Chapter 1.27
Enterprise Resource Planning Systems in a Global Environment

Paul Hawking
Victoria University, Australia

ABSTRACT

Companies around the world are placing increasing emphasis on strategy development and implementation. Some argue that this increased emphasis is in response to market forces of increased competition and globalization, and the need to be flexible and adaptive to the business environment. Strategy development and implementation is a multifaceted task reliant on a number of interdependent factors. One of these is the role of information technology which in recent times has become an integral part of most companies’ strategies. This chapter discusses the role of strategy development and the importance of the alignment of business and IT strategies in a global environment. It discusses the role of enterprise resource planning systems on strategy development and how these systems underpin many strategic objectives companies strive for in a global environment.

STRATEGY DEVELOPMENT

There is a plethora of articles, books, and presentations on the importance of strategy in today’s companies (Mintzberg, 1994; Porter & Miller, 1985; Kaplan & Norton, 1996). But even with this emphasis, companies struggle with their strategy development and implementation. This is reflected by a much cited reference to a Fortune magazine article which stated: “Less than 10% of strategies effectively formulated are effectively executed” (Kaplan & Norton, 1996). In other words more than 90% of companies that are able to create an effective strategy struggle to implement it.

A possible reason for this finding may be the diverse views of what a strategy is. The increased focus on strategy has resulted in the word “strategy” and its derivatives being concatenated with a broad range of terms in an attempt to imply a higher level of importance—for example, strategic planning, strategic learning, strategic thinking,
strategic leadership, corporate strategy, business strategy, and functional strategy. This is further reinforced in Mintzberg’s (1994) landmark article “The Rise and Fall of Strategic Planning,” where he argues the virtues between strategic planning and strategic thinking. In terms of what a strategy actually is, Minztberg (1992) defined strategy as:

* A plan—some sort of consciously intended course of action, a guideline (or set of guidelines) to deal with a situation. By this definition strategies have two essential characteristics: they are made in advance of the actions to which they apply, and they are developed consciously and purposefully.

He further attempted to define strategy from the perspectives of being a plan, a ploy, a position, a pattern, and a perspective (Ikavalko & Aaltonen, 2001). Porter’s (1996) definition of strategy focuses more on the outcome: “the creation of a unique and valuable position, involving a different set of activities.” He believes that a strategy is a way an organization seeks to achieve its vision and mission, and that a successful strategy allows a company to capture and sustain a competitive advantage.

The emphasis on the effective development and implementation of strategies has resulted in a number of methodologies being developed to facilitate this process. Two of the more accepted methodologies are Porter’s Value Chain (1985) and Kaplan and Norton’s (1996) Balanced Scorecard. Both methodologies adopt a multifaceted approach involving a number of perspectives to strategy development and implementation. This assists in identifying the interrelationships between the various facets that impact upon strategy and facilitates the devolution of the strategy to operational terms.

The Balanced Scorecard (Kaplan & Norton, 1996) views strategy development and implementation from four interrelated perspectives:

- Financial
- Customer
- Internal
- Learning and growth

Within each of these strategic perspectives, a number of objectives are developed, and for each objective, key performance indicators (KPIs) are identified and targets determined. The methodology then encourages companies to identify initiatives whereby these targets can be obtained (BSC, 2003). For many companies this has involved the adoption of information technology solutions. Porter and Millar (1985) proposed an information intensity matrix to assist in identifying where information technology could be used strategically in the value chain. Somogyi and Galliers (1987) supported this concept by identifying how information technology could be used to assist companies in attaining competitive advantage in the various strategic focuses across the value chain.

Over the last three decades, companies have increasingly identified the importance of information technology in the achievement of strategic objectives. Scott Morton (1991) identified five interrelated factors that influence the attainment of strategic objectives. One of these factors was information technology (see Figure 1).

### INFORMATION TECHNOLOGY ALIGNMENT

Even though the role of technology in strategy development and implementation has been identified, one of the major issues facing companies is the alignment of information technology (IT) strategy with their business strategy (CSC, 2000; Price Waterhouse, 1996). A recent survey of more than 300 CEOs and CIOs identified the alignment of IT and business strategy as their number one priority (Beal, 2003). The importance of this alignment has been identified as a priority for