Chapter 6.18
A Comparison Between the Use of IT in Business and Education:
Applications of the Internet to Tertiary Education

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ABSTRACT

Since the mid-1990s, there have been many claims that the Web has become the new paradigm for teaching. However, most academics do not use the Web as a replacement for teaching, but to provide extra benefits for their students. There is a strong parallel between this use of the Internet for teaching, and the use of IT in business for providing added-value products or administrative efficiencies. In this chapter, the similarities between the use of IT in business and education are discussed, and the categorization of aspects of Web use in education using standard business categories relating to savings and quality are explored. The results are obtained from a survey of academics conducted internationally using the Web, and it surveys perceptions of benefits gained from supplementing teaching with Web-based services. The results revealed similar usage levels of Administrative and Educational Features to aid tertiary education on the Internet. The administrative uses showed slightly more benefits for the institution than for students and vice-versa for educational uses. In both types of uses, their adoption seemed to be based upon how difficult the feature was to set up as well as the added-value benefits it provided. An analysis of the correlation of the benefits identified for institution and students showed a correspondence between most of the uses, with a few interesting differences.

INTRODUCTION

For many years, information technology (IT) has been used to find ways to "add value" for customers to entice them to purchase the products and services of a business. This chapter examines the possibility of translating the benefits of "added value" to the use of the Internet by tertiary educators for subject and course delivery. Many educators use the Internet to supplement existing modes of delivery. Importantly, the Internet is providing a number of "added value" supplemental benefits for subjects and courses delivered using this new, hybrid teaching mode. There are two aspects to subject delivery to where "added-value" benefits may be applied, and that is in the *administrative tasks* associated with a subject and the *educational tasks*. In both instances, IT solutions can be employed to fully or partially process some of these tasks. Given the complex and often fluid nature of the education process, it is rare that a fully integrated solution can be found to adequately service both aspects of subject delivery. Most solutions are partial in that key components are targeted by IT solutions to assist the subject coordinator in the process. If we examine closely the underlying benefits gained in the application of IT to these tasks, there is a strong parallel to the benefits to be gained by business organizations with similar applications of IT. While the actual benefits actually sought by academics depend on the motivation for the IT solution, the perceived benefits can be classified using standard categories used to gauge similar commercial applications.

BACKGROUND

In order to investigate the benefits of using Web-based techniques to supplement traditional teaching in terms of business efficiencies, the reasons commercial organizations use IT are examined. The different aspects of subject delivery also need to be considered in order to draw a parallel with the ultimate benefits to be gained.

Information Technology: Efficiency and Added Value

There are a number of reasons for using IT in organizations today (O'Brien, 1999):

- **For the support of business operations:** This is usually to make the business operation more efficient (by making it faster, cheaper, and more accurate).
- **For the support of managerial decision making:** Support is provided by allowing more sophisticated cost–benefit analyses, providing decision support tools, and so forth.
- **For the support of strategic advantage:** This refers to the use of Porter's (1985) three generic strategies as a means of using information technology to improve competitiveness by adding value to products and services.

It has been recognized for a number of decades that the use of computers can provide cost savings and improvements in efficiencies in many organizations. Porter and Millar (1985) have generally been credited with recognizing that the capabilities of information technology can extend further to providing organizations with the opportunity to add value to their goods. Value is measured by the amount that buyers are willing to pay for a product or service. Porter and Millar (1985) identified three ways that organizations can add value to their commodities or services (known as *generic strategies for improving competitiveness*):

- Be the lowest cost producer.
- Produce a unique or differentiated good (providing value in a product or service that a competitor cannot provide or match, at

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