

ORGANISING LIBRARY INNOVATION

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International Summer School on the Digital Library TICER, Tilburg University, August 26, 1999

Abstract

As a consequence of technological developments libraries need to change their strategy and their activities in a fundamental way. The innovation process necessary to implement these changes pervades all the library's activities. Because of its comprehensiveness and its pervasiveness it demands special attention of the library's management. And poses a number of conditions on the organisation of the innovation process.

The paper analyses the complexity of the innovation process and describes the consequences for the organisation of innovative projects.

1. Introduction

Technological developments have a fundamental influence on many aspects of today's society, but this influence is most apparent for those processes in which information plays a crucial role and, of course, this also applies to libraries.

Technological developments will change the traditional 'paper' libraries to libraries that are to a large extent digital libraries, and at least some of them will become completely digital. Of course we have to differentiate between different types of libraries and, within university libraries, between the different disciplines they provide their services for. But to a large extent these differences are only differences in the phase of transition. All libraries must and actually will use modern technology to change the way they are carrying out their traditional activities. But then it will become apparent that this will lead to fundamental changes in their services and their attitude to the organisation and the people they are serving, and consequently also to their own strategy and goals.

- The most important aspects of the change from a classical library to a digital library are described in chapter 2.
- The nature of this change implies that it is not just 'a change' but a fundamental innovation. Consequently, a lot of attention has to be given to the way the innovation process has to be organised. This is the subject of chapter 3.
- Chapter 4 describes the innovation process at the University Library of Utrecht University, which illustrates the analysis and recommendations of chapter 3.
- Finally, chapter 4 summarises some conclusions and gives recommendations for the follow-up of innovative projects.

Although the paper is written primarily from the point of view of an university library, its analysis and conclusions also apply to other types of libraries.

2. From classical university library to digital library

Currently, libraries find themselves riding on the crescent of a second computerisation wave. The first wave took place during the seventies and turned manual back-room activities, such

as acquiring, distribution and cataloguing, into computer-controlled activities. Commercial enterprises began marketing and selling products designed for computerising the library's distribution, cataloguing and acquisition systems.

For the library's traditional customers, this implied that they had to fundamentally reorient themselves to the new way the bibliographic information was now becoming available, that is through an on-line public access catalogue (OPAC). Additionally, libraries commenced building local bibliographic and indexing databases as well as several other databases (McClure a.o., 1994).

Essential in the computerisation wave of the 90s is the deployment of computer networks (e.g. campus-wide networks at universities as well as national and international networks). These networks provide access to remote electronic information by means of library information systems.

Another factor is at least equally important. Available electronic information is no longer limited to so-called secondary information (catalogues, bibliographic databases). Also primary information has now become electronically available. Presently, we can refer to the electronic full-text versions of scientific journals. Electronic textbooks and readers enable us to consult information outside the library, i.e. at the professional and private work site of the library's traditional customer.

The change of all traditional activities.

We must realise that all traditional library activities are being affected by this innovation: the character of these tasks is about to change as a consequence of technological developments. Within this context, we can observe a number of trends.

One very important trend is the fact that the physical collection is becoming less and less important. This development is accompanied by a second change. It is signalled by a library service that is shifting its focus. It is moving from concentrating on supply towards centring on what is asked for by its customers. In correspondence with this trend, information reference is becoming more and more significant. The library acquires a gateway function, referring to information, irrespective of the location where it has been physically stored. Growing emphasis will be put on navigation. By and large, users will be preferring to find their own way across the large amount of available information. To an increasing extent, service will be provided from a distance: the users will choose to consult their sources sitting at their own desk, at their own computer. This, in turn, implies that the library needs to increase the accessible electronic collection, which is accomplished by disclosing sources elsewhere, but also by electronically providing material that has already been available on paper. Of course, this development entails new problems related to the storage of electronic information.

A second important trend points to a fading distinction between several traditional tasks of the library.

Let me give you some examples.

Basically, the library has been fulfilling the following traditional tasks:

- selecting information
- acquiring information
- preserving information
- managing information
- providing access to information.

Selecting a particular electronic document is equal to confirming its relevance. Its proper registration can be considered as its organisation, which is part of the task of managing information. So, in effect, we are observing the blurring of the borderline between the selection of knowledge and its organisation.

Another fading distinction is the vanishing difference between the acquisition of an electronic document and providing access to the information contained in it. We need to strive towards a kind of metacatalogue that no longer distinguishes between paper and electronic documents and in which the location where the information is stored is no longer the first criterion in searching.

Because of these developments, the ability to judge the relevance for the primary processes is becoming increasingly important for all library activities. But who is to be a qualified judge of this? At the library, this used to be the subject librarian. However, his job tends to become more and more complicated: the information quantity is growing enormously fast, and the users, especially the researchers, are becoming ever more specialised. Libraries will need to involve an increasing number of scientists and appeal to their judgements. For this purpose, the libraries will need to construct and maintain a network, using it as a base for helping the scientists to organise their information.

A third trend is related to the traditional way of looking towards library tasks as some kind of overhead. This is rapidly becoming an obsolete way of thinking. In the future, library tasks will be considered as directly productive force.

We must realise that distinguishing between the actual provision of information and the various processes in which this information is used is becoming ever more difficult. In the case of the university library, the primary university tasks are education and research. The fundamental aspect of education is the transfer of knowledge from teacher to student. The once clear distinction between knowledge transfer through teaching on the one hand and the provision of information by the library on the other becomes obscured. This is the result of deploying information technology in education. To a growing extent, the library services are blending with the teaching process.

A similar trend can be observed in the process of research. Here, the fundamental stages are the identification of sources, the exchange of information with colleagues, the interpretation and analysis of data and the dissemination of findings. In this case, the boundaries between the provision of information and the various stages in the research process are fading as well. Comparable tendencies are becoming apparent in other primary processes supported by library tasks, for example in policy-making and legal consultancy.

In general, it can be assessed that library functions are progressively integrating with the primary processes they are serving. This implies that we should no longer consider the library tasks as some sort of overhead services. On the contrary, they are developing into a directly productive force.

It should be emphasised again that, in order to properly determine the relevance of certain information amidst this vast available reservoir of data, we need to acquire a thorough knowledge of the discipline in question.

Opportunities for new activities.

Developments in information technology also imply that the position of the library is no longer evident within the process from information production to information consumption. But, although some of the traditional library tasks are under threat, there are also opportunities for strengthening the library's position through a number of new activities. To understand how the changes following from the implementation of new technology can result in new library tasks, we should take a look at the so-called information chain. The role of the library is often

described as a link in this information chain. At the moment, we can notice various problems connected to the information chain. For readers who are not yet familiar with the jargon, the accepted definition of the information chain is as follows: 'An infrastructure consisting of a chain of groups which each fulfil one or more functions in the process of supplying information by using the available means.' The chain stretches from the production to the consumption of information. Traditionally, the various stages have been strictly distinguished in terms of the chain's main functions, i.e. subsequently in the production, distribution, acquisition, and consumption of information.

Usually, this chain is represented graphically. The traditional representation used to be comparatively simple. Lately however, it seems to have become more complex due to the pressure of an ever expanding information stream and as a result of various technological developments. We have been hearing suggestions that the chain is about to explode.

Actually, this metaphor of an exploding chain or cycle is not correct. The chain is not bursting at all. What is exploding, however, is the amount of information, and this is due to the way this information is being transferred. Yet, all the functions in the traditional information chain, i.e. production, distribution, acquisition and knowledge consumption, can be carried out at a so-called integrated work site. Within this context, the image of an imploding chain would be more appropriate, since the system is starting to shrink due to the pressure exerted by the environment (*Savenije, 1995*).

The configuration of functions within the information chain has become subjected to change, whilst within this changing constellation, all the parties involved are struggling to determine their positions. For instance, all kinds of arrangements have been made between universities and publishers on how they could explore their new roles harmoniously. There is a considerable danger, however, that they will remain stuck in the traditional chain. This danger becomes all the more obvious as soon as we attempt to describe the development of the information chain in terms of the so-called synergy model. This model, which we have borrowed from chemical theories on dissipative structures, is often applied to organisations and systems. (*Zuyderhoudt, 1985*).

According to this model, the control of processes within an organisation remains stable until the configuration becomes agitated by a notable interior or exterior factor alien to the accepted pattern. In case these disturbances increase in number or extent, this leads to an unstable situation. In this situation, all sorts of events may occur which the ruling order will not allow for. Usually this state is characterised as chaos.

Sooner or later, however, a new order will emerge out of this chaos, a constellation that is able to warrant renewed stability under altered circumstances.

If, however, a new order fails to arise, the result will be regression: stagnating development and a more or less random disintegration of structure.

Considering these developments in the field of information provision, this implies the necessity of innovative and creative experimenting with new roles instead of adhering to traditional patterns. All forceful attempts to preserve the old structure will not only impede any development as such, but will also expose it to increasing danger of arbitrary disintegration.

One conclusion from this analysis is that in my opinion libraries should try and become publishers of electronic documents instead of merely relying on agreements with commercial publishers (*Savenije, 1997*).

Furthermore, this analysis strongly suggests a revision of the functions concerning the

provision of information for educational purposes, as well as the function of consumption of information within the context of student education.

3. Organising innovation

Factors relevant for the organisation of the innovative process.

In the preceding section, we have argued that innovating the library necessitates far-reaching and radical changes. These involve not just the adaptation of traditional library tasks to new demands or to recent technical developments. Their extent becomes obvious, as soon as we realise that a number of factors traditionally related to libraries and their organisation actually constitute an obstacle for innovating the library.

- The first factor is the lack of flexibility in the library organisation as such. Customarily, the libraries have grouped their tasks according to rigidly defined function categories. The demands corresponding with these function categories have been strictly defined as well. Descriptions concerning the functions of reference librarian or catalogue librarian are examples of these categories. In practice, the rigid division and inflexible job descriptions do not contribute to a dynamic personnel flow.
- Secondly, as soon as the average library staff member becomes confronted with the prospect of change, he tends to be somewhat conservative and cautious. Of course his cautiousness is related to the nature of his profession. In his job, the librarian is concentrated on the task of preserving. Therefore, he is always alert when it comes to protecting the cultural heritage. Almost by nature, he tends to be a little sceptical towards aspirations expressed by his colleagues. At the same time, he appears to be somewhat reserved when it comes realising certain ambitions of his own. Surely, this does not stem from any lack of readiness to participate but from in-born cautiousness. Furthermore, the emphasis on formal qualifications seems to have reinforced these aspects.
- In the third place, innovations as such do not easily find a firm holding within the entire library organisation. This circumstance is related to the position occupied within the organisation by the activities that are connected with information technology. Many libraries have had a department for information technology since the first computerisation wave, its responsibility being the supervision of computerised library systems and its proper functioning.

In many cases, one of the activities this department is requested to instigate (or has chosen to create for itself) is the testing of new technology examining its usefulness for library purposes. Thus, the department in question becomes a centre of innovation within the existing organisation. As a result, it is the library's technology staff who will be initiating and testing various new developments, activities that may eventually result in the creation of an electronic library within, or rather in addition to the traditional library.

This turn of events may bring along several complications. First, problems could arise when finding the right balance between going-concern and innovation. Staff members may be inclined to appoint more priority to their new tasks than to well-known routine jobs. Yet, this development could give rise to even far more serious threats. Within the regular departments, it could lead to animosity towards innovation as such. Their staff might become susceptible to the impression that these innovations were exclusively reserved for their colleagues in the technology departments, who tend to be not very well at communicating in an accepted conventional manner.

Clearly, these circumstances are in obvious contrast with the requirements innovation and change demand from library personnel.

With respect to the question of how the innovative process needs to be organised, other factors are of importance as well.

- First, the innovation process requires a certain amount of creativity. As indicated above, the position occupied by the library within the information chain needs to be reconsidered. This involves an interpretation of the library's position within its environment. This interpretation, of course, depends on the particular situation and, therefore, differs per library. However, a proper strategic analysis is necessary to instigate new activities.
- Secondly, the innovation process is no simple matter due to number of factors.
 - The complex organisation of the university library: the relationship with faculty policies often results in organising several branch libraries which are part of one or several faculty structures.
 - The many different categories of library services involved: this implies a comprehensive approach in which a large number of people must participate.
 - The rapid technological developments: changes in standards may interfere with the plans concerning the process of change; therefore, a flexible approach is needed.

These factors underline the importance of the special attention the library management must pay to the innovation process.

Project organisation.

The best manner to realise this objective is to introduce a temporary separate organisation assigned for the sole purpose of the innovation project. Or, to be more specific, a project organisation with:

- independent responsibilities,
- a special project manager and project co-ordinators,
- a separate budget.

As a matter of fact, this is the only way to observe the deadlines and monitor results in a detailed fashion.

When looking more closely at the innovation process, we notice that it actually consists of a large number of subsidiary projects, each with discriminate objectives, different time spans and budgets, as well as various project leaders.

Of vital importance to the project organisation are:

- a general project manager,
- a few project co-ordinators,
- one or more steering groups,
- a number of work groups.

The tasks of the overall project manager comprise:

- the co-ordination of the project as a whole,

- guiding the project co-ordinators and the various project leaders,
- monitoring the progress of the subsidiary projects,
- taking care of external contacts,
- defining and initiating new projects,
- preparing requests for external grants and subventions.

The general project manager is supported by a few project co-ordinators appointed to support a well-defined range of subsidiary projects, e.g. for projects having an infrastructural nature. Furthermore, every separate subsidiary project needs to have its own project leader.

The steering groups are responsible for the content and progress of an entire project or a number of subsidiary interlinked projects.

The work groups consist of regular library staff who participate in the activities of a subsidiary project.

The general project manager is not to belong to the staff of any library department and should report directly to the library head management. Co-operating with the project manager are a number of project co-ordinators who are appointed to work exclusively for the project. The remaining participants should only be partly relieved from their regular activities and must combine their innovation process contributions with their regular job.

Various project types

Another aspect important from an organisational point of view is the variety in subsidiary projects. According to their subject fields, the following types can be distinguished:

- projects concentrating on the technical infrastructure: these are aimed at improving information technology infrastructure;
- projects directed towards new services: these projects aim at developing new library services;
- projects directed towards the organisational infrastructure: these projects aim at adjusting the library organisation, adaptations that are necessary from the point of view of innovation.

According to their objectives, we can distinguish the following projects types:

- definition studies: projects directed towards collecting, arranging and analysing information, necessary for defining a particular project;
- pilot projects: projects resulting into the decision whether an innovative strategy involved needs to be pursued or not.
- implementation projects: projects directed towards results that can be directly implemented within the library organisation.

In the next chapter we shall be considering some examples of the mentioned project types.

Funding innovation projects

A major problem during the innovation process is the circumstance that all involved activities must be carried out in parallel, or rather in addition to the regular and traditional tasks. It is not unlikely that a number of these latter tasks become diminished in extent or eventually even become interrupted. Yet, for the time being, this is not possible. It may prove difficult to find the financial resources necessary for realising the project, since this occurs directly at the

expense of the regular tasks.

Therefore, it is imperative to attract extra funds. In order to realise such an extensive operation, one could appeal to the institutions who finance the library organisation or to external providers of funds on national or international scale (e.g. the European Community). Generally, these external fund providers insist that part (usually 50%) of the necessary funds be raised by the library itself (i.e. on a joint-venture base).

To this end, all involved costs must be calculated in advance and specified in a project budget. Furthermore, they must be defined in such a manner that their indication during and after completion of the project is feasible. All expenses spent on staff members must be covered by this budget, irrespective of the question whether the employees need to be replaced for the fulfilment of their regular activities or not.

Moreover, all indirect expenses for the staff involved must be specified as well. These comprise office (desk, computer, telephone etc.) and travelling expenses. Occasionally, the fund providers may also accept the involved staff sharing in the general overhead expenses of the organisation. In this case, the indirect expenses almost amount to the actual salary costs. Naturally, this requires an extra administrative investment. Simultaneously, however, it provides a clear specification of the financial efforts carried by the library organisation. Since the extent of external subsidies usually corresponds to the organisation's own contribution, this may well prove worth while.

When composing the budget, one should also determinate whether the regular departments need to be compensated for the detachment of their staff members, and if so, to what extent. Of course, this is only recommendable in urgent cases. Should this possibility be discarded altogether, however, this might lead to some resistance towards the innovation process, especially with the department managers.

The budget must be specified for every subsidiary project. In this respect, the expenses related to the general project manager should best be integrated within the budget and allocated to the various subsidiary projects. Furthermore, it is expedient and sometimes even necessary, to specify the budget according to the separate project phases.

Training programmes intended for the project manager and his co-ordinators as well as the attending of conferences are to be funded by means of the innovation project budget. For the other participants in the process, only specific training courses related to the project should be financed via this budget; any other courses must be paid for by means of regular resources.

4. Innovation at Utrecht: The Electronic Library Utrecht

The principles described in the previous chapters can be illustrated with the example of the innovative project of the Utrecht University, called the Electronic Library Utrecht (briefly EBU, which is the Dutch acronym for 'Elektronische Bibliotheek Utrecht').

It was a joint project of the University Library and the Academic Computer Centre of the Utrecht University. The project was initiated in 1995 and had a duration of three years.

In fact it consisted of a number of systematically interdependent subsidiary projects with one common goal:

- the qualitative and quantitative amelioration of the present provision of information,
- an improved accessibility of information sources,
- the development of a series of completely new library services.

The leading principle was to comply with the requirements and wishes of researchers, teachers and students. In this respect the EBU project was not so much a technology driven project (based on what is technically possible) as it was a user-driven one. Thus the users were continually involved in assessing both purpose and result.

This point of departure does not imply that the EBU project assumed a restrained stance, with project managers politely waiting for the users to express their desires. On the contrary, the EBU project was engaged in constantly exploring a wide range of present and future resources and of existing, potential or intermediate solutions. The purpose was to map all feasible possibilities in order to present them in an exact clear and simple fashion, thus enabling university staff and students to indicate applications the project could realise on their behalf. Only this method permitted an adequate testing, improvement, adjustment and implementation of the practical project results.

Once all the subsidiary projects were concluded, the project management started the transfer of the responsibility for maintenance and support of every newly developed application to the regular sections of the organisation, especially of the university library.

Related to the strategic policy of the university library the following elements of the EBU policy were essential:

- integration of traditional and electronic library services,
- physical and conceptual accessibility of collections:
 - technical infrastructure,
 - well performing information retrieval mechanisms,
 - ergonomical interfaces,
- growth of electronic collections,
- centrality of the user.

Some examples of subsidiary projects are the following:

- **Definition studies:**
 - basic provisions for work station facilities,
 - information retrieval system,
 - library service and on-line learning,
 - decision matrix for the digitalisation of special collections.
- **Pilot projects:**
 - electronic SDI services,
 - electronic publishing of Ph.D. theses,
 - expanding of the collection via Internet,
 - the making of a new electronic scientific journal.
- **Implementation projects:**
 - training of the library personnel,
 - ergonomical desk top environment,
 - expanding the supply of electronic full text journals,
 - digitalising of the Utrecht Organ archive.

The project organisation can be described as follows.

The project was supervised by a steering committee, of which both the managing directors of the library and the computer centre were members. A specially appointed overall project manager (ms. Natalia Grygierczyk), responsible for the project, reported to them monthly.

The general project manager was assisted by two co-ordinators (one from the library, the

other from the computer centre) who were responsible for the logistics and the flow of information to separate project groups. Both co-ordinators and the overall project manager were responsible for the organisation, planning and logistics of the projects. In addition they directed several of the subsidiary projects; this way their knowledge was optimally used. The project involved two project groups. The first occupied itself with infrastructure, the other explored new forms of service. The project manager was not responsible to both groups; they just received information.

Both groups included library staff, computer centre personnel, and employees of the automation departments of the respective faculties. The two groups did not make any decisions, but they acted as sounding boards and advisory committees reacting to the plans and outcome of the subsidiary projects, and they promoted the acceptance of results. Executive working groups, carrying out the action, were set up for each specific project. Each working group had its own project leader who reported to the overall project manager.

The project budget totally amounted to Dfl 2.100.000:

- Dfl 550.000 provided by the library from its own budget,
- Dfl 550.000 provided by the Computer Centre from its innovation budget,
- Dfl 1.000.000 from the university innovation funds.

At this moment the EBU project is formally concluded. A number of subsidiary projects has been transferred to the regular organisation as a new service or activity.

The innovation of the library is being continued in a number of strategic projects (information retrieval and the supporting of electronic publishing) and also in some smaller projects, all involving library staff from several departments and co-ordinated by a central innovation manager.

5. Results and problems

In the preceding section we have argued that a successful library innovation process requires a separate project organisation. Such an approach demands, however, special care and attention for the integration process of the project's outcome into the regular organisation. In this respect, we would like to conclude by directing your attention on three important factors:

- the correlation with strategic planning in general,
- the transfer of project results to the regular organisation.
- the correlation with human resource management,

The correlation with strategic planning in general.

In order to implement the outcomes of the projects successfully, a broad embedding of the innovations within the organisation is needed. For this purpose, the following measures are of vital importance.

The library organisation needs to have a well-formulated mission, which has to be formulated in terms of actual unambiguous objectives. The vision at the base of these goals must be supported by the entire organisation. In case no mission or objectives have been drawn yet, this should receive top priority. Furthermore, it is important to prevent this aim from entirely turning into a top-down process. The organisation management has to be a source of inspiration. It can achieve this by providing the points of departure for a broadly based debate and by subsequently involving into this debate as many staff members as possible.

Within the context of the innovation process, both mission and objectives should define the envisaged goals as well as the expected results. In order to accomplish this, the innovations

must be described in a series of coherent and well-detailed project plans, in which all concerning time schedules, responsibilities, budgets as well as the final outcome are worked out appropriately.

Finally, in view of the high expenses of the innovation process as well as the broad appeal to available know-how, it is recommended to work together with other libraries on the various subsidiary projects if such co-operation is possible. This, however, always calls for scrupulous consideration from a strategic point of view: the project's target should not be altered, and it must provide its organisation with the proper profile.

The transfer of results to the regular organisation

In section 3, various project types were distinguished according to their objectives:

- definition studies,
- pilot projects,
- implementation projects.

During completion of each subsidiary project, the results for the regular organisation should be clearly determined. As to the transfer of results, we can observe the following possibilities:

- The project in question does not require a follow-up in the organisation. Either it has proved to be unsuccessful or, considered from a strategic point of view, it is advisable not to continue the involved activity.
- The project result is of strategic importance, however as of yet does not prove to be ready for transfer to the regular organisation. In that case, it should be continued as a strategic innovation project supervised by a separate project organisation.
- The project in question is prolonged within the regular organisation, either as a project or as a new regular service. In this case, the consequences for the involved staff must be specified: the number of staff required as well as their (new) qualifications.

Actually, the transfer of results to the organisation as a new regular service is the best way to safeguard a project's results. In our approach this can be done as follows:

- involve regular library staff in the projects as well as in the description of the activities involved in a new or renewed service or product as a result of the project;
- the new activity should be implemented within one of the regular departments;
- if the staff members involved in the project are functioning satisfactorily, they are the first candidates for the new regular job that may evolve out of the new activity;
- guidance should be given to the implementation of the new activity by training programs for the staff involved, detailed descriptions of the procedures to be followed, evaluation and (if necessary) adjustment of these procedures.

This process has a number of advantages and disadvantages:

- because of the training of the staff involved, the process described takes almost twice as long, compared with the situation in which experienced project staff is hired; but
- there is more commitment of the participating staff to the results; and
- at the end of the project the activities can be taken over by the regular organisation immediately.

The correlation with human resource management

The transfer of the project results to the regular organisation requires a proper tuning with the human resource management. I would like to mention the following points of attention with respect to this aspect (*Savenije & van Noord, 1999*).

A high priority for human resources while managing the organisation.

At many libraries, it is not exceptional that the human resource policy does not constitute one of the director's main tasks. The significance of introducing innovations to the library indicates the immediate priority of the consideration the organisation management needs to pay to this matter. Furthermore, it also suggests the urgency of not entirely leaving such important issues to a staff member. The managing director should urge his heads of department to join their efforts. Nevertheless, the managing director himself is to remain responsible for instigating, controlling and formulating the necessary conditions. In view of this, it is essential for him to be able to rely upon professional support given by a human resource manager, who should be specially appointed for library matters and who preferably possesses specific knowledge about this field.

An increase in flexibility of the organisation and its staff.

A primary condition for increasing the flexibility among staff and organisation is to consider the organisation plans under no circumstance as a long- or mid-term blue-print. The innovations effected by the projects will require regular altering of the organisation. Tasks are to become modified, superfluous, whereas new tasks will be added. Within the organisation, the preferable position of services and tasks will be subject to change too. In this respect, it is obvious that, during the yearly budget assessment, both organisation extent and structure need to be scrupulously considered and, if required, adapted. Since this may not be quite a commonly known phenomenon, proper informing of all involved departments is absolutely imperative.

A second condition is that job descriptions may not be narrow. During the project course, a broader delineation provides the possibility for modifying the emphasis while avoiding any arguments about legal positions. However, in view of individual performance reviews, it is important to supplement job descriptions with specified individual tasks, which are temporary, nevertheless .

A third condition is the arrangement of regular performance reviews, preferably every year. During these meetings, which should be organised by the direct supervisor, special attention has to be focused on the staff member's possible career development. What are his ambitions and future opportunities with respect to his present or a possible other office? For instance, do they call for any additional training? In this context, questions like whether a staff member wishes to become engaged in the innovation projects could be considered as well. Such a performance review could also result in outplacement outside the organisation. If the employee in question has performed extraordinarily well or achieved an exceptional result, he should be appropriately recompensated, e.g. by rewarding him a bonus or a study tour.

In order to adequately actualise this mobility policy, it may prove useful to create a mobility bank. Every staff member should be allowed to have his qualifications, experience and ambitions registered . In the event of any temporary or permanent vacancies, these data could then be taken into account. Moreover, such a detailed and updated registration system would provide the basis for a possible exchange of offices, temporary or permanent.

Employees that aspire a different position within the organisation, but whose competence has not been confirmed yet, could enter an assessment procedure. These persons might also be detached to a different short- or long-term office, in which an evaluation of his functioning should lead to clear conclusions.

It may prove beneficial, specially to less extensive organisations, to initiate such a mobility bank together with other libraries in the region. Within this framework, it is essential though the vacancy fulfillment policy is explained and clarified, and that employees who are in danger of being dismissed obtain priority.

Since the number of cases in which two employees can immediately exchange offices is quite limited, mobility may be enhanced by retaining a certain buffer consisting of temporary employees. Even the opportunity of a so-called triangular exchange is not likely to occur very often. A number of temporary formative units or staff, whose appointment can be cancelled at short notice, could augment the opportunities for permanent personnel.

The willingness of employees to co-operate in a mobility program also depends on the atmosphere within various departments and work sites. The formulation of a mobility policy could constitute an additional reason for investing more effort into proper working conditions by the entire organisation.

A comprehensive education policy.

The library organisation needs to have a proper education program comprising various categories of significant training courses. In order of priority, these categories are:

- Adequate competence absent in an entire organisation or an entire department.
- Incompetent individual employees (whereas full competence is a necessity for a proper fulfillment of the offices in question).
- Preferences for training courses within the context of an individual career policy.

Transformations within the library organisation require a considerable budget for training. Nearly every library employee will need to familiarise himself with the opportunities offered by information technology. As such he is expected to overcome any fear of flying. In this respect, it is feasible to institute a combined training program together with several other libraries. With respect to all these activities, proper equipment for every staff member is an absolute prerequisite.

Furthermore, it is recommendable to generally stimulate the use of information technology by staff members. At work sites, this can be accomplished by introducing Intranet facilities for internal communication. In addition, the use of information technology can be encouraged by creating auspicious conditions for purchasing equipment for private use.

As a matter of fact, this final aspect may prove to be the most important point of all lessons learnt. Without a motivated and skilled staff it should be impossible to plan and carry out the innovation process to the extent that is required by the changes the library is confronted with.

Literature:

- Grygierczyk, Natalia (1996). Utrecht Electronic Library: Planning an ambitious innovation. *The Journal of Academic Librarianship*. Vol. 22, p. 45-50, January 1996.
- McClure, Ch.R; Moen, W.E.; Ryan, J. (1994). *Libraries and the Internet/NREN: Perspectives, issues and challenges*. London: Westport.

- Savenije, Bas (1995). De onbegrensde bibliotheek (The boundless library. In: The infinite library, lectures held at the conference 'The Electronic Library Utrecht'). Utrecht University Library.
- Savenije, Bas (1997). New competitors for the publishers - The cobbler and his last. Electronic Library. Vol. 15, no.6, p. 431-435, December 1997.
- Savenije, Bas & Lieke van Noord (1999). Human resource management in de digitale bibliotheek (Human resource management in the digital library). Informatie Professional 1999, (3), 2-16.
- Zuyderhoudt, R.W.L. (1985). Synergetica. M&O, 1985 (2), 116-135.