Chapter I

An Implementation View of Value

“The most powerful weapon on earth is the human soul on fire.”

Marshall Foch

Enterprise-level information systems are the information technologies (IT) that firms use to support their core business processes, such as sales, finance and operations. Well-known examples of these include enterprise resource planning (ERP), customer relationship management (CRM), business intelligence (BI) and supply chain management (SCM). There are also thousands of more specialized applications.

The IT industry has grown to $800 billion and can be divided into the segments shown in Figure 1.1 (Gerstner, 2002). Enterprise software is in the middle of Figure 1.1 and is the focus of this book. The bottom of the figure is hardware where billions of dollars are invested in equipment required to implement the enterprise software. The top is services, which includes maintenance of the hardware and software as well as implementation and advice services.

The firms that implement these systems to support their business process, almost inevitably, face a difficult implementation. Enterprise-level information technologies are often purchased in the form of software packages that are
created to support the requirements of a wide variety of firms, and may not perfectly address specific business needs or fit into the organization they hope to serve. As a result, firms must adapt their organizations and internal technology to fit the solution. These changes introduce potentially serious problems and have resulted in a high failure rate for enterprise software projects.

Overcoming these problems requires a socio-technical perspective that implements systems from an organizational and human perspective. At this point, software companies are too concerned with how different they are from each other, and not enough with how different the customer is after their technology is installed. That difference, the effect on customer, is the wild card. It can make a software company successful or not and it is what this book is about.

This book reviews the leading research on how technology affects humans and organizations, how technology is adopted, and the best practices in system development. The goal is to combine this with “best practices” from the industry to address several patterns in the software industry, including:

- We struggle to design solutions that work for people and their organizations. As a result, there is a low level of technology adoption that hurts many promising solutions.
- Our customers have difficulty installing our products and realizing their true value. We do not easily fit into their infrastructure and we tend to underestimate their challenge.