

FIGURE 2.1 Current Position and Strategic Directions of Movement in the Competitive Product Space

The *plan* specifies precisely what managers must do in order to reach corporate objectives. Often, the implicit objective of a business strategy is to deliver sustained superior, not just average, performance relative to the competition. To outperform one's rivals, one must be—and remain—different from and better than them. Because similar firms, especially those in the same industry, perform in much the same way, a sustainable competitive advantage requires some form of differentiation.

Competitive Product Space **Competitive product space** is a representation of the firm's product portfolio as measured along the four dimensions or product attributes—product cost, response time, variety, and quality—that were introduced in Chapter 1. Figure 2.1 represents a firm's product portfolio in the competitive product space, but for graphical simplicity, we show only variety and cost while holding response time and quality constant. (In fact, instead of representing product cost directly, the figure shows the reciprocal of cost [$1/\text{cost}$] as a proxy of cost efficiency.) An organization may, for example, differentiate itself by offering customers value through a product with a unique combination of the four product attributes. Measuring and quantifying the portfolio of current product offerings along these four dimensions yields a set of *points*, one per product, in the competitive product space.

Strategic Positioning **Strategic positioning** defines those positions that the firm wants to occupy in its competitive product space; it identifies the product attributes that the firm wants to provide to its customers. Figure 2.1 depicts strategic positioning of two firms—A and B. Firm A provides a low-cost standardized product, whereas Firm B provides a customized but expensive product. The arrow shows the intended direction of movement as the firm's strategy.

Competitors also occupy positions in the competitive product space. One could conceivably measure product performance of each competitor, deduce its strategic positioning from the attributes of its products, and represent its current position in the competitive space. Occupying a differentiated position, then, entails producing and delivering different product attributes. This approach requires the firm's business processes to be structured and operated in ways that differ from those of competitors. In the automotive industry, for example, Hyundai aims to occupy a low-cost position, while Rolls-Royce strives for the highest-quality cars. As we will see, each company's business processes will also differ. To sustain its competitive advantage, a firm must ensure that its competition finds it difficult to imitate its chosen position.

Operational Effectiveness To deliver superior performance, a firm must strive to select product attributes that are distinct from those of its competition and create business processes that are more effective in producing and delivering them than its competition. **Operational effectiveness** means *possessing process competencies that support the given strategic position*. Developing process competencies requires designing suitable business processes and operating policies. "Operational effectiveness includes but is not limited to efficiency. It refers to any number of practices that allow a company to better utilize its inputs by, for example, reducing defects in products or developing products faster" (Porter, 1996). It is important to understand that operational effectiveness does not necessarily mean the lowest-cost process, which may be called operational efficiency. A firm such as FedEx has a strategic position and process competencies that are focused on speed and reliability, not on low cost. In contrast, Southwest has a strategic position and process competencies with a much greater emphasis on low cost. In practice, gaining and sustaining a competitive advantage requires that a firm have a good strategic position *and* operational effectiveness to support that position.

2.2 THE STRATEGY HIERARCHY

Strategy spans different levels in an organization. At the highest level of a diversified company, **corporate strategy** defines businesses in which the corporation will participate and specifies how key corporate resources will be acquired and allocated to each business. Corporate strategy formation is thus like portfolio selection—choosing a mix of divisions or product lines so as to ensure synergy and competitive advantage.

At the next level, **business strategy** defines the scope of each division or business unit in terms of the attributes of the products that it will offer and the market segments that it will serve. Here, strategy includes what we described earlier as strategic positioning. Since the goal is to differentiate the firm from its competition by establishing competitive priorities in terms of the four product attributes, business strategy entails a two-pronged analysis:

1. Competitive analysis of the industry in which the business unit will compete
2. Critical analysis of the unit's competitive skills and resources

At the next level, we have **functional strategies** that define the purpose for marketing, operations, and finance—the three main functions in most organizations:

- Marketing identifies and targets customers that the business unit wants to serve, the products that it must supply in order to meet customer needs, and the competition that it will face in the marketplace.
- Operations designs, plans, and manages processes through which the business unit supplies customers with desired products.
- Finance acquires and allocates the resources needed to operate a unit's business processes.

Each of these functions must translate the midlevel business strategy into its own functional requirements by specifying what it must do well in order to support the higher-level strategy.

In particular, **operations strategy** configures and develops business processes that best enable a firm to produce and deliver the products specified by the business strategy. This task includes selecting activities and resources and combining them into a network architecture that, as we saw in Chapter 1, defines the key elements of a process, such as inputs and outputs, flow units, and information structure. Operations is also responsible for developing or acquiring the necessary process competencies—process cost, flow time, flexibility, and quality—to support the firm's business strategy. Whereas business strategy involves choosing product attributes on which to compete,

operations strategy focuses on the process competencies required to produce and deliver those product attributes.

Thus, business strategy is concerned with selecting external markets and products to supply them, whereas **operations strategy** involves designing internal processes and interfaces between the input and output markets. An operations strategy must establish operational objectives that are consistent with overall business goals and develop processes that will accomplish them. For example, a business strategy based on product cost as a top competitive priority calls for an operations strategy that focuses on efficient and lean business processes. Southwest's business strategy has historically focused on low cost. To support this strategy it has designed and operated business processes that aim for high utilization of assets and a high level of labor productivity to lower costs. Similarly, if a firm seeks competitive advantage through product variety, its business processes must be flexible enough to produce and deliver customized products. For example, Zara, the Spanish apparel retailer has achieved tremendous success by providing a wide variety of products using processes that are fast and flexible enough to bring new products to market quickly and replenish them in small lots. If the goal is to provide short response times, processes must include greater investment in inventories (for manufactured goods) or greater resource availability through excess capacity (for both manufacturing and service operations) as we will show in the remainder of this book. Finally, a strategy that calls for producing and delivering high-quality products requires high-quality processes with precision equipment and highly trained workers. In every case, process competencies must be *aligned* with desired product attributes—operations strategy must be *consistent* with business strategy. Example 2.1 describes how Walmart achieved such consistency.

EXAMPLE 2.1

As an example of consistency in strategic hierarchy, consider the case of Walmart, the well-known retailer. Figure 2.2 shows how Walmart has positioned itself as a low-cost retailer of medium-quality goods supplied with high accessibility and availability in terms of both store locations and continuous product availability on store shelves. To support this business strategy, Walmart's operations strategy calls for an efficient distribution process that features short response times and low inventory levels.

To accomplish both of these seemingly contradictory objectives, Walmart's logistics process calls for its own transportation fleet and information network, complete with satellite communications systems to connect stores in well-chosen locations. To ensure close communication among retail outlets and suppliers—and thus quick replenishment of depleted stocks—point-of-sales (POS) data are transmitted by a proprietary information system called Retail Link. Low pipeline-inventory levels are achieved by a system called cross-docking: incoming trucks dock opposite outgoing trucks so that goods can be transferred directly from incoming to outgoing trucks without intermediate storage.

The overall result is impressive, even when compared with other industry leaders: a high inventory turnover rate (Walmart achieved 9.2 turns in 2009 compared to 6.1 for Target), improved targeting of products to markets (resulting in fewer stockouts and markdowns), significantly higher sales per square foot of store space (Walmart averaged sales of \$425 per square foot in 2009 compared to \$273 for Target), dominant market

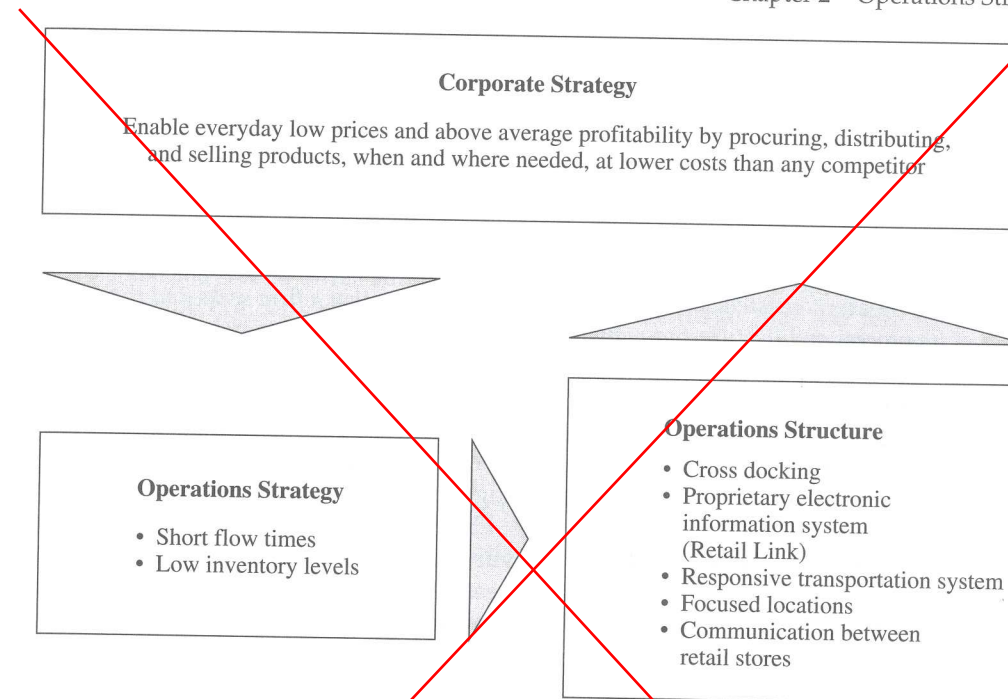


FIGURE 2.2 The Wal-Mart Strategy and Operations Structure

share, and growth (Walmart's sales in 2009 were about \$405 billion compared to about \$63 billion for Target). Walmart is, therefore, an outstanding example of a strategically well-positioned firm that has carefully orchestrated its operations strategy and process architecture to support its business strategy.

As they move forward, however, Walmart faces some challenges. Further growth in the United States requires Walmart to focus on smaller formats in urban areas. This is very different from the current retail network of the company that primarily consists of very large stores outside major urban areas. Walmart's current design of its business processes is unlikely to be completely consistent with the strategic position of smaller formats. Walmart will thus have to design new business processes.

2.3 STRATEGIC FIT

The hierarchical framework described in the previous section reflects a top-down approach to strategy formulation: Once the firm's business strategy has defined its position in the competitive space (as defined by price, time, variety, and quality), its business processes are then designed and managed to attain and maintain that position. It is worth pursuing this point because it helps us answer a fundamental question: What distinguishes an effective business process? In manufacturing, a common tendency is to equate an effective process with an efficient process. Although **cost efficiency**—*achieving a desired level of outputs with a minimal level of inputs and resources*—is obviously an important competitive advantage, firms may also compete on a number of other dimensions such as response time, product variety, or quality. Thus, a business process that is effective for one company may be a poor choice for another company pursuing a different strategy in the same industry.

How, then, does "effective" differ from "efficient"? A process is efficient if it operates at low cost. A process is effective if it supports the execution of the company's strategy.

A low-cost process can be both efficient and effective if, as in the case of Walmart, low cost is a key component of the strategic position of the firm. Thus, the key condition for process effectiveness is the existence of a strategic fit among three main components of a firm's strategy:

- Its strategic position
- Its process architecture
- Its managerial policies

Strategic fit means *consistency between the strategic position that a firm seeks and the competencies of its process architecture and managerial policies*. Consistency may be absent if top-level managers lack knowledge about basic business processes or if they delegate important process decisions to operating managers who are unfamiliar with the firm's overall strategy. In either case, the company's strategic position and network of business processes may be incompatible. For instance, Jaikumar (1986) gives examples of firms that had invested in flexible manufacturing systems but were still producing only a handful of products in fairly large volumes. Flexible manufacturing systems should be used to support a strategy of greater variety of products at lower volumes. Otherwise, they would simply result in an increased product cost.

The potential conflict between the top-down strategy and the principle of strategic fit was first identified in 1969 by Skinner, who argued that "too often top management overlooks manufacturing's potential to strengthen or weaken a company's competitive ability." As a result, concluded Skinner, "manufacturing becomes the missing link in corporate strategy" (Skinner, 1969). Among other things, Skinner was criticizing the perception of operations as a technical discipline concerned only with cost reduction and low-level day-to-day decisions.

Even though that misperception is still fairly widespread, consultants, educators, and practicing operations managers have made substantial progress in understanding the strategic importance of operations. Indeed, the business process reengineering movement of the early 1990s stressed the fundamental rethinking and redesign of business processes as a means of improving performance in such areas as time, cost, quality, and service. This theory advocates radical changes in processes (and, in fact, in the organization as a whole) as an effective means of formulating strategy and designing processes that will result in significant improvements in performance. By equating organizations with processes, this view has put business process design and management on the strategic agenda of top management at numerous firms (Harrison & Loch, 1995).

It is important to understand that there is no permanent state of strategic fit. Dell is a perfect illustration of the need to constantly adapt both the strategic position and the process architecture. Dell, founded in early 1984, was the worldwide leader in the computer industry with a global market share nearing 18 percent in 2004. In terms of the product attributes discussed in Chapter 1, Dell's initial focus was to increase product variety and customization while keeping product cost low and delivery-response time and quality acceptable. To best deliver that specific value proposition, Dell designed an operational process that involved direct sales coupled with a lean and responsive assemble-to-order system. According to Carpenter (2003), Michael Dell explains that "his key to success was putting the focus on the customer and building a custom computer that was exactly what the user needed." The perfect fit between intended strategic positioning and the process used to deliver the products yielded impressive returns: "[Michael] Dell said his business grew by 80 percent for the first eight years, 60 percent for the next six and about 20 percent each year since then." After ten spectacular years, Dell hit a rough patch between 2005 and 2010. Revenues increased marginally from \$49 billion in 2004 to \$53 billion in 2009. Annual net income, however, declined from over \$3 billion in 2004 to under \$1.5 billion in 2009. In fact,

Michael Dell returned to the company in 2007 to alter the two key process architecture choices that had led to success earlier. He introduced selling computers through retail stores like Walmart (instead of only selling direct) and outsourced some assembly to third parties who often built computers to stock rather than to order. These changes in process architecture were required because hardware became more of a commodity over time, and customer priorities shifted from variety (customization) to low cost. This required Dell to design new processes focused on low cost rather than flexibility.

Market- and Process-Driven Strategies Although the top-down view is convenient for explaining the concept of strategic fit, some experts urge that the relationship be reversed. Management, contends one team of researchers, should emphasize that "the building blocks of corporate strategy are not products and markets but business processes. Competitive success then depends on transforming a company's key processes into strategic competencies that consistently provide superior value to the customer" (Stalk et al., 1992).

Strategic fit may be achieved using either of two approaches:

1. **Market-driven strategy:** A firm starts with key competitive priorities and then develops processes to support them.
2. **Process-driven strategy:** A firm starts with a given set of process competencies and then identifies a market position that is best supported by those processes.

Whereas producers of commodity products tend to be market driven, technologically innovative companies tend to drive markets. Apple has had remarkable success in this regard using both its design competency and an intimate understanding of the customer to design products like the iPod, iPhone, and iPad and content delivery services like iTunes that have led the market. eBay and Google are examples of service providers whose technological innovations drove the online auction and search markets. Facebook designed technology that has led to an explosion in online social networking. In all these examples, it is important to observe that even though their origin was a technological innovation, ultimate success depended on meeting a customer need effectively. eBay used its technology to make running an auction quicker and cheaper, Google has made search quicker and cheaper, while Facebook has made connecting with others more convenient.

In general, strategic fit requires both market- and process-driven strategies. It entails identifying external market opportunities along with developing internal process competencies until the two are mutually consistent, and it means doing so repeatedly. The resulting view of strategic fit, argues one review of the field, "inextricably links a company's internal competencies (what it does well) and its external industry environment (what the market demands and what competitors offer)" (Collis & Montgomery, 1995).

2.4 FOCUSED OPERATIONS

The concepts of strategic fit and strategic positioning are rooted in the very existence of trade-offs and the need to make choices. As discussed, strategic fit requires business processes that are consistent with a given business strategy. However, because no single process can perform well on every dimension, *there cannot be a process that fits all strategies*. Choosing a strategy, therefore, involves focus: "The essence of strategy," observes Michael Porter, "is what to do and what *not* to do" (Porter, 1996).

Focused Strategy and Focused Processes It is generally easier to design a process that achieves a limited set of objectives than one that must satisfy many diverse objectives. This fact underlies the concept of **focused strategy**: *committing to a limited, congruent set*