



## **Chapter II**

# **The Role of IT and Planning for IT Value**

To determine the value of IT once it has been put into place and used, it is important to understand the context of the application of IT. Basically, the role of IT is to enable strategic change and improve business performance in several dimensions. IT enables the rapid delivery of top-quality, increasingly customized products and services, it supports organizations in meeting high standards in customer care, and it provides the means to compress design and development times in order to be the first to market. IT helps to launch new products more frequently, to explore and enter new markets faster, and to seek new distribution channels. All of these dimensions can give companies a powerful competitive edge, and IT is increasingly woven into them. IT does not stand on its own but contributes to realizing business objectives in today's competitive, often global environment.

To determine the value of IT once it has been put into place and used, it is important to first understand the context of the application of IT since it does not stand on its own but rather contributes to realizing business objectives. The first part of this chapter provides a review of the evolution of the role and application of IT, leading to its role in today's information-based organization. Secondly, it is obvious that the best value from IT is gained if the "right" investment decisions for IT are made. To make the right decisions about IT in the context of business objectives, organizations need to carry out some form of IT planning. Planning-for-success is therefore the second main subject of this chapter. The evolution of IT planning practices is briefly described, leading to the most important attributes of contemporary, effective IT planning approaches. Finally, the chapter links the distinct roles of IT with the planning and valuation approaches for IT investments in relation to their business purpose.

## THE ROLE OF IT

With organizations increasingly depending on information and Information Technology, and business changes needing to be implemented almost overnight, the ubiquitous availability of IT is a key ingredient of overall business performance in many industries. Of course, IT has not always played such an essential role; its importance has evolved over time and in stages.

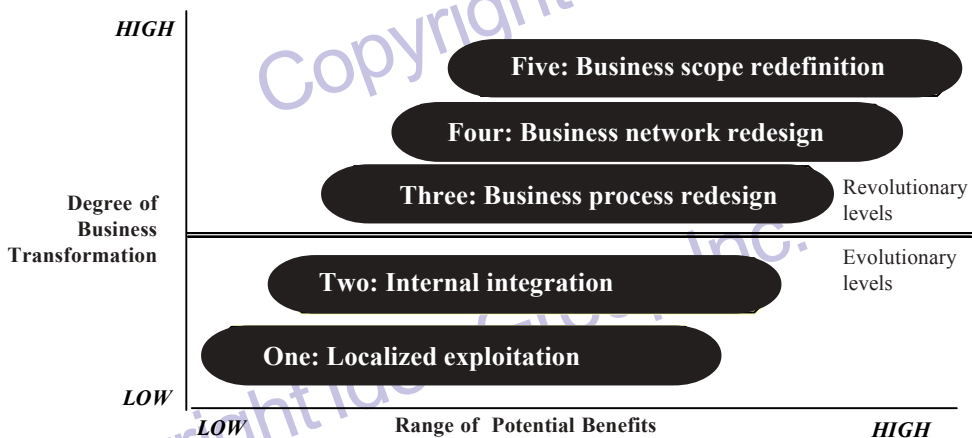
The evolution of IT is handsomely described by the framework, which Professor Venkatraman developed as part of the Management in the 1990s Research Program. This program was conceived as a close collaboration between academic researchers at the MIT Sloan School of Management and representatives of major companies. The results of their research include the various types of applications of IT in today's organization.

Venkatraman suggests five stages of growth, as illustrated in Figure 2.1.

- Stage 1: Localized exploitation of IT* within business functions. This stage denotes the well-known examples of supporting IT such as order entry systems, customer support systems, computer-integrated design and manufacturing systems, payroll and bookkeeping systems, and so on. Functional departments specify their requirements and expect the systems department to respond by delivering systems accordingly, with maximum efficiency. Implementation of a system is typically followed by several years of maintenance (including enhancement) to keep it aligned with functional requirements, which inevitably change as the goals of the business change.

The benefits of exploiting IT relate to the efficiency of business processes and task efficiency and accuracy. Exploiting IT reduces delays and cuts or reduces clerical labor costs. The value of IT investments at this stage is relatively easy to

Figure 2.1: Venkatraman's Five Stages of Growth



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