Chapter IV

The Integral Role of Information Technology in Achieving Business Strategy Success: Managing the Information Resources of Global Competitors

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This chapter examines the impact of culture on the organizational and information technology infrastructures of global competitors while considering the role business strategy plays on both infrastructures. Information technology is increasingly becoming a focal point of the firm’s business strategy for internally derived competitive advantage, as well as a means for linking to the firm’s supply chain partners. Prior research has suggested that when managers consider how culture impacts the information flow and structure of the organization and its supply chain partners, a more effective “fit” between business strategies and performance results. A conceptual framework is proposed comparing national cultures and two important organizational factors—components of organizational structures and components of information systems. Specifically, the framework helps explain how organizational structures and information technology will vary based on national culture within the confines of the firm’s chosen competitive strategy. Examples from three cultures are used to demonstrate how international managers and researchers may better understand the impact of cultural differences on the operations of firms choosing to compete in international markets. Finally, propositions are offered for future empirical testing by information management researchers.

INTRODUCTION

Information technology has fundamentally altered the way firms compete. It has added electronic methods to the firm’s business strategy, forced information technology to the center of the firm’s strategic thinking, and has clearly become a central focus in business integration through the streamlining of the supply chain (Betz, 2001). Strategic information systems now serve to “network” the supply chain by integrating business strategy and information technology (Pun & Lee, 2000).

According to Cross (2000), “Information and communication technologies are forcing managers to rethink and reshape their business strategies, their use of technology, and their relations with suppliers and customers. The convergence of new technologies, hypercompetitive markets, and ‘heat-seeking’ financial and human capital that quickly flow to new and untested business models now threatens a number of traditional business models and processes.” (p. 36).

However, when organizations expand across national borders, managers are faced with a host of conditions differing from those affecting their domestic operations. These include differences in national cultures, competitive strategies, information sharing processes and worker expectations (Lynn, 1999; Shore & Venkataraman, 1996). In addition, in international expansions managers are under increased pressure to integrate and coordinate multi-country operations resulting in the need to use human and information resources as effectively as possible (Shore, 1996). Ensuring that workers in every location share knowledge accurately, and in a timely manner, is part of the human resource and information system managers’ responsibilities. This can be a daunting task. For example, global competition in the oil industry led British Petroleum to initiate the International Management Project to implement sweeping changes in the oil company’s global management structure, information sharing processes and corporate culture. The goal of the Project was to achieve management consensus on organizational roles and responsibilities, implement effective information sharing, and develop an organizational structure that would encourage flexible networks rather than formal, face-to-face meetings (Siddall, Willey & Tavares, 1992).

Thus, in the push to expand operations to the global marketplace, organizations’ information systems are playing an increasingly key role. In contrast to their operations in the United States, managers are discovering that processes for sharing information are not easily transportable across borders (Ein-Dor, Segev & Orgad, 1993). In order to achieve timely information system implementation, the systems must be developed with an in-depth understanding of local factors (Barker, 1993).

Recent research in the area of information technology and information sharing has proposed contingency models explaining how information systems should be based on the need for organizational “fit” by taking into account key external factors (Henderson & Venkatraman, 1991), as well as differences between headquarters and subsidiary operations (Cheung & Burn, 1994). According to contingency theory, competitive strategies and organizational infrastructures should “fit” the external and internal factors influencing the firm in order to achieve superior competitive performance (see for example, Andrews, 1987; Chandler, 1962; Child, 1972; Porter, 1985). Recent research regarding how firms are structured suggests that values underpinning the formal organizational structure convey important information for workers to execute the mission of the firm within the confines of management’s chosen business strategies (Gibson, 1994; Hinings, Thibault, Slack & Kikulis, 1996). For example, Leidner, Carlsson, Elam and Corrales (1999) document the differences in how managers perceive the benefits of information sharing processes as they
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