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## **Chapter XVII**

# **Using Information Technology to Meet Electronic Commerce and MIS Education Demands**

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### **ABSTRACT**

*Localized applications of institutional learning obtained from four years of successful use of educational information technology in a distance-learning program suggest that the current electronic commerce educational gap may be mitigated by innovative uses of technology in the management information systems curriculum. Presented in this chapter is a case where an educational information technology intensive approach was found to be useful for improving the management information systems education delivery process, when faced with personnel and curriculum space considerations. Just as encountered in the distance learning data, preliminary results indicate enhanced student learning from the interactive and personalized aspects of the information technology, despite the twin constraints of limited management information systems faculty resources and limited Master of Business Administration curriculum flexibility. Face-to-face applications of the interactive and personalized aspects of information technology that were learned in the distance learning experience suggest that technologically based solutions to management information systems education resource pressures may help to effectively meet new requirements for teaching electronic commerce, without sacrificing the traditional management information systems curriculum.*

## **INTRODUCTION**

Localized applications of institutional learning obtained from four years of successful use of educational information technology (IT) in a distance-learning program suggest that the current electronic commerce educational gap may be mitigated by innovative uses of technology in the MIS curriculum. Presented in this chapter is a case where an educational IT intensive approach was found to be useful for improving the MIS education delivery process, when faced with personnel and curriculum space considerations. First, a technical description of a multilocation, top of the line distance learning facility is covered, and research that explores critical success factors for technology-assisted use in learning for MBA students is introduced. Results from a study of 2898 student responses across 117 classes indicate that certain aspects of information technology may facilitate and enhance perceptions of student learning, despite the challenges of the location disconnect. Second, a specific case of a mass customization style educational IT is described, deployed in a face-to-face environment for a highly compressed MBA class on electronic commerce and MIS. Just as encountered in the distance learning data, preliminary results indicate enhanced student learning from the interactive and personalized aspects of the IT, despite the twin constraints of limited MIS faculty resources and limited MBA curriculum flexibility. Thus, face-to-face applications of the interactive and personalized aspects of IT that were learned in the distance learning experience suggest that technologically based solutions to MIS education resource pressures may help to effectively meet new requirements for teaching electronic commerce, without sacrificing the traditional MIS curriculum.

## **ISSUES, CONTROVERSIES, PROBLEMS**

The speed of change of electronic commerce in business and the speed of change in institutions of higher learning involve vastly different scales of measurement. While the growth of the “new” economy has moved at an incredible pace, the question of how to include electronic commerce education in the more slowly moving and resource-constrained university curricula remains unresolved for many institutions. This chapter was motivated by an institutional goal of balancing the MBA student interest and need for new electronic commerce coursework, with the short-term limitations of too few MIS faculty and not enough curriculum space. This increased demand for electronic commerce education by business school students was addressed by offering effective, technology-based solutions based upon the experiences learned to date with distance learning technology and iterative successes in the process of MIS curricular change.

Discussed in this chapter is a semester-long, three credit accelerated MBA-level course that combines electronic commerce and classic MIS topics. The course is unique in that it was delivered via the two parallel streams of heavy applications of information technology and face-to-face classroom instruction. It is an interesting case to review, because we used interactive and customized technology to enhance and exponentially drive more material through the course, thus enabling the coverage of more topics in the space of a one-semester course. By using extensive Web-based teaching combined with the traditional classroom approach, we were able to address the problem of how to teach an electronic commerce offering in addition to the traditional MIS material within the MBA curriculum. Although some students were overly challenged by the additional workload, other students were receptive

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