Maximizing the Value of Information Technology Investments: Strategic Perspectives

Caroline Howard, HC Consulting, USA

Strategies for evaluating and maximizing the returns on information technology investments on firm performance are analyzed in this issue. Increasingly, information technologies and systems are being viewed as valuable assets that are often critical to the achievement of organizational goals and therefore, fundamental to strategic plans. Articles in this issue present a variety of perspectives for evaluating the effects of information technology investments and formulating strategies for maximizing the value of information technologies.

The journal begins with two articles that discuss the difficulties in estimating the return on information technology investment and suggest approaches for determining value. First, Paul Louis Drnevich and David McIntyre examine the elusiveness of demonstrating a definitive link between IT and firm performance in spite of enormous and continuous expenditures by firms. Through a review of the past 25 years of the IT and Strategy literatures, Drnevich and McIntyre provide evidence of the lack of clear theoretical grounding and consistent empirical support for the strategic importance of IT. The authors review theoretical bases for economic value creation and develop a taxonomy for the roles and performance implications of IT. They then use the taxonomy to examine a sample of important prior research.

Stephen Duhan, Margi Levy, and Philip Powell continue the investigation of the value of IT contributions on firm performance. In a two year case study examining the enhancement of an electronic typesetting capability, Duhan, Levy, and Powell investigate the Capability Development Model as a way to better understand Information Systems (IS) and IT and provide a mechanism for evaluating the IS/IT contribution to firm performance. They suggest a dynamic capabilities perspective to explain the way firms adapt capabilities to changing market environments over time.

Euripidis Loukis and Ioakim Sapounas show that strategic alignment of IS significantly increases the value of IT investment to firm performance. In an article describing their study utilizing firm-level data from Greek companies, Loukis and Sapounas examine IS strategic alignment both at the strategy formulation and implementation level along with investigating the effect of adopting an innovation strategy on IS strategic alignment. Not only do their findings demonstrate the importance of strategic alignment of IS to firm performance, they also found that the adoption of innovation strategy has a positive effect on the strategic alignment of IS. The positive
effect on alignment is both at the strategy formulation and implementation level, because strategic alignment puts pressure on firms to direct their IS investment towards the support of their new innovative products/services, and also to increase the involvement of organizational units responsible for these innovations in the corresponding IS and application development projects.

Sineenad Paisittanand, L. A. Digman, and Sang M. Lee examine the lack of systematic attention has been paid to the linkages between knowledge capabilities and strategy implementation. They draw from literature on knowledge capabilities theory and strategy implementation to investigate two aspects of knowledge capabilities in an organization and their effect on strategy implementation effectiveness along with knowledge process capabilities and knowledge infrastructure capabilities. Based on findings from an email survey of middle managers, they recommend guidelines designed to help middle-managers better understand how to develop activities of knowledge process and knowledge infrastructure capabilities for strategy implementation effectiveness. It is hoped that it brings awareness of the strategic importance of knowledge in an organization, especially in the area of strategy implementation.

Gordon Hunter’s article completes the presentation with a different perspective, investigating the strategic initiatives necessary for the future operation of the business. These initiatives also contribute to establishing and maintaining competitive advantage and relate to the recognition of data and information as a valuable resource. The first concerns the structural aspects of creating leadership to facilitate information technology use. The second involves implementation of a cross-functional integrated information system, specifically a Enterprise Resource Planning (ERP) system, and radical improvement of business processes through its implementation.

Caroline Howard
Editor-in-Chief
IJSITA