The Integration of Library, Telecommunications, and Computing Services in a University

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EXECUTIVE SUMMARY

Today many IS departments and individuals are attempting to transform from technical groups and specialists to user oriented functions and customer support personnel. The major responsibility of the traditional IS department has evolved from the development, operation, and support of technology to the management of information. In the university environment, managers of information have traditionally been librarians. Librarians have increasingly become users of electronic information resources. A merger of the library with computing and telecommunications brings together technical expertise with information management skills.

This case study describes the process of integrating the library, computing and telecommunications services in a University. Within the last two years, a new manager in the newly created position of Chief Information Officer merged these diverse organizations. We will describe the techniques used during the first year to foster communication, develop new strategic direction, and create and implement a new organizational structure. We will focus on establishing leadership, the organizational change and operational planning process, and the initial implementation of the new organizational structure. We will describe some of the problems and obstacles that needed to be addressed, including new management’s establishment of trust and control, creating an environment for change, managing change amid strong time pressures, human resource issues, and resource constraints.

It is expected that many of the issues that arose during this merger will be addressed by organizations in other industries as they attempt to evolve from technical IS groups to more customer oriented organizations. Today it is imperative that IS functions provide client support, which requires different types of skills from those traditionally nurtured among technical experts in traditional IS departments.

BACKGROUND

The University is an independent, coeducational institution located in northeastern United States. Approximately 5000 undergraduate and 1500 graduate students are enrolled in programs in the arts and humanities, business, education, engineering, natural and social sciences. The University employs approximately 1400 faculty and staff.

The University’s mission is to advance learning through the integration of teaching, research and service to others. It is committed to integrated learning, promoting the discovery, integration, and
communication of knowledge. The University’s mission statement embraces a commitment to the
tellectual, physical, social, ethical, and spiritual development of all members of the academic
community.

To support the discovery and integration of knowledge, the University built extensive library
resources, including a collection of over 1 million volumes. The advent of the campus wide network
enabled the library to supply all users with electronic as well as traditional services. In 1995 the
university library staff numbered approximately 60, having just been significantly reduced from 75.
The organization of the libraries in June 1995 is shown in Appendix A.

The University also built extensive computer and communications resources to support its
mission. The computing center served the needs of students, instructors, researchers, and adminis-
trative users. A total of approximately 90 people worked in this department, whose structure is shown
in Appendix A.

SETTING THE STAGE
The library and computing center at this university, as at most universities, evolved separately,
with different roots and cultures. We describe here the evolution of these two groups, similar
integration efforts at other schools, and the University’s decision to integrate these functions.

**Library Services vs. Computing and Communication Services: Evolutionary Differences**

Historically the library’s primary function has been to provide information to faculty and
students who are in the pursuit of knowledge. Initially when computers were introduced into
universities, their primary purpose was the storage and dissemination of data. Whereas data are
simple observations of states of the world that are easily structured, captured, quantified, and
transferred, information is data endowed with relevance and purpose which requires a unit of
analysis, needs consensus on meaning, and requires human mediation (Davenport, 1997). The role
of the librarian has generally been to aid the user in finding meaningful information that can be
transferred to knowledge, information that has been reflected upon. As computers have become more
pervasive and user oriented, they have evolved as a source of information rather than simply data.
As a result, data processing centers have evolved to encompass information management.

While the library and computing and communications services both provided support for
information gathering and processing, there were significant cultural differences within these
professions. These differences were embedded in different approaches to problem solving. For the
computing people, new technology was often the key to solve problems because it enabled more
efficient and effective processing of data and information. For the librarians, the information itself
provided answers.

Gender differences, the nature of the educational training, and the problems that were solved
by librarians as opposed to computing personnel contributed to cultural differences. The library
profession is predominately female while computing is male dominated. At the university, the
library’s director and four out of six associate directors were female. In Computing and Telecommu-
nications, only one associate director was female and she was two levels down within the hierarchy.
The demarcation between exempt and nonexempt staff was much greater in the library as compared
to the computing center, most probably because of the greater importance of formal education in the
library.

Librarians were generally excellent oral and written communicators. They used their skills in
meetings where they joined together to plan and discuss various issues. The computing people had
strong analytical skills and analyzed and solved problems often without as much discussion. Whereas
the librarians worked best in a very collegial atmosphere, computing people often stressed doing the
best individual job, i.e., developing the best program, solving the problem quickest, etc.

The librarians interacted primarily with faculty and students. They were comfortable working
with novice users, often providing general solutions to meet the needs of large groups. Computing
people entered the profession when communication with external constituents was minimized
through the segregation of the computing center. “Many computer people were attracted to the IT