COMPARATIVE STUDY OF STRATEGIC ISSUES IN THE MANAGEMENT OF BUSINESS SCHOOL COMPUTER RESOURCES

Ralph Stair, Jr.
Florida State University

Business schools have seen dramatic growth in the acquisition and use of computer systems and technology. The overall purpose of this paper is to investigate strategic issues in the management of business school computer resources. Three surveys conducted in 1984, 1986, and 1988 reveal trends and the current situation. Other research will also be used to gain insights into important strategic issues. This paper discusses technology growth patterns, goal development, strategic decision making, staffing and management issues, budget levels and phases, and strategic support issues. The two most critical strategic issues appear to be adequate funding and a lack of goals and/or strategic planning. All three surveys indicate that these important issues have not been adequately addressed.

Since the early 1980’s, business schools have gone from little or no computer support to sophisticated systems including advanced personal computers, networks, micro to mainframe links, and a wide array of software products for students, faculty, and administrators (Chen and Willhardt, 1986; Simkin, 1986). During the early years, there weren’t many choices and computer related decisions were not as complex (Cougar, 1984). Today, there is a vast array of products that business schools can acquire (Mroz, 1984). There are also many more possible system configurations such as stand alone personal computers, networks, and micro to mainframe links. While past decisions concerning computer resources seemed difficult, decisions made today are much more complex. This means that there is more potential for making very good or very bad decisions. The overall purpose of this paper is to explore these important decisions and managerial issues. This will be done by examining past and current research to look at trends and to
identify important issues.

**Methodology**

The results of three surveys will be used to establish a trend line and to develop conclusions about strategic issues in the management of business school computer resources. In addition, other surveys and research will be used to gain further insights (Frand, 1987; Stair, 1989; Turner, 1987). The first survey was conducted by Render and Stair in 1984 (Render and Stair, 1985). This survey investigated issues related to the management of computer resources, curriculum changes, and interactions with industry. The 1984 survey was sent to about 600 business school deans. There were 210 returned and usable questionnaires, representing a response rate of 35 percent.

The second survey was conducted in 1986 by Render and Stair (Render and Stair, 1987). It investigated the same issues as the 1984 survey. This survey was sent to the same group as the 1984 survey. There were 160 returned and usable responses, representing a response rate of 27 percent.

The third survey was conducted by Frand in 1988 (Frand, 1988). This survey investigated many issues including strategic planning, business school computer support, strategic computing support, and instructional and curriculum issues. Like the 1984 and 1986 surveys by Render and Stair, the 1988 survey by Frand was sent to business schools in the United States and Canada.

**Overview of Growth Patterns**

The primary reason for the importance of strategic issues in the management of business school computer resources is the dynamic growth in the acquisition and use of computer technology over the last five years (Fleit, 1987). Business schools have gone from little or no dedicated computer equipment to becoming small data centers with equipment, software, and staff (Frand, 1987). Thus, business schools are now facing the opportunities and problems of any newly established data center.

The growth of system acquisition and use has been explosive and much higher than expected. The 1984 survey revealed that there were 30.7 microcomputers in the typical lab. Respondents of this survey predicted that by 1986 there would be about 49 microcomputers in the typical lab, but according to the 1986 survey, the average lab size was 58.4 micros. In the 1986 survey, business school deans were again asked to predict microcomputer acquisition and use in 1988, and again the estimates were too low. The estimate made in 1986 for the number of microcomputers in 1988 was 86.8. The 1988 survey revealed that the average number of micros was 148.8. The 1988 survey does, however, include micros for faculty and administrative usage.

The mix of microcomputers has also changed during the last five years. In general, the market penetration for IBM and compatible systems has increased, while Apple systems have decreased. In 1984, 64.9 percent of all business schools surveyed had some type of IBM PC. By 1986, this figure increased to 84.4 percent. Apple systems, on the other hand, were on the decline. In 1984, 45.7 percent of the business schools responding had some type of Apple computer system, in most cases the Apple II series. By 1986, this figure dropped to 33.8 percent. Because lab sizes were increasing, there was an increase in the number of Apple II computers in the average lab between 1984 and 1986. In addition, the Apple II series was being replaced by Macintosh systems. Table 1 reveals the number of microcomputers installed for 1984, 1986, and 1988 for IBM and Apple systems.

The average number of IBM systems is remaining the same, while the number of Apple systems has dramatically declined. IBM compatible systems have increased and make up most of the difference between the averages in Table 1 and the averages reported earlier.

**Goal Development and Decision Making**
Related Content

A Theoretical Investigation and Extension of a Model of Information Technology Architecture Maturity
Randy V. Bradley and Terry A. Byrd (2011). *Organizational and End-User Interactions: New Explorations* (pp. 352-375).
www.igi-global.com/chapter/theoretical-investigation-extension-model-information/53099?camid=4v1a

Exploring the Effects of Hardware Performance, Application Design and Cognitive Demands on User Productivity and Perceptions
Andrew Sears and Julie A. Jacko (2003). *Journal of Organizational and End User Computing* (pp. 54-74).
www.igi-global.com/article/exploring-effects-hardware-performance-application/3768?camid=4v1a

Quality of Use of a Complex Technology: A Learning-Based Model
www.igi-global.com/chapter/quality-use-complex-technology/18232?camid=4v1a

Introducing the Check-Off Password System (COPS): An Advancement in User Authentication Methods and Information Security
www.igi-global.com/chapter/introducing-check-off-password-system/18173?camid=4v1a