Chapter 1.3
The Interplay of Strategic Management and Information Technology

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ABSTRACT

The authors trace historical developments in the fields of information technology (IT) and strategic management. IT's evolution from the mainframe era to the Internet era has been accompanied by a shift in the strategic emphasis of IT. In the early days, IT's contribution to the organization was largely information provision, monitoring and control. Current research at the intersection of IT and strategic management increasingly highlights the impact of IT in terms of informing strategic decisions and enabling information flow vis-à-vis all manner of organizational processes. We believe these fields are ripe for research focusing on their complementary impact on organizational performance.

INTRODUCTION

We live in an age in which the value of information and knowledge has far surpassed that of physical goods. Information resources have become a key differentiator of successful businesses. Information technology (IT) and information systems (IS) are now integrated in almost every aspect of business, from planning to analysis and design, operations management and strategic decision making. Even for those businesses not in information industries, information plays a vital role in supporting their business functions, from routine operations to strategizing. John Naisbitt (1982) theorized that information would be the driving force for organizations. Companies that manage information well are more likely to maintain a competitive advantage against their peers. Because information has become a major force in driving business activities, Evans and Wurster (2000) proclaimed that every business is in the information business.

IT and IS have experienced dramatic changes in the last few decades. Their major role in business has shifted from tools to support "back-office" operations to an integrated part of business strategies and the maintenance of core competencies. Strategic management, as the process of business strategy formulation and strategy implementation, is concerned with establishing goals and directions, and developing and carrying out plans to achieve those goals. As organizations evolve, so do their strategies and strategic management practices. In recent years, IT has become increasingly important in strategic management. IT and IT-enabled systems are now indispensable in supporting business strategies. In this chapter, we examine the evolution of information technology and strategic management, and their interplay in the last 50 years. We start with a review of major theories and development in both strategic management and IT, and then explore how IT has become an enabler for strategic management. We also discuss research issues in IT-enabled strategic management, and suggest future directions in this cross-disciplinary research field.

STRATEGIC MANAGEMENT

Strategic management is concerned with managerial decisions and actions that determine the long-term prosperity of the organization. An organization must have a clear strategy and its strategy must be carefully developed and implemented to match its resources and environment in the pursuit of its organizational goals. Two meanings behind the often-used term "strategy," as Lowell Steele (1989) pointed out, are the ideational content of strategy and the process of formulating strategy. The former refers to the array of options that one uses to compete and survive, and the latter refers to the planning that leads to the construction of the strategic plan. Thus, IT-enabled strategic management must address the role IT plays in strategy content options and priorities, strategy formulation processes and strategy implementation processes. Strategic management focuses on identifying the direction of an organization, and designing and instituting major changes needed to gear the organization towards moving in the established direction.

Early research in strategic management started in the 1950s, with leading researchers such as Peter Drucker, Alfred Chandler and Philip Selznick. Drucker (1954) pioneered the theory of management by objectives (MBO). He is also one of the first to recognize the dramatic changes IT brought to management. He predicted in the 1960s the rise of knowledge workers in the information age (Drucker, 1968). Alfred Chandler (1962) recognized the importance of a corporate-level strategy that gives a business its structure and direction; as he put it, "structure follows strategy." Philip Selznick (1957) established the ground work of matching a company's internal attributes with external factors.

In the 1970s, theories of strategic management primarily focused on growth, market share and portfolio analysis. A long-term study aimed at understanding the Profit Impact of Marketing Strategies (PIMS) was carried out from the 1960s to the 1970s. The study concluded that a company's rate of profit is positively correlated with its market share. This is a result of economies of scale (Buzzell & Gale, 1987). As companies pursued larger market share, a number of growth strategies—such as horizontal integration, vertical integration, diversification, franchises, mergers and acquisitions, and joint ventures—were developed. As will be discussed later, those strategies are even more widely used today, with the facilitation of information and networking technologies.

Another shifting of strategic focus occurring in the 1970s was the move from sales orientation towards customer orientation. Researchers such as Theodore Levitt (1983) argued that businesses

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