Many questions raised by managers and researchers over the last two decades on the business value of information technology (IT) have not yet been settled. Firms invest in IT in order to improve their business performance. However, some firms fail to improve while others succeed. The overall benefits realized from IT vary enormously from firm to firm. Computerization does not automatically create business value, although it is one essential component. Just as important are organizational changes such as new strategies, new business processes, and new organizational assets. The critical question facing information systems (IS) managers is not only “Does IT pay off?” but also “How can we best use IT and related technologies?” However, little is known about successful strategies for creating business value with IT, what characteristics of firms create more value from IT, and what types of IT contribute to increase in business value.

This book tackles these questions from a number of unique perspectives. The first chapter, by Tallon and Kraemer, investigates the relationship between strategic alignment and IT payoffs at the process level. By focusing on how IT supports key processes, it provides a comprehensive assessment of the link between strategic alignment and IT business value. The authors operationalize the degree of strategic alignment and IT business value based on executives’ perceptions, which they use to examine empirically the relationship between the two. They find a positive and significant relationship between strategic alignment and IT payoffs. They also uncover evidence of an alignment paradox, which shows that while strategic alignment can lead to increased payoffs from IT, this relationship is only valid up to a certain point.

Shams and Wheeler’s chapter provides interesting insights into the informational aspects of strategic alignment. The authors define strategic alignment in terms of three semiological dimensions: pragmatics, semantics, and syntactics. They use these three perspectives to demonstrate the importance of these informational dimensions in the analysis of strategic alignment. The authors also introduce organizational dynamics as a fourth dimension to address time-related changes.
The chapter by Setzekorn, Rai, and Melcher examines empirically the mediating effects of supply chain coordination strategy and manufacturing IT infrastructure on the relationship between business complexity and firm inventory productivity. To cope with the diversity and volatility associated with a firm’s product markets, firms deploy extensive manufacturing IT infrastructure, which can improve inventory turnover by reducing the need for inventory buffers. However, without a supply chain coordination strategy, they experience significantly lower inventory turnover. The authors provide evidence for the importance of supply chain coordination strategy, which is complementary to IT investment, for better (i.e., higher) inventory turnover.

Navarrete and Pick’s chapter empirically studies the impact of IT investments on organizational performance in the Mexican banking industry by employing multiple performance measures: profitability, efficiency, productivity, and performance indexes. It provides an interesting look at the relationship between IT and business value at the firm level in a context different from the United States. The authors find that there is a lack of correlation between IT spending and indexes of profitability and efficiency, but that there are positive and significant correlations between IT spending and indexes of productivity and performance. They also provide insights into economic and industry factors affecting IT business value in the Mexican banking industry, such as the historical aspects of the industry and the effects of changes in ownership.

The chapter by Shin examines empirically the relationship between IT and coordination costs, and the relationship between IT and firm productivity by considering the value derived from IT’s reduction of coordination costs and its improvement of coordination. The author finds that IT is strongly associated with lower coordination costs and that IT contributes to firm productivity by reducing coordination costs and improving coordination of economic activities.

Based on the case of the Mexican banking industry, Navarrete and Pick’s next chapter analyzes empirically the relationship between IT expenditure and the monetary value (the real and perceived market values) of banks. They find that IT spending has a positive impact on the value of the firm when it reflects the change of ownership or the control of the organization, and that firms spending more on IT do not tend to reach higher selling prices. They discuss the model and the results in terms of the productivity paradox.

Gupta and Sharma investigate how e-commerce enhances business value. The authors introduce an e-commerce framework and show how this framework affects critical value activities such as production, logistics, customer service, sales, and marketing—and the way these factors create business value. They discuss business value at the industry and the firm levels separately. They also discuss the emergence of new intelligent enterprises and learning organizations that are made
possible by the wide adaptation of an e-commerce framework.

Stahl’s chapter provides interesting insights into the business value of IT from an ethical perspective. Discussing the relationship between business and moral value, the author introduces a theory of values based on the assumption that higher-order values come into play in the case of value conflicts. According to the author, this theory can help management make better decisions by incorporating these higher-order values into the decision-making process. This can lead to solutions that are morally and financially superior.

The chapter by Chinburg, Sharda, and Weiser proposes a methodology that facilitates the mapping of network security to business needs using classification schemes, the Open System Interconnection, and Porter’s value chain, along with a decision-support tool called analytical hierarchy process. According to the authors, by relating the two classification schemes using the decision-support tool, this methodology can provide an effective way of determining network security needs that will create business value.

Shin and Kinsella’s chapter investigates the business value of Internet-based virtual private networks (IVPN) in managing communications among distributed business entities. Based on two case studies, the authors propose a decision model of the IVPN, which can be used for the assessment of its strategic value and risks, as well as for the design of virtual telecommunication networks in organizations.

Ghahramani’s chapter discusses an optimization model for telecommunication systems that can evaluate business value and utility for every activity in the systems design and development process, thereby enabling systems designers and developers to determine the business value of telecommunication systems. According to the author, this model is capable of facilitating higher business profitability and productivity by enhancing systems’ strategic goals such as customer service and product position and quality.

The chapter by Craig studies the link between EC strategy and firm performance, focusing on small- and medium-sized manufacturing enterprises. The study shows that small- and medium-sized enterprises (SMEs) gain disproportionately from EC. The author finds that, for SMEs, a higher proportion of stronger performers are found in the group that makes EC a strategic priority. He also finds that, for all firms that view EC as strategically important, SMEs have more to gain than larger firms. A higher proportion of these are strong performers, compared to larger firms.

Based on earlier studies on successful use of IT in small business, Poon’s chapter analyzes how management can effectively help small firms to benefit through Internet commerce. By examining the management factors that contribute to Internet commerce benefits among small businesses, the author finds three factors that make a distinct contribution to success: (1) pushing for Internet technology
adoption, (2) setting up new business initiatives through Internet commerce, and (3) convincing others to use Internet commerce.

Singh’s chapter discusses the opportunities and challenges of e-commerce experienced by small businesses in Australia. It is an exploratory study based on interviews conducted with 20 small e-business owners. Based on his findings, the author provides suggestions to enhance the value of e-commerce in small organizations.

Research on IT business value is valuable not only for academics but also for practitioners, because knowledge obtained through this kind of research can provide managers with a more precise rationale for making IT investments. When IT initiatives fail, it is usually because they are not supported by business case and value propositions. Thus, research on this area should continue for the purpose of obtaining and sharing solutions toward the unsettled and challenging questions surrounding the relationship between IT and business value.

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