Part 5 STRATEGY AND LEADERSHIP IN THE TWENTY-FIRST CENTURY

15 Strategic Elements of Competitive Advantage

IKEA, the $22 billion global furniture powerhouse based in Sweden, faced a difficult business environment in the first few years of the twenty-first century. The euro's strength dampened financial results, as did an economic downturn in Central Europe. The company faces increasing competition from hypermarkets, "do-it-yourself" retailers such as Wal-Mart, and supermarkets that are expanding into home furnishings. Looking to the future, CEO Anders Dahlvig is stressing three areas for improvement: product assortment, customer service, and product availability. With stores in 34 countries, the company's success reflects founder Ingvar Kamprad's "social ambition" of selling a wide range of stylish, functional home furnishings at prices so low that the majority of people can afford to buy them. The store exteriors are painted bright blue and yellow: Sweden's national colors. Shoppers view furniture on the main floor in scores of realistic settings arranged throughout the cavernous showrooms. In a departure from standard industry practice, IKEA's furniture bears names such as "Ivar" and "Sten" instead of model numbers. At IKEA, shopping is a self-service activity; after browsing and writing down the names of desired items, shoppers can pick up their furniture on the lower level. There they find "flat packs" containing the furniture in kit form; one of the cornerstones of IKEA's strategy is having customers take their purchases home in their own vehicles and assemble the furniture themselves. The lower level of a typical IKEA store also contains a restaurant, a grocery store called the Swede Shop, a supervised play area for children, and a baby care room.

The essence of marketing strategy is successfully relating the strengths of an organization to its environment. As the horizons of marketers have expanded from domestic to regional and global, so too have the horizons of competitors. The reality in almost every industry today, including home furnishings, is global competition. This fact of life puts an organization under increasing pressure to master techniques for conducting industry analysis and competitor analysis, and understanding competitive advantage at both the industry and national levels. This chapter covers these topics in detail.

Global marketing experts cite IKEA as an illustration of several key strategic principles. IKEA exemplifies the concept of the flagship firm: The company has built a network of more than 2,000 suppliers in 50 countries. This arrangement has helped IKEA achieve and maintain a low-cost position in the global furniture industry. IKEA reaps further economies by minimizing transportation and delivery costs. Furniture is shipped to the stores in flat packaging; customers assemble the finished pieces themselves. In its quest for cost leadership, IKEA's management team is mindful of the need for ethical corporate citizenship. In 2000, IKEA launched an initiative in India designed to ensure that the companies that supply it with carpets do not use child labor. In part, the initiative helps poor women in India's "carpet belt" pay off their debts and achieve financial independence.

INDUSTRY ANALYSIS: FORCES INFLUENCING COMPETITION

A useful way of gaining insight into competitors is through industry analysis. As a working definition, an industry can be defined as a group of firms that produce products that are close substitutes for each other. In any industry, competition works to drive down the rate of return on invested capital toward the rate that would be earned in the economist's "perfectly competitive" industry. Rates of return that are greater than this so-called "competitive" rate will stimulate an inflow of capital either from new entrants or from existing competitors making additional investment. Rates of return below this competitive rate will result in withdrawal from the industry and a decline in the levels of activity and competition.

Harvard University's Michael E. Porter, a leading theorist of competitive strategy, developed a **five forces model** to explain competition in an industry: the threat of new entrants, the threat of substitute products or services, the bargaining power of buyers, the bargaining power of suppliers, and the competitive rivalry among current members of the industry. In industries such as soft drinks, pharmaceuticals, and cosmetics, the favorable nature of the five forces has resulted in attractive returns for competitors. However, pressure from any of the forces can limit profitability, as evidenced by the recent fortunes of some competitors in the PC and semiconductor industries. A discussion of each of the five forces follows.

Threat of New Entrants

New entrants to an industry bring new capacity, a desire to gain market share and position, and, quite often, new approaches to serving customer needs. The decision to become a new entrant in an industry is often accompanied by a major commitment of resources. New players mean prices

will be pushed downward and margins squeezed, resulting in reduced industry profitability in the long run. Porter describes eight major sources of barriers to entry, the presence or absence of which determines the extent of threat of new industry entrants.[1]

The first barrier, *economies of scale*, refers to the decline in per-unit product costs as the absolute volume of production per period increases. Although the concept of scale economies is frequently associated with manufacturing, it is also applicable to R&D, general administration, marketing, and other business functions. Honda's efficiency at engine R&D, for example, results from the wide range of products it produces that feature gasoline-powered engines. When existing firms in an industry achieve significant economies of scale, it becomes difficult for potential new entrants to be competitive.

Product differentiation, the second major entry barrier, is the extent of a product's perceived uniqueness; in other words, whether or not it is a commodity. Differentiation can be achieved as a result of unique product attributes or effective marketing communications, or both. Product differentiation and brand loyalty "raise the bar" for would-be industry entrants who would be required to make substantial investments in R&D or advertising. For example, Intel achieved differentiation and erected a barrier in the microprocessor industry with its "Intel Inside" advertising campaign and logo that appear on many PC brands.

A third entry barrier relates to *capital requirements*. Capital is required not only for manufacturing facilities (fixed capital) but also for financing R&D, advertising, field sales and service, customer credit, and inventories (working capital). The enormous capital requirements in such industries as pharmaceuticals, mainframe computers, chemicals, and mineral extraction present formidable entry barriers.

A fourth barrier to entry are the one-time *switching costs* caused by the need to change suppliers and products. These might include retraining, ancillary equipment costs, the cost of evaluating a new source, and so on. The perceived cost to customers of switching to a new competitor's product may present an insurmountable obstacle preventing industry newcomers from achieving success. For example, Microsoft's huge installed base of PC operating systems and applications presents a formidable entry barrier.

A fifth barrier to entry is access to *distribution channels*. If channels are full, or unavailable, the cost of entry is substantially increased because a new entrant must invest time and money to gain access to existing channels or to establish new channels. Some Western companies have encountered this barrier in Japan.

Government policy is frequently a major entry barrier. In some cases, the government will restrict competitive entry. This is true in a number of industries, especially those outside the United States, that have been designated as "national" industries by their respective governments. Japan's postwar industrialization strategy was based on a policy of preserving and protecting national industries in their development and growth phases. The result was a market that proved difficult for non-Japanese competitors to enter, an issue that was targeted by the Clinton administration. American business executives in a wide range of industries urged adoption of a government policy that would reduce some of these barriers and open the Japanese market to more U.S. companies.

Established firms may also enjoy *cost advantages independent of scale economies* that present barriers to entry. Access to raw materials, a large pool of low-cost labor, favorable locations, and government subsidies are several examples.

[1] Michael E. Porter, *Competitive Strategy* (New York: Free Press, 1980), pp. 7–33.

Finally, expected *competitor response* can be a major entry barrier. If new entrants expect existing competitors to respond strongly to entry, their expectations about the rewards of entry will certainly be affected. A potential competitor's belief that entry into an industry or market will be an unpleasant experience may serve as a strong deterrent. Bruce Henderson, former president of the Boston Consulting Group, used the term *brinkmanship* to describe a recommended approach for deterring competitive entry. Brinkmanship occurs when industry leaders convince potential competitors that any market entry effort will be countered with vigorous and unpleasant responses. This is an approach that Microsoft has used many times to maintain its dominance in software operating systems and applications.

In the quarter century since Porter first described the five forces model, the digital revolution appears to have altered the entry barriers in many industries. First and foremost, technology has lowered the cost for new entrants. For example, Barnes & Noble watched an entrepreneurial upstart, Amazon.com, storm the barriers protecting traditional "brick-and-mortar" booksellers. Amazon.com founder Jeff Bezos identified and exploited a glaring inefficiency in book distribution: Bookstores ship unsold copies of books back to publishers to be shredded and turned into pulp. Amazon.com's centralized operations and increasingly personalized online service enable customers to select from millions of different titles at discount prices and have them delivered to their homes within days. For a growing number of book-buying consumers, Amazon.com eclipses the value proposition of local bookstores that offer "only" a few thousand titles and gourmet coffee bars. Since Bezos founded Amazon.com in 1995, sales have grown to $10.7 billion and the company has expanded into new product lines such as CDs and DVDs. The company serves tens of millions of customers in 160 countries. Barnes & Noble responded by entering the online book market itself even as it continues to be profitable in its traditional bricks-and-mortar business. In the meantime, Bezos has repositioned Amazon.com as an Internet superstore selling electronics and general merchandize. In 2003, the company earned a first-ever full-year profit of $35 million.

Threat of Substitute Products

A second force influencing competition in an industry is the threat of substitute products. The availability of substitute products places limits on the prices market leaders can charge in an industry; high prices may induce buyers to switch to the substitute. Once again, the digital revolution is dramatically altering industry structures. In addition to lowering entry barriers, the digital era means that certain types of products can be converted to bits and distributed in pure digital form. For example, the increased popularity of peer-to-peer (p-to-p) file swapping among music fans accompanied the development of the MP3 file format for music. Napster and other online music services offer a substitute to consumers who are tired of paying $15 or more for a CD. Although a U.S. court severely curtailed Napster's activities, other services—including several outside the United States—have sprung up in its place. Bertelsmann, Sony, and the top players in the music industry were taken by surprise, and even now are struggling to develop a coherent response to the threat to their core businesses (see Case 17-1).

Bargaining Power of Buyers

In Porter's model, "buyers" refers to manufacturers (e.g., GM) and retailers (e.g., Wal-Mart), rather than consumers. The ultimate aim of such buyers is to pay the lowest possible price to obtain the products or services that they require.

Usually, therefore, if they can, buyers drive down profitability in the supplier industry. To accomplish this, the buyers have to gain leverage over their vendors. One way they can do this is to purchase in such large quantities that supplier firms are highly dependent on the buyers' business. Second, when the suppliers' products are viewed as commodities—that is, as standard or undifferentiated—buyers are likely to bargain hard for low prices because many firms can meet their needs. Buyers will also bargain hard when the supplier industry's products or services represent a significant portion of the buying firm's costs. A fourth source of buyer power is the willingness and ability to achieve backward integration.

For example, because it purchases massive quantities of goods for resale, Wal-Mart is in a position to dictate terms to any vendor wishing to distribute its products at the retail giant's stores. The Coca-Cola Company and PepsiCo are two of the companies that cater to the retailer's demands, creating new products and altering delivery systems. Wal-Mart's influence also extends to the recorded music industry; Wal-Mart refuses to stock CDs bearing parental advisory stickers for explicit lyrics or violent imagery. Recording artists who want their recordings available at Wal-Mart have the option of altering lyrics and song titles or deleting offending tracks. Likewise, artists are sometimes asked to change album cover art if Wal-Mart deems it offensive. Recently, Wal-Mart launched Soundcheck, which consists of performances by up-and-coming bands that are broadcast every Friday night on the in-house television network found in each store. Exclusive tracks featuring special versions of songs by the Soundcheck sessions' artists are also available on walmart.com.[2]

"Wal-Mart is the 800-pound gorilla. You're going to want to do more things for a customer who is growing as fast as Wal-Mart is."[3]

Ted Taft, Meridian Consulting Group

Wal-Mart has become one of the biggest sellers of recorded music in the United States. Ten years, ago, "big-box retail" accounted for about 20 percent of recorded music sales; today, the figure is about 65 percent. Much of the discounter's growth in this area has come at the expense of specialty music stores. In 2006 alone, about 800 music stores—including those of the bankrupt Tower Records chain—closed. One way that Wal-Mart exercises its buying power is by refusing to stock CDs bearing "Parental Advisory" stickers warning of controversial or potentially offensive lyrics; many artists release edited versions so that Wal-Mart will carry them. However, some artists refuse to make such concessions. For example, Green Day's American Idiot *and Mos Def's* Black on Both Sides *are not available in "clean" versions. As a result, shoppers won't find them at Wal-Mart.*

[2] Jonathan Birchall, "Wal-Mart, the Record Label," *Financial Times* (January 31, 2006), p. 17.
[3] Melanie Warner, "Its Wish, Their Command," *The New York Times* (March 3, 2006), p. C1.

Bargaining Power of Suppliers

Supplier power in an industry is the converse of buyer power. If suppliers have enough leverage over industry firms, they can raise prices high enough to significantly influence the profitability of their organizational customers. Several factors determine suppliers' ability to gain leverage over industry firms. Suppliers will have the advantage if they are large and relatively few in number. Second, when the suppliers' products or services are important inputs to user firms, are highly differentiated, or carry switching costs, the suppliers will have considerable leverage over buyers. Suppliers will also enjoy bargaining power if alternative products do not threaten their business. A fourth source of supplier power is the willingness and ability of suppliers to develop their own products and brand names if they are unable to get satisfactory terms from industry buyers. In the tech world, Microsoft and Intel are two excellent examples of companies with substantial supplier power. Because about 90 percent of the world's nearly 600 million PCs use Microsoft's operating systems and Intel's microprocessors, the two companies enjoy a great deal of leverage relative to Dell, Compaq, and other computer manufacturers. Because Microsoft became so powerful, the U.S. government and the EU launched separate antitrust investigations.

Rivalry Among Competitors

Rivalry among firms refers to all the actions taken by firms in the industry to improve their positions and gain advantage over each other. Rivalry manifests itself in price competition, advertising battles, product positioning, and attempts at differentiation. To the extent that rivalry among firms forces companies to rationalize costs, it is a positive force. To the extent that it drives down prices, and, therefore, profitability, and creates instability in the industry, it is a negative factor. Several factors can create intense rivalry. Once an industry becomes mature, firms focus on market share and how it can be gained at the expense of others. Second, industries characterized by high fixed costs are always under pressure to keep production at full capacity to cover the fixed costs. Once the industry accumulates excess capacity, the drive to fill capacity will push prices—and profitability—down. A third factor affecting rivalry is lack of differentiation or an absence of switching costs, which encourages buyers to treat the products or services as commodities and shop for the best prices. Again, there is downward pressure on prices and profitability. Fourth, firms with high strategic stakes in achieving success in an industry generally are destabilizing because they may be willing to accept below-average profit margins to establish themselves, hold position, or expand.

The PC industry is a case in point. For years, demand for PCs grew at an annual rate of 15 percent. Since the tech bubble burst in early 2000, however, firms have been dealing with a worldwide slowdown in demand; recent growth has been in the single digits. Dell has responded by aggressively cutting prices in a bid to boost share. With profit margins collapsing, competitors are struggling to adjust. The price war has claimed one victim already; in mid-2001, key rival Compaq agreed to an acquisition by Hewlett-Packard. Dell is legendary for its lean operating philosophy; just $0.115 of every sales dollar go to overhead, compared with $0.16 at Gateway, $0.21 at Compaq, and $0.225 at Hewlett-Packard. The company can assemble a complete PC in three minutes. With a build-to-order strategy at the heart of its business model, Dell's sales staff maintains close ties with customers. This approach gives Dell a great deal of flexibility when making pricing decisions.[4]

"Our goal is to shrink the profit pool and take the biggest slice."[5]

Kevin Rollins, President and COO, Dell

[4] Gary McWilliams, "Lean Machine: How Dell Fine-Tunes its PC Pricing to Gain Edge in a Slow Market," *The Wall Street Journal* (June 8, 2001), p. A1.

[5] Richard Waters, "Dell Aims to Stretch Its Way of Business," *Financial Times* (November 13, 2003), p. 8.

COMPETITIVE ADVANTAGE

Competitive advantage exists when there is a match between a firm's distinctive competencies and the factors critical for success within its industry. Any superior match between company competencies and customers' needs permits the firm to outperform competitors. There are two basic ways to achieve competitive advantage. First, a firm can pursue a low-cost strategy that enables it to offer products at lower prices than competitors. Competitive advantage may also be gained by a strategy of differentiating products so that customers perceive unique benefits, often accompanied by a premium price. Note that both strategies have the same effect: They both contribute to the firm's overall value proposition. Michael E. Porter explored these issues in two landmark books, *Competitive Strategy* (1985) and *Competitive Advantage* (1990); the latter is widely considered to be one of the most influential management books in recent years.

"The only way to gain lasting competitive advantage is to leverage your capabilities around the world so that the company as a whole is greater than the sum of its parts. Being an international company—selling globally, having global brands or operations in different countries—isn't enough."[6]

David Whitwam, former CEO, Whirlpool

Ultimately, customer perception decides the quality of a firm's strategy. Operating results such as sales and profits are measures that depend on the level of psychological value created for customers: The greater the perceived consumer value, the better the strategy. A firm may market a better mousetrap, but the ultimate success of the product depends on customers deciding for themselves whether or not to buy it. Value is like beauty; it's in the eye of the beholder. In sum, creating more value than the competition achieves competitive advantage, and customer perception defines value.

Two different models of competitive advantage have received considerable attention. The first offers "generic strategies," four routes or paths that organizations choose to offer superior value and achieve competitive advantage. According to the second model, generic strategies alone did not account for the astonishing success of many Japanese companies in the 1980s and 1990s. The more recent model, based on the concept of "strategic intent," proposes four different sources of competitive advantage. The following paragraphs describe both models.

Generic Strategies for Creating Competitive Advantage

In addition to the "five forces" model of industry competition, Michael Porter has developed a framework of so-called generic business strategies based on the two types or sources of competitive advantage mentioned previously: *low-cost* and *differentiation*. The relationship of these two sources with the scope of the target market served (narrow or broad) or product mix width (narrow or wide) yields four **generic strategies**: *cost leadership*, *product differentiation*, *cost focus*, and *focused differentiation*.

Generic strategies aiming at the achievement of competitive advantage or superior marketing strategy demand that the firm make choices. The choices concern the *type* of competitive advantage it seeks to attain (based on cost or differentiation) and the *market scope* or *product mix width* within which competitive advantage will be attained.[7] The nature of the choice between types of advantage and market scope is a gamble, and it is the nature of every gamble that it entails *risk*: By choosing a given generic strategy, a firm always risks making the wrong choice.

Broad Market Strategies: Cost Leadership and Differentiation

Cost leadership is competitive advantage based on a firm's position as the industry's low-cost producer in broadly defined markets or across a wide mix of products. This strategy has gained widespread appeal in recent years as a result

6 Regina Fazio Maruca, "The Right Way to Go Global: An Interview with Whirlpool CEO David Whitwam," *Harvard Business Review* 72, no. 2 (March–April 1994), p. 135.

7 Michael E. Porter, *Competitive Advantage: Creating and Sustaining Superior Performance* (New York: Free Press, 1985), p. 12.

of the popularization of the experience curve concept. In general, a firm that bases its competitive strategy on overall cost leadership must construct the most efficient facilities (in terms of scale or technology) and obtain the largest share of market so that its cost per unit is the lowest in the industry. These advantages, in turn, give the producer a substantial lead in terms of experience with building the product. Experience then leads to more refinements of the entire process of production, delivery, and service, which leads to further cost reductions.

Whatever its source, cost leadership advantage can be the basis for offering lower prices (and more value) to customers in the late, more-competitive stages of the product life cycle. In Japan, companies in a range of industries—photography and imaging, consumer electronics and entertainment equipment, motorcycles, and automobiles—have achieved cost leadership on a worldwide basis.

Cost leadership, however, is a sustainable source of competitive advantage only if barriers exist that prevent competitors from achieving the same low costs. In an era of increasing technological improvements in manufacturing, manufacturers constantly leapfrog over one another in pursuit of lower costs. At one time, for example, IBM enjoyed the low-cost advantage in the production of computer printers. Then, the Japanese took the same technology and, after reducing production costs and improving product reliability, gained the low-cost advantage. IBM fought back with a highly automated printer plant in North Carolina, where the number of component parts was slashed by more than 50 percent and robots were used to snap many components into place. Despite these changes, IBM ultimately chose to exit the business; the plant was sold.

When a firm's product has an actual or perceived uniqueness in a broad market, it is said to have achieved competitive advantage by means of **differentiation**. This can be an extremely effective strategy for defending market position and obtaining above-average financial returns; unique products often command premium price. Examples of successful differentiation include Maytag in large home appliances, Caterpillar in construction equipment, and almost any successful branded consumer product. Maytag has been called "the Rolls-Royce of washers and dryers;" half the washers sold in the United States are priced at $399 or less, and Maytag does offer a model at that price point. However, Maytag also markets Neptune, a high-tech, water-saving machine; the Neptune line is priced substantially higher than "regular" washers. IBM traditionally has differentiated itself with a strong sales/service organization and the security of the IBM standard in a world of rapid obsolescence. Among athletic shoe manufacturers, Nike has positioned itself as the technological leader thanks to unique product features found in a wide array of shoes.

Narrow Target Strategies: Cost Focus and Focused Differentiation

The preceding discussion of cost leadership and differentiation considered only the impact on broad markets. By contrast, strategies to achieve a narrow focus advantage target a narrowly defined market or customer. This advantage is based on an ability to create more customer value for a narrowly targeted segment and results from a better understanding of customer needs and wants. A narrow-focus strategy can be combined with either cost- or differentiation-advantage strategies. In other words, while a *cost focus* means offering low prices to a narrow target market, a firm pursuing *focused differentiation* will position itself in terms of product uniqueness and premium prices that appeal to a tightly defined target market.

German's *Mittelstand* companies have been extremely successful pursuing **focused differentiation** strategies backed by a strong export effort. The world of "high-end" audio equipment offers another example of focused differentiation. A few hundred small companies design speakers, amplifiers, and related hi-fi gear that costs thousands of dollars per component. While audio components represent a $21 billion market worldwide, annual sales in the high-end segment are only

With annual revenues of $110 billion, Munich-based Siemens AG is a key global player in a variety of engineering sectors. Siemens pursues differentiation focus strategies by targeting key business-to-business segments with relevant marketing messages. Worldwide, public interest in energy-related issues has increased significantly. This advertisement for Siemens' U.S. unit underscores the company's commitment to innovation in power generation, transmission, and distribution to ensure that the nation's energy needs are met.

about $1.1 billion. American companies such as Audio Research, Conrad-Johnson, Krell, Mark Levinson, Martin-Logan, and Thiel dominate the segment, which also includes hundreds of smaller enterprises with annual sales of less than $10 million. The state-of-the-art equipment these companies offer is distinguished by superior craftsmanship and performance and is highly sought after by audiophiles in Asia (especially Japan and Hong Kong) and Europe. Industry growth is occurring as companies learn more about overseas customers and build relationships with distributors in other countries.[8]

[8] Personal communication with Kerry Moyer, senior director, industry programs, Consumer Electronics Association, Arlington, Virginia.

In keeping with the design aesthetics or high-end audio gear, Aragon's seven-channel surround sound home theatre preamp and matching amplifier are the epitome of classic, minimalist design. The amplifier alone (bottom unit) retails for about $3,000.

The final strategy is **cost focus**, when a firm's lower cost position enables it to offer a narrow target market and lower prices than the competition. In the shipbuilding industry, for example, Polish and Chinese shipyards offer simple, standard vessel types at low prices that reflect low production costs.[9] Germany's Aldi, a no-frills "hard discounter" with operations in numerous countries, offers a very limited selection of household goods at extremely low prices. IKEA, the Swedish furniture company described in the chapter introduction, has grown into a successful global company by combining both the focused differentiation and cost focus strategies. As George Bradley, president of Levitz Furniture in Boca Raton, Florida, noted, "[IKEA] has really made a splash. They're going to capture their niche in every city

global MARKETING Q&A

Wall Street Journal: "Sixty percent of the operating profit of LVMH comes from Vuitton. Doesn't that worry you?"

Bernard Arnault, Chairman and Chief Executive Officer, LVMH Moët Hennessy-Louis Vuitton: "Not at all, because I think Vuitton is the brand that has the most growth potential and no direct, comparable competitor. There is a real economic reason people buy Vuitton. There's some fashion, but it's not really fashion. The real motivation is that it's the best value in leather goods. The price is high, but it's not crazy. Vuitton is like Microsoft. You cannot imitate the business model. It's impossible."

Wall Street Journal: "How concerned are you about Louis Vuitton counterfeits?

Bernard Arnault: "Very concerned. On the other hand, this summer when I was on the beaches in Italy and France, all the counterfeit bags were Vuitton and Dior, so maybe it's a sign that the product is doing well—the price of success. We try to seize the counterfeits, but it's a constant struggle."

Source: The Wall Street Journal *(Western Edition) by Lisa Bannon and Allesandra Galloni. Copyright 2003 by Dow Jones & Company, Inc. Reproduced with permission of Dow Jones & Company, Inc. in the format Textbook via Copyright Clearance Center.*

[9] Michael E. Porter, *The Competitive Advantage of Nations* (New York: Free Press, 1990), p. 39.

they go into." Such a strategy can be risky. As Bradley explains, "Their market is finite because it is so narrow. If you don't want contemporary, knock-down furniture, it's not for you. So it takes a certain customer to buy it. And remember, fashions change."[10]

The issue of sustainability is central to this strategy concept. As noted, cost leadership is a sustainable source of competitive advantage only if barriers exist that prevent competitors from achieving the same low costs. Sustained differentiation depends on continued perceived value and the absence of imitation by competitors.[11] Several factors determine whether or not focus can be sustained as a source of competitive advantage. First, a cost focus is sustainable if a firm's competitors are defining their target markets more broadly. A focuser doesn't try to be all things to all people: Competitors may diminish their advantage by trying to satisfy the needs of a broader market segment—a strategy which, by definition, means a blunter focus. Second, a firm's differentiation focus advantage is only sustainable if competitors cannot define the segment even more narrowly. Also, focus can be sustained if competitors cannot overcome barriers that prevent imitation of the focus strategy, and if consumers in the target segment do not migrate to other segments that the focuser doesn't serve.

The Flagship Firm: The Business Network with Five Partners[12]

According to Professors Alan Rugman and Joseph D'Cruz, Porter's model is too simplistic given the complexity of today's global environment. Rugman and D'Cruz have developed an alternative framework based on business networks that they call the **flagship model** (Figure 15-1). Japanese vertical *keiretsu* and Korean *chaebol* have succeeded, Rugman and D'Cruz argue, by adopting strategies that are mutually reinforcing within a business system and by fostering a collective long-term outlook among partners in the system. Moreover, the authors note, "long-term competitiveness in global industries is less a matter of

Indian pharmaceutical companies such as Ranbaxy and Dr Reddy's Laboratories specialize in low-cost, generic versions of drugs to treat cancer, AIDS, and other diseases. Despite the fact that India passed new patent legislation in 2005 intended to limit the manufacture of generics, Western pharmaceutical companies are concerned about lack of clarity in the laws. Meanwhile, the Indian pharmaceutical sector is becoming more global; some industry experts expect Indian companies to have at least a 30 percent share of the worldwide generics market.

10 Jeffrey A. Trachtenberg, "Home Economics: IKEA Furniture Chain Pleases with Its Prices, Not with Its Service," *The Wall Street Journal* (September 17, 1991), pp. A1, A5.

11 Michael E. Porter, *Competitive Advantage: Creating and Sustaining Superior Performance* (New York: Free Press, 1985), p. 158.

12 The following discussion is adapted from Alan M. Rugman and Joseph R. D'Cruz. *Multinationals as Flagship Firms* (Oxford, England: Oxford University Press, 2000).

the rest of the story

IKEA

IKEA's unconventional approach to the furniture business has enabled it to rack up impressive growth in a $30 billion industry in which overall sales have been flat. Sourcing furniture from a network of more than 1,600 suppliers in 55 countries helps the company maintain its low-cost, high-quality position. During the 1990s, IKEA expanded into Central and Eastern Europe. Because consumers in those regions have relatively low purchasing power, the stores offer a smaller selection of goods; some furniture was designed specifically for the cramped living styles typical in former Soviet bloc countries. Throughout Europe, IKEA benefits from the perception that Sweden is the source of high-quality products and efficient service. Currently, Germany and the United Kingdom are IKEA's top two markets. The United Kingdom represents the fastest-growing market in Europe; although Britons initially viewed the company's less-is-more approach as cold and "too Scandinavian," they were eventually won over. IKEA currently has 10 stores in the United Kingdom and plans to open 20 more in the next decade. As Allan Young, creative director of London's St. Luke's advertising agency, noted, "IKEA is anticonventional. It does what it shouldn't do. That's the overall theme for all IKEA ads: liberation from tradition."

In 2005, IKEA opened two stores near Tokyo; more stores are on the way as the company expands in Asia. IKEA's first attempt to develop the Japanese market in the mid-1970s resulted in failure. Why? As Tommy Kullberg, chief executive of IKEA Japan, explains, "In 1974, the Japanese market from a retail point of view was closed. Also, from the Japanese point of view, I do not think they were ready for IKEA, with our way of doing things, with flat packages and asking the consumers to put things together and so on." However, demographic and economic trends are much different today. After years of recession, consumers are seeking alternatives to paying high prices for quality goods. Also, IKEA's core customer segment—post-baby boomers in their thirties—will grow by nearly 10 percent between 2000 and 2010. In Japan, IKEA will offer home delivery and an assembly service option.

Industry observers predict that North America will eventually rise to the number one position in terms of IKEA's worldwide sales. The company opened its first U.S. store in Philadelphia in 1985; as of 2003, IKEA operated 16 stores in the United States and 11 in Canada. Plans call for opening five U.S. stores each year over between now and 2015. As Goran Carstedt, president of IKEA North America, explains, "Our customers understand our philosophy, which calls for each of us to do a little in order to save a lot. They value our low prices. And almost all of them say they will come back again." As one industry observer noted, "IKEA is on the way to becoming the Wal-Mart Stores of the home-furnishing industry. If you're in this business, you'd better take a look."

"To succeed in Japan, I think we have to tell the whole story of why we can sell our products at affordable prices."

Tommy Kullberg, Chief Executive, IKEA Japan

Sources: Richard Tomkins, "How Ikea Has Managed to Treat Us Mean and Keep Us Keen," Financial Times *(January 14–January 15, 2006), p. 7; Theresa Howard, "Ikea Builds on Furnishings Success,"* USA Today *(December 29, 2004), p. 3B; Mariko Sanchanta, "Ikea's Second Try at Japan's Flat-Pack Fans,"* Financial Times *(March 4, 2004), p. 11; Paula M. Miller, "IKEA with Chinese Characteristics,"* China Business Review *(July–August 2004), pp. 36–38; Christopher Brown-Humes, "An Empire Built on a Flat Pack,"* Financial Times *(November 24, 2003), p. 8; Brown-Humes, "Ikea Aims to Fill Up Homes One Catalogue at a Time,"* Financial Times *(August 14, 2003), p. 14; Alan M. Rugman and Joseph R. D'Cruz,* Multinationals as Flagship Firms *(Oxford: Oxford University Press, 2000), Chapter. 3; Ernest Beck, "IKEA Sees Quirkiness as Selling Point in UK,"* The Wall Street Journal *(January 4, 2001), pp. A1, A5; Loretta Roach, "IKEA: Furnishing the World,"* Discount Merchandiser *(October 1994), pp. 46, 48; "Furnishing the World,"* Economist *(November 19, 1994), pp. 79–80.*

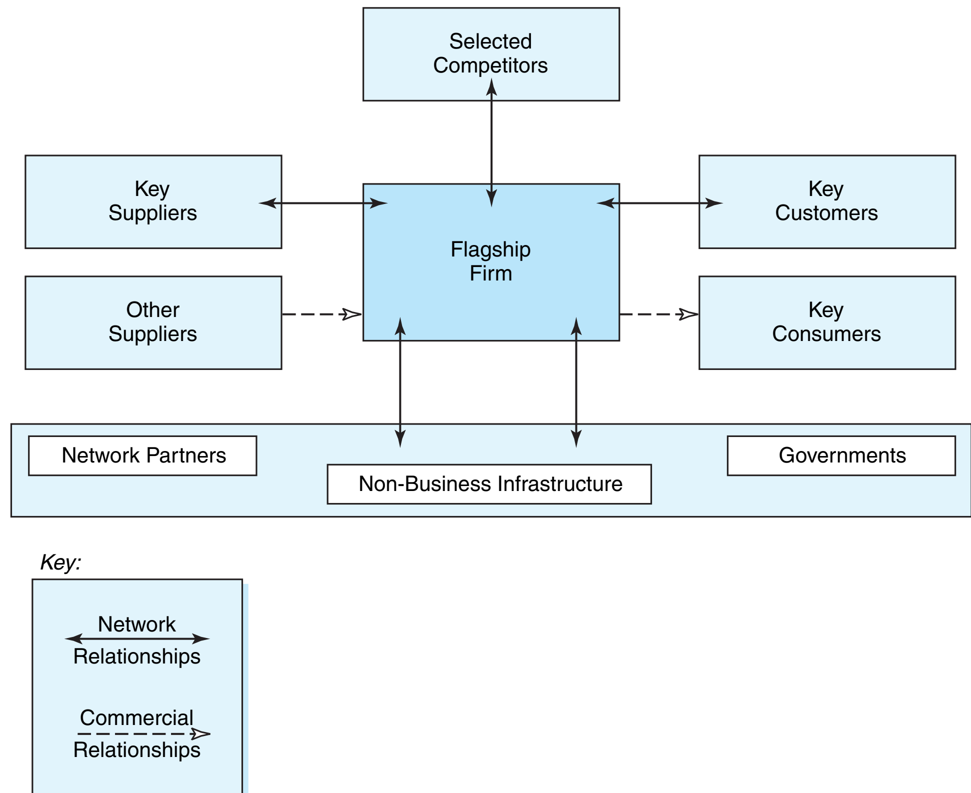
rivalry between firms and more a question of competition between business systems." A major difference between their model and Porter's is that Porter's is based on the notion of corporate individualism and individual business transactions. For example, as discussed previously, Microsoft's tremendous supplier power allows it to dictate to, and even prosper at the expense of, the computer manufacturers it supplies with operating systems and applications. The flagship model is evident in the strategies of Ford, Volkswagen, and other global automakers; Sweden's IKEA and Italy's Benetton are additional examples.

As shown in Figure 15-1, the flagship firm is at the center of a collection of five partners; together, they form a business system that consists of two types of relationships. The flagship firm provides the leadership, vision, and resources to "lead the network in a successful global strategy." *Key suppliers* are those that perform some value-creating activities, such as manufacturing of critical components, better than the flagship. The double-headed arrows that penetrate the flagship and key suppliers in Figure 15-1 indicate that this is a network relationship, with a sharing of strategies, resources, and responsibility for the success of the network. Other suppliers are kept at "arm's length"; these traditional commercial relationships are depicted diagrammatically by arrows that stop at the border of the flagship. Likewise, the flagship has network relationships with *key customers* and more traditional, arm's length commercial relationships with *key consumers*. In the case of Volkswagen, for example, dealers are its key customers while individual car buyers are key consumers; similarly,

Figure 15-1

The Flagship Model

Source: "The Flagship Model" (p.9) from "Multinationals as Flagship Firms" by Rugman, Alan M. and D'Cruz, Joseph R. (2003). By permission of Oxford University Press.



Benetton's key customers are its retail outlets while the individual clothes shopper is the key consumer. *Key competitors* are companies with which the flagship develops alliances such as those described at the end of Chapter 9. The fifth partner is the *nonbusiness infrastructure* (NBI), comprised of universities, governments, trade unions, and other entities that can supply the network with intangible inputs such as intellectual property and technology. In the flagship model, flagship firms often play a role in the development of a country's industrial policy.

Daewoo Group was once a typical Korean chaebol *(family-run conglomerate). However, after the currency crisis of the 1990s, Daewoo underwent a dramatic restructuring. Daewoo Motors was acquired by GM, and India's Tata Motors bought Daewoo Commercial Vehicle. Today, the Korean government owns about 54 percent of Daewoo Shipbuilding & Marine Engineering (DSME); global investors hold the remaining shares. As an independent entity, DSME is prospering by pursuing a differentiation focus strategy. Its products include liquified-natural-gas tankers and offshore drilling platforms.*

Luciano Benetton is one of four siblings who founded the Italian fashion company that bears the family's name. Luciano, who is currently chairman of the Benetton Group, is preparing to turn over control of the company to son Alessandro. The change comes as Benetton faces increased competition from fleet-footed global rivals such as Sweden's Hennes & Mauritz and Spain's Zara. Some industry observers note that Benetton's business model, which involves partnerships with regional sales agents, will need to be adjusted to reflect the business environments in key emerging markets such as China and India.

Benetton's success in the global fashion industry illustrates the flagship model. Benetton is the world's largest purchaser of wool, and its centralized buying enables the company to reap scale economies. The core activities of cutting and dyeing are retained in-house, and Benetton has made substantial investments in computer-assisted design and manufacturing. However, Benetton is linked to approximately 400 subcontractors that produce finished garments in exclusive supply relationships with the company. In turn, a network of 80 agents who find investors, train managers, and assist with merchandising, link the subcontractors to the 5,000 Benetton retail shops. As Rugman and D'Cruz note, "Benetton is organized to reward cooperation and relationship building and the company's structure has been created to capitalize on the benefits of long-term relationships."

Creating Competitive Advantage via Strategic Intent

An alternative framework for understanding competitive advantage focuses on competitiveness as a function of the pace at which a company implants new advantages deep within its organization. This framework identifies **strategic intent**, growing out of ambition and obsession with winning, as the means for achieving competitive advantage. Writing in the *Harvard Business Review*, Gary Hamel and C. K. Prahalad note:

> Few competitive advantages are long lasting. Keeping score of existing advantages is not the same as building new advantages. The essence of strategy lies in creating tomorrow's competitive advantages faster than competitors mimic the ones you possess today. An organization's capacity to improve existing skills and learn new ones is the most defensible competitive advantage of all.[13]

This approach is founded on the principles of W. E. Deming, who stressed that a company must commit itself to continuing improvement in order to be a winner in a competitive struggle. For years, Deming's message fell on deaf ears in the

[13] Gary Hamel and C.K. Prahalad, "Strategic Intent," *Harvard Business Review* 67, no. 3 (May–June 1989), pp. 63–76. See also Hamel and Prahalad, "The Core Competence of the Corporation," *Harvard Business Review* 68, no. 3 (May–June 1990), pp. 79–93.

United States, while the Japanese heeded his message and benefited tremendously. Japan's most prestigious business award is named after him. Finally, however, U.S. manufacturers are starting to respond.

The significance of Hamel and Prahalad's framework becomes evident when comparing Caterpillar and Komatsu. As noted earlier, Caterpillar is a classic example of differentiation: The company became the largest manufacturer of earthmoving equipment in the world because it was fanatical about quality and service. Caterpillar's success as a global marketer has enabled it to achieve a 35 percent share of the worldwide market for earthmoving equipment, more than half of which represents sales to developing countries. The differentiation advantage was achieved with product durability, global spare parts service (including guaranteed parts delivery anywhere in the world within 48 hours), and a strong network of loyal dealers.

Caterpillar faced a very challenging set of environmental forces during the last several decades. Many of Caterpillar's plants were closed by a lengthy strike in the early 1980s; a worldwide recession at the same time caused a downturn in the construction industry. This hurt companies that were Caterpillar customers. In addition, the strong dollar gave a cost advantage to foreign rivals.

Compounding Caterpillar's problems was a new competitive threat from Japan. Komatsu was the world's number-two construction equipment company and had been competing with Caterpillar in the Japanese market for years. Komatsu's products were generally acknowledged to offer a lower level of quality. The rivalry took on a new dimension after Komatsu adopted the slogan "*Maru-c*," meaning "encircle Caterpillar." Emphasizing quality and taking advantage of low labor costs and the strong dollar, Komatsu surpassed Caterpillar as number one in earthmoving equipment in Japan and made serious inroads in the United States and other markets. However, the company continued to develop new sources of competitive advantage even after it achieved world-class quality. For example, new-product development cycles were shortened and manufacturing was rationalized. Caterpillar struggled to sustain its competitive advantage because many customers found that Komatsu's combination of quality, durability, and lower price created compelling value. Yet even as recession and a strong yen put new pressure on Komatsu, the company sought new opportunities by diversifying into machine tools and robots.[14]

The Komatsu-Caterpillar saga is just one example of how more than the pursuit of generic strategies can shape global competitive battles. Many firms have gained competitive advantage by *disadvantaging* rivals through "competitive innovation." Hamel and Prahalad define *competitive innovation* as "the art of containing competitive risks within manageable proportions" and identify four successful approaches used by Japanese competitors. These are: *building layers of advantage*, *searching for loose bricks*, *changing the rules of engagement*, and *collaborating*.

Layers of Advantage

A company faces less risk in competitive encounters if it has a wide portfolio of advantages. Successful companies steadily build such portfolios by establishing layers of advantage on top of one another. Komatsu is an excellent example of this approach. Another is the TV industry in Japan. By 1970, Japan was not only the world's largest producer of black-and-white TV sets but was also well on its way to becoming the leader in producing color sets. The main competitive advantage for such companies as Matsushita at that time was low labor costs.

[14] Robert L. Rose and Masayoshi Kanabayashi, "Komatsu Throttles Back on Construction Equipment," *The Wall Street Journal* (May 13, 1992), p. B4.

Because they realized that their cost advantage could be temporary, the Japanese also added an additional layer of *quality and reliability* advantages by building plants large enough to serve world markets. Much of this output did not carry the manufacturer's brand name. For example, Matsushita Electric sold products to other companies such as RCA that marketed them under their own brand names. Matsushita was pursuing a simple idea: A product sold was a product sold, no matter whose label it carried.[15]

In order to build the next layer of advantage, the Japanese spent the 1970s investing heavily in marketing channels and Japanese brand names to gain recognition. This strategy added yet another layer of competitive advantage: the *global brand franchise*; that is, a global customer base. By the late 1970s, channels and brand awareness were established well enough to support the introduction of new products that could benefit from global marketing—VCRs and photocopy machines, for example. Finally, many companies have invested in *regional manufacturing* so their products can be differentiated and better adapted to customer needs in individual markets.

The process of building layers illustrates how a company can move along the value chain to strengthen competitive advantage. The Japanese began with manufacturing (an upstream value activity) and moved on to marketing (a downstream value activity) and then back upstream to basic R&D. All these sources of competitive advantage represent mutually reinforcing layers that are accumulated over time.

Loose Bricks

A second approach takes advantage of the "loose bricks" left in the defensive walls of competitors whose attention is narrowly focused on a market segment or a geographic area to the exclusion of others. For example, Caterpillar's attention was focused elsewhere when Komatsu made its first entry into the Eastern Europe market. Similarly, Taiwan's Acer prospered by following founder Stan Shih's strategy of approaching the world computer market from the periphery. Shih's inspiration was the Asian board game Go, in which the winning player successfully surrounds opponents. Shih gained experience and built market share in countries overlooked by competitors such as IBM and Compaq. By the time Acer was ready to target the United States in earnest, it was already the number one PC brand in key countries in Latin America, Southeast Asia, and the Middle East.[16] Intel's loose brick was its narrow focus on complex microprocessors for PCs. Even as it built its core business to a commanding 90 percent share of the market, markets for non-PC consumer electronics products were exploding. The new products, which include set-top boxes for televisions, digital cameras, and so-called smart cards, require chips that are far cheaper than those produced by Intel. Competitors such as NEC and LSI Logic recognized the opportunity and beat Intel into an important new market.[17]

Changing the Rules

A third approach involves changing the so-called "rules of engagement" and refusing to play by the rules set by industry leaders. For example, in the copier market, IBM and Kodak imitated the marketing strategies used by market leader Xerox. Meanwhile Canon, a Japanese challenger, wrote a new rulebook.

While Xerox built a wide range of copiers, Canon built standardized machines and components, reducing manufacturing costs. While Xerox employed a huge direct sales force, Canon chose to distribute through office-product dealers. Canon also designed serviceability, as well as reliability, into its products so that it could

[15] James Lardner, *Fast Forward: Hollywood, The Japanese, and the VCR Wars* (New York: New American Library, 1987) p. 135.

[16] Dan Shapiro, "Ronald McDonald, Meet Stan Shih," *Sales & Marketing Management* (November 1995), p. 86.

[17] Dean Takahashi, "Hand-Held Combat: How the Competition Got Ahead of Intel in Making Cheap Chips," *The Wall Street Journal* (February 12, 1998), pp. A1, A10.

rely on dealers for service rather than incurring the expense required to create a national service network. Canon further decided to sell rather than lease its machines, freeing the company from the burden of financing the lease base. In another major departure, Canon targeted its copiers at secretaries and department managers rather than at the heads of corporate duplicating operations.[18]

Canon introduced the first full-color copiers and the first copiers with "connectivity"— the ability to print images from such sources as video camcorders and computers. The Canon example shows how an innovative marketing strategy—with fresh approaches to the product, pricing, distribution, and selling—can lead to overall competitive advantage in the marketplace. Canon is not invulnerable, however; in 1991 Tektronix, a *U.S.* company, leapfrogged past Canon in the color copier market by introducing a plain-paper color copier that offered sharper copies at a much lower price.[19]

Collaborating

A final source of competitive advantage is using know-how developed by other companies. Such *collaboration* may take the form of licensing agreements, joint ventures, or partnerships. History has shown that the Japanese have excelled at using the collaborating strategy to achieve industry leadership. As noted in Chapter 9, one of the legendary licensing agreements of modern business history is Sony's licensing of transistor technology from AT&T's Western Electric subsidiary in the 1950s for $25,000. This agreement gave Sony access to the transistor and allowed the company to become a world leader. Building on its initial successes in the manufacturing and marketing of portable radios, Sony has grown into a superb global marketer whose name is synonymous with a wide assortment of high-quality consumer electronics products.

More recent examples of Japanese collaboration are found in the aircraft industry. Today, Mitsubishi Heavy Industries Ltd. and other Japanese companies manufacture airplanes under license to U.S. firms and also work as subcontractors for aircraft parts and systems. Many observers fear that the future of the American aircraft industry may be jeopardized as the Japanese gain technological expertise. The next section discusses various examples of "collaborative advantage."[20]

GLOBAL COMPETITION AND NATIONAL COMPETITIVE ADVANTAGE[21]

An inevitable consequence of the expansion of global marketing activity is the growth of competition on a global basis. In industry after industry, global competition is a critical factor affecting success. As Yoshino and Rangan have explained,

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18 Gary Hamel and C.K. Prahalad, "Strategic Intent," *Harvard Business Review* 67, no. 3 (May–June 1989), p. 69.

19 G. Pascal Zachary, "Color Printer Gives Tektronix Jump on Canon," *The Wall Street Journal* (June 14, 1991), p. B1.

20 Hamel and Prahalad have continued to refine and develop the concept of strategic intent since it was first introduced in their groundbreaking 1989 article. During the 1990s, the authors outlined five broad categories of resource leverage that managers can use to achieve their aspirations: Concentrating resources on strategic goals via convergence and focus; accumulating resources more efficiently via extracting and borrowing; complementing one resource with another by blending and balancing; conserving resources by recycling, co-opting, and shielding; and rapid recovery of resources in the marketplace. Gary Hamel and C. K. Prahalad, "Strategy as Stretch and Leverage," *Harvard Business Review* 71, no. 2 (March–April 1993) pp. 75–84.

21 This section draws heavily on Chapter 3, "Determinants of National Competitive Advantage," and Chapter 4, "The Dynamics of National Advantage," in Porter 1990. For an extended country analysis based on Porter's framework, see Michael Enright, Antonio Francés, and Edith Scott Assavedra, *Venezuela: The Challenge of Competitiveness* (New York: St. Martin's Press, 1996).

global competition occurs when a firm takes a global view of competition and sets about maximizing profits worldwide, rather than on a country-by-country basis. If, when expanding abroad, a company encounters the same rival in market after market, then it is engaged in global competition.[22] In some industries, global companies have virtually excluded all other companies from their markets. An example is the detergent industry, in which three companies—Colgate, Unilever, and Procter & Gamble—dominate an increasing number of detergent markets in Latin America and the Pacific Rim. Many companies can make a quality detergent, but brand-name muscle and the skills required for quality packaging overwhelm local competition in market after market.[23]

The automobile industry has also become fiercely competitive on a global basis. Part of the reason for the initial success of foreign automakers in the United States was the reluctance—or inability—of U.S. manufacturers to design and manufacture high-quality, inexpensive small cars. The resistance of U.S. manufacturers was based on the economics of car production: the bigger the car, the higher the list price. Under this formula, small cars meant smaller unit profits. Therefore, U.S. manufacturers resisted the increasing preference in the U.S. market for smaller cars, a classic case of ethnocentrism and management myopia. European and Japanese manufacturers' product lines have always included cars smaller than those made in the United States. In Europe and Japan, market conditions were much different: less space, high taxes on engine displacement and on fuel, and greater market interest in functional design and engineering innovations. First Volkswagen, then Japanese automakers such as Nissan and Toyota discovered a growing demand for their cars in the U.S. market. It is noteworthy that many significant innovations and technical advances—including radial tires, antilock brakes, and fuel injection—also came from Europe and Japan. Airbags are a notable exception.

The effect of global competition has been highly beneficial to consumers around the world. In the two examples cited, detergents and automobiles, consumers have benefited. In Central America, detergent prices have fallen as a result of global competition. In the United States, foreign companies have provided consumers with the automobile products, performance, and price characteristics they wanted. If smaller, lower-priced imported cars had not been available, it is unlikely that Detroit manufacturers would have provided a comparable product as quickly. What is true for automobiles in the United States is true for every product class around the world. Global competition expands the range of products and increases the likelihood that consumers will get what they want.

The downside of global competition is its impact on the producers of goods and services. Global competition creates value for consumers, but it also has the potential to destroy jobs and profits. When a company offers consumers in other countries a better product at a lower price, this company takes customers away from domestic suppliers. Unless the domestic supplier can create new values and find new customers, the jobs and livelihoods of the domestic supplier's employees are threatened.

This section addresses the following issue: Why is a particular nation a good home base for specific industries? Why, for example, is the United States the home base for the leading competitors in PCs, software, credit cards, and movies? Why is Germany the home of so many world leaders in printing presses, chemicals, and luxury cars? Why are so many leading pharmaceutical, chocolate/confectionery, and trading companies located in Switzerland? Why are the world leaders in consumer electronics based in Japan?

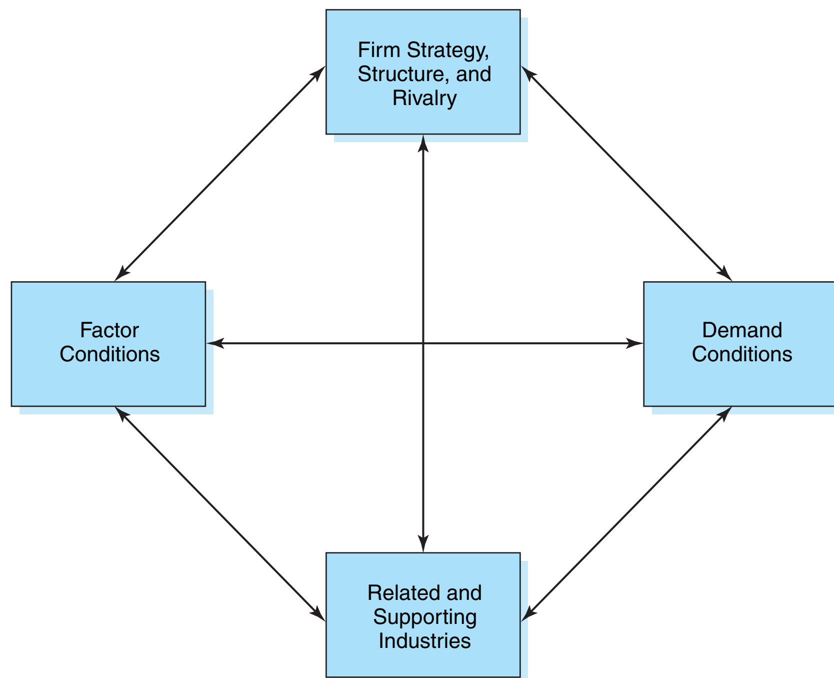
[22] Michael Y. Yoshino and U. Srinivasa Rangan, *Strategic Alliances: An Entrepreneurial Approach to Globalization* (Boston: Harvard Business School Press, 1995), p. 56.

[23] See Joseph Kahn, "Cleaning Up: P&G Viewed China as a National Market and Is Conquering It," *The Wall Street Journal* (September 12, 1995), pp. A1, A6.

Figure 15-2

National Diamond

Source: Reprinted with permission of Business Review. Table from Michael E. Porter, "The Competitive Advantage of Nations," Business Review, 90, no. 2 (March–April 1990), p. 77. Copyright © 2004 by Business School Publishing Corporation; All rights reserved.



Harvard professor Michael E. Porter addressed these issues in his landmark 1990 book *The Competitive Advantage of Nations*. Many observers hailed the book as a groundbreaking guide for shaping national policies on competitiveness. According to Porter, the presence or absence of particular attributes in individual countries influences industry development, not just the ability of individual firms to create core competences and competitive advantage.[24] Porter describes these attributes—factor conditions, demand conditions, related and supporting industries, and firm strategy, structure, and rivalry—in terms of a national "diamond" that creates **national advantage**. (Figure 15-2). The diamond shapes the environment in which firms compete. Activity in any one of the four points of the diamond impacts all the others and vice versa.

Factor Conditions

The phrase **factor conditions** refers to a country's endowment with resources. Factor resources may have been created or inherited. *Basic factors* may be inherited or created without much difficulty; because they can be replicated in other nations, they are not sustainable sources of national advantage. Specialized factors, by contrast, are more advanced and provide a more sustainable source for advantage. Porter describes five categories of factor conditions: human, physical, knowledge, capital, and infrastructure.

Human Resources The quantity of workers available, the skills possessed by these workers, the wage levels, and the overall work ethic of the workforce together constitute a nation's human resources factor. Countries with a plentiful supply of low-wage workers have an obvious advantage in the production of labor-intensive products. On the other hand, such countries may be at a *disadvantage* when it comes to the production of sophisticated products requiring highly skilled workers capable of working without extensive supervision.

[24] Michael E. Porter, *The Competitive Advantage of Nations* (New York: Free Press, 1990).

Physical Resources The availability, quantity, quality, and cost of land, water, minerals, and other natural resources determine a country's physical resources. A country's size and location are also included in this category because proximity to markets and sources of supply, as well as transportation costs, are strategic considerations. These factors are important advantages or disadvantages to industries dependent on natural resources.

Knowledge Resources The availability within a nation of a significant population having scientific, technical, and market-related knowledge means that the nation is endowed with knowledge resources. The presence of this factor is usually a function of the number of research facilities and universities—both government and private—operating in the country. This factor is important to success in sophisticated products and services, and to doing business in sophisticated markets. This factor relates directly to Germany's leadership in chemicals; for some 160 years, Germany has been home to top university chemistry programs, advanced scientific journals, and apprenticeship programs.

Capital Resources Countries vary in the availability, amount, cost, and types of capital available to the country's industries. The nation's savings rate, interest rates, tax laws, and government deficit all affect the availability of this factor. The advantage enjoyed by industries in countries with low capital costs versus those located in nations with relatively high capital costs is sometimes decisive. Firms paying high capital costs are frequently unable to stay in a market where the competition comes from a nation with low capital costs. The firms with the low cost of capital can keep their prices low and force the firms paying high costs to either accept low returns on investment or leave the industry.

Infrastructure Resources Infrastructure includes a nation's banking system, health-care system, transportation system, communications system, as well as the availability and cost of using these systems. More sophisticated industries are more dependent on advanced infrastructures for success.

Competitive advantage accrues to a nation's industry if the mix of factors available to the industry is such that it facilitates pursuit of a generic strategy (i.e., low-cost production or the production of a highly differentiated product or service). Nations that have selective factor *disadvantages* may also indirectly create competitive advantage. For example, the absence of suitable labor may force firms to develop forms of mechanization or automation that give the nation an advantage. High transportation costs may motivate firms to develop new materials that are less expensive to transport.

Demand Conditions

The nature of home demand conditions for the firm's or industry's products and services is important because it determines the rate and nature of improvement and innovation by the firms in the nation. **Demand conditions** are the factors that either train firms for world-class competition or that fail to adequately prepare them to compete in the global marketplace. Three characteristics of home demand are particularly important to the creation of competitive advantage: the composition of home demand, the size and pattern of growth of home demand, rapid home market growth, and the means by which a nation's home demand pulls the nation's products and services into foreign markets.

Composition of Home Demand This demand element determines how firms perceive, interpret, and respond to buyer needs. Competitive advantage can be achieved when the home demand sets the quality standard and gives local firms a better picture of buyer needs, at an earlier time, than is available

to foreign rivals. This advantage is enhanced when home buyers pressure the nation's firms to innovate quickly and frequently. The basis for advantage is the fact that the nation's firms can stay ahead of the market when firms are more sensitive to and more responsive to home demand and when that demand, in turn, reflects or anticipates world demand.

Size and Pattern of Growth of Home Demand These are important only if the composition of the home demand is sophisticated and anticipates foreign demand. Large home markets offer opportunities to achieve economies of scale and learning while dealing with familiar, comfortable markets. There is less apprehension about investing in large-scale production facilities and expensive R&D programs when the home market is sufficient to absorb the increased capacity. If the home demand accurately reflects or anticipates foreign demand, and if the firms do not become content with serving the home market, the existence of large-scale facilities and programs will be an advantage in global competition.

Rapid Home Market Growth This is yet another incentive to invest in and adopt new technologies faster, and to build large, efficient facilities. The best example of this is in Japan, where rapid home market growth provided the incentive for Japanese firms to invest heavily in modern automated facilities. *Early home demand*, especially if it anticipates international demand, gives local firms the advantage of getting established in an industry sooner than foreign rivals. Equally important is *early market saturation*, which puts pressure on a company to expand into international markets and innovate. Market saturation is especially important if it coincides with rapid growth in foreign markets.

Means by Which a Nation's Products and Services Are Pushed or Pulled into Foreign Countries The issue here is whether a nation's people and businesses go abroad and then demand the nation's products and services in those second countries. For example, when the U.S. auto companies set up operations in foreign countries, the auto parts industry followed. The same is true for the Japanese auto industry. Similarly, when overseas demand for the services of U.S. engineering firms skyrocketed after World War II, those firms, in turn, established demand for U.S. heavy construction equipment. This provided an impetus for Caterpillar to establish foreign operations.

A related issue is that of a nation's people going abroad for training, pleasure, business, or research. After returning home, they are likely to demand the products and services with which they became familiar while abroad. Similar effects can result from professional, scientific, and political relationships between nations. Those involved in the relationships begin to demand the products and services of the recognized leaders.

It is the interplay of demand conditions that produces competitive advantage. Of special importance are those conditions that lead to initial and continuing incentives to invest and innovate, and to continuing competition in increasingly sophisticated markets.

Related and Supporting Industries

A nation has an advantage when it is home to globally competitive companies in business sectors that are **related and supporting industries**. Globally competitive supplier industries provide inputs to downstream industries. The latter, in turn, are likely to be globally competitive in terms of price and quality and, thus, gain competitive advantage from this situation. Downstream industries will have easier access to these inputs and the technology that produced them, and to the managerial and organizational structures that have made them competitive. Access is a function of

proximity both in terms of physical distance and cultural similarity. It is not the inputs in themselves that give advantage. It is the *contact* and *coordination* with the suppliers, the opportunity to structure the value chain so that linkages with suppliers are optimized. These opportunities may not be available to foreign firms.

Similar advantages are present when there are globally competitive, related industries in a nation. Opportunities are available for coordinating and sharing value chain activities. Consider, for example, the opportunities for sharing between computer hardware manufacturers and software developers. Related industries also create "pull through" opportunities as described previously. For example, non-U.S. sales of PCs from Compaq, Dell, IBM, Acer, and others have bolstered demand for software from Microsoft and other U.S. companies. Porter notes that the development of the Swiss pharmaceuticals industry can be attributed in part to Switzerland's large synthetic dye industry; the discovery of the therapeutic effects of dyes, in turn, led to the development of pharmaceutical companies.[25]

Firm Strategy, Structure, and Rivalry

The **nature of firm strategy, structure, and rivalry** is the final determinant of a nation's diamond. Domestic rivalry in a single national market is a powerful influence on competitive advantage. The PC industry in the United States is a good example of how a strong domestic rivalry keeps an industry dynamic and creates continual pressure to improve and innovate. The rivalry between Dell, Hewlett-Packard, Gateway, Compaq, Apple, and others forces all the players to develop new products, improve existing ones, lower costs and prices, develop new technologies, and continually improve quality and service to keep customers happy. Rivalry with foreign firms may lack this intensity. Domestic rivals have to fight each other not just for market share, but also for employee talent, R&D breakthroughs, and prestige in the home market. Eventually, strong domestic rivalry will push firms to seek international markets to support expansions in scale and R&D investments, as Japan amply demonstrates. The absence of significant domestic rivalry can lead to complacency in the home firms and eventually cause them to become noncompetitive in the world markets.

It is not the number of domestic rivals that is important; rather, it is the intensity of the competition and the quality of the competitors that make the difference. It is also important that there be a fairly high rate of new business formations to create new competitors and safeguard against the older companies becoming comfortable with their market positions and products and services. As noted earlier in the discussion of the five forces model, new industry entrants bring new perspectives and new methods. They frequently define and serve new market segments that established companies have failed to recognize.

Differences in management styles, organizational skills, and strategic perspectives also create advantages and disadvantages for firms competing in different types of industries, as do differences in the intensity of domestic rivalry. In Germany, for example, company structure and management style tends to be hierarchical. Managers tend to come from technical backgrounds and to be most successful when dealing with industries that demand highly disciplined structures, like chemicals and precision machinery. Italian firms, on the other hand, tend to look like, and be run like, small family businesses that stress customized over standardized products, niche markets, and substantial flexibility in meeting market demands.

Capital markets and attitudes toward investments are important components of the national environments. For example, U.S. laws prohibit banks from taking an equity stake in companies to which they extend loans. This drives a short-term focus on quarterly and annual gains and losses. This focus is carried into equity

[25] Michael E. Porter, *The Competitive Advantage of Nations* (New York: Free Press, 1990), p. 324.

Well-known and highly esteemed in its own country, India's Tata Group participates in a variety of industries, including heavy vehicles, cars, department stores, and tea. Now the group's management team is hoping to maintain that brand image as it implements an international strategy. Historically, Tata Group's competitive advantage was based on scouring the globe to find the lowest cost, highest quality production inputs—be they raw materials or skilled labor—and then selling them in the global marketplace at a substantial profit. Now Tata is expanding by acquiring businesses in various parts of the world. For example, in 2006, the Group's Indian Hotels Company subsidiary announced plans to buy the Ritz-Carlton Hotel in Boston.

markets where low profits produce low share prices and the threat of a takeover. As a result, U.S. firms tend to do well in new-growth industries and other rapidly expanding markets. They do not do well in more mature industries where return on investment is lower and patient searching for innovations is required. Many other countries have an opposite orientation. Banks are allowed to take equity stakes in the customer companies to which they loan, which, therefore, take a long-term view and are less concerned about short-term results.

There are two final external variables to consider in the evaluation of national competitive advantage—chance and government.

Chance

Chance events play a role in shaping the competitive environment. Chance events are occurrences that are beyond the control of firms, industries, and usually governments. Included in this category are such things as wars and their aftermaths, major technological breakthroughs, sudden dramatic shifts in factor or input cost, like an oil crisis, dramatic swings in exchange rates, and so on.

Chance events are important because they create major discontinuities in technologies that allow nations and firms that were not competitive to leapfrog over old competitors and become competitive, even leaders, in the changed industry. For example, the development of microelectronics allowed many Japanese firms to overtake U.S. and German firms in industries that had been based on electromechanical technologies—areas traditionally dominated by the Americans and Germans.

From a systemic perspective, the role of chance events lies in the fact that they alter conditions in the diamond. The nation with the most favorable "diamond," however, will be the one most likely to take advantage of these events and convert them into competitive advantage. For example, Canadian researchers were the first to isolate insulin, but they could not convert this breakthrough into a globally competitive product. Firms in the United States and Denmark were able to do that because of their respective national "diamonds."

Government

Although it is often argued that government is a major determinant of national competitive advantage, government is not a determinant but rather an influence on determinants. Government influences determinants by virtue of its role as a buyer of products and services, and by its role as a maker of policies on labor, education, capital formation, natural resources, and product standards. It also influences determinants by its role as a regulator of commerce—for example, by telling banks and telephone companies what they can and cannot do.

By reinforcing determinants in industries where a nation has competitive advantage, government improves the competitive position of the nation's firms. Governments devise legal systems that influence competitive advantage by means of tariffs and nontariff barriers and laws requiring local content and labor. In the United States, for example, the dollar's decline over the past decade has been due in part to a deliberate policy to enhance U.S. export flows and stem imports. In other words, government can improve or lessen competitive advantage, but it cannot create it.

CURRENT ISSUES IN COMPETITIVE ADVANTAGE

Porter's work on national competitive advantage has stimulated a great deal of further research. The Geneva-based World Economic Forum issues an annual report ranking countries in terms of their competitiveness. A decade ago, Morgan Stanley used the Porter framework to identify 238 companies with a sustainable competitive advantage worldwide. "National advantage" was then assessed by analyzing how many of these companies were headquartered in a particular country. The United States ranked first, with 125 companies identified as world leaders (see Table 15-1). Among the world's automakers, Morgan Stanley's analysts considered only BMW, Toyota, and Honda to have worldwide competitive advantage.[26]

Hypercompetitive Industries

In a book published in the mid-1990s, Dartmouth College professor Richard D'Aveni suggests that the Porter strategy frameworks fail to adequately address the dynamics of competition in the 1990s and the new millennium.[27] D'Aveni takes a different approach. He notes that, in today's business environment, short product life cycles, short product design cycles, new technologies,

Table 15-1

Location of Companies with Global Competitive Advantage

Country	Number of Companies
1. United States	125
2. United Kingdom	21
3. Japan	19
4. France	12
5. Germany	10
6. Netherlands	7
7. Canada	6
8. Switzerland	6
9. Sweden	3
10. Finland	3

[26] Tony Jackson, "Global Competitiveness Observed from an Unfamiliar Angle," *Financial Times* (November 21, 1996), p. 18.
[27] Richard D'Aveni, *Hypercompetition: Managing the Dynamics of Strategic Maneuvering* (New York: Free Press, 1994).

and globalization undermine market stability. The result is an escalation and acceleration of competitive forces. In light of these changes, D'Aveni believes the goal of strategy has shifted from sustaining to disrupting advantages. The limitation of the Porter models, D'Aveni argues, is that they are static; that is, they provide a snapshot of competition at a given point in time. Acknowledging that Hamel and Prahalad broke new ground in recognizing that few advantages are sustainable, D'Aveni aims to build upon their work in order to shape "a truly dynamic approach to the creation and destruction of traditional advantages." D'Aveni uses the term **hypercompetition** to describe a dynamic competitive world in which no action or advantage can be sustained for long. In such a world, D'Aveni argues, "everything changes" because of the dynamic maneuvering and strategic interactions by hypercompetitive firms such as Microsoft and Gillette.

According to D'Aveni's model, competition unfolds in a series of dynamic strategic interactions in four arenas: cost/quality, timing and know-how, entry barriers, and deep pockets. Each of these arenas is "continuously destroyed and recreated by the dynamic maneuvering of hypercompetitive firms." According to D'Aveni, the only source of a truly sustainable competitive advantage is a company's ability to manage its dynamic strategic interactions with competitors by means of frequent movements and countermovements that maintain a relative position of strength in each of the four arenas (see Table 15-2).

Table 15-2

Dynamic Strategic Interactions in Hypercompetitive Industries

Arena	Dynamic Strategic Interaction
1. Cost/Quality	1. Price wars 2. Quality and price positioning 3. "The middle path" 4. "Cover all niches" 5. Outflanking and niching 6. The move toward an ultimate value marketplace 7. Escaping from the ultimate value marketplace by restarting the cycle
2. Timing and know-how	1. Capturing first-moving advantages 2. Imitation and improvement by follows 3. Creating impediments to imitation 4. Overcoming the impediments 5. Transformation or leapfrogging 6. Downstream vertical integration
3. Entry barriers	1. Building a geographic stronghold by creating and reinforcing entry barriers 2. Targeting the product market strongholds of competitors in other countries 3. Incumbents make short-term counterresponses to guerrilla attacks 4. Incumbents realize they must respond fully to the invaders by making strategic responses to create new hurdles. 5. Competitors react to new hurdles 6. Long run counter-responses via defensive or offensive moves 7. Competition between the incumbent and entrant is exported to entrant's home turf 8. An unstable standoff between the competitors is established
4. Deep pockets	

Cost/Quality

Competition in the first arena, cost/quality, occurs via seven dynamic strategic interactions: price wars, quality and price positioning, "the middle path," "cover all niches," outflanking and niching, the move toward an ultimate value marketplace, and escaping from the ultimate value marketplace by restarting the cycle. D'Aveni cites the global watch industry as an example of hypercompetitive behavior in the cost/quality arena. In the 1970s, the center of the industry shifted from Switzerland to Japan as the Japanese created high-quality quartz watches that could be sold cheaply. In the early 1980s, the merger of two Swiss companies into Société Suisse Microelectronique et d'Horlogerie SA (SMH) was followed by a highly automated manufacturing innovation that allowed a quartz movement to be integrated into a stylish plastic case. As a result of this innovation and a strong marketing effort in support of the Swatch brand, the center of the watch industry shifted back to Switzerland. Today, the Swatch Group is the world's second largest watch maker; the watch industry continues to be highly segmented, with prestige brands competing on reputation and exclusivity; as with many other luxury goods, higher prices are associated with higher perceived quality. In the low-cost segment, brands compete on price and value.

Swatch Group is providing sports timing systems and services worth nearly $40 million for the 2008 Beijing Olympics. As Swatch Group CEO Georges Nicolas Hayek, Jr., noted, "We will ship 500 tons of equipment and 300 professional engineers from Switzerland to different competition venues in Beijing to measure and transmit results and scores." Hayek, the son of Swatch founder Nicolas Hayek, expects that the company's annual sales in China will reach five to six million watches by 2008. Swatch products will be available at several hundred Chinese stores and sales counters; the majority will be in Shanghai.

Timing and Know-How

The second arena for hypercompetition is based on organizational advantages derived from timing and know-how. As described by D'Aveni, a firm that has the skills to be a "first mover" and arrive first in a market has achieved a *timing advantage*. A *know-how advantage* is the technological knowledge—or other knowledge of a new method of doing business—that allows the firm to create an entirely new product or market.[28] D'Aveni identifies six dynamic strategic interactions that drive competition in this arena: capturing first-mover advantages; imitation and improvement by followers; creating impediments to imitation; overcoming the impediments; transformation or leapfrogging; and downstream vertical integration. As the consumer electronics industry has globalized, Sony and its competitors have exhibited hypercompetitive behavior in this second arena. Sony has an enviable history of first-mover achievements based on its know-how in audio technology: first pocket-sized transistor radio, first consumer VCR, first portable personal stereo, and first compact disc player. Although each of these innovations literally created an entirely new market, Sony has fallen victim to the risks associated with being a first mover. The second dynamic strategic interaction—imitation and improvement by followers—can be seen in the successful efforts of JVC and Matsushita to enter the home VCR market a few months after Sony's Betamax launch. VHS technology offered longer recording times and became the dominant consumer format worldwide until advent of the DVD era. More recently, Sony has found technological leaps harder to achieve, as evidenced by the slow market acceptance of its MiniDisc digital recording/playback units. Sony has also shown a willingness to be a follower; the company only entered the video game industry in 1994, but its 64-bit PlayStation outsold a competitive product from Sega. After Sony launched the PlayStation 2 in 2000, Sega halted production of its Dreamcast game player; the company is now concentrating on developing game software.

After years of moves and countermoves between Sony and its imitators, Sony progressed to downstream vertical integration with the 1988 purchase of CBS Records for $2 billion and then, later, the purchase of Columbia Pictures. The acquisitions, which represent the sixth dynamic strategic interaction, were intended to complement Sony's core "hardware" businesses (e.g., TVs, VCRs, and hi-fi equipment) with "software" (e.g., videocassettes and CDs). However, Matsushita quickly imitated Sony by paying $6 billion for MCA. Initially, neither Sony nor Matsushita proved successful at managing the acquisitions. Sony took a $2.7 billion pretax write-off in 1995 for losses relating to its motion picture group; Matsushita sold 80 percent of its MCA stake to Seagram. More recently, Sony Pictures Entertainment has enjoyed huge success with the *Spider-Man* movies and *Casino Royale*, the latest James Bond film. Meanwhile, Sony faced a more fundamental challenge: PCs and the Internet dramatically changed the consumer electronics industry. The digital revolution rendered Sony's core competences in analog audio technology obsolete. Sony executives must develop new know-how resources if the company is to continue to lead in the information age.

Barriers to Entry

Industries in which barriers to entry have been built up comprise the third arena in which hypercompetitive behavior is exhibited. As described earlier in the chapter, these barriers include economies of scale, product differentiation, capital investments, switching costs, access to distribution channels, cost advantages other than scale, and government policies. D'Aveni describes how aggressive competitors

[28] Richard D'Aveni, *Hypercompetition: Managing the Dynamics of Strategic Maneuvering* (New York: Free Press, 1994), p. 71.

erode these traditional entry barriers via eight strategic interactions. For example, a cornerstone of Dell's global success in the PC industry is a direct-sales approach that bypasses dealers and other distribution channels. Similarly, in the long distance industry, ring-back services based in the United States and elsewhere enabled persons making long-distance calls from Europe to sidestep exorbitant rates charged by government-owned telecoms.

The first dynamic strategic interaction comes as a company builds a geographic "stronghold" by creating and reinforcing barriers. After securing a market—especially the home-country market—competitors begin to seek markets outside the stronghold. Thus, the second dynamic strategic interaction takes place when companies target the product market strongholds of competitors in other countries. Honda's geographic expansion outside Japan with motorcycles and automobiles —a series of forays utilizing guerrilla tactics—is a case in point. The third dynamic strategic interaction comes when incumbents make short-term counterresponses to the guerrilla attacks. Strong incumbents may try to turn back the invader with price wars, factory investment, or product introductions, or they may adopt a wait-and-see attitude before responding. In the case of both Harley-Davidson and the Detroit-based U.S. auto industry, management originally underestimated and rationalized away the full potential of the threat from Honda and other Japanese companies. Realizing that their company was a weak incumbent, Harley-Davidson management had little choice but to appeal for government protection. The resulting "breathing room" allowed Harley to put its house in order. Similarly, the U.S. government heeded Detroit's pleas for relief and imposed tariffs and quotas on Japanese auto imports. This gave the Big Three time to develop higher-quality, fuel-efficient models to offer U.S. consumers.

The fourth dynamic strategic interaction occurs when the incumbent realizes it must respond fully to the invader by making strategic responses to create new hurdles. U.S. automakers, for example, waged a PR campaign urging U.S. citizens to "Buy American." The fifth dynamic strategic interaction takes place when competitors react to these new hurdles. In an effort to circumvent import quotas as well as co-opt the "Buy American" campaign, the Japanese automakers built plants in the United States. The sixth dynamic strategic interaction consists of long-run counterresponses to the attack via defensive moves or offensive moves. GM's 1990 introduction of Saturn is a good illustration of a well-formulated and executed defensive move. As the first decade of the twenty-first century continues, GM is launching another defensive move; in an effort to defend its Cadillac nameplate from Lexus, Acura, and Infiniti, GM is developing a global strategy for Cadillac. Competition in the third arena continues to escalate; in the seventh dynamic strategic interaction, competition between the incumbent and entrant is exported to the entrant's home turf. President Clinton's threat of trade sanctions against Japanese automakers in 1995 was intended to send a message that Japan needed to open its auto market. In 1997, GM intensified its assault on Japan with the introduction of Saturn. The eighth and final dynamic strategic interaction in this arena consists of an unstable standoff between the competitors. Over time, the stronghold erodes as entry barriers are overcome, leading competitors to the fourth arena.

As the preceding discussion shows, the irony and paradox of the hypercompetition framework is that, in order to achieve a sustainable advantage, companies must seek a series of *unsustainable* advantages! D'Aveni is in agreement with the late Peter Drucker, who long counseled that the role of marketing is innovation and the creation of new markets. Innovation begins with abandonment of the old and obsolete. Sumantra Ghoshal and Christopher Bartlett make a similar point in *The Individualized Corporation*:

> Managers are forced to refocus their attention from a preoccupation with defining defensible product-market positions to a newly awakened interest in how to

> develop the organizational capability to sense and respond rapidly and flexibly to change. . . . Managers worldwide have begun to focus less on the task of forecasting and planning for the future and more on the challenge of being highly sensitive to emerging changes. Their broad objective is to create an organization that is constantly experimenting with appropriate responses, then is able to quickly diffuse the information and knowledge gained so it can be leveraged by the entire organization. The age of strategic planning is fast evolving into the era or organizational learning.[29]

Likewise, D'Aveni urges managers to reconsider and reevaluate the use of what he believes are old strategic tools and maxims. He warns of the dangers of commitment to a given strategy or course of action. The flexible, unpredictable player may have an advantage over the inflexible, committed opponent. D'Aveni notes that, in hypercompetition, pursuit of generic strategies results in short-term advantage at best. The winning companies are the ones that successfully move up the ladder of escalating competition, not the ones that lock into a fixed position. D'Aveni is also critical of the five forces model. The best entry barrier, he argues, is maintaining the initiative, not mounting a defensive attempt to exclude new entrants.

Additional Research on Comparative Advantage

Other researchers have challenged Porter's thesis that a firm's home-base country is the main source of core competencies and innovation. For example, Indiana University Professor Alan Rugman argues that the success of companies based in small economies such as Canada and New Zealand stems from the "diamonds" found in a particular set or combination of home and related countries. For example, a company based in an EU nation may rely on the national "diamond" of one of the 26 other EU members. Similarly, one impact of NAFTA on Canadian firms is to make the U.S. "diamond" relevant to competency creation. Rugman argues that, in such cases, the distinction between the home nation and the host nation becomes blurred. He proposes that Canadian managers must look to a "double diamond" and assess the attributes of both Canada and the United States when formulating corporate strategy.[30] In other words, he argues that, for smaller countries, the nation is not the relevant unit of analysis in formulating strategy. Rather, corporate strategists must look beyond the nation to the region or to sets of closely linked countries. Other critics have argued that Porter generalized inappropriately from the American experience, while confusing industry-level competition with trade at the national level. In the *Journal of Management Studies*, Howard Davies and Paul Ellis assert that nations can achieve sustained prosperity without becoming innovation driven; the authors also note the absence of strong diamonds in the home bases of many global industries.[31]

As for Michael Porter, his views on corporate strategy and competitive advantage evolved during the last quarter century. In a recent interview, he emphasized the difference between operational efficiency and strategy. The former, in Porter's view, concerns improvement via time-based competition or total quality management; the latter entails "making choices." Porter explains, "'Choice' arises from doing things differently from the rival. And strategy is about trade-offs, where you decide to do this and not that. Strategy is the deliberate choice not to respond to some customers, or choosing which customer

[29] Sumantra Ghoshal and Christopher Bartlett, *The Individualized Corporation* (New York: HarperBusiness, 1997), p. 71.

[30] Alan M. Rugman and Lain Verbeke, "Foreign Subsidiaries and Multinational Strategic Management: An Extension and Correction of Porter's Single Diamond Framework," *Management International Review* 3, no. 2 (1993), pp. 71–84.

[31] Howard Davies and Paul Ellis, "Porter's Competitive Advantage of Nations: Time for the Final Judgment?" *Journal of Management Studies* 37 no. 8 (December 2000) pp. 1189–1213.

needs you are going to respond to." Porter is not convinced of the validity of competitive advantage models based on core competency or hypercompetitive industries. As for core competencies, Porter notes:

> Any individual thing that a company does can usually be imitated. The whole notion that you should rest your success on a few core competencies is an idea that invites destructive competition. Successful companies don't compete that way. They fit together the things they do in a way that is very hard to replicate. [Competitors] have to match everything, or they've basically matched nothing.

On the subject of hypercompetition, Porter says:

> I don't think we're moving towards a hypercompetitive world in which there are no tradeoffs. We're probably moving in the other direction. There are more customer segments than ever before, more technological options, more distribution channels. That ought to create lots of opportunities for unique positions.[32]

[32] Tony Jackson, "Why Being Different Pays," *Financial Times* (June 23, 1997), p. 14.

summary

In this chapter we focus on factors that help industries and countries achieve **competitive advantage**. According to Porter's **five forces model**, industry competition is a function of the threat of new entrants, the threat of substitutes, the bargaining power of suppliers and buyers, and rivalry among existing competitors. Managers can use Porter's **generic strategies** model to conceptualize possible sources of competitive advantage. A company can pursue broad market strategies of **cost leadership** and **differentiation** or the more targeted approaches of **cost focus** and **focused differentiation**. Rugman and D'Cruz have developed a framework known as the **flagship model** to explain how networked business systems have achieved success in global industries. Hamel and Prahalad have proposed an alternative framework for pursuing competitive advantage, growing out of a firm's **strategic intent** and use of competitive innovation. A firm can build layers of advantage, search for loose bricks in a competitor's defensive walls, change the rules of engagement, or collaborate with competitors and utilize their technology and know-how.

Today, many companies are discovering that industry competition is changing from a purely domestic to a global phenomenon. Thus, competitive analysis must also be carried out on a global scale. Global marketers must also have an understanding of national sources of competitive advantage. Porter has described four determinants of **national advantage**. **Factor conditions** include human, physical, knowledge, capital, and infrastructure resources. **Demand conditions** include the composition, size, and growth pattern of home demand. The rate of home market growth and the means by which a nation's products are pulled into foreign markets also affect demand conditions. The final two determinants are the presence of **related and supporting industries** and the **nature of firm strategy, structure, and rivalry**. Porter notes that chance and government also influence a nation's competitive advantage. Porter's work has been the catalyst for promising new research into strategy issues, including D'Aveni's work on **hypercompetition** and Rugman's recent **double-diamond framework** for national competitive advantage.

discussion questions

1. How can a company measure its competitive advantage? How does a firm know if it is gaining or losing competitive advantage? Cite a global company and its source of competitive advantage.
2. Outline Porter's five forces model of industry competition. How are the various barriers to entry relevant to global marketing?
3. How does the five partners, or flagship model, developed by Rugman and D'Aveni differ from Porter's five forces model?
4. Give an example of a company that illustrates each of the four generic strategies that can lead to competitive advantage: overall cost leadership, cost focus, differentiation, and differentiation focus.
5. Briefly describe Hamel and Prahalad's framework for competitive advantage.
6. How can a nation achieve competitive advantage?
7. According to current research on competitive advantage, what are some of the shortcomings of Porter's models?
8. What is the connection, if any, between *national* competitive advantage and *company* competitive advantage? Explain and discuss.

Case 15-1

Kodak in the Twenty-First Century: The Search for New Sources of Competitive Advantage

Eastman Kodak Company is at a crossroads. After inventing the famous Brownie camera in 1900, Kodak reigned as the undisputed leader in the silver-halide chemical processes that formed the basis of the photography industry throughout the twentieth century. Kodak's yellow boxes of film were iconic symbols of the brand. Once, the company's color film business was a classic cash cow, accounting for as much as 70 percent of Kodak's revenues. However, the company's long-entrenched conservative corporate culture, bureaucratic organizational structure, and go-slow approach to innovation resulted in sluggish, ill-fated responses to changes in the photography market. Although management understood that the digital revolution was changing the way consumers take, store, and access photos, the speed of the changeover from film-based photography to digital came as a shock. In the late 1990s, Kodak invested $1 billion in an alternative film-based format known as Advanced Photo System. It flopped. Meanwhile, the company maintained a premium pricing strategy, allowing competitors such as Fuji to undercut it and gain market share.

Now, management is attempting to remake the company's business model in fundamental ways. After being named president and CEO in 2000, Daniel Carp replaced most of Kodak's executive team with newcomers who had worked at technology-oriented companies such as Hewlett-Packard, Lexmark International, and General Electric. To shore up its core film business, Kodak will make private-label film for sale outside the United States. Kodak has also vowed to fight more aggressively for market share with its branded film by cutting prices. Perhaps the most dramatic move is the decision to stop selling film-based cameras for the consumer market in the United States, Canada, and Europe. The only exception is a popular line of disposable single-use cameras. The company will continue to develop and market film cameras in China, India, Eastern Europe, and Latin America, where management believes the traditional photography format still has potential for growth.

"The trick is to get the cost structure of the traditional consumer business down. We are a business in transition."

Daniel Carp, former CEO, Eastman Kodak

By 2005, the year Carp retired and Antonio Perez was named Chairman and CEO, the digital camera market in the United States had become a key battleground. Canon ranked number one in digital camera sales; led by the PowerShot A520, Canon had 7 of the 10 top-selling models on Amazon.com. Although Canon's cameras are designed and manufactured in Japan, company engineers regularly visit the United States to absorb insights about consumer needs. One analyst noted, "Canon has built on its camera heritage and has been able to get people to believe in them as a digital company." The same analyst was also impressed by Kodak. Although the company's traditional sources of competitive advantage were in film and processing, "In a short period of time they've transitioned into a strong hardware company. They've done an amazing job," he said.

Managing the transition away from film will also require Kodak to redefine relationships with key business partners. For example, Kodak was for many years the exclusive supplier of traditional photo processing services for the Walgreens drugstore chain; the relationship, which includes one-hour services, generates about $500 million in annual revenue for Kodak. Archrival Fuji has a close partnership with Wal-Mart. Now, Fuji is making inroads at Walgreens as well. The minilabs supplied by Kodak were subject to frequent breakdowns; despite the fact that Walgreens was bound by long-term leases; the retailer began installing Fuji minilabs at a cost of $115,000 per unit. Presently, about one-third of Walgreen's 4,290 stores now use Fuji's one-hour minilab equipment. Walgreen's photo processing Web site also uses Fuji to process prints. Not to be outdone, at the 2006 Photo Marketing Association trade show, Kodak unveiled the DSP900, a modular replacement for the minilab that can produce 900 prints per hour at half the price of previous models.

Kodak currently has installed about 60,000 self-service photo kiosks in the United States that allow customers to print photos from their digital cameras. Fuji also supplies in-store kiosks bearing the Aladdin brand name. Now, Hewlett-Packard has entered the retail photo services market as well; it has begun installing $15,000 PhotoStudio kiosks at stores in the Long's Drugs chain. As Matt Troy, an analyst with Citigroup Investment Research, noted, "Kodak has been very successful in cultivating an ecosystem in the digital world. H-P's motivation is to sell more ink. The kiosks are a few more straws to drink from the ink well." Concludes Troy, "H-P is trying to be the next Kodak."

Discussion Questions

1. Assess Kodak's situation in terms of Porter's five forces model and generic strategies. Which forces are driving competition in the photo industry? What has happened to Kodak's traditional sources of competitive advantage?
2. Do you think the digital photography revolution will spread to China and India more quickly than Kodak's management expects?

3. For decades, Kodak has been known as the world's largest consumer photography company. Today, the company's strategy calls for a shift towards b-to-b marketing with an emphasis on such products as medical imaging systems and digital printing systems. What risks does this change in strategic direction present?

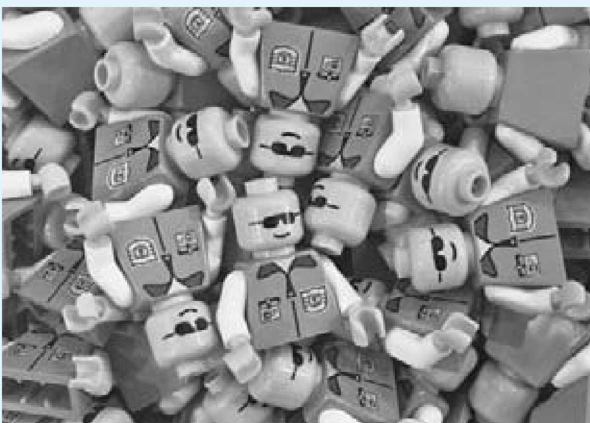
Sources: Francesco Guerrera, "Kodak Refocuses on Digital Age," *Financial Times* (November 29, 2006), p. 11; William M. Bulkeley, "Kodak Revamps Wal-Mart Kiosks," *The Wall Street Journal* (September 6, 2006), p. B2; Damon Darlin, "Hewlett-Packard Decides Store Photo Printing Is Its Turf," *The New York Times* (February 23, 2006), pp. C1, C17; Jefferson Graham, "Canon, Kodak Face Off in Digital Arena," *USA Today* (February 23, 2006), p. 3B; James Bandler, "Losing Focus: As Kodak Eyes, Digital Future, A Big Partner Starts to Fade," *The Wall Street Journal* (January 23, 2004), pp. A1, A8; Bandler, "Ending Era, Kodak Will Stop Selling Most Film Cameras," *The Wall Street Journal* (January 14, 2004), p. B1, B4; Bandler, "Kodak Shifts Focus from Film, Betting Future on Digital Lines," *The Wall Street Journal* (September 29, 2003), pp. A1, A12.

Case 15-2

LEGO

The LEGO Company is a $1.6 billion global business built out of the humblest of materials: interlocking plastic toy bricks. From its base in Denmark, the family-owned LEGO empire extends around the world and came to include theme parks, clothing, and computer-controlled toys. Each year, the company produces about 14 billion plastic blocks as well as tiny human figures to populate towns and operate gizmos that spring from the imaginations of young people. LEGO products, which are especially popular with boys, are available in more than 130 countries; in the key North American market, the company's overall share of the construction-toy market has been as high as 80 percent. Kjeld Kirk Kristiansen, the grandson of the company's founder as well as the main shareholder, served as CEO from 1979 until 2004. Kristiansen says that LEGO products stand for "exuberance, spontaneity, self-expression, concern for others, and innovation." (The company's name comes from the Danish phrase *leg godt*, which means "play well.") Kristiansen also attributes his company's success to the esteem the brand enjoys among parents. "Parents consider LEGO not as just a toy company but as providing products that help learning and developing new skills," he says.

For the past several years, however, some of those parents have been switching loyalties. Mega Bloks, a rival company in Montreal, Canada, has been aggressively gaining market share with its own colorful plastic blocks. Some are compatible with LEGO products, and all generally cost less than comparable LEGO products. LEGO executives believe that LEGO's proprietary mix of resin results in a higher quality toy. By contrast, Mega Bloks holds costs down by using commodity-grade resin. While LEGO dominates the 7- to 12-year-old segment, Mega Bloks is the number one player in the preschool market. Because the bricks in Mega Bloks's original line are larger and softer than LEGO, some parents believe they are easier for very young children to use. LEGO responded by introducing a Duplo line of oversized blocks made of the same material as the company's core brick line. In recent years, Mega Bloks has introduced a midsized line as well as a line called Micro for the elementary school set. Micro bricks can be used interchangeably with LEGOs. LEGO filed a lawsuit alleging that the Micro line copied the "look" of the knobs on LEGO bricks and, thus, violated Canadian trademark law. Canada's Federal Court of Appeal dismissed the claim in 2003, concluding that the bricks' design is functional and entitled to trademark protection. In 2004, Canada's Supreme Court announced that it would hear LEGO's appeal.



"For many people, the biggest part of the brand equity is the brick—which is why we must ensure a significant proportion of the business stays in the brick arena."

Francesco Ciccolella, Senior Vice President for Corporate Development, LEGO Company

In short, Mega Bloks has prospered at LEGO's expense. Mega Bloks' sales doubled between 2000 and 2003; by contrast, the Danish company reported its first loss ever—$44 million—in 1988. Meanwhile, Hasbro and other competitors are also targeting the $600 million market for construction toys. In the 1990s, LEGO's strategy called for new sources of growth beyond the core block category. The company developed its own line of original robot action figures. Known as Bionicles, the figures can be integrated with the traditional construction materials. Currently, the Bionicle line is LEGO's best seller; in 2003, a direct-to-DVD animated feature, *Bionicle—Mask of Light*, was released by Miramax. Another new product, Mybots, was a $70 toy set that included blocks with computer chips embedded to provide lights and sound. A $200 Mindstorms Robotics Invention System allowed users to build computer-controlled creatures. To further leverage the LEGO brand, the company also formed alliances with Walt Disney Company and Lucasfilm, creator of the popular *Star Wars* series. For several years, sales of licensed merchandise relating to the popular Harry Potter and Star Wars movie franchises sold extremely well.

More recently, however, although the Harry Potter movie series continued to enjoy great success, interest in the Potter-themed play sets was waning. After a disappointing Christmas 2003 season, LEGO was left with millions of dollars of unsold goods. The difficult retail situation was compounded by the dollar's weakness relative to the Danish krone; LEGO posted a record loss of $166 million for 2003. The company unveiled a number of new initiatives aimed at restoring profitability. Its new Quattro line of large, soft bricks is targeted directly at the preschool market. Clikits is a line for pastel-colored bricks targeted at young girls who want to create jewelry.

In 2004, after several years of losses, Jørgen Vig Knudstorp succeeded Kristiansen as LEGO's chief executive. Acknowledging that the company's forays into theme parts, children's clothing, and software games had been the wrong strategy, Knudstorp launched a restructuring initiative. Production was outsourced to a Singapore company with production facilities in Mexico and the Czech Republic; in the past few years, more than 2,000 jobs have been eliminated. In 2006, LEGO launched a new generation of programmable robots in the Mindstorms line. As Knudstorp noted, "Mindstorms is as close to the core as you can come other than a bucket of bricks, which is the core of the core."

Discussion Questions

1. Jørgen Vig Knudstorp became CEO in 2004. Assess the key strategic decisions he has made, including outsourcing, divesting the theme parks, and launching new toys in the Mindstorms line.
2. In 2004, LEGO continued its entertainment promotional and product tie-ins with new Harry Potter and Spiderman movies. Do you think this is the right strategy?
3. Using Porter's generic strategies framework, compare and contrast LEGO and Mega Bloks in terms of their respective pursuit of competitive advantage.

Sources: John Tagliabue, "Taking Their Blocks and Playing Toymaker Elsewhere," *The New York Times* (November 20, 2006), p. A4; Lauren Foster and David Ibison, "Spike the Robot Helps LEGO Rebuild Strategy," *Financial Times* (June 22, 2006), p. 18; Ian Austen, "Building a Legal Case, Block by Block," *The New York Times* (February 2, 2005), p. C6; Joseph Pereira and Christopher J. Chipello, "Battle of the Block Makers," *The Wall Street Journal* (February 4, 2004), pp. B1, B4; Clare MacCarthy, "Deputy Chief Sacked as LEGO Tries to Rebuild," *Financial Times* (January 9, 2004), p. 19; Majken Schultz and Mary Jo Hatch, "The Cycles of Corporate Branding: The Case of the LEGO Company," *California Management Review* 46, no. 1 (Fall 2003), pp. 6–26; Meg Carter, "Building Blocks of Success," *Financial Times* (October 30, 2003), p. 8; Peter Marsh, "LEGO Builds Its Future," *Financial Times* (March 16–17, 1996), p. 9.