One of the chief advisors asked us, if we would not suffer for the beauty of the building. The answer: Certainly not.

- A full solution versus partial solution seen from the library’s side. Fitting the concrete solution to the economy for the building was a continuous process and one of the lines of conflict was that the architect and the technicians wanted to finish part of the whole project according to the original intention for fitting out the building. In one case that meant that we would not get the integration of the old building with the new building at the harbour front, which was contrary to the whole idea of having an integrated old and new library building. We got the integrated solution, but we also got some economic problems.

- The Amager project consisted of two parts, a central storage for collections and a part for the new University Library with offices. One suggestion from the advisors was that we put in only half of the shelves, thereby making it possible to finish the offices and the coming University Library area. We came up with a fully equipped shelving system for the storage room and a very modest finish of the office rooms.

Through the Building Executive Group, etc. we could make the libraries’ priorities important guidelines for finding the necessary cuts and solutions. It is not satisfying to make cuts, but it is satisfying, that if you do have to cut then you cut in the right places.

ON INFLUENCING THE BUILDING PROCESS

A good formal position is a precondition to be taken seriously. The library had a strong formal position on all levels in the formal organization running the building projects. Our position was tested a number of times and there is no substitute for taking on a conflict when required. In the middle of the process the Building Directorate wanted to push the library back to the traditional impotent role of user. A number of hard economic decisions were coming up, and it was important that the priorities were determined in the light of the long-term interest of the library.

The Ministry agreed that it was in the Ministry’s and the Library’s best interest that we kept our position in the formal organization and chaired the Building Executive Group and participated in the Finance Group’s running decision-making.

To sum up:

- a good formal position is a precondition to be taken seriously
- the position must be defended
- and cooperation, understanding and teamwork are essential.

WEB SITES REFERRED TO IN THE TEXT

The Royal Library. [http://www.kb.dk/index-en.htm](http://www.kb.dk/index-en.htm)