This chapter outlines the significance of enterprise resource planning (ERP) systems and analyses the rationale used for their adoption. This study is structured around a theory of the motivations for investment in information technology (IT) to support core business operations. The data used for the study are documents published electronically on the Internet by universities. A content analysis was applied to this data. The chapter employs frequent use of quotes from the sources selected to assist the reader to understand the context and to verify the analysis. The findings are that the main reasons for adopting ERP are the modernization of systems, greater usability and flexibility, integration of data and systems, business process reengineering, an increase in the degree of electronic data interchange including the provision of Web-based interfaces to application systems, reduced maintenance and risk avoidance.

INTRODUCTION

Enterprise Resource Planning (ERP) systems have achieved considerable importance in the contemporary information systems arena. ERP sy-
tems are large and complex integrated software packages that support standard business activities. The scope of ERP systems, aligned with their numerous configuration alternatives and breadth of organizational impact, make the task of implementing them considerable, extending in many cases over several years. The extent to which ERP systems are shaping the IT industry is captured in the following comparison: “Twelve years ago, IT people identified their organizations as IBM or Digital shops, says Bruce Richardson, VP of Research at AMR Research Inc. They’re now more likely to be SAP or PeopleSoft” (Sweat, 1998). The financial impact is correspondingly significant: “By early 2000 the ERP revolution generated over $20 billion in revenues annually for suppliers and an additional $20 billion for consulting firms” (Willcocks & Sykes, 2000). ERP systems have now been adopted by the majority of the Fortune top 500 firms and as the high end of the market becomes saturated, ERP systems are filtering down to medium-sized organizations such as universities and to regions beyond those initially penetrated in Europe and North America (Kumar & Van Hillegersberg, 2000). The phenomenon of the widespread adoption of ERP systems, described as the “ERP revolution” (Ross, 1999), leads us to question the reasons for its occurrence and the focus of this chapter is the rationale universities have used when adopting these systems.

THEORETICAL FRAMEWORK

The general question of how organizations shift from one technology to another is addressed by both economic theory and the theory of innovation. Economic theory postulates that in free economies the price system is the invisible hand that determines how resources are deployed and organizations behave. By adopting a new technology that lowers the costs of production, a producer organization may be able to secure a price advantage and thereby achieve a greater market share or reap larger than usual profits until competitors copy the innovation. Even if economic reasons do not account for the adoption of new technology in a manifestly financial, quantitative sense, economic theory gives the further underlying explanation that human beings and therefore organizations also, since they are controlled by people, are utility maximizers and act rationally (Simon, 1978). Consequently we may assume that by adopting an innovation organizations believe they will derive benefit from so doing.

Economic theory therefore gives insight into the reasons why innovations are adopted. The theory of innovations explains the process of how they
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