Enterprise Resource Planning Implementation in an Institution of Higher Learning: A Case Study of Drummond University

Randall B. Hayes, Central Michigan University, USA
Kathleen M. Utecht, Sam Houston State University, USA

EXECUTIVE SUMMARY

Enterprise Resource Planning (ERP) software systems are implemented in major corporations because of their unique design which enables the integration of information across the functional areas of a business. Implementations of ERP software, such as SAP or Oracle, are most commonly documented in the manufacturing sector. This case study, however, describes the implementation of ERP in an institution of higher learning. In particular, issues pertaining to implementing SAP in a university structure, measuring the return on an ERP investment in an educational institution, and managing organizational change are discussed. [Article copies are available for purchase from InfoSci-on-Demand.com]

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ORGANIZATIONAL BACKGROUND

Drummond University (DU) was founded in 1892 in a small town in the Midwest. The university began as a teacher preparatory school, but over the years added both professional and liberal arts programs. Capitalizing on its small-town setting and diverse educational programs, the university has grown to become one of the largest regional universities in the Midwest. The university now enrolls approximately 18,000 students, of which 15% are graduate students. The school attracts students from 35 different countries: a significant achievement for a rural institution. Currently, the university has nearly 2,500 employees on the staff.

Much of the attraction of Drummond is due to its mission of offering a “high value” education. In the context of the university’s mission statement, “high value” means an excellent education at a reasonable price. The university’s tuition rates are among the lowest in the state,
and the university has been cited in one national news magazine as representing one of the top-10 values in higher education in the Midwest. Tuition increases in recent years have been near the rate of inflation, a notable achievement when competing institutions have increased tuition at two or three times this amount.

A president, who answers to an eight member Board of Trustees, governs the university. The governor of the state appoints the Board, and board members serve 8-year terms, although they can be reappointed. The president is responsible for a $300 million budget of which 57% goes for salaries and wages, 33% pays for supplies and equipment, 4.3% is for salable merchandise, 2% goes for debt service, and 4% is for miscellaneous purposes. About a third of the university’s revenues come from state appropriations, while tuition and room and board payments from students provide about half of the total revenues. The rest of the university’s income comes from a variety of sources, including donations and income from athletic events.

Four divisions report directly to the president: Academic and Student Affairs, Business and Finance, University Advancement, and Athletics. The president selects the provost (who manages Academic and Student Affairs) with the advice of the faculty. The president can appoint the managers of the other divisions directly, but all division heads (including the provost) must receive Board of Trustees approval. The Board of Trustees selects the president, with some advice from the faculty.

**SETTING THE STAGE**

Bob Stewart was concerned about a call he had just received. Stewart was a senior professor in the Information Systems Department at DU and was acknowledged as one of the more capable people on campus in the area of databases and networking. The call was from Allen Carpenter, one of the senior members of DU’s Board of Trustees. Carpenter wanted Stewart’s evaluation of the SAP R/3 system that had been installed on campus 10 years earlier. Specifically, Carpenter wanted Stewart to consider whether DU had made the right choice in adopting an Enterprise Resource Planning (ERP) system and whether DU was using the software effectively (Martins & Kambil, 1999).

Stewart knew Carpenter slightly through a previous presentation to the Board regarding an unrelated issue. Carpenter was the CEO of a mid-sized publishing company, and he had the reputation of someone who wanted to bring a serious business-like approach to the way the university conducted its affairs. Carpenter always wanted detailed cash flow data regarding any new university initiative, and he wanted tight accountability for any new project’s success or failure. As he was a senior member of the Board, Carpenter’s approach was adopted by the Board of Trustees. Before Carpenter’s arrival almost 12 years ago, the Board had acted very much like a Board of Directors of a not-for-profit or charitable institution. The focus of the Board’s decisions was on the attainment of educational goals, and in the enhancement of the research reputation of the university. Success measures for educational initiatives were normally expressed in terms of student achievements, enrollments, and applications to the university. Success measures for research efforts were counts of the numbers of articles published and research grants received. Financial measures of success, when they were used at all, mainly comprised summaries of budgeted expenditures versus actual expenditures. With his MBA training and long business experience, Allen Carpenter found these traditional methods of project evaluation incomplete at best, and superficial at worst. Carpenter had set out to change the approach, and largely he had succeeded. Now the university evaluated educational and research initiatives more like a