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Chapter VI

Implementing Relational Database Systems: Implications for Administrative Cultures and Information Resource Management

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EXECUTIVE SUMMARY

Traditionally, administrative computing has been the main, or often only, unit in a campus developing and maintaining the basic operating systems of an institution (McKinney et al., 1987). Information resources have been confined to an infrastructure, such as a mainframe computer or minicomputers, which processes registration, financial aid, and other services (Van Dusen, 1997). The advent of increasingly sophisticated software and hardware tools has challenged the centralization of the control and manipulation of information resources. Crow and Rariden (1993) describe an ideal information resource management model as follows:

Powerful software tools are available that can essentially eliminate the technical expertise necessary to process either universitywide data or off-campus research databases. ... Students, faculty, and administrators will be able to ask and answer their own datarelated questions from their desks without the assistance or intervention of a computer center's staff. (p. 467)

To date, no institution has achieved this ideal (Van Dusen, 1997). However, colleges and universities are making progress toward it. This chapter describes the experiences of two institutions, University of Redlands and Cabrillo College, as they implement similar relational database systems. It describes the effects of the implementation process on the institutional administrative cultures, and the implications for information resource management.

CASE QUESTIONS

- What factors drive an institution to replace its existing administrative information system (AIS)?
- What are the elements and phases of the implementation process?
- What are the expected benefits of implementing a new AIS? What are the potential risks?
- When replacing an existing AIS, in what ways should an institution consider changing the organizational structure that was supported by the original system?

CASE NARRATIVE

Background

Founded in 1907, the University of Redlands (UOR) is a private institution, located 60 miles east of Los Angeles. The organizational structure of the University includes the board of trustees, the president and vice presidents for Finance and Administration, and Academic Affairs. The University has two colleges — the College of Arts and Sciences (CAS) and the Alfred North Whitehead College of Lifelong Learning (ANWC). CAS offers more than 25 majors in liberal arts and programs of study in professional and pre-professional fields to over 1,500 residential students. ANWC offers undergraduate and

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