

Chapter Four

The External Environment

After reading and studying this chapter, you should be able to

1. Describe the three tiers of environmental factors that affect the performance of a firm.
2. List and explain the five factors in the remote environment.
3. Give examples of the economic, social, political, technological, and ecological influences on a business.
4. Explain the five forces model of industry analysis and give examples of each force.
5. Give examples of the influences of entry barriers, supplier power, buyer power, substitute availability, and competitive rivalry on a business.
6. List and explain the five factors in the operating environment.
7. Give examples of the influences of competitors, creditors, customers, labor, and direct suppliers on a business.

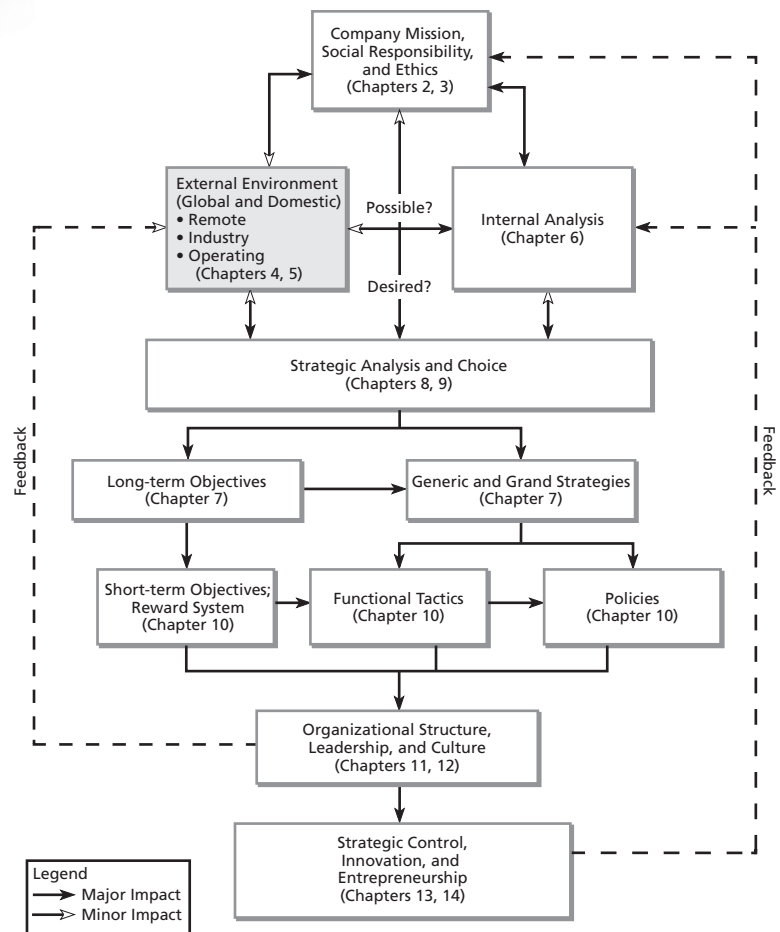
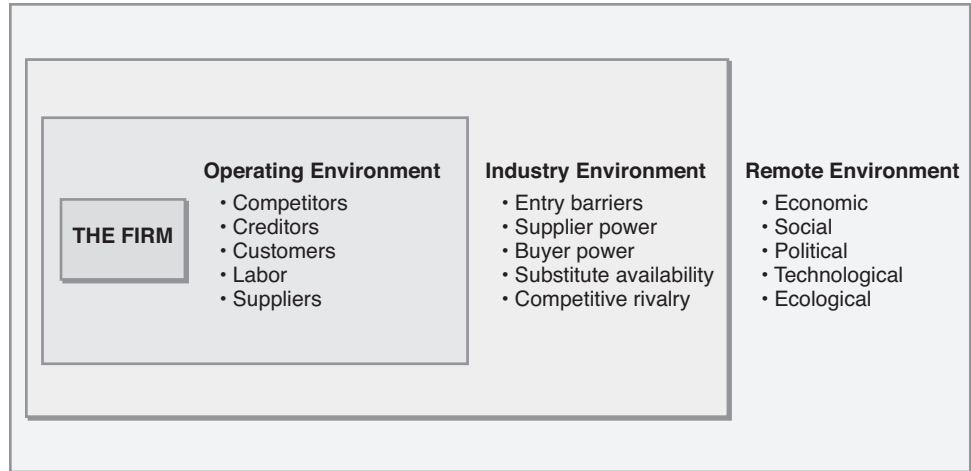


EXHIBIT 4.1 The Firm's External Environment



THE FIRM'S EXTERNAL ENVIRONMENT

external environment

The factors beyond the control of the firm that influence its choice of direction and action, organizational structure, and internal processes.

A host of external factors influence a firm's choice of direction and action and, ultimately, its organizational structure and internal processes. These factors, which constitute the **external environment**, can be divided into three interrelated subcategories: factors in the remote environment, factors in the industry environment, and factors in the operating environment. This chapter describes the complex necessities involved in formulating strategies that optimize a firm's market opportunities. Exhibit 4.1 suggests the interrelationship between the firm and its remote, its industry, and its operating environments. In combination, these factors form the basis of the opportunities and threats that a firm faces in its competitive environment.

REMOTE ENVIRONMENT

remote environment

Economic, social, political, technological, and ecological factors that originate beyond, and usually irrespective of, any single firm's operating situation.

The **remote environment** comprises factors that originate beyond, and usually irrespective of, any single firm's operating situation: (1) economic, (2) social, (3) political, (4) technological, and (5) ecological factors. That environment presents firms with opportunities, threats, and constraints, but rarely does a single firm exert any meaningful reciprocal influence. For example, when the economy slows and construction starts to decrease, an individual contractor is likely to suffer a decline in business, but that contractor's efforts in stimulating local construction activities would be unable to reverse the overall decrease in construction starts. The trade agreements that resulted from improved relations between the United States and China and the United States and Russia are examples of political factors that impact individual firms. The agreements provided individual U.S. manufacturers with opportunities to broaden their international operations.

Economic Factors

Economic factors concern the nature and direction of the economy in which a firm operates. Because consumption patterns are affected by the relative affluence of various market

Where Wal-Mart Isn't: Four Countries the Retailer Can't Conquer

Wal-Mart (WMT) is the biggest retailer in the world, with sales of \$135 billion in 26 countries outside the U.S. But it doesn't have stores in some of the world's biggest markets. Not in Germany, not in South Korea, not in Russia. And, not in India, either.

In 2013, Walmart announced that it is breaking up with its Indian partner, Bharti Enterprises, which means the American company's ambitious plans to open hundreds of supercenters around India won't be realized soon. In the official statement, Scott Price, head of Walmart Asia, referred obliquely to "investment conditions" as part of the problem. He had been more direct in an Associated Press interview two days earlier at the Asia-Pacific Economic Cooperation summit. Price said that the Indian government's requirement that foreign retailers source 30 percent of the products they sell from small and medium-sized Indian businesses is the "critical stumbling block." Walmart does have a wholesale business in India, which it is keeping.

Price didn't mention that the Indian government is investigating allegations that Walmart violated rules governing foreign investment in the retail industry, or that Walmart is conducting an internal probe on possible violations of U.S. anti-corruption laws.

Walmart has not figured out a way to enter Russia, either. For nearly six years, it looked to buy a local

company that could ease potential cultural and bureaucratic misunderstandings. Walmart lost a bid for a promising partner, a discount chain called Kopeyka, in 2010. Walmart later closed its Moscow office after saying disagreements on price had thwarted its acquisition plans.

Then there's Germany and South Korea. After opening stores in both countries, Walmart closed them in 2006. Germans didn't like Walmart employees handling their groceries at the check-out line. Male customers thought the smiling clerks were flirting. And many Europeans prefer to shop daily at local markets. In South Korea, Walmart also stuck to its American marketing strategies, concentrating on everything from electronics to clothing and not what South Koreans go to big markets for: food and beverages.

However, Walmart's global ambitions remain strong. In 2013, the company was rumored to be interested in purchasing the Hong Kong chain, ParknShop (13:HK).

Source: Excerpted from: Susan Berfield. Where Wal-Mart Isn't: Four Countries the Retailer Can't Conquer. *Bloomberg Businessweek Magazine*, October 10, 2013. <http://www.businessweek.com/articles/2013-10-10/where-walmart-isnt-four-countries-the-retailer-cant-conquer>

segments, each firm must consider economic trends in the segments that affect its industry. On both the national and international level, managers must consider the general availability of credit, the level of disposable income, and the propensity of people to spend. Prime interest rates, inflation rates, and trends in the growth of the gross national product are other economic factors they should monitor.

Changes in economic factors can be difficult to interpret. Walmart has sales of \$135 billion in 26 countries outside the U.S. But it has failed in attempts to understand the consumer shopping patterns and pricing preferences of several of the world's biggest markets, including Germany, South Korea, Russia, and India. As discussed in Strategy in Action, Exhibit 4.2, initial missteps halted Walmart's plans in 2013 to open hundreds of supercenters in India.

For example, in 2003, the depressed economy hit Crown Cork & Seal Co. especially hard because it had \$2 billion in debt due in the year and no way to raise the money to pay it. The down market had caused its stock price to be too low to raise cash as it normally would. Therefore, Crown Cork managers turned to issuing bonds to refinance its debt. With

the slow market, investors were taking advantage of such bonds because they could safely gain higher returns over stocks. Not only were investors getting a deal, but Crown Cork and other companies were seeing the lowest interest rates on bonds in years and by issuing bonds could reorganize their balance sheets.

The emergence of new international power brokers has changed the focus of economic environmental forecasting. Among the most prominent of these power brokers are the European Economic Community (EEC, or Common Market), the Organization of Petroleum Exporting Countries (OPEC), and coalitions of developing countries.

The EEC, whose members include most of the West European countries, eliminated quotas and established a tariff-free trade area for industrial products among its members. By fostering intra-European economic cooperation, it has helped its member countries compete more effectively in non-European international markets.

Social Factors

The social factors that affect a firm involve the beliefs, values, attitudes, opinions, and lifestyles of persons in the firm's external environment, as developed from cultural, ecological, demographic, religious, educational, and ethnic conditioning. As social attitudes change, so too does the demand for various types of clothing, books, leisure activities, and so on. Like other forces in the remote external environment, social forces are dynamic, with constant change resulting from the efforts of individuals to satisfy their desires and needs by controlling and adapting to environmental factors. Teresa Iglesias-Solomon hopes to benefit from social changes with *Niños*, a children's catalog written in both English and Spanish. The catalog features books, videos, and Spanish cultural offerings for English-speaking children who want to learn Spanish and for Spanish-speaking children who want to learn English. *Niños'* target market includes middle- to upper-income Hispanic parents, consumers, educators, bilingual schools, libraries, and purchasing agents. Iglesias-Solomon has reason to be optimistic about the future of *Niños*, because the Hispanic population is growing five times faster than the general U.S. population and ranks as the nation's largest minority.

Another form of social change occurs in a nation when it is exposed to major business changes. One recent example is the phenomenal growth in the popularity of franchises in India. As discussed in *Global Strategy in Action*, Exhibit 4.3, this growth in 2012 was shown by its 1,200 franchise ventures, 300 international franchisors, sales of U.S. \$7 billion, and growth in the range of 30–35 percent per year. The growth of franchising has been increasing so fast that India's legal infrastructure lags in providing specific rules to govern its operation. However, as detailed in the exhibit, there are numerous laws governing various aspects of franchising for strategic managers in India to obey.

One of the most profound social changes in recent years has been the entry of large numbers of women into the labor market. This has not only affected the hiring and compensation policies and the resource capabilities of their employers; it has also created or greatly expanded the demand for a wide range of products and services necessitated by their absence from the home. Firms that anticipated or reacted quickly to this social change offered such products and services as convenience foods, microwave ovens, and day care centers.

A second profound social change has been the accelerating interest of consumers and employees in quality-of-life issues. Evidence of this change is seen in recent contract negotiations. In addition to the traditional demand for increased salaries, workers demand such benefits as sabbaticals, flexible hours or four-day workweeks, lump-sum vacation plans, and opportunities for advanced training.

A third profound social change has been the shift in the age distribution of the population. Changing social values and a growing acceptance of improved birth control methods are

Franchising Laws in India

In the past two decades, India has witnessed a sea change in its foreign investment. Globalization, liberalization, and growing brand awareness have resulted in India becoming one of the largest and tastiest emerging markets. Being geographically vast and culturally diverse, India offered a favorable franchising environment with a huge consumer market. The popularity of franchising as a business model in India in 2012 was shown by its 1,200 franchise ventures, 300 international franchisors, sales of U.S. \$7 billion, and growth in the range of 30–35 percent per annum.

Although India did not have franchise-specific legislation or regulation, there are numerous laws governing various aspects of franchising. The following are five of the most important laws for franchisors in India to consider:

- **Contract Act.** The contractual relationship between the franchisor and the franchisee would be governed by the Indian Contract Act, 1872. A franchise agreement would be enforceable under Indian law as it would meet the criteria of a valid contract. However, care would have to be taken that the agreement does not contain any provision which makes it void or voidable.
- **Consumer Protection and Product Liability.** The Consumer Protection Act, 1986, provides for remedies to consumers in case of defects in products or deficiency in services making the manufacturers and service providers liable for the same.
- **Competition Law.** In view of the globalization and liberalization of its economy, the focus has shifted from curbing monopolies to promoting healthy competition in India. Accordingly, the Competition Act, 2002, was enacted and is now in force in its entirety. The relevant provisions from the franchising perspective are those with respect to anticompetitive agreements and abuse of dominant position.
- **Intellectual Property Rights Trademark Protection:** India's IPR laws include the Trademark Act, 1999, the Designs Act, 2000, the Copyright Act, 1957, the Patent Act, 1970, which provide for protection of the IPR of the franchisor and enforcement mechanism against infringement of the same.
- **Foreign Exchange Regulations.** The Foreign Exchange Management Act, 1999, and the rules/regulations framed thereunder, govern payments in foreign exchange. A franchise arrangement would normally involve payments such as franchise fee, royalty for use of trademarks and system, training expenses, advertisement contributions, and so on and can be remitted to the foreign franchisor without any approvals. Issue of guarantees in favor of a foreign franchisor would require approval of the Reserve Bank of India.

Source: Preeti Mehta. 2012. "Franchising in India." *Franchising World*, 44 (7): 55–56.

expected to raise the mean age of the U.S. population, which was 27.9 in 1970, and 34.9 in the year 2000 to 43.7 years by 2030. This trend will have an increasingly unfavorable effect on most producers of predominantly youth-oriented goods and will necessitate a shift in their long-range marketing strategies. Producers of hair and skin care preparations already have begun to adjust their research and development to reflect anticipated changes in demand.

At times, the social preferences of a nation seem unique or at least uniquely intense. Such a case is presented in Global Strategy in Action, Exhibit 4.4. In 2013, "Pura Raza Espanola" or Pure Spanish Breed horses were being slaughtered and turned into horse meat for export. They were victims of a devastating economic recession that made extravagances difficult to maintain and socially inappropriate when more than a quarter of the Spanish population was unemployed. The anguish of the business decision about how to dispose of the highly valued horses was extremely hard on the Spanish society.

A consequence of the changing age distribution of the population has been a sharp increase in the demands made by a growing number of senior citizens. Constrained by fixed incomes, these citizens have demanded that arbitrary and rigid policies on retirement age be modified and have successfully lobbied for tax exemptions and increases in Social

Legendary Horses Victim of Spain's Economic Bust

In 2013, "Pura Raza Espanola" or Pure Spanish Breed [horses] were being slaughtered and turned into horse meat for export. They were victims of a wrenching economic downturn that has wiped out fortunes, turned housing developments into ghost towns, and left more than a quarter of the population out of work. The southern Spanish region of Andalusia, famed for flamenco and Moorish castles, is also home to a legendary breed of horses that carried conquistadors into battle in the Americas, featured in Hollywood epics and more recently became trophy acquisitions for Spaniards during a giddy economic boom.

The Pura Raza Espanola breed has always been popular in Spain but took off just after the start of the country's biggest ever economic boom in the late 1990s. They had already won fame as war horses and gifts exchanged between European nobility, and have been featured in Hollywood films such as *Gladiator* and *Braveheart*. The spike in demand over the last decade triggered a breeding frenzy in which the number of horses in Spain rose by the hundreds of thousands, nearly half of them purebreds like Pura Raza Espanola. Spain's newly minted affluent classes couldn't get enough of them.

Then came the bust of Spain's property bubble in 2008. First demand for the horses dried up. In 2013, as

the financial crisis deepens with no end in sight, there was a new dilemma: Horse owners are increasingly unable to pay for an animal's upkeep of approximately \$500 a month. It all means that they face slaughter if owners can't find anybody to take the animals off their hands. Until 2012, Spanish law even dictated that rejected horses must be sent to the slaughterhouse. That's no longer the case but most still are turned into meat because there's little alternative if nobody else is willing to take the horses in. Owners who simply abandon horses face steep fines.

The number of horses sent to slaughter in Spain by owners and breeders hit 70,000 in 2012, more than double the 30,000 recorded killed by the country's Agriculture Ministry in 2008. The Agriculture Ministry horse census counted 660,889 horses in Spain in 2013, down from a high of 748,622 in 2011—but the number is still much higher than the 435,598 counted in 2007 just before Spain's economic boom imploded. Veterinarians and horse experts warn that the high number of horses being killed in Spain could continue for years.

Source: Excerpted from Alan Clendinning, April 8, 2013. "Legendary Horses Latest Victim of Spain's Bust." *The Miami Herald*.

Security benefits. Such changes have significantly altered the opportunity-risk equations of many firms—often to the benefit of firms that anticipated the changes.

Cutting across these issues is concern for individual health. The fast-food industry has been the target of a great deal of public concern. A great deal of popular press attention has been directed toward Americans' concern over the relationship between obesity and health. As documented by the hit movie *Supersize Me*, McDonald's was caught in the middle of this new social concern because its menu consisted principally of high-calorie, artery-clogging foods. Health experts blamed the fast-food industry for the rise in obesity, claiming that companies like McDonald's created an environment that encouraged overeating and discouraged physical activity. Specifically, McDonald's was charged with taking advantage of the fact that kids and adults were watching more TV, by targeting certain program slots to increase sales.

McDonald's responded aggressively and successfully. The company's strategists soon established McDonald's Corp. as an innovator in healthy food options. By 2005, the world's largest fast-food chain launched a new promotional campaign touting healthy lifestyles, including fruit and milk in Happy Meals, activity programs in schools, and a new partnership with the International Olympic Committee. At the time of the announcement, McDonald's was enjoying its longest ever period of same-store sales growth in 25 years, with 24 consecutive months of improved global sales resulting from new healthy menu options, later hours, and better customer service, such as cashless payment options. McDonald's healthy options included a fruit and walnut salad, Paul Newman's brand lowfat Italian dressing, and premium chicken sandwiches in the United States and chicken flatbread and fruit smoothies in Europe.

U.S. Union Warns Obama on Trade Talk Tactics

The largest U.S. labor union has warned the Obama administration and the European Commission not to use fresh transatlantic trade negotiations to “tear down” regulatory standards, but rather to bolster workers’ rights—a sign that support from the American left for any deal is far from guaranteed.

In an interview with the *Financial Times*, Celeste Drake, a trade and globalization policy specialist at the AFL-CIO, the largest federation of U.S. labor unions, said, “We are very concerned—as are our European brothers and sisters—that the agreement not be used as a way to tear down standards in areas such as food safety rules, or consumer right-to-know laws, or environmental protections.”

U.S. labor unions are a critical part of President Barack Obama’s Democratic base—and have often been opposed to trade liberalization policies under both Republican and Democratic administrations.

The unions could be a thorn in the side of the White House as it tries to build political support for the negotiations. As well as their worries about a race-to-the-bottom on regulatory standards, U.S. unions will have some demands of their own, in the hope of bringing in some European-style workers’ rights to America, such as union representation on corporate boards,

transnational workers’ councils, or greater barriers to redundancies.

“I’m not trying to imply that the U.S. is going to become a more democratic socialist nation but what I am saying is it does provide negotiators the opportunity to look deeply at their labor market policies to see if there are places where they could cooperate to harmonize upward instead of doing the traditional harmonizing downward,” Ms. Drake said.

The AFL-CIO’s views are distinctly at odds with the way that many U.S. business groups are eyeing the trade talks with the EU. Since tariffs are already low, the focus of the negotiations will be on ways to remove obstacles to trade across a broad range of sectors.

Such regulatory convergence—if successful—could be used by the U.S. and the EU as a global standard that would boost their competitiveness amid growing competition from emerging markets such as China, India, Brazil and others. Corporate America would be sorely disappointed if the negotiations did not achieve that goal.

Source: Politi, James. 2013. “U.S. Union Warns Obama on Trade Talk Tactics.” <http://www.ft.com/intl/cms/s/0/46aed1b8-7928-11e2-930b-00144feabdc0.html>, February 17.

Translating social change into forecasts of business effects is a difficult process, at best. Nevertheless, informed estimates of the impact of such alterations as geographic shifts in populations and changing work values, ethical standards, and religious orientation can only help a strategizing firm in its attempts to prosper.

Political Factors

The direction and stability of political factors are a major consideration for managers on formulating company strategy. Political factors define the legal and regulatory parameters within which firms must operate. Political constraints are placed on firms through fair-trade decisions, antitrust laws, tax programs, minimum wage legislation, pollution and pricing policies, administrative jawboning, and many other actions aimed at protecting employees, consumers, the general public, and the environment. Because such laws and regulations are most commonly restrictive, they tend to reduce the potential profits of firms. However, some political actions are designed to benefit and protect firms. Such actions include patent laws, government subsidies, and product research grants. Often, different stakeholders take different sides on important issues that affect business operations. They then work to influence legislators to vote for the position that they favor. The attempt of labor unions to influence President Barack Obama as payback for their support at the polls is a well-publicized example, as described in Exhibit 4.5, Strategy in Action.

Political factors either may limit or benefit the firms they influence. For example, in a pair of surprising decisions, the Federal Communications Commission (FCC) ruled that

local phone companies had to continue to lease their lines to the long-distance carriers at what the locals said was below cost. At the same time, the FCC ruled that the local companies were not required to lease their broadband lines to the national carriers. These decisions were good and bad for the local companies because, although they would lose money by leasing to the long-distance carriers, they could regain some of that loss with their broadband services that did not have to be leased.

The decisions did not mean that the local carriers had to remove existing lines and replace them with broadband lines. Instead, the local carriers would have to run two networks to areas where they want to incorporate broadband because the long-distance carriers had a right to the conventional lines as ruled in the decision. These regulations caused the local carriers to alter their strategies. For example, they often chose to reduce capital investments on new broadband lines because they had to maintain old lines as well. The reduction in capital investments was used to offset the losses they incurred in subsidizing their current lines to the long-distance carriers.

There are many political factors that profoundly affect the nature and potential of business operations in a country, including government policy with regard to industry cooperation, antitrust activities, foreign trade, depreciation, environmental protection, deregulation, and foreign trade barriers. However, executives often point to a nation's corporate tax structure as the most important consideration in their deliberation about international expansion. Exhibit 4.6, *Global Strategy in Action* describes how Google's international tax maneuvering shelters billions of dollars of income annually.

The direction and stability of political factors are a major consideration when evaluating the remote environment. Consider piracy. Microsoft's performance in the Chinese market is greatly affected by the lack of legal enforcement of piracy and also by the policies of the Chinese government. Likewise, the government's actions in support of its competitor, Linux, have limited Microsoft's ability to penetrate the Chinese market.

Political activity also has a significant impact on two governmental functions that influence the remote environment of firms: the supplier function and the customer function.

Supplier Function

Government decisions regarding the accessibility of private businesses to government-owned natural resources and national stockpiles of agricultural products will affect profoundly the viability of the strategies of some firms.

Customer Function

Government demand for products and services can create, sustain, enhance, or eliminate many market opportunities. For example, the Kennedy administration's emphasis on landing a man on the moon spawned a demand for thousands of new products; the Carter administration's emphasis on developing synthetic fuels created a demand for new skills, technologies, and products; the Reagan administration's strategic defense initiative (the "Star Wars" defense) sharply accelerated the development of laser technologies; Clinton's federal block grants to the states for welfare reform led to office rental and lease opportunities; and the war against terrorism during the Bush administration created enormous investment in aviation.

Technological Factors

The fourth set of factors in the remote environment involves technological change. To avoid obsolescence and promote innovation, a firm must be aware of technological changes that might influence its industry. Creative technological adaptations can suggest possibilities for new products or for improvements in existing products or in manufacturing and marketing techniques.

“Dutch Sandwich” Saves Google Billions in Taxes

The heart of Google’s international operations is a silvery glass office building in central Dublin, a block from the city’s Grand Canal. In 2009, the office was credited with 88 percent of the search juggernaut’s \$12.5 billion in sales outside the U.S. Most of the profits, however, went to the tax haven of Bermuda.

To reduce its overseas tax bill, Google uses a complicated legal structure that has saved it \$3.1 billion in 2007–2009 and boosted 2009’s overall earnings by 26 percent. Google has managed to lower its overseas tax rate more than its peers in the technology sector. Its rate since 2007 has been 2.4 percent.

According to company disclosures, Apple, Oracle, Microsoft and IBM—which together with Google make up the top five technology companies by market capitalization—reported tax rates between 4.5 percent and 25.8 percent on their overseas earnings from 2007 to 2009.

“It’s remarkable that Google’s effective rate is that low,” says Martin A. Sullivan, a tax economist who formerly worked for the U.S. Treasury Department. “This company operates throughout the world mostly in high-tax countries where the average corporate rate is well over 20 percent.”

In Bermuda there’s no corporate income tax at all. Google’s profits travel to the island’s white sands via a convoluted route known to tax lawyers as the “Dutch Sandwich.” In Google’s case, it generally works like this: When a company in Europe, the Middle East or Africa purchases a search ad through Google, it sends the money to Google Ireland. The Irish government taxes corporate profits at 12.5 percent, but Google mostly escapes that tax because its earnings don’t stay in the Dublin office, which reported a pretax profit of less than 1 percent of revenues in 2008.

Irish law makes it difficult for Google to send the money directly to Bermuda without incurring a large tax hit, so the payment makes a brief detour through the Netherlands, since Ireland doesn’t tax certain payments to companies in other European Union states. Once the money is in the Netherlands, Google can take advantage of generous Dutch tax laws. Its subsidiary there, Google Netherlands Holdings, is just a shell (it has no employees) and passes on about 99.8 percent of what it collects to Bermuda.

All of these arrangements are legal. Google Ireland licenses its search and advertising technology from Google headquarters in Mountain View, CA. The licensing agreement allows Google to attribute its overseas profits to its Irish operations instead of the U.S., where most of the technology was developed. The subsidiary is supposed to pay an “arm’s length” price for the rights, or the same amount an unrelated company would. Yet because licensing fees from the Irish subsidiary generate income that is taxed at 35 percent, one of the highest corporate rates in the world, Google has an incentive to set the licensing price as low as possible. The effect is to shift some of its profits overseas in an arrangement known as “transfer pricing.”

This, too, is legal. In 2006 the IRS approved Google’s transfer pricing arrangements, which began in 2003. Transfer pricing arrangements are popular with technology and pharmaceutical companies in particular because they rely on intellectual property, which is easily transportable across borders.

Source: Excerpted from Jesse Drucker, “‘Dutch Sandwich’ Saves Google Billions in Taxes,” *Bloomberg Businessweek*, Msnbc.com, October 22, 2010. <http://www.msnbc.msn.com/id/39784907>

technological forecasting

The quasi-science of anticipating environmental and competitive changes and estimating their importance to an organization’s operations.

A technological breakthrough can have a sudden and dramatic effect on a firm’s environment. It may spawn sophisticated new markets and products or significantly shorten the anticipated life of a manufacturing facility. Thus, all firms, and most particularly those in turbulent growth industries, must strive for an understanding both of the existing technological advances and the probable future advances that can affect their products and services. This quasi-science of attempting to foresee advancements and estimate their impact on an organization’s operations is known as **technological forecasting**.

Technological forecasting can help protect and improve the profitability of firms in growing industries. It alerts strategic managers to both impending challenges and promising opportunities. As examples: (1) advances in xerography were a key to Xerox’s success but caused major difficulties for carbon paper manufacturers, and (2) the perfection of transistors changed the nature of competition in the radio and television industry, helping

In China, Food Self-sufficiency vs. Industrial Growth

China faces a clash between a policy of food self-sufficiency and the industrial growth that has made it the world's No. 2 economy. "With rising living standards and more consumption of meat, eggs, and dairy, grain consumption is inevitably on the rise."

Growing cities, expanding deserts from years of overgrazing, and a reforestation effort have helped shrink China's farmland by 8.3 million hectares in the past 12 years, the government says. With less land under cultivation, Chinese farmers are unable to boost production of corn and wheat fast enough to cool surging domestic prices, so the country is importing more. "China's increased demand for agricultural commodities will mean an increase in prices for the entire world,"

says David Stroud, chief executive officer of New York hedge fund TS Capital Partners.

Making up for a 5 percent shortfall in China's grain harvest could consume 20 percent of current global grain exports, says Abah Ofon, a Singapore-based commodities analyst at Standard Chartered Bank. "As China continues to grow, demand and supply will struggle to keep up," Ofon says. "For China, the world's biggest consumer and producer, a small deficit can result in huge demand for imports."

Source: Excerpted from: Luzi-Ann Javier and Michael Forsythe. In China, Factories vs. Farms. *Bloomberg Businessweek Magazine*, April 28, 2011. http://www.businessweek.com/magazine/content/11_19/b4227009958677.htm

such giants as RCA while seriously weakening smaller firms whose resource commitments required that they continue to base their products on vacuum tubes.

The key to beneficial forecasting of technological advancement lies in accurately predicting future technological capabilities and their probable impacts. A comprehensive analysis of the effect of technological change involves study of the expected effect of new technologies on the remote environment, on the competitive business situation, and on the business-society interface. In recent years, forecasting in the last area has warranted particular attention. For example, as a consequence of increased concern over the environment, firms must carefully investigate the probable effect of technological advances on quality-of-life factors, such as ecology and public safety.

For example, by combining the powers of Internet technologies with the capability of downloading music in a digital format, Bertelsmann has found a creative technological adaptation for distributing music online to millions of consumers whenever or wherever they might be. Bertelsmann, AOL Time Warner, and EMI formed a joint venture called Musicnet. The ease and wide availability of Internet technologies is increasing the marketplace for online e-tailers. Bertelsmann's response to the shifts in technological factors enables it to distribute music more rapidly through Musicnet to a growing consumer base.

ecology

The relationships among human beings and other living things and the air, soil, and water that supports them.

pollution

Threats to life-supporting ecology caused principally by human activities in an industrial society.

Ecological Factors

The most prominent factor in the remote environment is often the reciprocal relationship between business and the ecology. The term **ecology** refers to the relationships among human beings and other living things and the air, soil, and water that support them. Threats to our life-supporting ecology caused principally by human activities in an industrial society are commonly referred to as **pollution**. Specific concerns include global warming, loss of habitat and biodiversity, as well as air, water, and land pollution.

Economic growth can contribute to ecological damage. For example, as described in Global Strategy in Action, Exhibit 4.7, China's extraordinary economic growth has led to rapidly competing demands for land, while threatening the national policy of food self-sufficiency.

The global climate has been changing for ages; however, it is now evident that humanity's activities are accelerating this tremendously. A change in atmospheric radiation, due in part to ozone depletion, causes global warming. Solar radiation that is normally absorbed into the atmosphere reaches the earth's surface, heating the soil, water, and air.

Another area of great importance is the loss of habitat and biodiversity. Ecologists agree that the extinction of important flora and fauna is occurring at a rapid rate and, if this pace is continued, could constitute a global extinction on the scale of those found in fossil records. The earth's life-forms depend on a well-functioning ecosystem. In addition, immeasurable advances in disease treatment can be attributed to research involving substances found in plants. As species become extinct, the life support system is irreparably harmed. The primary cause of extinction on this scale is a disturbance of natural habitat. For example, current data suggest that the earth's primary tropical forests, a prime source of oxygen and potential plant "cure," could be destroyed in only five decades.

Air pollution is created by dust particles and gaseous discharges that contaminate the air. Acid rain, or rain contaminated by sulfur dioxide, which can destroy aquatic and plant life, is believed to result from coal-burning factories in 70 percent of all cases. A health-threatening "thermal blanket" is created when the atmosphere traps carbon dioxide emitted from smokestacks in factories burning fossil fuels. This "greenhouse effect" can have disastrous consequences, making the climate unpredictable and raising temperatures.

Water pollution occurs principally when industrial toxic wastes are dumped or leak into the nation's waterways. Because fewer than 50 percent of all municipal sewer systems are in compliance with Environmental Protection Agency requirements for water safety, contaminated waters represent a substantial present threat to public welfare. Efforts to keep from contaminating the water supply are a major challenge to even the most conscientious of manufacturing firms.

Land pollution is caused by the need to dispose of ever-increasing amounts of waste. Routine, everyday packaging is a major contributor to this problem. Land pollution is more dauntingly caused by the disposal of industrial toxic wastes in underground sites. With approximately 90 percent of the annual U.S. output of 500 million metric tons of hazardous industrial wastes being placed in underground dumps, it is evident that land pollution and its resulting endangerment of the ecology have become a major item on the political agenda.

As a major contributor to ecological pollution, business now is being held responsible for eliminating the toxic by-products of its current manufacturing processes and for cleaning up the environmental damage that it did previously. Increasingly, managers are being required by the government or are being expected by the public to incorporate ecological concerns into their decision making. For example, between 1975 and 1992, 3M cut its pollution in half by reformulating products, modifying processes, redesigning production equipment, and recycling by-products. Similarly, steel companies and public utilities have invested billions of dollars in costlier but cleaner-burning fuels and pollution control equipment. The automobile industry has been required to install expensive emission controls in cars. The gasoline industry has been forced to formulate new low-lead and no-lead products. And thousands of companies have found it necessary to direct their R&D resources into the search for ecologically superior products, such as Sears's phosphate-free laundry detergent and Pepsi-Cola's biodegradable plastic soft-drink bottle.

Environmental legislation impacts corporate strategies worldwide. Many companies fear the consequences of highly restrictive and costly environmental regulations. However, some manufacturers view these new controls as an opportunity, capturing markets with products that help customers satisfy their own regulatory standards. Other manufacturers

contend that the costs of environmental spending inhibit the growth and productivity of their operations.

Despite cleanup efforts to date, the job of protecting the ecology will continue to be a top strategic priority—usually because corporate stockholders and executives choose it, increasingly because the public and the government require it. As evidenced by Exhibit 4.8,

EXHIBIT 4.8 Federal Ecological Legislation

National Environmental Policy Act, 1969 Established Environmental Protection Agency; consolidated federal environmental activities under it. Established Council on Environmental Quality to advise president on environmental policy and to review environmental impact statements.

Air Pollution:

Clean Air Act, 1963 Authorized assistance to state and local governments in formulating control programs. Authorized limited federal action in correcting specific pollution problems.

Clean Air Act, Amendments (Motor Vehicle Air Pollution Control Act), 1965 Authorized federal standards for auto exhaust emission. Standards first set for 1968 models.

Air Quality Act, 1967 Authorized federal government to establish air quality control regions and to set maximum permissible pollution levels. Required states and localities to carry out approved control programs or else give way to federal controls.

Clean Air Act Amendments, 1970 Authorized EPA to establish nationwide air pollution standards and to limit the discharge of six principal pollutants into the lower atmosphere. Authorized citizens to take legal action to require EPA to implement its standards against undiscovered offenders.

Clean Air Act Amendments, 1977 Postponed auto emission requirements. Required use of scrubbers in new coal-fired power plants. Directed EPA to establish a system to prevent deterioration of air quality in clean areas.

Solid Waste Pollution:

Solid Waste Disposal Act, 1965 Authorized research and assistance to state and local control programs.

Resource Recovery Act, 1970 Subsidized construction of pilot recycling plants; authorized development of nationwide control programs.

Resource Conservation and Recovery Act, 1976 Directed EPA to regulate hazardous waste management, from generation through disposal.

Surface Mining and Reclamation Act, 1976 Controlled strip mining and restoration of reclaimed land.

Water Pollution:

Refuse Act, 1899 Prohibited dumping of debris into navigable waters without a permit. Extended by court decision to industrial discharges.

Federal Water Pollution Control Act, 1956 Authorized grants to states for water pollution control. Gave federal government limited authority to correct specific pollution problems.

Water Quality Act, 1965 Provided for adoption of water quality standards by states, subject to federal approval.

Water Quality Improvement Act, 1970 Provided for federal cleanup of oil spills. Strengthened federal authority over water pollution control.

Federal Water Pollution Control Act Amendments, 1972 Authorized EPA to set water quality and effluent standards; provided for enforcement and research.

Safe Drinking Water Act, 1974 Set standards for drinking water quality.

Clean Water Act, 1977 Ordered control of toxic pollutants by 1984 with best available technology economically feasible.

the government has made numerous interventions into the conduct of business for the purpose of bettering the ecology.

Benefits of Eco-Efficiency

Many of the world's largest corporations are realizing that business activities must no longer ignore environmental concerns. Every activity is linked to thousands of other transactions and their environmental impact; therefore, corporate environmental responsibility must be taken seriously and environmental policy must be implemented to ensure a comprehensive organizational strategy. Because of increases in government regulations and consumer environmental concerns, the implementation of environmental policy has become a point of competitive advantage. Therefore, the rational goal of business should be to limit its impact on the environment, thus ensuring long-run benefits to both the firm and society. To neglect this responsibility is to ensure the demise of both the firm and our ecosystem.

Responding to this need, General Electric unveiled plans to double its research funds for technologies that reduce energy use, pollution, and emissions tied to global warming. GE said it would focus even more on solar and wind power as well as other environmental technologies it is involved with, such as diesel-electric locomotives, lower emission aircraft engines, more efficient lighting, and water purification. The company's "ecomagination" plans for 2010 include investing \$1.5 billion annually in cleaner technologies research; and doubling revenues to \$20 billion from environmentally friendly products and services.

Stephen Schmidheiny, chairman of the Business Council for Sustainable Development, has coined the term **eco-efficiency** to describe corporations that produce more-useful goods and services while continuously reducing resource consumption and pollution. He cites a number of reasons for corporations to implement environmental policy: customers demand cleaner products, environmental regulations are increasingly more stringent, employees prefer to work for environmentally conscious firms, and financing is more readily available for eco-efficient firms. In addition, the government provides incentives for environmentally responsible companies.

Setting priorities, developing corporate standards, controlling property acquisition and use to preserve habitats, implementing energy-conserving activities, and redesigning products (e.g., minimizing packaging) are a number of measures the firm can implement to enhance an eco-efficient strategy. One of the most important steps a firm can take in achieving a competitive position with regard to the eco-efficient strategy is to fully capitalize on technological developments as a method of gaining efficiency.

There are four key characteristics of eco-efficient corporations:

- Eco-efficient firms are proactive, not reactive. Policy is initiated and promoted by business because it is in their own interests and the interest of their customers, not because it is imposed by one or more external forces.
- Eco-efficiency is designed in, not added on. This characteristic implies that the optimization of eco-efficiency requires every business effort regarding the product and process to internalize the strategy.
- Flexibility is imperative for eco-efficient strategy implementation. Continuous attention must be paid to technological innovation and market evolution.
- Eco-efficiency is encompassing, not insular. In the modern global business environment, efforts must cross not only industrial sectors but national and cultural boundaries as well.

eco-efficiency

Company actions that produce more useful goods and services while continuously reducing resource consumption and pollution.

INDUSTRY ENVIRONMENT

industry environment

The general conditions for competition that influence all businesses that provide similar products and services.

Harvard professor Michael E. Porter propelled the concept of **industry environment** into the foreground of strategic thought and business planning. The cornerstone of his work first appeared in the *Harvard Business Review*, in which Porter explains the five forces that shape competition in an industry. His well-defined analytic framework helps strategic managers to link remote factors to their effects on a firm's operating environment.

With the special permission of Professor Porter and the *Harvard Business Review*, we present in this section of the chapter the major portion of his seminal article on the industry environment and its impact on strategic management.¹

HOW COMPETITIVE FORCES SHAPE STRATEGY

The essence of strategy formulation is coping with competition. Yet it is easy to view competition too narrowly and too pessimistically. While we sometimes hear executives complaining to the contrary, intense competition in an industry is neither coincidence nor bad luck.

Moreover, in the fight for market share, competition is not manifested only in the other players. Rather, competition in an industry is rooted in its underlying economics, and competitive forces exist that go well beyond the established combatants in a particular industry. Customers, suppliers, potential entrants, and substitute products are all competitors that may be more or less prominent or active depending on the industry.

The state of competition in an industry depends on five basic forces, which are diagrammed in Exhibit 4.9. The collective strength of these forces determines the ultimate profit potential of an industry. It ranges from intense in industries like tires, metal cans, and steel, where no company earns spectacular returns on investment, to mild in industries like oil-field services and equipment, soft drinks, and toiletries, where there is room for quite high returns.

In the economists' "perfectly competitive" industry, jockeying for position is unbridled and entry to the industry very easy. This kind of industry structure, of course, offers the worst prospect for long-run profitability. The weaker the forces collectively, however, the greater the opportunity for superior performance.

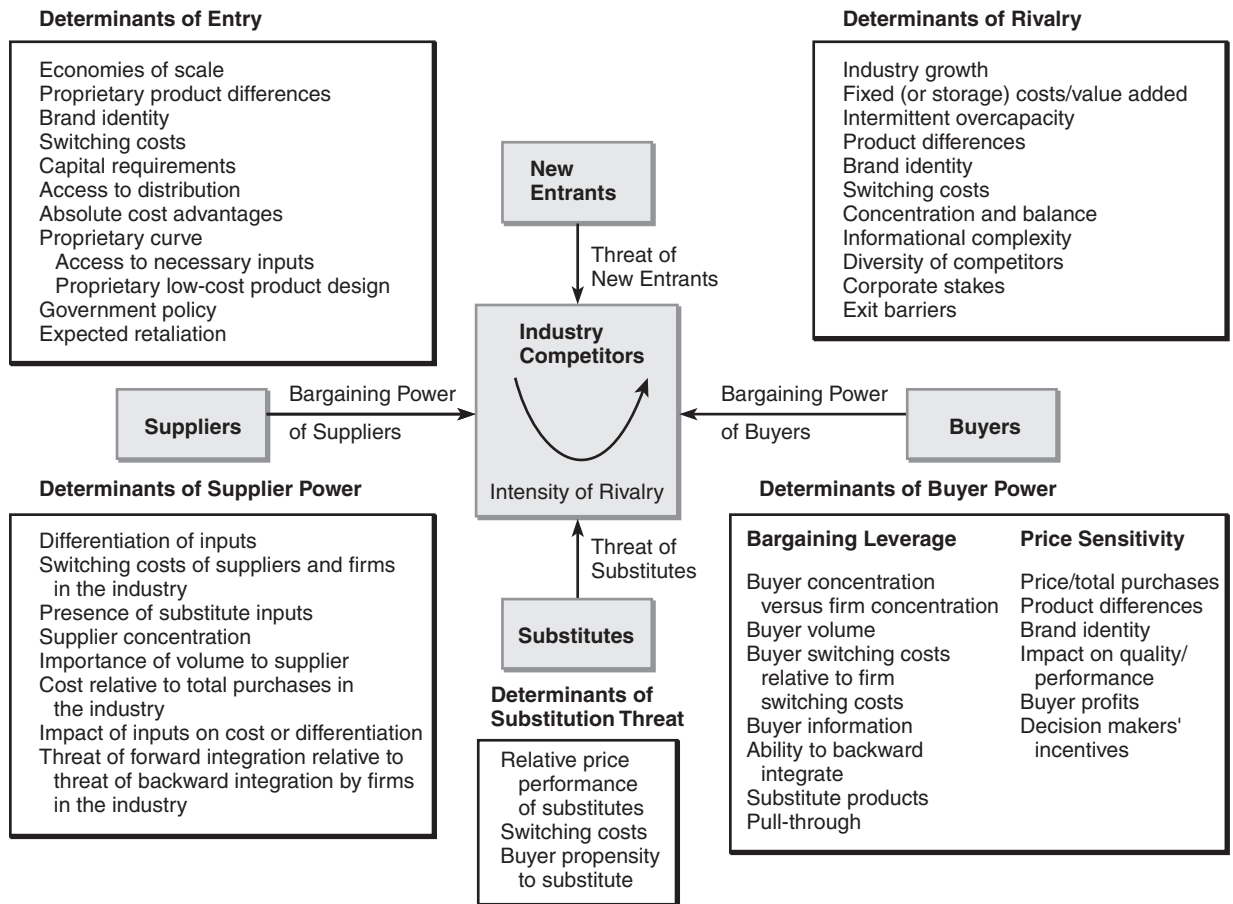
Whatever their collective strength, the corporate strategist's goal is to find a position in the industry where his or her company can best defend itself against these forces or can influence them in its favor. The collective strength of the forces may be painfully apparent to all the antagonists; but to cope with them, the strategist must delve below the surface and analyze the sources of competition. For example, what makes the industry vulnerable to entry? What determines the bargaining power of suppliers?

Knowledge of these underlying sources of competitive pressure provides the groundwork for a strategic agenda of action. They highlight the critical strengths and weaknesses of the company, animate the positioning of the company in its industry, clarify the areas where strategic changes may yield the greatest payoff, and highlight the places where industry trends promise to hold the greatest significance as either opportunities or threats.

Understanding these sources also proves to be of help in considering areas for diversification.

¹M. E. Porter, "How Competitive Forces Shape Strategy," *Harvard Business Review*, March–April 1979, pp. 137–45. Copyright © 1979 by the Harvard Business School Publishing Corporation; all rights reserved.

EXHIBIT 4.9 Forces Driving Industry Competition



Source: Reprinted by permission of *Harvard Business Review*. Exhibit from “How Competitive Forces Shape Strategy,” by M. E. Porter, March–April 1979. Copyright 1979 by the Harvard Business School Publishing Corporation; all rights reserved.

CONTENDING FORCES

The strongest competitive force or forces determine the profitability of an industry and so are of greatest importance in strategy formulation. For example, even a company with a strong position in an industry unthreatened by potential entrants will earn low returns if it faces a superior or a lower-cost substitute product—as the leading manufacturers of vacuum tubes and coffee percolators have learned to their sorrow. In such a situation, coping with the substitute product becomes the number one strategic priority.

Different forces take on prominence, of course, in shaping competition in each industry. In the ocean-going tanker industry, the key force is probably the buyers (the major oil companies), while in tires it is powerful OEM buyers coupled with tough competitors. In the steel industry the key forces are foreign competitors and substitute materials.

Every industry has an underlying structure, or a set of fundamental economic and technical characteristics, that gives rise to these competitive forces. The strategist, wanting to

position his or her company to cope best with its industry environment or to influence that environment in the company's favor, must learn what makes the environment tick.

This view of competition pertains equally to industries dealing in services and to those selling products. To avoid monotony, we refer to both products and services as *products*. The same general principles apply to all types of business.

A few characteristics are critical to the strength of each competitive force. They will be discussed in this section.

Threat of Entry

New entrants to an industry bring new capacity, the desire to gain market share, and often substantial resources. Similarly, companies diversifying through acquisition into the industry from other markets often leverage their resources to cause a shake-up, as Philip Morris did with Miller beer.

The seriousness of the threat of entry depends on the barriers present and on the reaction from existing competitors that the entrant can expect. If **barriers to entry** are high and a newcomer can expect sharp retaliation from the entrenched competitors, he or she obviously will not pose a serious threat of entering.

There are six major sources of barriers to entry.

Economies of Scale

These economies deter entry by forcing the aspirant either to come in on a large scale or to accept a cost disadvantage. Scale economies in production, research, marketing, and service are probably the key barriers to entry in the mainframe computer industry, as Xerox and GE sadly discovered. **Economies of scale** also can act as hurdles in distribution, utilization of the sales force, financing, and nearly any other part of a business.

Economies of scale refer to the savings that companies within an industry achieve due to increased volume. Simply put, when the volume of production increases, the long-range average cost of a unit produced will decline.

Economies of scale result from technological and nontechnological sources. The technological sources of these economies are higher levels of mechanization or automation and a greater modernization of plant and facilities. The nontechnological sources include better managerial coordination of production functions and processes, long-term contractual agreements with suppliers, and enhanced employee performance arising from specialization.

Economies of scale are an important determinant of the intensity of competition in an industry. Firms that enjoy such economies can charge lower prices than their competitors. They also can create barriers to entry by reducing their prices temporarily, or permanently, to deter new firms from entering the industry.

Product Differentiation

Product differentiation, or brand identification, creates a barrier by forcing entrants to spend heavily to overcome customer loyalty. Advertising, customer service, being first in the industry, and product differences are among the factors fostering brand identification. It is perhaps the most important entry barrier in soft drinks, over-the-counter drugs, cosmetics, investment banking, and public accounting. To create high fences around their business, brewers couple brand identification with economies of scale in production, distribution, and marketing.

Capital Requirements

The need to invest large financial resources to compete creates a barrier to entry, particularly if the capital is required for unrecoverable expenditures in upfront advertising or R&D. Capital is necessary not only for fixed facilities but also for customer credit, inventories,

barriers to entry

The conditions that a firm must satisfy to enter an industry.

economies of scale

The savings that companies achieve because of increased volume.

product

differentiation

The extent to which customers perceive differences among products and services.

The Experience Curve as an Entry Barrier

In recent years, the experience curve has become widely discussed as a key element of industry structure. According to this concept, unit costs in many manufacturing industries (some dogmatic adherents say in all manufacturing industries) as well as in some service industries decline with “experience,” or a particular company’s cumulative volume of production. (The experience curve, which encompasses many factors, is a broader concept than the better-known learning curve, which refers to the efficiency achieved over time by workers through much repetition.)

The causes of the decline in unit costs are a combination of elements, including economies of scale, the learning curve for labor, and capital-labor substitution. The cost decline creates a barrier to entry because new competitors with no “experience” face higher costs than established ones, particularly the producer with the largest market share, and have difficulty catching up with the entrenched competitors.

Adherents of the experience curve concept stress the importance of achieving market leadership to maximize this barrier to entry, and they recommend aggressive action to achieve it, such as price cutting in anticipation of falling costs in order to build volume. For the combatant that cannot achieve a healthy market share, the prescription is usually, “Get out.”

Is the experience curve an entry barrier on which strategies should be built? The answer is, not in every industry. In fact, in some industries, building a strategy on the experience curve can be potentially disastrous.

That costs decline with experience in some industries is not news to corporate executives. The significance of the experience curve for strategy depends on what factors are causing the decline.

A new entrant may well be more efficient than the more experienced competitors: if it has built the newest plant, it will face no disadvantage in having to catch up. The strategic prescription, “You must have the largest, most efficient plant,” is a lot different from “You must produce the greatest cumulative output of the item to get your costs down.”

Whether a drop in costs with cumulative (not absolute) volume erects an entry barrier also depends on the sources of the decline. If costs go down because of technical advances known generally in the industry or because of the development of improved equipment that can be copied or purchased from equipment suppliers, the experience curve is not an entry barrier at all—in fact, new or less-experienced competitors may actually enjoy a cost advantage over the leaders. Free of the legacy of heavy past investments, the newcomer or less-experienced competitor can purchase or copy the newest and lowest cost equipment and technology.

If, however, experience can be kept proprietary, the leaders will maintain a cost advantage. But new entrants may require less experience to reduce their costs than the leaders needed. All this suggests that the experience curve can be a shaky entry barrier on which to build a strategy.

and absorbing start-up losses. While major corporations have the financial resources to invade almost any industry, the huge capital requirements in certain fields, such as computer manufacturing and mineral extraction, limit the pool of likely entrants.

Cost Disadvantages Independent of Size

Entrenched companies may have cost advantages not available to potential rivals, no matter what their size and attainable economies of scale. These advantages can stem from the effects of the learning curve (and of its first cousin, the experience curve), proprietary technology, access to the best raw materials sources, assets purchased at preinflation prices, government subsidies, or favorable locations. Sometimes cost advantages are enforceable legally, as they are through patents. (For analysis of the much-discussed experience curve as a barrier to entry, see Exhibit 4.10, Strategy in Action.)

Access to Distribution Channels

The new boy or girl on the block must, of course, secure distribution of his or her product or service. A new food product, for example, must displace others from the supermarket shelf via price breaks, promotions, intense selling efforts, or some other means. The more

Chinese Companies Retreat from U.S. Listings as Scrutiny Mounts

Early in 2013, Chinese companies were deserting U.S. stock markets in record numbers as regulatory scrutiny mounted and the advantages of a U.S. listing slipped away. U.S. government investigations of suspect financial reports and battered share prices have for many Chinese companies wrecked the chances of raising new money in the United States and given them little reason to stay. "There's very little in [the] way of new capital flows to those companies, their valuations are low and they're encountering significant headwinds in terms of regulatory oversight," said James Feltman, a senior managing director at Mesirow Financial Consulting.

Twenty-seven China-based companies with U.S. listings announced plans to go private through buyouts in 2012, up from 16 in 2011 and just six in 2010, according to investment bank Roth Capital Partners. Before 2010, only one to two privatizations a year were typically done by China-based companies. In addition, about 50 mostly small Chinese companies "went dark," or deregistered with the U.S. Securities and Exchange Commission, ending their requirements for public disclosures. That was up from about 40 in 2011 and the most since at least 1994, when the SEC's records start.

Just three Chinese companies successfully went public on U.S. exchanges in 2012, down from 12 in 2011 and 41 in 2010. About 300 China-based companies still have shares trading in the United States on exchanges or "over-the-counter" between individual dealers. Bankers are aggressively pitching the idea of companies pulling

out of the United States and relisting elsewhere, saying they can get a better share price in Hong Kong or mainland China. "The idea is that the markets here understand the China story better and will therefore hopefully assign a higher valuation to the stocks," said Mark Lehmkuhler, a partner at the law firm Davis Polk, in Hong Kong. U.S.-listed Chinese companies in the consumer staples sector, for example, were trading recently at a 67 percent discount to comparable Chinese companies on the Hong Kong Exchange, according to investment bank Morgan Joseph.

A failure by U.S. regulators to reach an agreement with China on accounting oversight was pushing more Chinese companies to abandon their U.S. listings, bankers and lawyers said. The United States had been trying to get access to audit records and permission to inspect Chinese audit firms to combat a rash of accounting scandals. China balked, leaving the future of U.S. listings for Chinese companies in doubt.

Stepping up pressure, the SEC deregistered about 50 China-based companies over the past two years. In December 2012, it charged the Chinese arms of five top accounting firms with securities violations for failing to turn over documents, raising tensions in its standoff with China.

Source: Excerpted from "Chinese Companies Retreat from U.S. Listings as Scrutiny Mounts." 2013. *Reuters Hedgeworld*, January 14.

limited the wholesale or retail channels are and the more that existing competitors have these tied up, obviously the tougher that entry into the industry will be. Sometimes this barrier is so high that, to surmount it, a new contestant must create its own distribution channels, as Timex did in the watch industry.

Government Policy

The government can limit or even foreclose entry to industries, with such controls as license requirements, limits on access to raw materials, and tax incentives. Regulated industries like trucking, liquor retailing, and freight forwarding are noticeable examples; more subtle government restrictions operate in fields like ski-area development and coal mining. The government also can play a major indirect role by affecting entry barriers through such controls as air and water pollution standards and safety regulations.

A distinctive form of government policy regulates the access of businesses to public investment in the United States. An agency of the U.S. federal government known as the Securities and Exchange Commission works with the New York Stock exchange, NASDAQ, and other corporate stock exchanges to regulate the listing of companies. As detailed in *Global Strategy in Action*, Exhibit 4.11, Chinese companies were backing away from

pursuing membership in the exchanges by 2013. A failure by U.S. regulators to reach an agreement with China on accounting oversight was pushing Chinese companies to abandon their U.S. listings. The United States had been trying to get access to audit records and permission to inspect Chinese audit firms to combat a rash of accounting scandals. China balked, leaving the future of U.S. listings for Chinese companies in doubt and their participation in the U.S. investment industry sharply limited.

The potential rival's expectations about the reaction of existing competitors also will influence its decision on whether to enter. The company is likely to have second thoughts if incumbents have previously lashed out at new entrants, or if

The incumbents possess substantial resources to fight back, including excess cash and unused borrowing power, productive capacity, or clout with distribution channels and customers.

The incumbents seem likely to cut prices because of a desire to keep market shares or because of industrywide excess capacity.

Industry growth is slow, affecting its ability to absorb the new arrival and probably causing the financial performance of all the parties involved to decline.

Powerful Suppliers

Suppliers can exert bargaining power on participants in an industry by raising prices or reducing the quality of purchased goods and services. Powerful suppliers, thereby, can squeeze profitability out of an industry unable to recover cost increases in its own prices. By raising their prices, soft-drink concentrate producers have contributed to the erosion of profitability of bottling companies because the bottlers—facing intense competition from powdered mixes, fruit drinks, and other beverages—have limited freedom to raise their prices accordingly.

The power of each important supplier (or buyer) group depends on a number of characteristics of its market situation and on the relative importance of its sales or purchases to the industry compared with its overall business.

A *supplier* group is powerful if

1. It is dominated by a few companies and is more concentrated than the industry it sells.
2. Its product is unique or at least differentiated, or if it has built-up switching costs. Switching costs are fixed costs that buyers face in changing suppliers. These arise because, among other things, a buyer's product specifications tie it to particular suppliers, it has invested heavily in specialized ancillary equipment or in learning how to operate a supplier's equipment (as in computer software), or its production lines are connected to the supplier's manufacturing facilities (as in some manufacturing of beverage containers).
3. It is not obliged to contend with other products for sale to the industry. For instance, the competition between the steel companies and the aluminum companies to sell to the can industry checks the power of each supplier.
4. It poses a credible threat of integrating forward into the industry's business. This provides a check against the industry's ability to improve the terms on which it purchases.
5. The industry is not an important customer of the supplier group. If the industry is an important customer, suppliers' fortunes will be tied closely to the industry, and they will want to protect the industry through reasonable pricing and assistance in activities like R&D and lobbying.

Powerful Buyers

Customers likewise can force down prices, demand higher quality or more service, and play competitors off against each other—all at the expense of industry profits.

A *buyer* group is powerful if

1. It is concentrated or purchases in large volumes. Large-volume buyers are particularly potent forces if heavy fixed costs characterize the industry—as they do in metal containers, corn refining, and bulk chemicals, for example—which raise the stakes to keep capacity filled.

2. The products it purchases from the industry are standard or undifferentiated. The buyers, sure that they always can find alternative suppliers, may play one company against another, as they do in aluminum extrusion.

3. The products it purchases from the industry form a component of its product and represent a significant fraction of its cost. The buyers are likely to shop for a favorable price and purchase selectively. Where the product sold by the industry in question is a small fraction of buyers' costs, buyers are usually much less price sensitive.

4. It earns low profits, which create great incentive to lower its purchasing costs. Highly profitable buyers, however, are generally less price sensitive (i.e., of course, if the item does not represent a large fraction of their costs).

5. The industry's product is unimportant to the quality of the buyers' products or services. Where the quality of the buyers' products is very much affected by the industry's product, buyers are generally less price sensitive. Industries in which this situation exists include oil field equipment, where a malfunction can lead to large losses, and enclosures for electronic medical and test instruments, where the quality of the enclosure can influence the user's impression about the quality of the equipment inside.

6. The industry's product does not save the buyer money. Where the industry's product or service can pay for itself many times over, the buyer is rarely price sensitive; rather, he or she is interested in quality. This is true in services like investment banking and public accounting, where errors in judgment can be costly and embarrassing, and in businesses like the mapping of oil wells, where an accurate survey can save thousands of dollars in drilling costs.

7. The buyers pose a credible threat of integrating backward to make the industry's product. The Big Three auto producers and major buyers of cars often have used the threat of self-manufacture as a bargaining lever. But sometimes an industry so engenders a threat to buyers that its members may integrate forward.

Most of these sources of buyer power can be attributed to consumers as a group as well as to industrial and commercial buyers; only a modification of the frame of reference is necessary. Consumers tend to be more price sensitive if they are purchasing products that are undifferentiated, expensive relative to their incomes, and of a sort where quality is not particularly important.

The buying power of retailers is determined by the same rules, with one important addition. Retailers can gain significant bargaining power over manufacturers when they can influence consumers' purchasing decisions, as they do in audio components, jewelry, appliances, sporting goods, and other goods.

Because of its heavy reliance on a few large customers, MasterCard's corporate strategy is strongly influenced by buyer power. MasterCard Inc. generates revenue by charging fees to process payments from banks to consumers who swipe MasterCard-brand credit and debit cards, making the banks, not individual consumers, MasterCard's customers.

MasterCard issues 916 million cards through 25,000 financial institutions in more than 200 countries.

Rapid consolidation within the banking industry, combined with a 28 percent market share in global credit and debit card transactions compared with main-rival Visa's 68 percent share, means that MasterCard has to work hard to win and keep bank business. Further, MasterCard's dependence on four large customers, which make up 30 percent of annual revenues (J.P. Morgan Chase, Citigroup, Bank of America, and HSBC), makes it vulnerable to attack.

Substitute Products

By placing a ceiling on the prices it can charge, substitute products or services limit the potential of an industry. Unless it can upgrade the quality of the product or differentiate it somehow (as via marketing), the industry will suffer in earnings and possibly in growth.

Manifestly, the more attractive the price-performance trade-off offered by substitute products, the firmer the lid placed on the industry's profit potential. Sugar producers confronted with the large-scale commercialization of high-fructose corn syrup, a sugar substitute, learned this lesson.

Substitutes not only limit profits in normal times but also reduce the bonanza an industry can reap in boom times. The producers of fiberglass insulation enjoyed unprecedented demand as a result of high energy costs and severe winter weather. But the industry's ability to raise prices was tempered by the plethora of insulation substitutes, including cellulose, rock wool, and Styrofoam. These substitutes are bound to become an even stronger force once the current round of plant additions by fiberglass insulation producers has boosted capacity enough to meet demand (and then some).

Substitute products that deserve the most attention strategically are those that (a) are subject to trends improving their price-performance trade-off with the industry's product or (b) are produced by industries earning high profits. Substitutes often come rapidly into play if some development increases competition in their industries and causes price reduction or performance improvement.

Jockeying for Position

Rivalry among existing competitors takes the familiar form of jockeying for position—using tactics like price competition, product introduction, and advertising price-cutting. This type of intense rivalry is related to the presence of a number of factors:

1. Competitors are numerous or are roughly equal in size and power. In many U.S. industries in recent years, foreign contenders, of course, have become part of the competitive picture.
2. Industry growth is slow, precipitating fights for market share that involve expansion-minded members.
3. The product or service lacks differentiation or switching costs, which lock in buyers and protect one combatant from raids on its customers by another.
4. Fixed costs are high or the product is perishable, creating strong temptation to cut prices. Many basic materials businesses, like paper and aluminum, suffer from this problem when demand slackens.
5. Capacity normally is augmented in large increments. Such additions, as in the chlorine and vinyl chloride businesses, disrupt the industry's supply–demand balance and often lead to periods of overcapacity and price-cutting.
6. Exit barriers are high. Exit barriers, like very specialized assets or management's loyalty to a particular business, keep companies competing even though they may be earning low or

Global Construction Industry Forecast

Construction activity across a wide range of economies—both developed and emerging—has been going through [a] ‘soft patch’ by those countries’ usually robust standards, reflecting weaker conditions across the wider global economy. Those affected in this way include the more developed economies of Australia and Canada, some key emerging Asian economies such as China, India and Korea, east European economies including Russia and Poland, and some Latin American economies including Brazil. However, these countries are, for the most part, less exposed to the kind of financial and fiscal difficulties facing western Europe, the United States and Japan, and also have generally stronger underlying construction growth potential reflecting the scope for wider GDP ‘catch-up’ and positive demographics. Forecasters envisaged a return to robust growth in all of these cases in 2013.

More specifically, construction output growth across the emerging markets group as a whole is expected to be 5 percent in 2013 and 7 percent in 2014, having slowed from 5 percent in 2011 to 4 percent in 2012. Growth in China is put at 8 percent in 2014 following two calendar years of comparatively modest 7 percent growth, while sector growth in India is put at 9 percent next year following a 12-year low of 4.2 percent in 2013. Meanwhile, sector growth in Canada is put at 4 percent in 2014 following a slowdown to 1 percent in 2013, while that in Australia is seen reviving to 4 percent in 2013—going on to 4 percent in 2014—following 2012’s modest 2 percent. Finally, Japan had been enjoying a period of unusually robust construction growth by that country’s own recent standards, with the construction

activity index approximately 5 percent higher than in 2012.

The main downside risk to the wider global economy stemmed from the possibility of a group of member states exiting the euro, with a consequent short-term loss of GDP across the continent and beyond and added pressure on those countries not leaving the zone to tighten fiscal policy still further. Uncertainty stemming from this possibility was helping to hold back construction activity. Nevertheless, construction output around the globe was expected to be hit at least as hard, if not harder, than overall GDP in this event, reflecting the sector’s highly cyclical nature and its exposure to public spending and credit availability. A further downside risk to the wider economy, though with a smaller probability attached, stemmed from the possibility of conflict in the Middle East and [a] consequent spike in oil prices. In this case construction would be adversely affected indirectly, as private spending power was squeezed.

House building is heavily dependent on trends in the wider economy, labor markets, interest rates, credit conditions and (in the long term) demographics. It can also be prone to ‘booms,’ with subsequent stock overhangs and/or high prices affecting conditions. As a result, recent trends have varied considerably across countries, for example being positive in Germany and negative in Italy and Spain, with the United States seeing a sharp bounce from a very low base.

Source: Excerpted from “Global Industry Forecast—Construction.” Spring 2013. *Oxford Economics*.

even negative returns on investment. Excess capacity remains functioning, and the profitability of the healthy competitors suffers as the sick ones hang on. If the entire industry suffers from overcapacity, it may seek government help—particularly if foreign competition is present.

7. The rivals are diverse in strategies, origins, and “personalities.” They have different ideas about how to compete and continually run head-on into each other in the process.

As an industry matures, its growth rate changes, resulting in declining profits and (often) a shakeout. In the booming recreational vehicle industry of the early 1970s, nearly every producer did well; but slow growth since then has eliminated the high returns, except for the strongest members, not to mention many of the weaker companies. The same profit story has been played out in industry after industry—snowmobiles, aerosol packaging, and sports equipment are just a few examples.

An acquisition can introduce a very different personality to an industry, as has been the case with Black & Decker’s takeover of McCullough, the producer of chain saws.

Technological innovation can boost the level of fixed costs in the production process, as it did in the shift from batch to continuous-line photo finishing.

While a company must live with many of these factors—because they are built into the industry economics—it may have some latitude for improving matters through strategic shifts. For example, it may try to raise buyers' switching costs or increase product differentiation. A focus on selling efforts in the fastest growing segments of the industry or on market areas with the lowest fixed costs can reduce the impact of industry rivalry. If it is feasible, a company can try to avoid confrontation with competitors having high exit barriers and, thus, can sidestep involvement in bitter price-cutting.

An example of an industry forecast executive summary is provided in *Global Strategy in Action*, Exhibit 4.12. The summary gives an overview of the global construction industry as forecast in 2013. Notice at the end of the exhibit that the authors reference the influences discussed in this section of the book including labor markets, interest rates, long-term credit, demographics, economic cyclicalities, and inflation.

INDUSTRY ANALYSIS AND COMPETITIVE ANALYSIS

Designing viable strategies for a firm requires a thorough understanding of the firm's industry and competition. The firm's executives need to address four questions: (1) What are the boundaries of the industry? (2) What is the structure of the industry? (3) Which firms are our competitors? (4) What are the major determinants of competition? The answers to these questions provide a basis for thinking about the appropriate strategies that are open to the firm.

Industry Boundaries

An **industry** is a collection of firms that offer similar products or services. By "similar products," we mean products that customers perceive to be substitutable for one another. Consider, for example, the brands of personal computers (PCs) that are now being marketed. The firms that produce these PCs, such as Hewlett-Packard, IBM, Apple, and Dell, form the nucleus of the microcomputer industry.

Suppose a firm competes in the microcomputer industry. Where do the boundaries of this industry begin and end? Does the industry include desktops? Laptops? These are the kinds of questions that executives face in defining industry boundaries.

Why is a definition of industry boundaries important? First, it helps executives determine the arena in which their firm is competing. A firm competing in the microcomputer industry participates in an environment very different from that of the broader electronics business. The microcomputer industry comprises several related product families, including personal computers, inexpensive computers for home use, and workstations. The unifying characteristic of these product families is the use of a central processing unit (CPU) in a microchip. On the other hand, the electronics industry is far more extensive; it includes computers, radios, supercomputers, superconductors, and many other products.

The microcomputer and electronics industries differ in their volume of sales, their scope (some would consider microcomputers a segment of the electronics industry), their rate of growth, and their competitive makeup. The dominant issues faced by the two industries also are different. Witness, for example, the raging public debate being waged on the future of the "high-definition TV." U.S. policy makers are attempting to ensure domestic control of that segment of the electronics industry. They also are considering ways to stimulate "cutting-edge" research in superconductivity. These efforts are likely to spur innovation and stimulate progress in the electronics industry.

industry

A group of companies that provide similar products and services.

Second, a definition of industry boundaries focuses attention on the firm's competitors. Defining industry boundaries enables the firm to identify its competitors and producers of substitute products. This is critically important to the firm's design of its competitive strategy.

Third, a definition of industry boundaries helps executives determine key factors for success. Survival in the premier segment of the microcomputer industry requires skills that are considerably different from those required in the lower end of the industry. Firms that compete in the premier segment need to be on the cutting edge of technological development and to provide extensive customer support and education. On the other hand, firms that compete in the lower end need to excel in imitating the products introduced by the premier segment, to focus on customer convenience, and to maintain operational efficiency that permits them to charge the lowest market price. Defining industry boundaries enables executives to ask these questions: Do we have the skills it takes to succeed here? If not, what must we do to develop these skills?

Finally, a definition of industry boundaries gives executives another basis on which to evaluate their firm's goals. Executives use that definition to forecast demand for their firm's products and services. Armed with that forecast, they can determine whether those goals are realistic.

Problems in Defining Industry Boundaries

Defining industry boundaries requires both caution and imagination. Caution is necessary because there are no precise rules for this task and because a poor definition will lead to poor planning. Imagination is necessary because industries are dynamic—in every industry, important changes are under way in such key factors as competition, technology, and consumer demand.

Defining industry boundaries is a very difficult task. The difficulty stems from three sources:

1. The evolution of industries over time creates new opportunities and threats. Compare the financial services industry as we know it today with that of the 1990s, and then try to imagine how different the industry will be in the year 2020.
2. Industrial evolution creates industries within industries. The electronics industry of the 1960s has been transformed into many "industries"—TV sets, transistor radios, micro and macrocomputers, supercomputers, superconductors, and so on. Such transformation allows some firms to specialize and others to compete in different, related industries.
3. Industries are becoming global in scope. Consider the civilian aircraft manufacturing industry. For nearly three decades, U.S. firms dominated world production in that industry. But small and large competitors were challenging their dominance by 1990. At that time, Airbus Industries (a consortium of European firms) and Brazilian, Korean, and Japanese firms were actively competing in the industry.

The challenge of defining an industry is complicated by the fact that many large companies compete in multiple industries. Further, technology can quickly redefine an industry or lead directly to the creation of a new one. Global Strategy in Action, Exhibit 4.13 provides an example of how Apple has redefined one of the traditional industries in which it competes by the way it structures its supply chain.

Developing a Realistic Industry Definition

Given the difficulties just outlined, how do executives draw accurate boundaries for an industry? The starting point is a definition of the industry in global terms; that is, in terms that consider the industry's international components as well as its domestic components.

Having developed a preliminary concept of the industry (e.g., computers), executives flesh out its current components. This can be done by defining its product segments. Executives need to select the scope of their firm's potential market from among these related but distinct areas.

How Apple Set the Standard for Its Industry

In 2012, technology titans were increasingly looking like vertically integrated conglomerates largely in an attempt to emulate the success of Apple. Google acquired mobile-device maker Motorola Mobility for \$12.5 billion to manufacture smartphones and television set-top boxes. Amazon's Kindle Fire tablet represented its bridge between hardware and e-commerce. Oracle bought Sun Microsystems to champion engineered systems (integrated hardware-and-software devices). Even long-standing software giant Microsoft made hardware for its Xbox gaming system.

Vertical integration dictates that one company controls the end product as well as its component parts. In technology, Apple for 35 years had championed a vertical model, which featured an integrated hardware-and-software approach. For instance, the iPhone and iPad had hardware and software designed by Apple, which also designed its own processors for the devices. This integration allowed Apple to set the pace for mobile computing.

The tech industry's success in this type of integration was mixed. Samsung, a large technology conglomerate, thrived by making everything from LCD panels to processors, televisions and smartphones. But Sony, which attempted to meld content, TVs, and game systems like

the PlayStation, had yet to find a way to make the disparate parts gel.

Although tech companies were focusing on entering areas closely aligned with their core businesses, Lawrence Hrebiniak, a Wharton management professor, noted that hardware and software require different competencies and skill sets in areas such as manufacturing, procurement and supply chains. In that respect, the challenges these firms face were similar to what many diversified multinationals deal with when managing disparate business units.

Markets that are not commoditized, such as mobile computing, smartphones and tablets, benefit most from vertical integration. However, once markets become less differentiated, a specialized approach—where each member of a supply chain has a role—makes sense. In the case of PCs, a group of companies now made different parts of the machine that are then put together to create the final product: Microsoft built operating systems, Intel made processors, Nvidia provided graphic chips and a series of companies manufactures hard drives.

Source: Excerpted from "How Apple Made 'Vertical Integration' Hot Again—Too Hot, Maybe." March 16, 2012. Knowledge@Wharton.

To understand the makeup of the industry, executives adopt a longitudinal perspective. They examine the emergence and evolution of product families. Why did these product families arise? How and why did they change? The answers to such questions provide executives with clues about the factors that drive competition in the industry.

Exhibit 4.14, Global Strategy in Action provides an example of the changing industry dynamics in the Philippine telecommunications industry in 2011. Increased rivalry resulting from the maturing of the industry, heightened price competition, and product improvements all add to the challenges of the industry's strategic planners.

Executives also examine the companies that offer different product families, the overlapping or distinctiveness of customer segments, and the rate of substitutability among product families.

To realistically define their industry, executives need to examine five issues:

1. Which part of the industry corresponds to our firm's goals?
2. What are the key ingredients of success in that part of the industry?
3. Does our firm have the skills needed to compete in that part of the industry? If not, can we build those skills?
4. Will the skills enable us to seize emerging opportunities and deal with future threats?
5. Is our definition of the industry flexible enough to allow necessary adjustments to our business concept as the industry grows?

A Year of Change in the Philippine Telecommunications Industry

To say that 2011 would be a difficult year for the Philippine telecommunications industry is an understatement. The industry's dynamics are changing dramatically. While consumers rejoice about the barrage of unlimited and bucket-priced offerings that brought down the costs of text messaging and mobile voice calls, the revenues of telecommunications companies suffered.

Globe Telecom president and CEO Ernest Cu said the company's financial results are reflective of the challenges facing the industry, whereby traffic is growing, but revenues are declining with the market's increasing preference for unlimited services. Despite an increase in traffic and overall usage, Globe's mobile revenues were lower with sustained price pressures resulting from intense competition and subscribers' increasing preference for lower-yield bucket and unlimited promotions.

Globe's Super All Txt 20 is one such bucket-priced offering. For only P20 a day, a subscriber gets to send 200 text messages to any network, which means that each SMS costs only 10 centavos. The company's Unli Txt All Day allows one to send unlimited text messages to Globe/TM subscribers for one day. Many of these promos are offered for a limited time only, but they are usually renewed.

The mobile telephony sector is now a matured one. The cellular penetration rate has now exceeded 80 percent. This triggered the search for new revenue streams and the rise of broadband Internet services as the new revenue driver.

But even the cost of mobile Internet access has significantly gone down, thanks to bucket price and unlimited offerings. For just P50 a day, a Globe subscriber is given unlimited access to the Internet using a Globe Tattoo Broadband USB or mobile phone for one day. Smart also offers unlimited mobile surfing for P50 per day while Smart Broadband has its unlimited Internet access promo at P200 good for five days. With the entry of a new player, San Miguel Corp./Liberty Telecom's Wi-Tribe, expect the cost of Internet access to go down even further.

Now here's a look at how the industry's decision makers viewed prospects for 2011:

- PLDT planned to preserve "margins by strengthening cost management given the modest top-line

growth. . . . Demand for bucket and unlimited offers in the cellular space will continue. We expect that broadband will keep growing given the growing popularity of social networking and new access devices such as tablets and smartphones. PLDT will continue to invest in its network in order to fortify its market leadership."

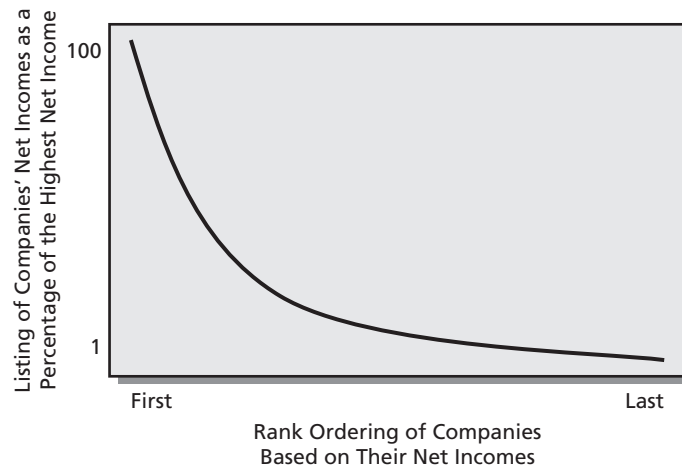
- In 2011 "we expect further developments in 3.5G. New Android phones are also getting exciting. We are optimistic both about the telco industry and the economy in general. . . . In 2011, we are confident we can achieve robust growth in both 2G and 3.5G as we continue our strong rollout of cellsites. By end of 2011, Sun should be even in number of cellsites as the other two telco players in almost all regions of the country." —James Go, president, Digital Telecommunications Phils. Inc. (Digitel)
- "Our growth drivers next year would continue to be data and Internet services for both consumer and corporate sectors. On the consumer side, we will continue to focus on Internet services as we leverage on our cooperation within the Lopez Group to deliver relevant and compelling communication and content services. At the same time, Bayan has been strong in the corporate data sector servicing banks and BPOs, and we hope to gain on the opportunities." —Rafael Aguado, chief operations officer, Bayan Telecommunications
- "The device business will continue to grow in leaps and bounds with the mobile phones still leading the way and new affordable devices such as smart phones and tablets coming in strong in the second half of the year. MyPhone will continue to invest in expanding our retail chains and service centers to maintain its excellent quality and after-sales service reputation." —David Lim, chairman, Solid Group, makers of MyPhone

Source: Excerpted from Mary Ann L. Reyes, "2010: A Year of Changing Telecommunications Market Dynamics," *The Philippine Star*, December 30, 2010.

Power Curves

Strategic managers have a new tool that helps them assess industry structure, which refers to the enduring characteristics that give an industry its distinctive character. According to Michele Zanini of the McKinsey Group, from whose work this discussion is derived, power

EXHIBIT 4.15
Common Shape of a
Power Curve



curves depict the fundamental structural trends that underlie an industry.² While major economic events like the worldwide recession of 2008 are extremely disruptive to business activity, they do little to change the relative position of most businesses to one another over the long term.

What would you guess is the typical shape of the distribution of companies in an industry? Is it bell shaped, with a few superlarge firms, many companies of medium size, and a few extremely small competitors? Or, is it linear, with a few large companies and progressively larger numbers of smaller firms? Do you think that company strategies should be different if one of these models is right and the other wrong?

In many industries, the top firm is best described as a mega-institution—a company of unprecedented scale and scope that has an undeniable lead over competitors. Wal-Mart, Best Buy, McDonald’s, and Starbucks are examples. However, even among these firms, there is a clear difference in size and performance. When the distribution of net incomes of the global top 150 corporations in 2005 was plotted, the result was a “power curve,” which implies that most companies, even in the set of superstars, are below average in performance. This power curve is shown in Exhibit 4.15.

A power curve is described as exhibiting a small set of companies with extremely large incomes, followed quickly by a much larger array of companies with significantly smaller incomes that are progressively smaller than one another, but only slightly.

As Zanini explains, low barriers to entry and high levels of rivalry are positively associated with an industry’s power curve dynamics. The larger the number of competitors in an industry, the larger the gap on the vertical axis usually is between the top and median companies. When entry barriers are lowered, such as occurs with deregulation, revenues increase faster in the top-ranking firms, creating a steeper power curve. This greater openness seems to create a more level playing field at first, but greater differentiation and consolidation tend to occur over time.

Power curves are also promoted by intangible assets such as software and biotechnology, which generate increasing returns to scale and economies of scope. By contrast, more labor- or capital-intensive sectors, such as chemicals and machinery, have flatter curves.

²Michele Zanini, “‘Using Power Curves’ to Assess Industry Dynamics,” *The McKinsey Quarterly*, November 2008.

In industries that display a power curve—including insurance, machinery, and U.S. banks and savings institutions—intriguing implications suggest that strategic thrusts rather than incremental strategies are required to improve a company’s position significantly. Zanini defends this idea with evidence from the retail mutual fund industry. The major players at the top of the power curve can extend their lead by exploiting network effects, such as cross-selling individual retirement accounts (IRAs), to a large installed base of 401(k) plan holders as they roll over their assets. A financial crisis, like the recession of 2008, increases the likelihood of this opportunity as weakened financial institutions sell their asset-management units to raise capital.

Power curves can be useful to strategic managers in understanding their industry’s structural dynamics and in benchmarking its performance. Because an industry’s curve evolves over many years, a large deviation in the slope can indicate some exceptional occurrence, such as unusual firm performance or market instability.

As Zanini concludes, power curves suggest that companies generally compete against one another and against an industry structure that becomes progressively more unequal. For most companies, this possibility makes power curves an important strategic consideration.

Competitive Analysis

How to Identify Competitors

In identifying their firm’s current and potential competitors, executives consider several important variables:

1. How do other firms define the scope of their market? The more similar the definitions of firms, the more likely the firms will view each other as competitors.
2. How similar are the benefits the customers derive from the products and services that other firms offer? The more similar the benefits of products or services, the higher the level of substitutability between them. High substitutability levels force firms to compete fiercely for customers.
3. How committed are other firms to the industry? Although this question may appear to be far removed from the identification of competitors, it is in fact one of the most important questions that competitive analysis must address, because it sheds light on the long-term intentions and goals. To size up the commitment of potential competitors to the industry, reliable intelligence data are needed. Such data may relate to potential resource commitments (e.g., planned facility expansions).

The idea of a power curve helps us to understand competition in the global aerospace and transport industry, as described in *Strategy in Action*, Exhibit 4.16. The exhibit points out that all airplane manufacturers only generally compete with one another, and that different groups of competitors are susceptible to different environmental influences, to different degrees and at different times. The result is a very uneven distribution of power among manufacturers and consequently, some very clear market segmentation.

Common Mistakes in Identifying Competitors

Identifying competitors is a milestone in the development of strategy. But it is a process laden with uncertainty and risk, a process in which executives sometimes make costly mistakes. Examples of these mistakes are:

1. Overemphasizing current and known competitors while giving inadequate attention to potential entrants.
2. Overemphasizing large competitors while ignoring small competitors.

Global Aerospace and Transport Industry Forecast

For Boeing in 2012, the push was clearly on to raise production schedules in order to fill existing orders, a stimulus which was likely to continue through to 2014 at least. European competitor Airbus' progress in filling orders early in 2012 was less impressive. Airlines and regulators were concerned about the cracks found in some wing brackets of the A380 planes, with extra inspections and fixes disrupting flight schedules and diverting management attention from other issues. In turn, Airbus' plans to ramp up production were pushed into 2013, as it dealt with problems on planes in production and already in service. In the first quarter of 2012, only four out of the 30 A380 deliveries scheduled for 2012 were achieved. Finally, the cloud over Asian orders due to disquiet about EU emission charges remained, with some airlines refusing to supply data. Nonetheless, on balance, EU 15 production growth was 6 percent in 2012, and predicted to accelerate to 8 percent in 2013 and almost 9 percent in 2014.

In terms of the drivers of demand for new aircraft, although airfreight volumes were weak in 2012, passenger load factors were encouraging despite uncertain macroeconomic conditions. Moreover, jet fuel costs came off the peaks in earlier 2012. U.S. fleet renewals plus the continued expansion of Middle East and low-cost carriers was offsetting curtailed investment plans from more established airlines (e.g., investment cuts by Air France-KLM and the likelihood Quantas would continue to focus more on its domestic rather than international routes that had meant delaying two A380 deliveries from 2013 until 2017).

Moving from the civilian to the military sector, the contrast remained stark. Firms were chasing fewer defense contracts as budgets of established military powers

remained under intense pressure. Austerity measures across Europe put military procurements under the microscope. Commodity, especially oil, producers including China were set to continue building up their forces but slower GDP growth in India threatened to slow military purchases in the near term.

Less established producers than Boeing and Airbus struggled to achieve the critical mass of orders that would allow them to reap economies of scale and move on decisively to produce bigger aircraft. Makers in China (Comae), Brazil (Embraer), Russia (Irkut) and Canada (Bombardier) all wished to move beyond producing regional jets and other smaller aircraft but earlier optimism about near-term prospects was fading. Nonetheless, after weaker-than-expected growth of 6 percent in 2012, aerospace output in emerging markets was forecast to rebound. Indeed, in the medium term, a gradual shift towards production in emerging markets was projected.

There are several distinctive economic forces at play in the industry. Aerospace products are expensive, discrete items with long delivery times, breaking any immediate link between short-term economic developments and sector production. The production series can also be quite erratic. However, civilian aircraft purchases ultimately stem from increasing demands to transport people and freight by air, while military purchases are driven by threat levels, defense priorities, and government budget constraints. There is also a growing push for emerging countries to expand their own aerospace industries, in order to break the duopoly of Airbus and Boeing.

Source: Excerpted from "Global Industry Forecast—Aerospace and Transport." Summer 2012. *Oxford Economics*.

3. Overlooking potential international competitors.
4. Assuming that competitors will continue to behave in the same way they have behaved in the past.
5. Misreading signals that may indicate a shift in the focus of competitors or a refinement of their present strategies or tactics.
6. Overemphasizing competitors' financial resources, market position, and strategies while ignoring their intangible assets, such as a top management team.
7. Assuming that all of the firms in the industry are subject to the same constraints or are open to the same opportunities.
8. Believing that the purpose of strategy is to outsmart the competition, rather than to satisfy customer needs and expectations.

OPERATING ENVIRONMENT

operating environment

Factors in the immediate competitive situation that affect a firm's success in acquiring needed resources.

The **operating environment**, also called the *competitive* or *task environment*, comprises factors in the competitive situation that affect a firm's success in acquiring needed resources or in profitably marketing its goods and services. Among the most important of these factors are the firm's competitive position, the composition of its customers, its reputation among suppliers and creditors, and its ability to attract capable employees. The operating environment is typically much more subject to the firm's influence or control than the remote environment. Thus, firms can be much more proactive (as opposed to reactive) in dealing with the operating environment than in dealing with the remote environment.

Competitive Position

Assessing its competitive position improves a firm's chances of designing strategies that optimize its environmental opportunities. Development of competitor profiles enables a firm to more accurately forecast both its short- and long-term growth and its profit potentials. Although the exact criteria used in constructing a competitor's profile are largely determined by situational factors, the following criteria are often included:

1. Market share.
2. Breadth of product line.
3. Effectiveness of sales distribution.
4. Proprietary and key account advantages.
5. Price competitiveness.
6. Advertising and promotion effectiveness.
7. Location and age of facility.
8. Capacity and productivity.
9. Experience.
10. Raw materials costs.
11. Financial position.
12. Relative product quality.
13. R&D advantages position.
14. Caliber of personnel.
15. General images.
16. Customer profile.
17. Patents and copyrights.
18. Union relations.
19. Technological position.
20. Community reputation.

Once appropriate criteria have been selected, they are weighted to reflect their importance to a firm's success. Then the competitor being evaluated is rated on the criteria, the ratings are multiplied by the weight, and the weighted scores are summed to yield a numerical profile of the competitor, as shown in Exhibit 4.17.

EXHIBIT 4.17
Competitor Profile

Key Success Factors	Weight	Rating*	Weighted Score
Market share	0.30	4	1.20
Price competitiveness	0.20	3	0.60
Facilities location	0.20	5	1.00
Raw materials costs	0.10	3	0.30
Caliber of personnel	<u>0.20</u>	1	<u>0.20</u>
	1.00†		3.30

*The rating scale suggested is as follows: very strong competitive position (5 points), strong (4), average (3), weak (2), very weak (1).

†The total of the weights must always equal 1.00.

This type of competitor profile is limited by the subjectivity of its criteria selection, weighting, and evaluation approaches. Nevertheless, the process of developing such profiles is of considerable help to a firm in defining its perception of its competitive position. Moreover, comparing the firm's profile with those of its competitors can aid its managers in identifying factors that might make the competitors vulnerable to the strategies the firm might choose to implement.

Customer Profiles

Perhaps the most vulnerable result of analyzing the operating environment is the understanding of a firm's customers that this provides. Developing a profile of a firm's present and prospective customers improves the ability of its managers to plan strategic operations, to anticipate changes in the size of markets, and to reallocate resources so as to support forecast shifts in demand patterns. The traditional approach to segmenting customers is based on customer profiles constructed from geographic, demographic, psychographic, and buyer behavior information.

Enterprising companies have quickly learned the importance of identifying target segments. In recent years, market research has increased tremendously as companies realize the benefits of demographic and psychographic segmentation. Research by American Express (AMEX) showed that competitors were stealing a prime segment of the company's business, affluent business travelers. AMEX's competing companies, including Visa and Mastercard, began offering high-spending business travelers frequent flier programs and other rewards including discounts on new cars. In turn, AMEX began to invest heavily in rewards programs, while also focusing on its strongest capabilities, assets, and competitive advantage. Unlike most credit card companies, AMEX cannot rely on charging interest to make money because most of its customers pay in full each month. Therefore, the company charges higher transaction fees to its merchants. In this way, increases in spending by AMEX customers who pay off their balances each month are more profitable to AMEX than to competing credit card companies.

Assessing consumer behavior is a key element in the process of satisfying your target market needs. Many firms lose market share as a result of assumptions made about target segments. Market research and industry surveys can help to reduce a firm's chances of relying on illusive assumptions. Firms most vulnerable are those that have had success with one or more products in the marketplace and as a result try to base consumer behavior on past data and trends.

Geographic

It is important to define the geographic area from which customers do or could come. Almost every product or service has some quality that makes it variably attractive to buyers from different locations. Obviously, a Wisconsin manufacturer of snow skis should think twice about investing in a wholesale distribution center in South Carolina. On the other hand, advertising in the *Milwaukee Journal-Sentinel* could significantly expand the geographically defined customer market of a major Myrtle Beach hotel in South Carolina.

Demographic

Demographic variables most commonly are used to differentiate groups of present or potential customers. Demographic information (e.g., information on sex, age, marital status,

income, and occupation) is comparatively easy to collect, quantify, and use in strategic forecasting, and such information is the minimum basis for a customer profile.

Psychographic

Personality and lifestyle variables often are better predictors of customer purchasing behavior than geographic or demographic variables. In such situations, a psychographic study is an important component of the customer profile. Advertising campaigns by soft-drink producers—Pepsi-Cola (“the Pepsi generation”), Coca-Cola (“the real thing”), and 7UP (“America’s turning 7UP”)—reflect strategic management’s attention to the psychographic characteristics of their largest customer segment—physically active, group-oriented nonprofessionals.

Buyer Behavior

Buyer behavior data also can be a component of the customer profile. Such data are used to explain or predict some aspect of customer behavior with regard to a product or service. Information on buyer behavior (e.g., usage rate, benefits sought, and brand loyalty) can provide significant aid in the design of more accurate and profitable strategies.

Suppliers

Dependable relationships between a firm and its suppliers are essential to the firm’s long-term survival and growth. A firm regularly relies on its suppliers for financial support, services, materials, and equipment. In addition, it occasionally is forced to make special requests for such favors as quick delivery, liberal credit terms, or broken-lot orders. Particularly at such times, it is essential for a firm to have had an ongoing relationship with its suppliers.

In the assessment of a firm’s relationships with its suppliers, several factors, other than the strength of that relationship, should be considered. With regard to its competitive position with its suppliers, the firm should address the following questions:

Are the suppliers’ prices competitive? Do the suppliers offer attractive quantity discounts?

How costly are their shipping charges? Are the suppliers competitive in terms of production standards?

In terms of deficiency rates, are the suppliers’ abilities, reputations, and services competitive?

Are the suppliers reciprocally dependent on the firm?

Creditors

Because the quantity, quality, price, and accessibility of financial, human, and material resources are rarely ideal, assessment of suppliers and creditors is critical to an accurate evaluation of a firm’s operating environment. With regard to its competitive position with its creditors, among the most important questions that the firm should address are the following:

Do the creditors fairly value and willingly accept the firm’s stock as collateral?

Do the creditors perceive the firm as having an acceptable record of past payment?

A strong working capital position? Little or no leverage?

Are the creditors' loan terms compatible with the firm's profitability objectives?

Are the creditors able to extend the necessary lines of credit?

The answers to these and related questions help a firm forecast the availability of the resources it will need to implement and sustain its competitive strategies.

Human Resources: Nature of the Labor Market

A firm's ability to attract and hold capable employees is essential to its success. However, a firm's personnel recruitment and selection alternatives often are influenced by the nature of its operating environment. A firm's access to needed personnel is affected primarily by four factors: the firm's reputation as an employer, local employment rates, the ready availability of people with the needed skills, and its relationship with labor unions.

Reputation

A firm's reputation within its operating environment is a major element of its ability to satisfy its personnel needs. A firm is more likely to attract and retain valuable employees if it is seen as permanent in the community, competitive in its compensation package, and concerned with the welfare of its employees, and if it is respected for its product or service and appreciated for its overall contribution to the general welfare.

Employment Rates

The readily available supply of skilled and experienced personnel may vary considerably with the stage of a community's growth. A new manufacturing firm would find it far more difficult to obtain skilled employees in a vigorous industrialized community than in an economically depressed community in which similar firms had recently cut back operations.

Availability

The skills of some people are so specialized that relocation may be necessary to secure the jobs and the compensation that those skills commonly command. People with such skills include oil drillers, chefs, technical specialists, and industry executives. A firm that seeks to hire such a person is said to have broad labor market boundaries; that is, the geographic area within which the firm might reasonably expect to attract qualified candidates is quite large. On the other hand, people with more common skills are less likely to relocate from a considerable distance to achieve modest economic or career advancements. Thus, the labor market boundaries are fairly limited for such occupational groups as unskilled laborers, clerical personnel, and retail clerks.

Many manufacturers in the United States attempt to minimize the labor cost disadvantage they face in competing with overseas producers by outsourcing to lower-cost foreign locations or by hiring immigrant workers. Similarly, companies in construction and other labor-intensive industries try to provide themselves with a cost advantage by hiring temporary, often migrant, workers.

Labor Unions

Approximately 12 percent of all workers in the United States belong to a labor union; and almost half of these are government employees. The percentages are higher in Japan and

western Europe at about 25 and 40 percent, respectively, and extremely low in developing nations. Unions represent the workers in their negotiations with employers through the process of collective bargaining. When managers' relationships with their employees are complicated by the involvement of a union, the company's ability to manage and motivate the people that it needs can be compromised.

EMPHASIS ON ENVIRONMENTAL FACTORS

This chapter has described the remote, industry, and operating environments as encompassing five components each. While that description is generally accurate, it may give the false impression that the components are easily identified, mutually exclusive, and equally applicable in all situations. In fact, the forces in the external environment are so dynamic and interactive that the impact of any single element cannot be wholly disassociated from the effect of other elements. For example, are increases in OPEC oil prices the result of economic, political, social, or technological changes? Or are a manufacturer's surprisingly good relations with suppliers a result of competitors,' customers,' or creditors' activities or of the supplier's own activities? The answer to both questions is probably that a number of forces in the external environment have combined to create the situation. Such is the case in most studies of the environment.

Strategic managers are frequently frustrated in their attempts to anticipate the environment's changing influences. Different external elements affect different strategies at different times and with varying strengths. The only certainty is that the effect of the remote and operating environments will be uncertain until a strategy is implemented. This leads many managers, particularly in less powerful or smaller firms, to minimize long-term planning, which requires a commitment of resources. Instead, they favor allowing managers to adapt to new pressures from the environment. While such a decision has considerable merit for many firms, there is an associated trade-off, namely that absence of a strong resource and psychological commitment to a proactive strategy effectively bars a firm from assuming a leadership role in its competitive environment.

There is yet another difficulty in assessing the probable impact of remote, industry, and operating environments on the effectiveness of alternative strategies. Assessment of this kind involves collecting information that can be analyzed to disclose predictable effects. Except in rare instances, however, it is virtually impossible for any single firm to anticipate the consequences of a change in the environment; for example, what is the precise effect on alternative strategies of a 2 percent increase in the national inflation rate, a 1 percent decrease in statewide unemployment, or the entry of a new competitor in a regional market?

Still, assessing the potential impact of changes in the external environment offers a real advantage. It enables decision makers to narrow the range of the available options and to eliminate options that are clearly inconsistent with the forecast opportunities. Environmental assessment seldom identifies the best strategy, but it generally leads to the elimination of all but the most promising options.

Exhibit 4.18 provides a set of key strategic forecasting issues for each level of environmental assessment—remote, industry, and operating. While the issues that are presented are not inclusive of all of the questions that are important, they provide an excellent set of questions with which to begin. Chapter 4 Appendix, Sources for Environmental Forecasting, is provided to help identify valuable sources of data and information from which answers and subsequent forecasts can be constructed. It lists governmental and private marketplace intelligence that can be used by a firm to gain a foothold in undertaking a strategic assessment of any level of the competitive environment.

EXHIBIT 4.18
Strategic Forecasting
Issues

Key Issues in the Remote Environment Economy

What are the probable future directions of the economies in the firm's regional, national, and international market? What changes in economic growth, inflation, interest rates, capital availability, credit availability, and consumer purchasing power can be expected? What income differences can be expected between the wealthy upper middle class, the working class, and the underclass in various regions? What shifts in relative demand for different categories of goods and services can be expected?

Society and demographics

What effects will changes in social values and attitudes regarding childbearing, marriage, lifestyle, work, ethics, sex roles, racial equality, education, retirement, pollution, and energy have on the firm's development? What effects will population changes have on major social and political expectations—at home and abroad? What constraints or opportunities will develop? What pressure groups will increase in power?

Ecology

What natural or pollution-caused disasters threaten the firm's employees, customers, or facilities? How rigorously will existing environment legislature be enforced? What new federal, state, and local laws will affect the firm, and in what ways?

Politics

What changes in government policy can be expected with regard to industry cooperation, antitrust activities, foreign trade, taxation, depreciation, environmental protection, deregulation, defense, foreign trade barriers, and other important parameters? What success will a new administration have in achieving its stated goals? What effect will that success have on the firm? Will specific international climates be hostile or favorable? Is there a tendency toward instability, corruption, or violence? What is the level of political risk in each foreign market? What other political or legal constraints or supports can be expected in international business (e.g., trade barriers, equity requirements, nationalism, patent protection)?

Technology

What is the current state of the art? How will it change? What pertinent new products or services are likely to become technically feasible in the foreseeable future? What future impact can be expected from technological breakthroughs in related product areas? How will those breakthroughs interface with the other remote considerations, such as economic issues, social values, public safety, regulations, and court interpretations?

Key Issues in the Industry Environment

New entrants

Will new technologies or market demands enable competitors to minimize the impact of traditional economies of scale in the industry? Will consumers accept our claims of product or service differentiation? Will potential new entrants be able to match the capital requirements that currently exist? How permanent are the cost disadvantages (independent of size) in our industry? Will conditions change so that all competitors have equal access to marketing channels? Is government policy toward competition in our industry likely to change?

Bargaining power of suppliers

How stable are the size and composition of our supplier group? Are any suppliers likely to attempt forward integration into our business level? How dependent will our suppliers be in the future? Are substitute suppliers likely to become available? Could we become our own supplier?

(continued)

EXHIBIT 4.18
(continued)**Substitute products or services**

Are new substitutes likely? Will they be price competitive? Could we fight off substitutes by price competition? By advertising to sharpen product differentiation? What actions could we take to reduce the potential for having alternative products seen as legitimate substitutes?

Bargaining power of buyers

Can we break free of overcommitment to a few large buyers? How would our buyers react to attempts by us to differentiate our products? What possibilities exist that our buyers might vertically integrate backward? Should we consider forward integration? How can we make the value of our components greater in the products of our buyers?

Rivalry among existing firms

Are major competitors likely to undo the established balance of power in our industry? Is growth in our industry slowing such that competition will become fiercer? What excess capacity exists in our industry? How capable are our major competitors of withstanding intensified price competition? How unique are the objectives and strategies of our major competitors?

Key Issues in the Operating Environment**Competitive position**

What strategic moves are expected by existing rivals—inside and outside the United States? What competitive advantage is necessary in selected foreign markets? What will be our competitors' priorities and ability to change? Is the behavior of our competitors predictable?

Customer profiles and market changes

What will our customer regard as needed value? Is marketing research done, or do managers talk to each other to discover what the customer wants? Which customer needs are not being met by existing products? Why? Are R&D activities under way to develop means for fulfilling these needs? What is the status of these activities? What marketing and distribution channels should we use? What do demographic and population changes portend for the size and sales potential of our market? What new market segments or products might develop as a result of these changes? What will be the buying power of our customer groups?

Supplier relationships

What is the likelihood of major cost increases because of dwindling supplies of a needed natural resource? Will sources of supply, especially of energy, be reliable? Are there reasons to expect major changes in the cost or availability of inputs as a result of money, people, or subassembly problems? Which suppliers can be expected to respond to emergency requests?

Creditors

What lines of credit are available to help finance our growth? What changes may occur in our creditworthiness? Are creditors likely to feel comfortable with our strategic plan and performance? What is the stock market likely to feel about our firm? What flexibility would our creditors show toward us during a downturn? Do we have sufficient cash reserves to protect our creditors and our credit rating?

Labor market

Are potential employees with desired skills and abilities available in the geographic areas in which our facilities are located? Are colleges and vocational/technical schools that can aid in meeting our training needs located near our plant or store sites? Are labor relations in our industry conducive to meeting our expanding needs for employees? Are workers whose skills we need shifting toward or away from the geographic location of our facilities?

Summary

A firm's external environment consists of three interrelated sets of factors that play a principal role in determining the opportunities, threats, and constraints that the firm faces. The remote environment comprises factors originating beyond, and usually irrespective of, any single firm's operating situation—economic, social, political, technological, and ecological factors. Factors that more directly influence a firm's prospects originate in the environment of its industry, including entry barriers, competitor rivalry, the availability of substitutes, and the bargaining power of buyers and suppliers. The operating environment comprises factors that influence a firm's immediate competitive situation—competitive position, customer profiles, suppliers, creditors, and the labor market. These three sets of factors provide many of the challenges that a particular firm faces in its attempts to attract or acquire needed resources and to profitably market its goods and services. Environmental assessment is more complicated for multinational corporations (MNCs) than for domestic firms because multinationals must evaluate several environments simultaneously.

Thus, the design of business strategies is based on the conviction that a firm able to anticipate future business conditions will improve its performance and profitability. Despite the uncertainty and dynamic nature of the business environment, an assessment process that narrows, even if it does not precisely define, future expectations is of substantial value to strategic managers.

Key Terms

barriers to entry, *p.* 102
eco-efficiency, *p.* 99
ecology, *p.* 96
economies of scale, *p.* 102

external environment, *p.* 88
industry, *p.* 109
industry environment, *p.* 100
operating environment, *p.* 116

pollution, *p.* 96
product differentiation, *p.* 102
remote environment, *p.* 88
technological forecasting, *p.* 95

Questions for Discussion

- Briefly describe two important recent changes in the remote environment of U.S. business in each of the following areas:
 - Economic.
 - Social.
 - Political.
 - Technological.
 - Ecological.
- Describe two major environmental changes that you expect to have a major impact on the wholesale food industry in the next 10 years.
- Develop a competitor profile for your college and for the college geographically closest to yours. Next, prepare a brief strategic plan to improve the competitive position of the weaker of the two colleges.
- Assume the invention of a competitively priced synthetic fuel that could supply 25 percent of U.S. energy needs within 20 years. In what major ways might this change the external environment of U.S. business?
- With your instructor's help, identify a local firm that has enjoyed great growth in recent years. To what degree and in what ways do you think this firm's success resulted from taking advantage of favorable conditions in its remote, industry, and operating environments?
- Choose a specific industry and, relying solely on your impressions, evaluate the impact of the five forces that drive competition in that industry.
- Choose an industry in which you would like to compete. Use the five-forces method of analysis to explain why you find that industry attractive.
- Many firms neglect industry analysis. When does this hurt them? When does it not?

9. The model below depicts industry analysis as a funnel that focuses on remote-factor analysis to better understand the impact of factors in the operating environment. Do you find this model satisfactory? If not, how would you improve it?



10. Who in a firm should be responsible for industry analysis? Assume that the firm does not have a strategic planning department.

Chapter 4 Appendix

Sources for Environmental Forecasting

Remote and Industry Environments

A. Economic considerations:

1. *Predicasts* (most complete and up-to-date review of forecasts)
2. National Bureau of Economic Research
3. *Handbook of Basic Economic Statistics*
4. *Statistical Abstract of the United States* (also includes industrial, social, and political statistics)
5. Publications by Department of Commerce agencies:
 - a. Office of Business Economics (e.g., *Survey of Business*)
 - b. Bureau of Economic Analysis (e.g., *Business Conditions Digest*)
 - c. Bureau of the Census (e.g., *Survey of Manufacturers* and various reports on population, housing, and industries)
 - d. Business and Defense Services Administration (e.g., *United States Industrial Outlook*)
6. Securities and Exchange Commission (various quarterly reports on plant and equipment, financial reports, working capital of corporations)
7. The Conference Board
8. *Survey of Buying Power*
9. *Marketing Economic Guide*
10. *Industrial Arts Index*
11. U.S. and national chambers of commerce
12. American Manufacturers Association
13. *Federal Reserve Bulletin*
14. *Economic Indicators*, annual report
15. *Kiplinger Newsletter*
16. International economic sources:
 - a. *Worldcasts*
 - b. Master key index for business international publications
 - c. Department of Commerce
 - (1) Overseas business reports
 - (2) Industry and Trade Administration
 - (3) Bureau of the Census—*Guide to Foreign Trade Statistics*
17. *Business Periodicals Index*

B. Social considerations:

1. Public opinion polls
2. Surveys such as *Social Indicators and Social Reporting*, the annals of the American Academy of Political and Social Sciences
3. Current controls: Social and behavioral sciences
4. Abstract services and indexes for articles in sociological, psychological, and political journals

5. Indexes for *The Wall Street Journal*, *New York Times*, and other newspapers
6. Bureau of the Census reports on population, housing, manufacturers, selected services, construction, retail trade, wholesale trade, and enterprise statistics
7. Various reports from such groups as the Brookings Institution and the Ford Foundation
8. World Bank Atlas (population growth and GNP data)
9. World Bank–World Development Report

C. Political considerations:

1. *Public Affairs Information Services Bulletin*
2. CIS Index (Congressional Information Index)
3. Business periodicals
4. Funk & Scott (regulations by product breakdown)
5. Weekly compilation of presidential documents
6. *Monthly Catalog of Government Publications*
7. *Federal Register* (daily announcements of pending regulations)
8. *Code of Federal Regulations* (final listing of regulations)
9. Business International Master Key Index (regulations, tariffs)
10. Various state publications
11. Various information services (Bureau of National Affairs, Commerce Clearing House, Dow Jones)

D. Technological considerations:

1. *Applied Science and Technology Index*
2. *Statistical Abstract of the United States*
3. Scientific and Technical Information Service
4. University reports, congressional reports
5. Department of Defense and military purchasing publishers
6. Trade journals and industrial reports
7. Industry contacts, professional meetings
8. Computer-assisted information searches
9. National Science Foundation annual report
10. *Research and Development Directory* patent records

E. Industry considerations:

1. *Concentration Ratios in Manufacturing* (Bureau of the Census)
2. *Input-Output Survey* (productivity ratios)
3. *Monthly Labor Review* (productivity ratios)
4. *Quarterly Failure Report* (Dun & Bradstreet)
5. *Federal Reserve Bulletin* (capacity utilization)
6. *Report on Industrial Concentration and Product Diversification in the 1,000 Largest Manufacturing Companies* (Federal Trade Commission)
7. Industry trade publications

8. Bureau of Economic Analysis, Department of Commerce (specialization ratios)

Industry and Operating Environments

A. Competition and supplier considerations:

1. Target Group Index
2. U.S. Industrial Outlook
3. Robert Morris annual statement studies
4. Troy, Leo *Almanac of Business & Industrial Financial Ratios*
5. *Census of Enterprise Statistics*
6. Securities and Exchange Commission (10-K reports)
7. Annual reports of specific companies
8. *Fortune 500 Directory*, *The Wall Street Journal*, *Baron's*, *Forbes*, *Dun's Review*
9. Investment services and directories: Moody's, Dun & Bradstreet, Standard & Poor's, Starch Marketing, Funk & Scott Index
10. Trade association surveys
11. Industry surveys
12. Market research surveys
13. *Country Business Patterns*
14. *Country and City Data Book*
15. Industry contacts, professional meetings, salespeople
16. *NFIB Quarterly Economic Report for Small Business*

B. Customer profile:

1. *Statistical Abstract of the United States*, first source of statistics
2. *Statistical Sources* by Paul Wasserman (a subject guide to data—both domestic and international)
3. *American Statistics Index* (Congressional Information Service Guide to statistical publications of U.S. government—monthly)
4. Office of the Department of Commerce:
 - a. Bureau of the Census reports on population, housing, and industries
 - b. *U.S. Census of Manufacturers* (statistics by industry, area, and products)
 - c. *Survey of Current Business* (analysis of business trends, especially February and July issues)
5. Market research studies (*A Basic Bibliography on Market Review*, compiled by Robert Ferber et al., American Marketing Association)

6. *Current Sources of Marketing Information: A Bibliography of Primary Marketing Data* by Gunther & Goldstein, AMA
7. *Guide to Consumer Markets*, The Conference Board (provides statistical information with demographic, social, and economic data—annual)
8. *Survey of Buying Power*
9. *Predicasts* (abstracts of publishing forecasts of all industries, detailed products, and end-use data)
10. *Predicasts Basebook* (historical data from 1960 to present, covering subjects ranging from population and GNP to specific products and services; series are coded by Standard Industrial Classifications)
11. *Market Guide* (individual market surveys of over 1,500 U.S. and Canadian cities; includes population, location, trade areas, banks, principal industries, colleges and universities, department and chain stores, newspapers, retail outlets, and sales)
12. *Country and City Data Book* (includes bank deposits, birth and death rates, business firms, education, employment, income of families, manufacturers, population, savings, and wholesale and retail trade)
13. *Yearbook of International Trade Statistics* (UN)
14. *Yearbook of National Accounts Statistics* (UN)
15. *Statistical Yearbook* (UN—covers population, national income, agricultural and industrial production, energy, external trade, and transport)
16. *Statistics of (Continents): Sources for Market Research* (includes separate books on Africa, America, Europe)

C. Key natural resources:

1. *Minerals Yearbook*, *Geological Survey* (Bureau of Mines, Department of the Interior)
2. *Agricultural Abstract* (Department of Agriculture)
3. Statistics of electric utilities and gas pipeline companies (Federal Power Commission)
4. Publications of various institutions: American Petroleum Institute, Atomic Energy Commission, Coal Mining Institute of America, American Steel Institute, and Brookings Institution