The future of libraries and computer centres: together or apart?
Solutions in Finland

Paivi Kytomaki
Oulu University
The present situation and pressures for change

Enormous changes have taken place over the last three years in the conditions governing Finnish universities and the environment in which they operate:

1. their income from budgetary sources has been cut back drastically, and at the same time the amount of external finance has increased;
2. their administration has been reorganized, with greater accent on cost efficiency and management by results;
3. they have become more international in outlook;
4. more emphasis is being placed on improvements in teaching;
5. desires are being expressed for a greater openness towards society in general, and this is even being regarded as one of the duties of the universities;
6. competition for resources among the universities has become more fierce\textsuperscript{1,2}.

All these considerations point to the fact that a university has to be able to tell people about its work, its results and its needs in various kinds of forum, and has to be capable of opening up and maintaining real-time interaction situations and of creating high quality teaching and learning environments by methods that may include the use of information technology\textsuperscript{2}.

In order to acquit itself of this task successfully, a university needs to undertake comprehensive, long-term strategic planning in which efficient data management occupies a prominent position. Since data constitute a significant resource, and data
management entails considerable financial investment\textsuperscript{3}, a data management strategy is also required as part of this strategic planning, i.e. a long-term vision or plan for the direction, commissioning and supervision of data resources. Efficient utilization of computer facilities can be looked on as one tool for the implementation of a university data management strategy, and one competitive advantage that the universities have over others\textsuperscript{2,4}. In the present situation the Finnish universities have lacked a comprehensive data management strategy of the kind which could be integrated into the overall strategy for the university, and various instances connected with data management, such as the computer centre, library, administration, faculties, etc., have drawn up and implemented plans of their own, independently of the university and of each other\textsuperscript{2,5,6}. Particular emphasis has been placed on the estrangement between the administration and the computer centre in many universities\textsuperscript{6}.

It is also common to hear people speak of a new mission for data processing, the task of which would be to provide new tools for carrying out all the core functional processes within a university, including computer-assisted instruction, distance learning, publication, databases, information services, registers, examinations, personnel administration and the filling of university posts, financial management, lecture room reservations, general management and the directing of university affairs at the highest level\textsuperscript{3}.

The Finnish universities are now in the process of reorganizing their way of doing things in this respect, defining the duties and responsibilities of the data management sector and placing it firmly in the hands of specific officials\textsuperscript{2,4,6}, and, in the same connection, a review is being made of the organizational status of the university libraries and computer centres and the relations between them. Efforts have also been made to take account of megatrends in society at large, since the technological frameworks that apply in the universities are, in a broad sense, connected with development prospects in the whole of our information society, and particularly with the changes taking place in education, research and the university system\textsuperscript{1,2,5}. 

244
**Organization of the supervision of data management**

The aims of the new model of data management being adopted in Finland are:

1. to support the running of each university and the achievement of the results intended, and

2. integration of the production of information by uniting the departments responsible for services connected with the university’s data management strategy.

Many of the Finnish universities have already set up a working group to supervise and coordinate their data management, and others are proposing to do the same. The chairman of the working group is usually one of the vice-rectors, thus ensuring commitment of the university leadership to the group’s decisions. Matters are normally prepared and brought before the working group by the Head of Data Management, who is frequently also the director or deputy director of the computer centre, but can also be some other person well-versed in data management, e.g. the chief librarian. It is also common in many universities for the chief librarian or director of the library to bring matters before the working group where these are directly concerned with the library or with data management questions for which the library is responsible. The reason for this is that in addition to its basic responsibilities, the library also maintains and develops various registers that not only fulfil a service function but are also of importance when major decisions are to be made in the university, and consequently the library and the chief librarian constitute part of the university’s data management organization.

The members of the data management working group are appointed by the governing board of the university, with due attention given to adequate proportional representation for research, teaching, administration, library and student interests and, at the same time, a broad range of computing experience and expertise, i.e. incorporating representatives of those departments in the university which provide services based on
the products of information technology. The term of office is usually three years at a time²,⁵.

The tasks of the data management working group at the University of Kuopio, for example, are:

- strategic planning of the use of data management and information technology and its incorporation into other aspects of the university’s strategic planning,
- preparation and proposal of a plan and budget for computer purchases and information system projects,
- preparation of new projects and focuses of development and their initiation, in accordance with the powers delegated to the working group,
- definition of the infrastructure, computer applications, services and functions that can be maintained in house by the university and those which must be purchased from outside suppliers,
- development of computer architectures, data transmission and data systems and the provision of instructions and recommendations concerning software, and approval of the annual plan for assignment of the funds allocated for data management⁷.

The responsibilities of the university administration would then be, above all, to develop the university’s data management and data processing strategy, to decide on major development projects, to lay down principles for the provision of information services and to issue recommendations and instructions aimed at ensuring consistency in data handling policy². In addition there are some universities, including Oulu, at which it has been proposed that the security of data systems should be the responsibility of the working group⁵.

In connection with the organization of data management, there has been some discussion in most of the universities on the possibility of combining the library and computer centre into a single unit, since these two institutions have come substantially closer together, in terms of their aims and purposes, in recent times and could in many
people's opinion be most easily combined in the interests of creating larger administrative units. The University of Kuopio even considered merging its computer centre, library, photography laboratories, printing works and audio visual section to form a single "Information and Teaching Services Unit", although the plan was eventually shelved.

In fact, no university in Finland has amalgamated its library and computer centre in an operative sense, but rather the connection has been made at the level of data management strategy, as described above. The library and computer centre at all the Finnish universities have traditionally functioned as quite separate units, under the direction of the director and a steering committee, and receiving their funds directly from the university governing board. Following the creation of a data management working group, the steering committees for the library and computer centre have been abolished at the Universities of Joensuu and Jyväskylä, for instance. Similarly the University of Kuopio is considering doing away with its Library Committee and replacing it with a Users’ Consultative Committee. The university computer centres have preserved their independence to a still greater extent, and their functions have been extended to meet the current needs of the universities in this sphere, but there are some places, e.g. the University of Turku, where the centre has lost its status as an independent unit altogether and has been subordinated to the university administration. Likewise computing services at the relatively small University of Lapland have from the very beginning been a part of the administrative office. The strategic planning group for computing at the University of Oulu has also proposed that the Computer Centre should become a service department responsible to the university office.

Division of labour between the library and computer centre: competition or cooperation?

Even though the library and computer centre at a university serve the same basic purpose, to store and retrieve information, the division of labour is a clearly defined
one and there is little actual competition between them. Each has its own specific sphere of activity. The computer centres are principally responsible for maintaining the computing infrastructure and, at least up to now, they have not been in a position to address the question of the communication of information other than from a largely technical point of view, while the libraries are primarily concerned with substance, i.e. the acquisition, storage, presentation and classification of information itself.

There are many points, however, at which cooperation is possible, the most notable of which is maintenance and development of the university’s computer network. Here it is clearly the computer centre that should be responsible for installing the network and ensuring its smooth function and comprehensiveness, while the library should be involved to a great extent in determining the databases available through it. The databases usually maintained by the libraries at Finnish universities comprise both those compiled by the library itself and those derived from the university’s publications, research and experts. The library’s CD-ROM network server is usually connected to the university network, thus providing access to its CD-ROM databases from PCs in use in the various departments. Also, the Finnish universities’ LINNEA network enables users to access their union database LINDA and many sets of data and articles compiled by the individual universities themselves. Thus the libraries are involved in extending the computer network as far as its content is concerned and the computer centres as far as its technical properties are concerned.

The libraries also contribute significantly to the development of user-friendly information search facilities, e.g. in the presentation and classification of the data included on the library’s or university’s WorldWideWeb (WWW) pages. Similarly, cooperation takes place in the training of users of network services, for which instructors are obtained from both the computer centre (technical aspects) and the library (information searches). It would also seem that the computer centre at all, or nearly all, of the universities is responsible for operating the library’s computer.
Cooperation between university libraries and computer centres in Finland seems to function smoothly, without any appreciable problems, and all the chief librarians and heads or planners of computer centres interviewed have reported that there is little or no competition between the two organizations, or any sense of encroachment on each others' territory. On the contrary, all of them indicated that cooperation had intensified greatly in the last few years, partly on account of the library's increased needs for computer technology. A certain overlapping of functions is recognized to exist in the teaching of information retrieval provided by the libraries, for instance, in that they have also had to instruct students in the use of a PC in general, or in the acquisition by the computer centres of CD-ROM databases which, in terms of their content, should belong to the university library's collections along with others of a similar type. It would seem, in fact, that competition could arise mostly in connection with the purchasing or production and retrieval of large bodies of information.

Furthermore, competition can be expected to increase along with the greater accessibility of publications and study materials in electronic form via the university networks, and also in the supplying of data sources. Should one seek to expand PC facilities at the computer centre and in the faculties, or convert reading desks in the library into integrated workstations, or will there be sufficient resources available to do both? If the libraries are unable to develop their reading rooms into multimedia facilities, the duties entrusted to them will begin to drift into the hands of others. Similarly there is a danger that the training of users of information retrieval systems, and the preparation of material and handbooks for this, could become dispersed between the two organizations in the future, which would not necessarily be in the interests of the user, i.e. the person looking for information. A meeting of heads of computer centres in Finland a few years ago predicted that the libraries would eventually disappear, evidently meaning libraries in the traditional sense. The fact of the matter seems to be, however, that the functions that the libraries currently fulfil will certainly not disappear, but the form in which the information is stored will alter to the extent that someone else could easily take over the job of dispensing it, if the libraries cannot keep abreast of the latest developments. This means that libraries
should take particular care with the training of their staff in computing and data management methods, follow the trends in information technology extremely closely, take an active part in the planning of data management in their university, and, of course, enter into full cooperation with computer centres.

References


2. HUSSO, Hannele and JOKINEN, Yrjö, eds. Tietotekniikka ja tietohallinto Kuopion yliopistossa. Tietotekniikka hyödyntävän tietotoiminnan ja sen hallinnon kehittämistä pohtineen työryhmän raportti. (Information technology and data management at the University of Kuopio. Report of a working group on data processing by the use of information technology and the development of its administration) Kuopio, University of Kuopio Planning Unit, 1994, 53 pp. + i.


