

# basic concepts of Strategic Management

**How does a company become successful and stay successful?** Certainly not by playing it safe and following the traditional ways of doing business! Taking a strategic risk is what General Electric (GE) did when it launched its *Ecomagination* strategic initiative in 2005. According to Jeffrey Immelt, Chairman and CEO:

Ecomagination is GE's commitment to address challenges, such as the need for cleaner, more efficient sources of energy, reduced emissions, and abundant sources of clean water. And we plan to make money doing it. Increasingly for business, "green" is green.<sup>1</sup>

Immelt announced in a May 9, 2005, conference call that the company planned to more than double its spending on research and development from \$700 million in 2004 to \$1.5 billion by 2010 for cleaner products ranging from power generation to locomotives to water processing. The company intended to introduce 30 to 40 new products, including more efficient lighting and appliances, over the next two years. It also expected to double revenues from businesses that made wind turbines, treat water, and reduce greenhouse-emitting gases to at least \$20 billion by 2010. In addition to working with customers to develop more efficient power generators, the company planned to reduce its own emission of greenhouse gases by 1% by 2012 and reduce the intensity of those gases 30% by 2008.<sup>2</sup> In 2006, GE's top management informed the many managers of its global business units that in the future they would be judged not only by the usual measures, such as return on capital, but that they would also be accountable for achieving corporate environmental objectives.

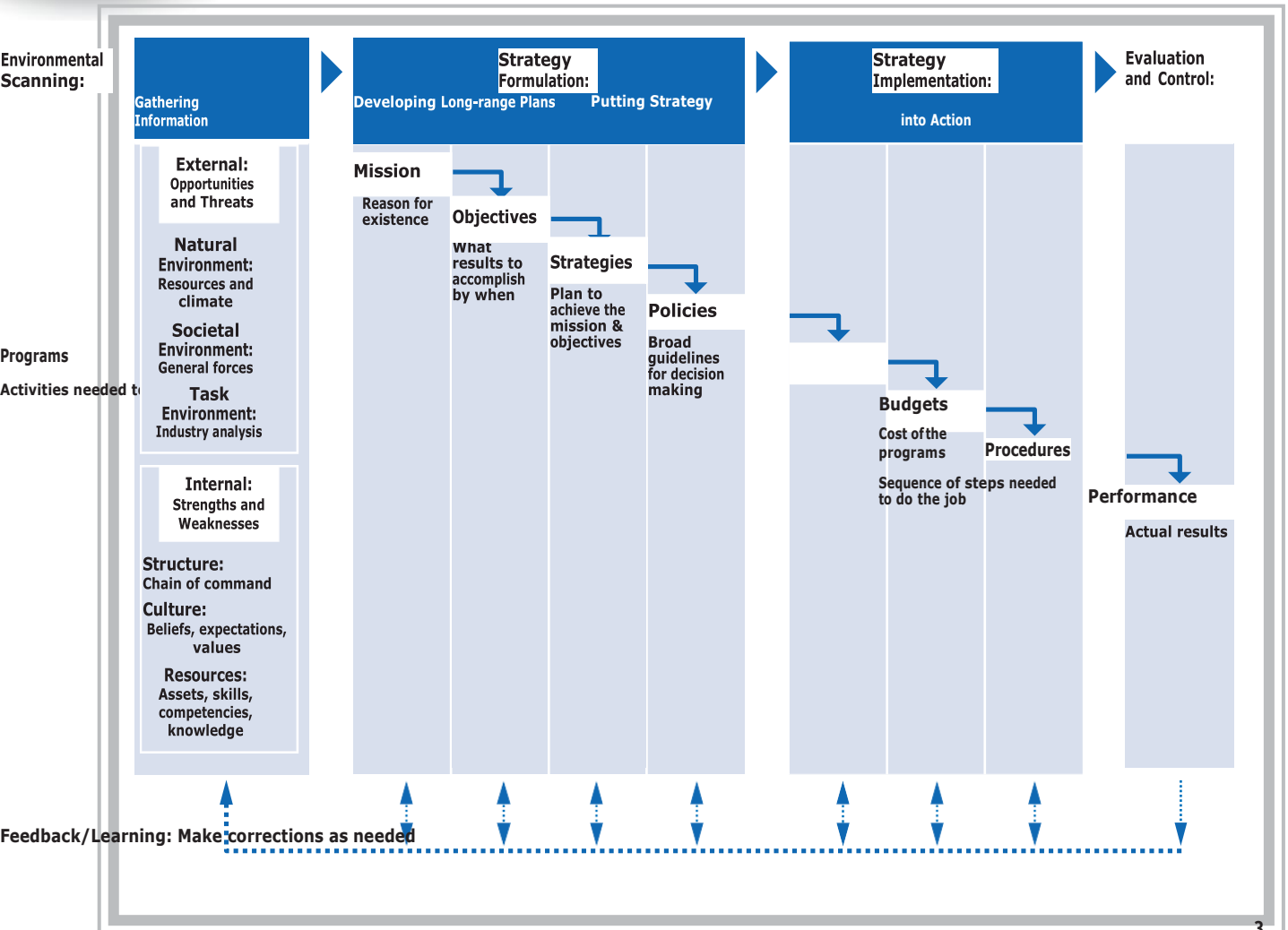
Ecomagination was a strategic change for GE, a company that had previously been condemned by environmentalists for its emphasis on coal and nuclear power and for polluting the Hudson and Housatonic rivers with polychlorinated biphenyls (PCBs) in the 1980s. Over the years, GE had been criticized for its lack of social responsibility and for its emphasis on profitability and financial performance over social and environmental objectives. What caused GE's management to make this strategic change?

In the 18 months before launching its new environmental strategy, GE invited managers from companies in various industries to participate in two-day "dreaming sessions" during which they were asked to imagine life in 2015—and the products they, as customers, would need from GE. The consensus was a future of rising fuel costs, restrictive environmental regulations, and growing consumer expectations for cleaner technologies, especially in the energy industry. Based on this conclusion, GE's management made the strategic decision to move in a new

# Learning Objectives

After reading this chapter, you should be able to:

- ◆ Understand the benefits of strategic management
- ◆ Explain how globalization and environmental sustainability influence strategic management
- ◆ Understand the basic model of strategic management and its components
- ◆ Identify some common triggering events that act as stimuli for strategic change
- ◆ Understand strategic decision-making modes
- ◆ Use the strategic audit as a method of analyzing corporate functions and activities



direction. According to Vice Chairman David Calhoun, “We decided that if this is what our customers want, let’s stop putting our heads in the sand, dodging environmental interests, and go from defense to offense.”<sup>3</sup>

Following GE’s announcement of its new strategic initiative, analysts raised questions regarding the company’s ability to make Ecomagination successful. They not only questioned CEO Immelt’s claim that green could be profitable as well as socially responsible, but they also wondered if Immelt could transform GE’s incremental approach to innovation to one of pursuing riskier technologies, such as fuel cells, solar energy, hydrogen storage, and nanotechnology.<sup>4</sup> Other companies had made announcements of green initiatives, only to leave them withering on the vine when they interfered with profits. For example, FedEx had announced in 2003 that it would soon be deploying clean-burning hybrid trucks at a rate of 3,000 per year, eventually cutting emissions by 250,000 tons of greenhouse gases. Four years later, FedEx had purchased fewer than 100 hybrid vehicles, less than 1% of its fleet! With hybrid trucks costing 75% more than conventional trucks, it would take 10 years for the fuel savings to pay for the costly vehicles. FedEx management concluded that breaking even over a 10-year period was not the best use of company capital. As a result of this and other experiences, skeptics felt that most large companies were only indulging in *greenwash* when they talked loudly about their sustainability efforts, but followed through with very little actual results.<sup>5</sup>

CEO Immelt had put his reputation at risk by personally leading GE’s Ecomagination initiative. Skeptics wondered if the environmental markets would materialize and if they would be as profitable as demanded by GE’s shareholders. Would a corporate culture known for its pursuit of the Six Sigma statistics-based approach to quality control be able to create technological breakthroughs and new green businesses? If Immelt was correct, not only would GE benefit, but other companies would soon follow GE’s lead. If, however, he was wrong, Immelt would have led his company down a dead end where it would be difficult to recover from the damage to its reputation and financial standing. According to a 25-year veteran of GE, “Jeff is asking us to take a really big swing . . . This is hard for us.”<sup>6</sup>

# The Study **1.1** Strategic Management

**Strategic management**: of managerial decisions and actions that determines the long-run performance of a corporation. It includes environmental scanning (both external and internal), strategy formulation (strategic or long-range planning), strategy implementation, and evaluation and control. The study of strategic management, therefore, emphasizes the monitoring and evaluating of external opportunities and threats in light of a corporation's strengths and weaknesses. Originally called *business policy*, strategic management incorporates such topics as strategic planning, environmental scanning, and industry analysis.

## PHASES OF STRATEGIC MANAGEMENT

Many of the concepts and techniques that deal with strategic management have been developed and used successfully by business corporations such as General Electric and the Boston Consulting Group. Over time, business practitioners and academic researchers have expanded and refined these concepts. Initially, strategic management was of most use to large corporations operating in multiple industries. Increasing risks of error, costly mistakes, and even economic ruin are causing today's professional managers in all organizations to take strategic management seriously in order to keep their companies competitive in an increasingly volatile environment.

As managers attempt to better deal with their changing world, a firm generally evolves through the following four **phases of strategic management**:<sup>7</sup>

**Phase 1—Basic financial planning:** Managers initiate serious planning when they are requested to propose the following year's budget. Projects are proposed on the basis of very little analysis, with most information coming from within the firm. The sales force usually provides the small amount of environmental information. Such simplistic operational planning only pretends to be strategic management, yet it is quite time consuming. Normal company activities are often suspended for weeks while managers try to cram ideas into the proposed budget. The time horizon is usually one year.

**Phase 2—Forecast-based planning:** As annual budgets become less useful at stimulating long-term planning, managers attempt to propose five-year plans. At this point they consider projects that may take more than one year. In addition to internal information, managers gather any available environmental data—usually on an ad hoc basis—and extrapolate current trends five years into the future. This phase is also time consuming, often involving a full month of managerial activity to make sure all the proposed budgets fit together. The process gets very political as managers compete for larger shares of funds. Endless meetings take place to evaluate proposals and justify assumptions. The time horizon is usually three to five years.

**Phase 3—Externally oriented (strategic) planning:** Frustrated with highly political yet ineffectual five-year plans, top management takes control of the planning process by initiating strategic planning. The company seeks to increase its responsiveness to changing markets and competition by thinking strategically. Planning is taken out of the hands of lower-level managers and concentrated in a planning staff whose task is to develop strategic plans for the corporation. Consultants often provide the sophisticated and innovative techniques that the planning staff uses to gather information and forecast future trends. Ex-military experts develop competitive intelligence units. Upper-level managers meet once a year at a resort "retreat" led by key members of the planning staff to evaluate and update the current strategic plan. Such top-down planning emphasizes formal strategy formulation and leaves the implementation issues to lower management levels. Top management typically develops five-year plans with help from consultants but minimal input from lower levels.

**Phase 4—Strategic management:** Realizing that even the best strategic plans are worthless without the input and commitment of lower-level managers, top management forms planning groups of managers and key employees at many levels, from various departments and workgroups. They develop and integrate a series of strategic plans aimed at achieving the company's primary objectives. Strategic plans at this point detail the implementation, evaluation, and control issues. Rather than attempting to perfectly forecast the future, the plans emphasize probable scenarios and contingency strategies. The sophisticated annual five-year strategic plan is replaced with strategic thinking at all levels of the organization throughout the year. Strategic information, previously available only centrally to top management, is available via local area networks and intranets to people throughout the organization. Instead of a large centralized planning staff, internal and external planning consultants are available to help guide group strategy discussions. Although top management may still initiate the strategic planning process, the resulting strategies may come from anywhere in the organization. Planning is typically interactive across levels and is no longer top down. People at all levels are now involved.

General Electric, one of the pioneers of strategic planning, led the transition from strategic planning to strategic management during the 1980s.<sup>8</sup> By the 1990s, most other corporations around the world had also begun the conversion to strategic management.

## BENEFITS OF STRATEGIC MANAGEMENT

Strategic management emphasizes long-term performance. Many companies can manage short-term bursts of high performance, but only a few can sustain it over a longer period of time. For example, of the original *Forbes 100* companies listed in 1917, only 13 have survived to the present day. To be successful in the long-run, companies must not only be able to *execute* current activities to satisfy an existing market, but they must also *adapt* those activities to satisfy new and changing markets.<sup>9</sup>

Research reveals that organizations that engage in strategic management generally outperform those that do not.<sup>10</sup> The attainment of an appropriate match, or “fit,” between an organization's environment and its strategy, structure, and processes has positive effects on the organization's performance.<sup>11</sup> Strategic planning becomes increasingly important as the environment becomes more unstable.<sup>12</sup> For example, studies of the impact of deregulation on the

U.S. railroad and trucking industries found that companies that changed their strategies and structures as their environment changed outperformed companies that did not change.<sup>13</sup>

A survey of nearly 50 corporations in a variety of countries and industries found the three most highly rated benefits of strategic management to be:

- ◆ Clearer sense of strategic vision for the firm.
- ◆ Sharper focus on what is strategically important.
- ◆ Improved understanding of a rapidly changing environment.<sup>14</sup>

A recent survey by McKinsey & Company of 800 executives found that formal strategic planning processes improve overall satisfaction with strategy development.<sup>15</sup> To be effective, however, strategic management need not always be a formal process. It can begin with a few simple questions:

1. Where is the organization now? (Not where do we hope it is!)
2. If no changes are made, where will the organization be in one year? two years? five years? 10 years? Are the answers acceptable?
3. If the answers are not acceptable, what specific actions should management undertake? What are the risks and payoffs involved?

Bain & Company's 2007 *Management Tools and Trends* survey of 1,221 global executives revealed strategic planning to be the most used management tool—used by 88% of respondents. Strategic planning is particularly effective at identifying new opportunities for growth and in ensuring that all managers have the same goals.<sup>16</sup> Other highly-ranked strategic management tools were mission and vision statements (used by 79% of respondents), core competencies (79%), scenario and contingency planning (69%), knowledge management (69%), strategic alliances (68%), and growth strategy tools (65%).<sup>17</sup> A study by Joyce, Nohria, and Roberson of 200 firms in 50 subindustries found that devising and maintaining an engaged, focused strategy was the first of four essential management practices that best differentiated between successful and unsuccessful companies.<sup>18</sup> Based on these and other studies, it can be concluded that strategic management is crucial for long-term organizational success.

Research into the planning practices of companies in the oil industry concludes that the real value of modern strategic planning is more in the *strategic thinking* and *organizational learning* that is part of a future-oriented planning process than in any resulting written strategic plan.<sup>19</sup> Small companies, in particular, may plan informally and irregularly. Nevertheless, studies of small- and medium-sized businesses reveal that the greater the level of planning intensity, as measured by the presence of a formal strategic plan, the greater the level of financial performance, especially when measured in terms of sales increases.<sup>20</sup>

Planning the strategy of large, multidivisional corporations can be complex and time consuming. It often takes slightly more than a year for a large company to move from situation assessment to a final decision agreement. For example, strategic plans in the global oil industry tend to cover four to five years. The planning horizon for oil exploration is even longer—up to 15 years.<sup>21</sup> Because of the relatively large number of people affected by a strategic decision in a large firm, a formalized, more sophisticated system is needed to ensure that strategic planning leads to successful performance. Otherwise, top management becomes isolated from developments in the business units, and lower-level managers lose sight of the corporate mission and objectives.

## 1.2 Globalization and Environmental Sustainability: Challenges to Strategic Management

Not too long ago, a business corporation could be successful by focusing only on making and selling goods and services within its national boundaries. International considerations were minimal. Profits earned from exporting products to foreign lands were considered frosting on the cake, but not really essential to corporate success. During the 1960s, for example, most U.S. companies organized themselves around a number of product divisions that made and sold goods only in the United States. All manufacturing and sales outside the United States were typically managed through one international division. An international assignment was usually considered a message that the person was no longer promotable and should be looking for another job.

Similarly, until the later part of the 20th century, a business firm could be very successful without being environmentally sensitive. Companies dumped their waste products in nearby streams or lakes and freely polluted the air with smoke containing noxious gases. Responding to complaints, governments eventually passed laws restricting the freedom to pollute the environment. Lawsuits forced companies to stop old practices. Nevertheless, until the dawn of the 21st century, most executives considered pollution abatement measures to be a cost of business that should be either minimized or avoided. Rather than clean up a polluting manufacturing site, they often closed the plant and moved manufacturing offshore to a developing nation with fewer environmental restrictions. Sustainability, as a term, was used to describe competitive advantage, not the environment.

## IMPACT OF GLOBALIZATION

Today, everything has changed. **Globalization**, the integrated internationalization of markets and corporations, has changed the way modern corporations do business. As Thomas Friedman points out in *The World Is Flat*, jobs, knowledge, and capital are now able to move across borders with far greater speed and far less friction than was possible only a few years ago.<sup>22</sup> For example, the inter-connected nature of the global financial community meant that the mortgage lending problems of U.S. banks led to a global financial crisis in 2008. The world-wide availability of the Internet and supply-chain logistical improvements, such as containerized shipping, mean that companies can now locate anywhere and work with multiple partners to serve any market. To reach the economies of scale necessary to achieve the low costs, and thus the low prices, needed to be competitive, companies are now thinking of a global market instead of national markets. Nike and Reebok, for example, manufacture their athletic shoes in various countries throughout Asia for sale on every continent. Many other companies in North America and Western Europe are outsourcing their manufacturing, software development, or customer service to companies in China, Eastern Europe, or India. Large pools of talented software programmers, English language proficiency, and lower wages in India enables IBM to employ 75,000 people in its global delivery centers in Bangalore, Delhi, or Kolkata to serve the needs of clients in Atlanta, Munich, or Melbourne.<sup>23</sup> Instead of using one international division to manage everything outside the home country, large corporations are now using matrix structures in which product units are interwoven with country or regional units. International assignments are now considered key for anyone interested in reaching top management.

As more industries become global, strategic management is becoming an increasingly important way to keep track of international developments and position a company for long-term competitive advantage. For example, General Electric moved a major research and development lab for its medical systems division from Japan to China in order to learn more about developing new products for developing economies. Microsoft's largest research center outside Redmond, Washington, is in Beijing. According to Wilbur Chung, a Wharton professor, "Whatever China develops is rolled out to the rest of the world. China may have a lower GDP per-capita than developed countries, but the Chinese have a strong sense of how products should be designed for their market."<sup>24</sup>

The formation of regional trade associations and agreements, such as the European Union, NAFTA, Mercosur, Andean Community, CAFTA, and ASEAN, is changing how international business is being conducted. See the **Global Issue** feature to learn how regional trade associations are forcing corporations to establish a manufacturing presence wherever they wish to market goods or else face significant tariffs. These associations have led to the increasing harmonization of standards so that products can more easily be sold and moved across national boundaries. International considerations have led to the strategic alliance between British Airways and American Airlines and to the acquisition of the Miller Brewing Company by South African Breweries (SAB), among others.

## IMPACT OF ENVIRONMENTAL SUSTAINABILITY

**Environmental sustainability** refers to the use of business practices to reduce a company's impact upon the natural, physical environment. Climate change is playing a growing role in business decisions. More than half of the global executives surveyed by McKinsey & Company in 2007 selected "environmental issues, including climate change," as the most important issue facing them over the next five years.<sup>25</sup> A 2005 survey of 27 large, publicly-held, multinational corporations based in North America revealed that 90% believed that government regulation was

# GLOBAL issue

## REGIONAL TRADE ASSOCIATIONS REPLACE NATIONAL TRADE BARRIERS



Formed as the European Economic Community in 1957, the **European Union (EU)** is the most significant trade association in the world. The goal of the EU is the complete economic integration of its 27 member countries so that goods made in one part of Europe can move freely without ever stopping for a customs inspection. The EU includes Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom. Others, including Croatia, Macedonia, and Turkey, have either recently applied or are in the process of applying. The EU is less than half the size of the United States of America, but has 50% more population. One currency, the euro, is being used throughout the region as members integrate their monetary systems. The steady elimination of barriers to free trade is providing the impetus for a series of mergers, acquisitions, and joint ventures among business corporations. The **European Union of South American Nations** was formed to unite the two existing free-trade areas with a secretariat in Ecuador and a parliament in Bolivia. In 2004, the five Central American countries of El Salvador, Guatemala, Honduras, Nicaragua, and Costa Rica plus the United States signed the **Central American Free Trade Agreement (CAFTA)**. The Dominican Republic joined soon thereafter. Previously, Central American textile manufacturers had to pay import duties of 18%–28% to sell their clothes in the United States unless they bought their raw material from U.S. companies. Under CAFTA, members can buy raw material from anywhere and their exports are duty free. In addition, CAFTA eliminated import duties on 80% of U.S. goods exported to the region, with the remaining tariffs being phased out over 10 years. but they were allowed to have their own tariff arrangements with nonmember countries. Cars and trucks must have 62.5% North American content to qualify for duty-free status. Transportation restrictions and other regulations have been being significantly reduced. A number of Asian and European corporations, such as Sweden's Electrolux, have built manufacturing facilities in Mexico to take advantage of the country's lower wages and easy access to the entire North American region.

South American countries are also working to harmonize their trading relationships with each other and to form trade associations. The establishment of the **Mercosur (Mercosul)** (Spanish-Portuguese) free-trade area among Argentina, Brazil, Uruguay, and Paraguay means that a manufacturing pres-made in one part of South America is becoming essential to avoid customs inspection. Venezuela has applied for admission to Mercosur. The **Andean Community (Comunidad Andina de Naciones)** is a free-trade alliance composed of Colombia, Ecuador, Peru, Bolivia, and Chile. On May 23, 2008, the **Union of South American Nations** was formed to unite the two existing free-trade areas with a secretariat in Ecuador and a parliament in Bolivia. In 2004, the five Central American countries of El Salvador, Guatemala, Honduras, Nicaragua, and Costa Rica plus the United States signed the **Central American Free Trade Agreement (CAFTA)**. The Dominican Republic joined soon thereafter. Previously, Central American textile manufacturers had to pay import duties of 18%–28% to sell their clothes in the United States unless they bought their raw material from U.S. companies. Under CAFTA, members can buy raw material from anywhere and their exports are duty free. In addition, CAFTA eliminated import duties on 80% of U.S. goods exported to the region, with the remaining tariffs being phased out over 10 years. but they were allowed to have their own tariff arrangements with nonmember countries. Cars and trucks must have 62.5% North American content to qualify for duty-free status. Transportation restrictions and other regulations have been being significantly reduced. A number of Asian and European corporations, such as Sweden's Electrolux, have built manufacturing facilities in Mexico to take advantage of the country's lower wages and easy access to the entire North American region.

2008. Increasingly referred to as ASEAN+3, ASEAN now includes China, Japan, and South Korea in its annual summit meetings. The ASEAN nations negotiated linkage of the ASEAN Free Trade Area (AFTA) with the existing free-trade area of Australia and New Zealand. With the EU extending eastward and NAFTA extending southward to someday connect with CAFTA and the Union of South American Nations, pressure is building on the independent Asian nations to join ASEAN.

imminent and 67% believed that such regulation would come between 2010 and 2015.<sup>26</sup> According to Eileen Claussen, President of the Pew Center on Global Climate Change:

*There is a growing consensus among corporate leaders that taking action on climate change is a responsible business decision. From market shifts to regulatory constraints, climate change poses real risks and opportunities that companies must begin planning for today, or risk losing ground*



to their more forward-thinking competitors. Prudent steps taken now to address climate change can improve a company's competitive position relative to its peers and earn it a seat at the table to influence climate policy. With more and more action at the state level and increasing scientific clarity, it is time for businesses to craft corporate strategies that address climate change.<sup>27</sup>

Porter and Reinhardt warn that “in addition to understanding its emissions costs, every firm needs to evaluate its vulnerability to climate-related effects such as regional shifts in the availability of energy and water, the reliability of infrastructures and supply chains, and the prevalence of infectious diseases.”<sup>28</sup> Swiss Re, the world's second-largest reinsurer, estimated that the overall economic costs of climate catastrophes related to climate change threatens to double to \$150 billion per year by 2014. The insurance industry's share of this loss would be \$30–\$40 billion annually.<sup>29</sup>

The effects of climate change on industries and companies throughout the world can be grouped into six categories of risks: regulatory, supply chain, product and technology, litigation, reputational, and physical.<sup>30</sup>

1. **Regulatory Risk:** Companies in much of the world are already subject to the *Kyoto Protocol*, which requires the developed countries (and thus the companies operating within them) to reduce carbon dioxide and other greenhouse gases by an average of 6% from 1990 levels by 2012. The European Union has an emissions trading program that allows companies that emit greenhouse gases beyond a certain point to buy additional allowances from other companies whose emissions are lower than that allowed. Companies can also earn credits toward their emissions by investing in emissions abatement projects outside their own firms. Although the United States withdrew from the Kyoto Protocol, various regional, state, and local government policies affect company activities in the U.S. For example, seven Northeastern states, six Western states, and four Canadian provinces have adopted proposals to cap carbon emissions and establish carbon-trading programs.
2. **Supply Chain Risk:** Suppliers will be increasingly vulnerable to government regulations—leading to higher component and energy costs as they pass along increasing carbon-related costs to their customers. Global supply chains will be at risk from an increasing intensity of major storms and flooding. Higher sea levels resulting from the melting of polar ice will create problems for seaports. China, where much of the world's manufacturing is currently being outsourced, is becoming concerned with environmental degradation. In 2006, 12 Chinese ministries produced a report on global warming foreseeing a 5%–10% reduction in agricultural output by 2030; more droughts, floods, typhoons, and sandstorms; and a 40% increase in population threatened by plague.<sup>31</sup>

The increasing scarcity of fossil-based fuel is already boosting transportation costs significantly. For example, Tesla Motors, the maker of an electric-powered sports car, transferred assembly of battery packs from Thailand to California because Thailand's low wages were more than offset by the costs of shipping thousand-pound battery packs across the Pacific Ocean.<sup>32</sup> Although the world production of oil had leveled off at 85 million barrels a day by 2008, the International Energy Agency predicted global demand to increase to 116 million barrels by 2030. Given that output from existing fields was falling 8% annually, oil companies must develop up to seven million barrels a day in additional capacity to meet projected demand. Nevertheless, James Mulva, CEO of ConocoPhillips, estimated in late 2007 that the output of oil will realistically stall at around 100 million barrels a day.<sup>33</sup>

3. **Product and Technology Risk:** Environmental sustainability can be a prerequisite to profitable growth. For example, worldwide investments in sustainable energy (including wind, solar, and water power) more than doubled to \$70.9 billion from 2004 to 2006.<sup>34</sup> Sixty percent of U.S. respondents to an Environics study stated that knowing a company is mindful of its impact on the environment and society makes them more likely to buy their products

and services.<sup>35</sup> Carbon-friendly products using new technologies are becoming increasingly popular with consumers. Those automobile companies, for example, that were quick to introduce hybrid or alternative energy cars gained a competitive advantage.

4. **Litigation Risk:** Companies that generate significant carbon emissions face the threat of lawsuits similar to those in the tobacco, pharmaceutical, and building supplies (e.g., asbestos) industries. For example, oil and gas companies were sued for greenhouse gas emissions in the federal district court of Mississippi, based on the assertion that these companies contributed to the severity of Hurricane Katrina. As of October 2006, at least 16 cases were pending in federal or state courts in the U.S. “This boomlet in global warming litigation represents frustration with the White House’s and Congress’ failure to come to grips with the issue,” explained John Echeverria, executive director of Georgetown University’s Environmental Law & Policy Institute.<sup>36</sup>
5. **Reputational Risk:** A company’s impact on the environment can heavily affect its overall reputation. The Carbon Trust, a consulting group, found that in some sectors the value of a company’s brand could be at risk because of negative perceptions related to climate change. In contrast, a company with a good record of environmental sustainability may create a competitive advantage in terms of attracting and keeping loyal consumers, employees, and investors. For example, Wal-Mart’s pursuit of environmental sustainability as a core business strategy has helped soften its negative reputation as a low-wage, low-benefit employer. By setting objectives for its retail stores of reducing greenhouse gases by 20%, reducing solid waste by 25%, increasing truck fleet efficiency by 25%, and using 100% renewable energy, it is also forcing its suppliers to become more environmentally sustainable.<sup>37</sup> Tools have recently been developed to measure sustainability on a variety of factors. For example, the SAM (Sustainable Asset Management) Group of Zurich, Switzerland, has been assessing and documenting the sustainability performance of over 1,000 corporations annually since 1999. SAM lists the top 15% of firms in its *Sustainability Yearbook* and classifies them into gold, silver, and bronze categories.<sup>38</sup> *Business Week* published its first list of the world’s 100 most sustainable corporations January 29, 2007. The *Dow Jones Sustainability Indexes* and the *KLD Broad Market Social Index*, which evaluate companies on a range of environmental, social, and governance criteria are used for investment decisions.<sup>39</sup> Financial services firms, such as Goldman Sachs, Bank of America, JPMorgan Chase, and Citigroup have adopted guidelines for lending and asset management aimed at promoting clean-energy alternatives.<sup>40</sup>
6. **Physical Risk:** The direct risk posed by climate change includes the physical effects of droughts, floods, storms, and rising sea levels. Average Arctic temperatures have risen four to five degrees Fahrenheit (two to three degrees Celsius) in the past 50 years, leading to melting glaciers and sea levels rising one inch per decade.<sup>41</sup> Industries most likely to be affected are insurance, agriculture, fishing, forestry, real estate, and tourism. Physical risk can also affect other industries, such as oil and gas, through higher insurance premiums paid on facilities in vulnerable areas. Coca-Cola, for example, studies the linkages between climate change and water availability in terms of how this will affect the location of its new bottling plants. The warming of the Tibetan plateau has led to a thawing of the permafrost—thereby threatening the newly-completed railway line between China and Tibet.<sup>42</sup> (See the **Environmental Sustainability Issue** feature for a more complete list of projected effects of climate change.)

Although global warming remains a controversial topic, the best argument in favor of working toward environmental sustainability is a variation of Pascal’s Wager on the existence of God:

*The same goes for global warming. If you accept it as reality, adapting your strategy and practices, your plants will use less energy and emit fewer effluents. Your packaging will be more*

# ENVIRONMENTAL sustainability issue

## PROJECTED EFFECTS OF CLIMATE CHANGE

According to the Intergovernmental Panel on Climate Change (IPCC), the global climate system is projected to include a number of changes during the 21st century.

### TEMPERATURE INCREASE

- ◆ Global average warming of approximately 0.2 degrees Celsius each decade.
- ◆ Long-term warming associated with doubled carbon dioxide concentrations in the range of 2 to 4.5 degrees Celsius.
- ◆ Fewer cold days and nights; warmer and more frequent hot days and nights.
- ◆ Increased frequency, intensity, and duration of heat waves in central Europe, western U.S., East Asia, and Korea.

### SEA LEVEL RISE

- ◆ Sea level will continue to rise due to thermal expansion of seawater and loss of land ice at greater rates.
- ◆ Sea level rise of 18 to 59 centimeters by the end of the 21st century.
- ◆ Warming will continue contributing to sea level rise for many centuries even if greenhouse gas concentrations are stabilized.

### PRECIPITATION AND HUMIDITY

- ◆ Increasing numbers of wet days in high latitudes; increasing numbers of dry spells in subtropical areas.

- ◆ Annual precipitation increases in most of northern Europe, Canada, northeastern U.S., and the Arctic.
- ◆ Winter precipitation increases in northern Asia and the Tibetan Plateau.
- ◆ Dryspells increase in length and frequency in the Mediterranean, Australia, and New Zealand; seasonal droughts increase in many mid-latitude continent interiors.

### EXTREME WEATHER-RELATED EVENTS

- ◆ Increasing intense tropical cyclone activity.
- ◆ Increasing frequency of flash floods and large-area floods in many regions.
- ◆ Increasing risk of drought in Australia, eastern New Zealand, and the Mediterranean, with seasonal droughts in central Europe and Central America.
- ◆ Increasing wildfires in arid and semi-arid areas such as Australia and the western U.S.

### OTHER RELATED EFFECTS

- ◆ Decreasing snow season length and depth in Europe and North America.
- ◆ Fewer cold days and nights leading to decreasing frosts.
- ◆ Accelerated glacier loss.
- ◆ Reduction in and warming of permafrost.

SOURCE: F. G. Sussman and J. R. Freed, "Adapting to Climate Change: A Business Approach," Paper prepared for the Pew Center on Global Climate Change (April 2008), pp. 5–6.

biodegradable, and your new products will be able to capture any markets created by severe weather effects. Yes, global warming might not be as damaging as some predict, and you might have invested more than you needed, but it's just as Pascal said: Given all the possible outcomes, the upside of being ready and prepared for a "fearsome event" surely beats the alternative.<sup>43</sup>

## Theo 1.3 Organizational Adaptation

Globalization and environmental sustainability present real challenges to the strategic management of business corporations. How can many keep track of all the changing technological, economic, political–legal, and sociocultural trends around the world and make the necessary adjustments? This is not an easy task. Various theories have been proposed to account for how organizations obtain fit with their environment. The theory of **population ecology**, for

example, proposes that once an organization is successfully established in a particular environmental niche, it is unable to adapt to changing conditions. Inertia prevents the organization from changing. The company is thus replaced (is bought out or goes bankrupt) by other organizations more suited to the new environment. Although it is a popular theory in sociology, research fails to support the arguments of population ecology.<sup>44</sup> **Institution theory**, in contrast, proposes that organizations can and do adapt to changing conditions by imitating other successful organizations. To its credit, many examples can be found of companies that have adapted to changing circumstances by imitating an admired firm's strategies and management techniques.<sup>45</sup> The theory does not, however, explain how or by whom successful new strategies are developed in the first place. The **strategic choice perspective** goes one step further by proposing that not only do organizations adapt to a changing environment, but they also have the opportunity and power to reshape their environment. This perspective is supported by research indicating that the decisions of a firm's management have at least as great an impact on firm performance as overall industry factors.<sup>46</sup> Because of its emphasis on managers making rational strategic decisions, the strategic choice perspective is the dominant one taken in strategic management. Its argument that adaptation is a dynamic process fits with the view of **organizational learning theory**, which says that an organization adjusts defensively to a changing environment and uses knowledge offensively to improve the fit between itself and its environment. This perspective expands the strategic choice perspective to include people at all levels becoming involved in providing input into strategic decisions.<sup>47</sup>

In agreement with the concepts of organizational learning theory, an increasing number of companies are realizing that they must shift from a vertically organized, top-down type of organization to a more horizontally managed, interactive organization. They are attempting to adapt more quickly to changing conditions by becoming "learning organizations."

## Creating a Learning Organization

### 1.4

Strategic management has evolved to the point that its primary value is in helping an organization operate successfully in a dynamic, complex environment. To be competitive in dynamic environments, corporations are becoming less bureaucratic and more flexible. In stable environments such as those that existed in years past, a competitive strategy simply involved defining a competitive position and then defending it. As it takes less and less time for one product or technology to replace another, companies are finding that there is no such thing as a permanent competitive advantage. Many agree with Richard D'Aveni, who says in his book *Hypercompetition* that any sustainable competitive advantage lies not in doggedly following a centrally managed five-year plan but in stringing together a series of strategic short-term thrusts (as Intel does by cutting into the sales of its own offerings with periodic introductions of new products).<sup>48</sup> This means that corporations must develop *strategic flexibility*—the ability to shift from one dominant strategy to another.<sup>49</sup>

Strategic flexibility demands a long-term commitment to the development and nurturing of critical resources. It also demands that the company become a **learning organization**—an organization skilled at creating, acquiring, and transferring knowledge and at modifying its behavior to reflect new knowledge and insights. Organizational learning is a critical component of competitiveness in a dynamic environment. It is particularly important to innovation and new product development.<sup>50</sup> For example, both Hewlett-Packard and British Petroleum (BP) use an extensive network of informal committees to transfer knowledge among their cross-functional teams and to help spread new sources of knowledge quickly.<sup>51</sup> Siemens, a major electronics company, created a global knowledge-sharing network, called ShareNet, in order to quickly spread information technology throughout the firm. Based on its experience with ShareNet, Siemens established PeopleShareNet, a system that serves as a virtual expert marketplace for

facilitating the creation of cross-cultural teams composed of members with specific knowledge and competencies.<sup>52</sup>

Learning organizations are skilled at four main activities:

- ◆ Solving problems systematically
- ◆ Experimenting with new approaches
- ◆ Learning from their own experiences and past history as well as from the experiences of others
- ◆ Transferring knowledge quickly and efficiently throughout the organization<sup>53</sup>

Business historian Alfred Chandler proposes that high-technology industries are defined by “paths of learning” in which organizational strengths derive from learned capabilities.<sup>54</sup> According to Chandler, companies spring from an individual entrepreneur’s knowledge, which then evolves into organizational knowledge. This organizational knowledge is composed of three basic strengths: technical skills, mainly in research; functional knowledge, such as production and marketing; and managerial expertise. This knowledge leads to new businesses where the company can succeed and creates an entry barrier to new competitors. Chandler points out that once a corporation has built its learning base to the point where it has become a core company in its industry, entrepreneurial startups are rarely able to successfully enter. Thus, organizational knowledge becomes a competitive advantage.

Strategic management is essential for learning organizations to avoid stagnation through continuous self-examination and experimentation. People at all levels, not just top management, participate in strategic management—helping to scan the environment for critical information, suggesting changes to strategies and programs to take advantage of environmental shifts, and working with others to continuously improve work methods, procedures, and evaluation techniques. For example, Motorola developed an action learning format in which people from marketing, product development, and manufacturing meet to argue and reach agreement about the needs of the market, the best new product, and the schedules of each group producing it. This action learning approach overcame the problems that arose previously when the three departments met and formally agreed on plans but continued with their work as if nothing had happened.<sup>55</sup> Research indicates that involving more people in the strategy process results in people not only viewing the process more positively, but also acting in ways that make the process more effective.<sup>56</sup>

Organizations that are willing to experiment and are able to learn from their experiences are more successful than those that are not.<sup>57</sup> For example, in a study of U.S. manufacturers of diagnostic imaging equipment, the most successful firms were those that improved products sold in the United States by incorporating some of what they had learned from their manufacturing and sales experiences in other nations. The less successful firms used the foreign operations primarily as sales outlets, not as important sources of technical knowledge.<sup>58</sup> Research also reveals that multidivisional corporations that establish ways to transfer knowledge across divisions are more innovative than other diversified corporations that do not.<sup>59</sup>

## Basic of Strategic Management

Strategic 1.5

consists of four basic elements:

- ◆ **Environmental scanning**
- ◆ **Strategy formulation**
- ◆ **Strategy implementation**
- ◆ **Evaluation and control**

FIGURE 1-1  
Basic Elements of the Strategic Management Process

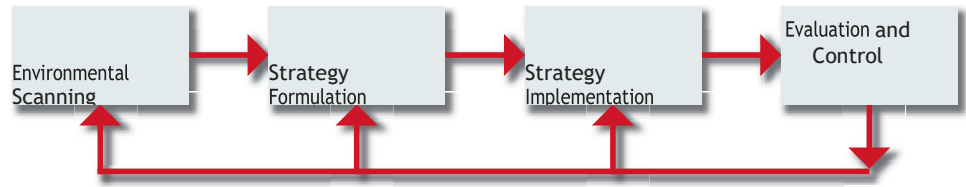
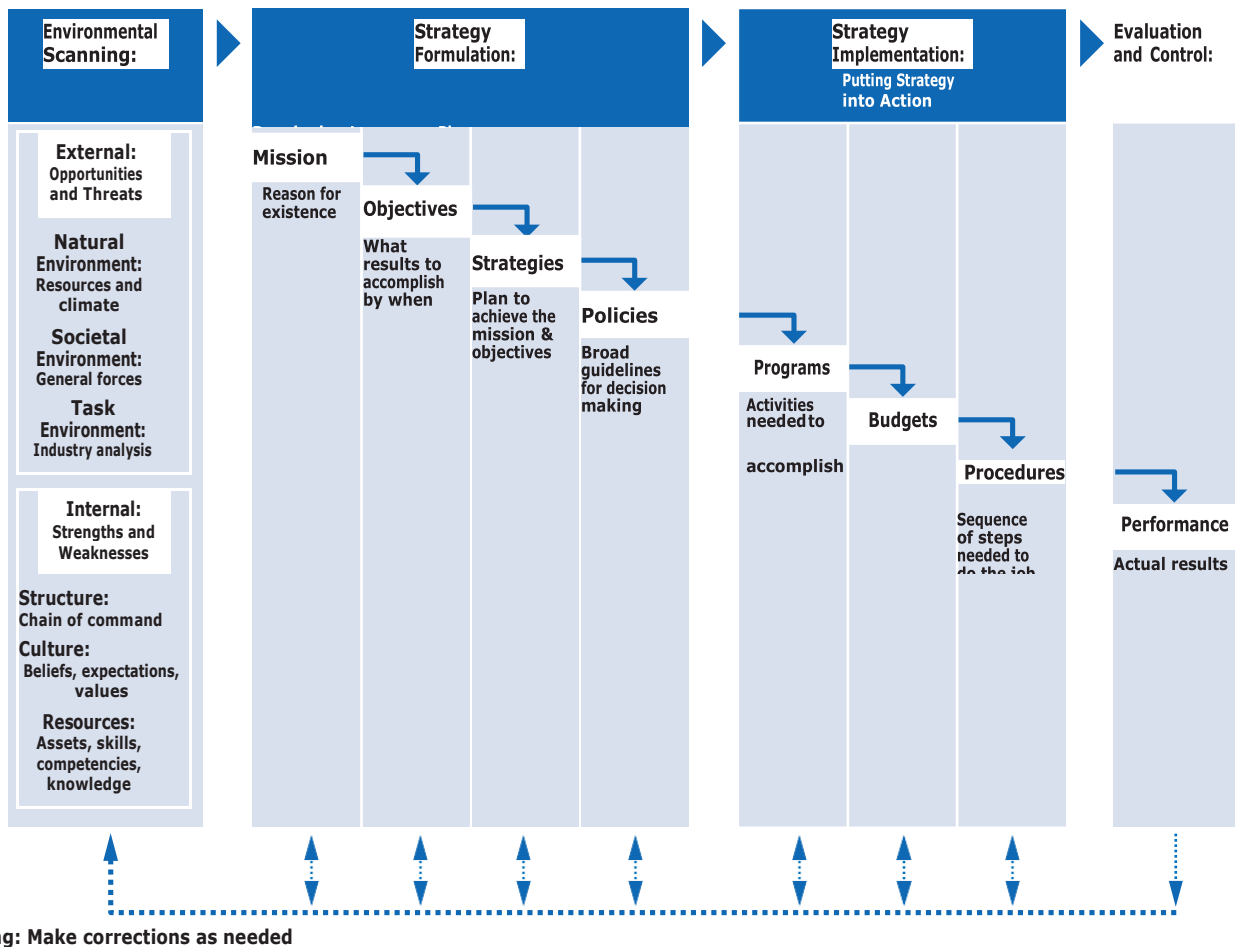


Figure 1–1 illustrates how these four elements interact; Figure 1–2 expands each of these elements and serves as the model for this book. This model is both rational and prescriptive. It is a planning model that presents what a corporation *should* do in terms of the strategic management process, not what any particular firm may actually do. The rational planning model predicts that as environmental uncertainty increases, corporations that work more diligently to analyze and predict more accurately the changing situation in which they operate will outperform those that do not. Empirical research studies support this model.<sup>60</sup> The terms used in Figure 1–2 are explained in the following pages.

FIGURE 1-2 Strategic Management Model



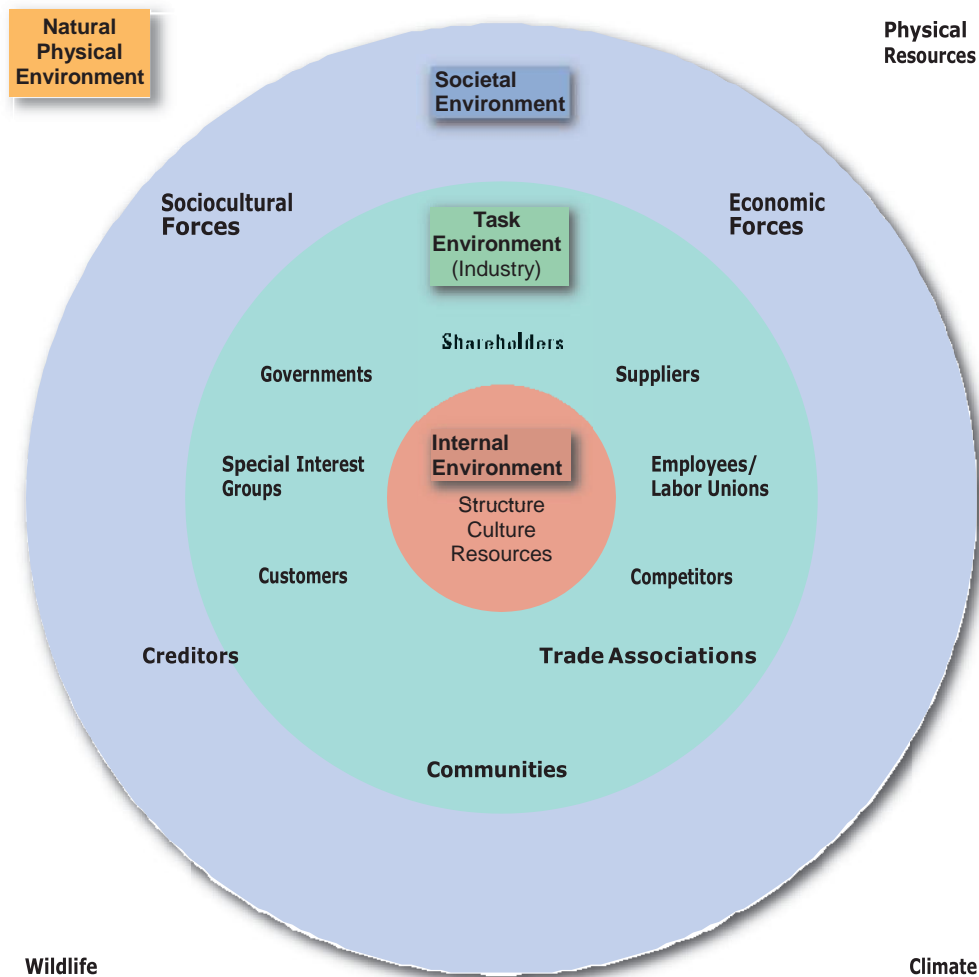
SOURCE: T. L. Wheelen, "Strategic Management Model," adapted from "Concepts of Management," presented to Society for Advancement of Management (SAM), International Meeting, Richmond, VA, 1981. T.L. Wheelen and SAM. Copyright © 1982, 1985, 1988, and 2005 by T.L. Wheelen and J.D. Hunger. Revised 1989, 1995, 1998, 2000 and 2005. Reprinted with permission.

## ENVIRONMENTAL SCANNING

**Environmental scanning** is the monitoring, evaluating, and disseminating of information from the external and internal environments to key people within the corporation. Its purpose is to identify **strategic factors**—those external and internal elements that will determine the future of the corporation. The simplest way to conduct environmental scanning is through **SWOT analysis**. SWOT is an acronym used to describe the particular **Strengths, Weaknesses, Opportunities, and Threats** that are strategic factors for a specific company. The **external environment** consists of variables (**Opportunities and Threats**) that are outside the organization and not typically within the short-run control of top management. These variables form the context within which the corporation exists. **Figure 1–3** depicts key environmental variables. They may be general forces and trends within the natural or societal environments or specific factors that operate within an organization’s specific task environment—often called its *industry*. (These external variables are defined and discussed in more detail in **Chapter 4**.)

The **internal environment** of a corporation consists of variables (**Strengths and Weaknesses**) that are within the organization itself and are not usually within the short-run

FIGURE 1-3 Environmental Variables



control of top management. These variables form the context in which work is done. They include the corporation's structure, culture, and resources. Key strengths form a set of core competencies that the corporation can use to gain competitive advantage. (These internal variables and core competencies are defined and discussed in more detail in **Chapter 5**.)

## STRATEGY FORMULATION

**Strategy formulation** is the development of long-range plans for the effective management of environmental opportunities and threats, in light of corporate strengths and weaknesses (SWOT). It includes defining the corporate mission, specifying achievable objectives, developing strategies, and setting policy guidelines.

### Mission

An organization's **mission** is the purpose or reason for the organization's existence. It tells what the company is providing to society—either a service such as housecleaning or a product such as automobiles. A well-conceived mission statement defines the fundamental, unique purpose that sets a company apart from other firms of its type and identifies the scope or domain of the company's operations in terms of products (including services) offered and markets served. Research reveals that firms with mission statements containing explicit descriptions of customers served and technologies used have significantly higher growth than firms without such statements.<sup>61</sup> A mission statement may also include the firm's values and philosophy about how it does business and treats its employees. It puts into words not only what the company is now but what it wants to become—management's strategic vision of the firm's future. The mission statement promotes a sense of shared expectations in employees and communicates a public image to important stakeholder groups in the company's task environment. Some people like to consider vision and mission as two different concepts: Mission describes what the organization is now; **vision** describes what the organization would like to become. We prefer to combine these ideas into a single mission statement.<sup>62</sup> Some companies prefer to list their values and philosophy of doing business in a separate publication called a *values statement*. For a listing of the many things that could go into a mission statement, see **Strategy Highlight 1.1**.

One example of a mission statement is that of Google:

*To organize the world's information and make it universally accessible and useful.*<sup>63</sup>

Another classic example is that etched in bronze at Newport News Shipbuilding, unchanged since its founding in 1886:


*We shall build good ships here—at a profit if we can—at a loss if we must—but always good ships.*<sup>64</sup>

A mission may be defined narrowly or broadly in scope. An example of a *broad* mission statement is that used by many corporations: "Serve the best interests of shareowners, customers, and employees." A broadly defined mission statement such as this keeps the company from restricting itself to one field or product line, but it fails to clearly identify either what it makes or which products/markets it plans to emphasize. Because this broad statement is so general, a *narrow* mission statement, such as the preceding examples by Google and Newport News Shipbuilding, is generally more useful. A narrow mission very clearly states the organization's primary business, but it may limit the scope of the firm's activities in terms of the product or service offered, the technology used, and the market served. Research indicates that a narrow mission statement may be best in a turbulent industry because it keeps the firm focused on what it does best; whereas, a broad mission statement may be best in a stable environment that lacks growth opportunities.<sup>65</sup>



# STRATEGY highlight 1.1

## DO YOU HAVE A GOOD MISSION STATEMENT?



According to Campbell, Director of Ashridge Strategic Management Centre and a long-time contributor to *Long Range Planning*, proposes a means for evaluating a mission statement. Arguing that mission statements can be more than just an expression of a company's purpose and ambition, he suggests that they can also be a company flag to rally around, a signpost for all stakeholders, a guide to behavior, and a celebration of a company's culture. For a company trying to achieve all of the above, evaluate its mission statement using the following 10-question test. Score each question 0 for no, 1 for somewhat, or 2 for yes. According to Campbell, a score of over 15 is exceptional, and a score of less than 10 suggests that more work needs to be done.

1. Does the statement describe an inspiring purpose that avoids playing to the selfish interests of the stakeholders?
2. Does the statement describe the company's responsibility to its stakeholders?
3. Does the statement define a business domain and explain why it is attractive?
4. Does the statement describe the strategic positioning that the company prefers in a way that helps to identify the sort of competitive advantage it will look for?
5. Does the statement identify values that link with the organization's purpose and act as beliefs with which employees can feel proud?
6. Do the values resonate with and reinforce the organization's strategy?
7. Does the statement describe important behavior standards that serve as beacons of the strategy and the values?
8. Are the behavior standards described in a way that enables individual employees to judge whether they are behaving correctly?
9. Does the statement give a portrait of the company, capturing the culture of the organization?
10. Is the statement easy to read?

SOURCE: Reprinted from *Long Range Planning*, Vol. 30, No. 6, 1997, Campbell "Mission Statements", pp. 931–932, Copyright © 1997 with permission of Elsevier.

## Objectives

**Objectives** are the end results of planned activity. They should be stated as *action verbs* and tell what is to be accomplished by when and quantified if possible. The achievement of corporate objectives should result in the fulfillment of a corporation's mission. In effect, this is what society gives back to the corporation when the corporation does a good job of fulfilling its mission. For example, by providing society with gums, candy, iced tea, and carbonated drinks, Cadbury Schweppes, has become the world's largest confectioner by sales. One of its prime objectives is to increase sales 4%–6% each year. Even though its profit margins were lower than those of Nestlé, Kraft, and Wrigley, its rivals in confectionery, or those of Coca-Cola or Pepsi, its rivals in soft drinks, Cadbury Schweppes' management established the objective of increasing profit margins from around 10% in 2007 to the mid-teens by 2011.<sup>66</sup>

The term *goal* is often used interchangeably with the term objective. In this book, we prefer to differentiate the two terms. In contrast to an objective, we consider a *goal* as an open-ended statement of what one wants to accomplish, with no quantification of what is to be achieved and no time criteria for completion. For example, a simple statement of "increased profitability" is thus a goal, not an objective, because it does not state how much profit the firm wants to make the next year. A good objective should be action-oriented and begin with the word *to*. An example of an objective is "to increase the firm's profitability in 2010 by 10% over 2009."

Some of the areas in which a corporation might establish its goals and objectives are:

- ◆ Profitability (net profits)
- ◆ Efficiency (low costs, etc.)
- ◆ Growth (increase in total assets, sales, etc.)
- ◆ Shareholder wealth (dividends plus stock price appreciation)
- ◆ Utilization of resources (ROE or ROI)
- ◆ Reputation (being considered a “top” firm)
- ◆ Contributions to employees (employment security, wages, diversity)
- ◆ Contributions to society (taxes paid, participation in charities, providing a needed product or service)
- ◆ Market leadership (market share)
- ◆ Technological leadership (innovations, creativity)
- ◆ Survival (avoiding bankruptcy)
- ◆ Personal needs of top management (using the firm for personal purposes, such as providing jobs for relatives)

## Strategies

A **strategy** of a corporation forms a comprehensive master plan that states how the corporation will achieve its mission and objectives. It maximizes competitive advantage and minimizes competitive disadvantage. For example, even though Cadbury Schweppes was a major competitor in confectionary and soft drinks, it was not likely to achieve its challenging objective of significantly increasing its profit margin within four years without making a major change in strategy. Management therefore decided to cut costs by closing 33 factories and reducing staff by 10%. It also made the strategic decision to concentrate on the confectionary business by divesting its less-profitable Dr. Pepper/Seven Up soft drinks unit. Management was also considering acquisitions as a means of building on its existing strengths in confectionary by purchasing either Kraft’s confectionary unit or the Hershey Company.

The typical business firm usually considers three types of strategy: corporate, business, and functional.

1. **Corporate strategy** describes a company’s overall direction in terms of its general attitude toward growth and the management of its various businesses and product lines. Corporate strategies typically fit within the three main categories of stability, growth, and retrenchment. Cadbury Schweppes, for example, was following a corporate strategy of retrenchment by selling its marginally profitable soft drink business and concentrating on its very successful confectionary business.
2. **Business strategy** usually occurs at the business unit or product level, and it emphasizes improvement of the competitive position of a corporation’s products or services in the specific industry or market segment served by that business unit. Business strategies may fit within the two overall categories, *competitive* and *cooperative* strategies. For example, Staples, the U.S. office supply store chain, has used a competitive strategy to differentiate its retail stores from its competitors by adding services to its stores, such as copying, UPS shipping, and hiring mobile technicians who can fix computers and install networks. British Airways has followed a cooperative strategy by forming an alliance with American Airlines in order to provide global service. Cooperative strategy may thus be used to

provide a competitive advantage. Intel, a manufacturer of computer microprocessors, uses its alliance (cooperative strategy) with Microsoft to differentiate itself (competitive strategy) from AMD, its primary competitor.

3. **Functional strategy** is the approach taken by a functional area to achieve corporate and business unit objectives and strategies by maximizing resource productivity. It is concerned with developing and nurturing a distinctive competence to provide a company or business unit with a competitive advantage. Examples of research and development (R&D) functional strategies are technological followership (imitation of the products of other companies) and technological leadership (pioneering an innovation). For years, Magic Chef had been a successful appliance maker by spending little on R&D but by quickly imitating the innovations of other competitors. This helped the company to keep its costs lower than those of its competitors and consequently to compete with lower prices. In terms of marketing functional strategies, Procter & Gamble (P&G) is a master of marketing “pull”—the process of spending huge amounts on advertising in order to create customer demand. This supports P&G’s competitive strategy of differentiating its products from those of its competitors.

Business firms use all three types of strategy simultaneously. A **hierarchy of strategy** is a grouping of strategy types by level in the organization. Hierarchy of strategy is a nesting of one strategy within another so that they complement and support one another. (See **Figure 1–4**.) Functional strategies support business strategies, which, in turn, support the corporate strategy(ies).

Just as many firms often have no formally stated objectives, many firms have unstated, incremental, or intuitive strategies that have never been articulated or analyzed. Often the only way to spot a corporation’s implicit strategies is to look not at what management says but at what it does. Implicit strategies can be derived from corporate policies, programs approved (and disapproved), and authorized budgets. Programs and divisions favored by budget increases and staffed by managers who are considered to be on the fast promotion track reveal where the corporation is putting its money and its energy.

**FIGURE 1-4**  
Hierarchy of Strategy



## Policies

A **policy** is a broad guideline for decision making that links the formulation of a strategy with its implementation. Companies use policies to make sure that employees throughout the firm make decisions and take actions that support the corporation's mission, objectives, and strategies. For example, when Cisco decided on a strategy of growth through acquisitions, it established a policy to consider only companies with no more than 75 employees, 75% of whom were engineers.<sup>67</sup> Consider the following company policies:

- ◆ **3M:** 3M says researchers should spend 15% of their time working on something other than their primary project. (This supports 3M's strong product development strategy.)
- ◆ **Intel:** Intel cannibalizes its own product line (undercuts the sales of its current products) with better products before a competitor does so. (This supports Intel's objective of market leadership.)
- ◆ **General Electric:** GE must be number one or two wherever it competes. (This supports GE's objective to be number one in market capitalization.)
- ◆ **Southwest Airlines:** Southwest offers no meals or reserved seating on airplanes. (This supports Southwest's competitive strategy of having the lowest costs in the industry.)
- ◆ **Exxon:** Exxon pursues only projects that will be profitable even when the price of oil drops to a low level. (This supports Exxon's profitability objective.)

Policies such as these provide clear guidance to managers throughout the organization. (Strategy formulation is discussed in greater detail in **Chapters 6, 7, and 8.**)

## STRATEGY IMPLEMENTATION

**Strategy implementation** is a process by which strategies and policies are put into action through the development of programs, budgets, and procedures. This process might involve changes within the overall culture, structure, and/or management system of the entire organization. Except when such drastic corporatewide changes are needed, however, the implementation of strategy is typically conducted by middle- and lower-level managers, with review by top management. Sometimes referred to as *operational planning*, strategy implementation often involves day-to-day decisions in resource allocation.

### Programs

A **program** is a statement of the activities or steps needed to accomplish a single-use plan. It makes a strategy action oriented. It may involve restructuring the corporation, changing the company's internal culture, or beginning a new research effort. For example, Boeing's strategy to regain industry leadership with its proposed 787 Dreamliner meant that the company had to increase its manufacturing efficiency in order to keep the price low. To significantly cut costs, management decided to implement a series of programs:

- ◆ Outsource approximately 70% of manufacturing.
- ◆ Reduce final assembly time to three days (compared to 20 for its 737 plane) by having suppliers build completed plane sections.
- ◆ Use new, lightweight composite materials in place of aluminum to reduce inspection time.
- ◆ Resolve poor relations with labor unions caused by downsizing and outsourcing.

Another example is a set of programs used by automaker BMW to achieve its objective of increasing production efficiency by 5% each year: (a) shorten new model development time from 60 to 30 months, (b) reduce preproduction time from a year to no more than five months,

and (c) build at least two vehicles in each plant so that production can shift among models depending upon demand.

## Budgets

A **budget** is a statement of a corporation's programs in terms of dollars. Used in planning and control, a budget lists the detailed cost of each program. Many corporations demand a certain percentage return on investment, often called a "hurdle rate," before management will approve a new program. This ensures that the new program will significantly add to the corporation's profit performance and thus build shareholder value. The budget thus not only serves as a detailed plan of the new strategy in action, it also specifies through pro forma financial statements the expected impact on the firm's financial future.

For example, General Motors budgeted \$4.3 billion to update and expand its Cadillac line of automobiles. With this money, the company was able to increase the number of models from five to nine and to offer more powerful engines, sportier handling, and edgier styling. The company reversed its declining market share by appealing to a younger market. (The average Cadillac buyer in 2000 was 67 years old.)<sup>68</sup> Another example is the \$8 billion budget that General Electric established to invest in new jet engine technology for regional-jet airplanes. Management decided that an anticipated growth in regional jets should be the company's target market. The program paid off when GE won a \$3 billion contract to provide jet engines for China's new fleet of 500 regional jets in time for the 2008 Beijing Olympics.<sup>69</sup>

## Procedures

**Procedures**, sometimes termed Standard Operating Procedures (SOP), are a system of sequential steps or techniques that describe in detail how a particular task or job is to be done. They typically detail the various activities that must be carried out in order to complete the corporation's program. For example, when the home improvement retailer Home Depot noted that sales were lagging because its stores were full of clogged aisles, long checkout times, and too few salespeople, management changed its procedures for restocking shelves and pricing the products. Instead of requiring its employees to do these activities at the same time they were working with customers, management moved these activities to when the stores were closed at night. Employees were then able to focus on increasing customer sales during the day. Both UPS and FedEx put such an emphasis on consistent, quality service that both companies have strict rules for employee behavior, ranging from how a driver dresses to how keys are held when approaching a customer's door. (Strategy implementation is discussed in more detail in **Chapters 9** and **10**.)

## EVALUATION AND CONTROL

**Evaluation and control** is a process in which corporate activities and performance results are monitored so that actual performance can be compared with desired performance. Managers at all levels use the resulting information to take corrective action and resolve problems. Although evaluation and control is the final major element of strategic management, it can also pinpoint weaknesses in previously implemented strategic plans and thus stimulate the entire process to begin again.

**Performance** is the end result of activities.<sup>70</sup> It includes the actual outcomes of the strategic management process. The practice of strategic management is justified in terms of its ability to improve an organization's performance, typically measured in terms of profits and return on investment. For evaluation and control to be effective, managers must obtain clear, prompt, and unbiased information from the people below them in the corporation's hierarchy. Using

this information, managers compare what is actually happening with what was originally planned in the formulation stage. For example, when market share (followed by profits) declined at Dell in 2007, Michael Dell, founder, returned to the CEO position and reevaluated his company's strategy and operations. Planning for continued growth, the company's expansion of its computer product line into new types of hardware, such as storage, printers, and televisions, had not worked as planned. In some areas, like televisions and printers, Dell's customization ability did not add much value. In other areas, like services, lower-cost competitors were already established. Michael Dell concluded, "I think you're going to see a more streamlined organization, with a much clearer strategy."<sup>71</sup>

The evaluation and control of performance completes the strategic management model. Based on performance results, management may need to make adjustments in its strategy formulation, in implementation, or in both. (Evaluation and control is discussed in more detail in **Chapter 11**.)

## FEEDBACK/LEARNING PROCESS

Note that the strategic management model depicted in **Figure 1–2** includes a feedback/learning process. Arrows are drawn coming out of each part of the model and taking information to each of the previous parts of the model. As a firm or business unit develops strategies, programs, and the like, it often must go back to revise or correct decisions made earlier in the process. For example, poor performance (as measured in evaluation and control) usually indicates that something has gone wrong with either strategy formulation or implementation. It could also mean that a key variable, such as a new competitor, was ignored during environmental scanning and assessment. In the case of Dell, the personal computer market had matured and by 2007 there were fewer growth opportunities available within the industry. Even Jim Cramer, host of the popular television program, *Mad Money*, was referring to computers in 2008 as "old technology" having few growth prospects. Dell's management needed to re-assess the company's environment and find better opportunities to profitably apply its core competencies.

## Initiation of Strategy: Triggering Events

After much research, most often an irregular process, but also there are an irregular process or a personal

1.6

Mintzberg discovered that strategy formulation is typically not a regular, continuous process: "It is a discontinuous process, proceeding in fits and starts. There are periods of stability in strategy development, flux, of groping, of piecemeal change, and of global change."<sup>72</sup> This view of strategy formulation is explained by the very human tendency to continue on a particular course of action until something goes wrong or a person questions his or her actions. This period of strategic drift may result from inertia on the part of the organization, or it may reflect management's belief that the current strategy is still appropriate and needs only some fine-tuning.

Most large organizations tend to follow a particular strategic orientation for about 15 to 20 years before making a significant change in direction.<sup>73</sup> This phenomenon, called *punctuated equilibrium*, describes corporations as evolving through relatively long periods of stability (equilibrium periods) punctuated by relatively short bursts of fundamental change (revolutionary periods).<sup>74</sup> After this rather long period of fine-tuning an existing strategy, some sort of shock to the system is needed to motivate management to seriously reassess the corporation's situation.


A **triggering event** is something that acts as a stimulus for a change in strategy. Some possible triggering events are:<sup>75</sup>

- ◆ **New CEO:** By asking a series of embarrassing questions, a new CEO cuts through the veil of complacency and forces people to question the very reason for the corporation's existence.
- ◆ **External intervention:** A firm's bank suddenly refuses to approve a new loan or suddenly demands payment in full on an old one. A key customer complains about a serious product defect.
- ◆ **Threat of a change in ownership:** Another firm may initiate a takeover by buying a company's common stock.
- ◆ **Performance gap:** A *performance gap* exists when performance does not meet expectations. Sales and profits either are no longer increasing or may even be falling.
- ◆ **Strategic inflection point:** Coined by Andy Grove, past-CEO of Intel Corporation, a *strategic inflection point* is what happens to a business when a major change takes place due to the introduction of new technologies, a different regulatory environment, a change in customers' values, or a change in what customers prefer.<sup>76</sup>

Unilever is an example of one company in which a triggering event forced management to radically rethink what it was doing. See **Strategy Highlight 1.2** to learn how a slumping stock price stimulated a change in strategy at Unilever.

## STRATEGY highlight 1.2

### TRIGGERING EVENT AT UNILEVER



Unilever, the second largest consumer goods company, had decades of operating in almost every country in the world, the company, however, fell in 2007 when its stock price fell sharply. When its stock price fell sharply, the company had become fat with unnecessary bureaucracy after management had and complexity. Unilever's traditional emphasis on the autonomy of its country managers had led to a lack of synergy and a duplication of corporate structures. Country managers had been making strategic decisions without regard for their effect on other regions or on the corporation as a whole. Starting at the top, two joint chairmen were replaced by one sole chief executive. In China, three companies were replaced by one. In India, three companies were replaced by one. Overall staff was cut by 25%. Unilever's management planned to eliminate 75 of its 300 factories and to reduce its Indian subsidiary from 20% to 13%. An in-depth review of Unilever's brands revealed that its brands were selected to be eliminated over a four-year period. Something else was wrong. According to Richard Rivers, Unilever's head of corporate division, exhibited confidence that after these changes, the company was better prepared to face competition. "We were just not executing as well as we should have," he stated. "We are much better organized now to defend ourselves," he stated. Over

SOURCE: Summarized from "The Legacy that Got Left on the Shelf," *The Economist* (February 2, 2008), pp. 77–79.

# Strategic 1.7 Decision Making

The distinguishing characteristic of strategic management is its emphasis on strategic decision making. As organizations grow larger and more complex, with more uncertain environments, decisions become increasingly complicated and difficult to make. In agreement with the strategic choice perspective mentioned earlier, this book proposes a strategic decision-making framework that can help people make these decisions regardless of their level and function in the corporation.

## WHAT MAKES A DECISION STRATEGIC

Unlike many other decisions, **strategic decisions** deal with the long-run future of an entire organization and have three characteristics:

1. **Rare:** Strategic decisions are unusual and typically have no precedent to follow.
2. **Consequential:** Strategic decisions commit substantial resources and demand a great deal of commitment from people at all levels.
3. **Directive:** Strategic decisions set precedents for lesser decisions and future actions throughout an organization.<sup>77</sup>

One example of a strategic decision with all of these characteristics was that made by Genentech, a biotechnology company that had been founded in 1976 to produce protein-based drugs from cloned genes. After building sales to \$9 billion and profits to \$2 billion in 2006, the company's sales growth slowed and its stock price dropped in 2007. The company's products were reaching maturity with few new ones in the pipeline. To regain revenue growth, management decided to target autoimmune diseases, such as multiple sclerosis, rheumatoid arthritis, lupus, and 80 other ailments for which there was no known lasting treatment. This was an enormous opportunity, but also a very large risk for the company. Existing drugs in this area either weren't effective for many patients or caused side effects that were worse than the disease. Competition from companies like Amgen and Novartis were already vying for leadership in this area. A number of Genentech's first attempts in the area had failed to do well against the competition.

The strategic decision to commit resources to this new area was based on a report from a British physician that the Genentech's cancer drug Rituxan eased the agony of rheumatoid arthritis in five of his patients. CEO Arthur Levinson was so impressed with this report that he immediately informed Genentech's board of directors. He urged them to support a full research program for Rituxan in autoimmune disease. With the board's blessing, Levinson launched a program to study the drug as a treatment for rheumatoid arthritis, MS, and lupus. The company deployed a third of its 1,000 researchers to pursue new drugs to fight autoimmune diseases. In 2006, Rituxan was approved to treat rheumatoid arthritis and captured 10% of the market. The company was working on some completely new approaches to autoimmune disease. The research mandate was to consider ideas others might overlook. "There's this tremendous herd instinct out there," said Levinson. "That's a great opportunity, because often the crowd is wrong."<sup>78</sup>

## MINTZBERG'S MODES OF STRATEGIC DECISION MAKING

Some strategic decisions are made in a flash by one person (often an entrepreneur or a powerful chief executive officer) who has a brilliant insight and is quickly able to convince others to adopt his or her idea. Other strategic decisions seem to develop out of a series of small incremental choices that over time push an organization more in one direction than another.



According to Henry Mintzberg, the three most typical approaches, or modes, of strategic decision making are entrepreneurial, adaptive, and planning (a fourth mode, logical incrementalism, was added later by Quinn):<sup>79</sup>

- ◆ **Entrepreneurial mode:** Strategy is made by one powerful individual. The focus is on opportunities; problems are secondary. Strategy is guided by the founder's own vision of direction and is exemplified by large, bold decisions. The dominant goal is growth of the corporation. Amazon.com, founded by Jeff Bezos, is an example of this mode of strategic decision making. The company reflected Bezos' vision of using the Internet to market books and more. Although Amazon's clear growth strategy was certainly an advantage of the entrepreneurial mode, Bezos' eccentric management style made it difficult to retain senior executives.<sup>80</sup>
- ◆ **Adaptive mode:** Sometimes referred to as "muddling through," this decision-making mode is characterized by reactive solutions to existing problems, rather than a proactive search for new opportunities. Much bargaining goes on concerning priorities of objectives. Strategy is fragmented and is developed to move a corporation forward incrementally. This mode is typical of most universities, many large hospitals, a large number of governmental agencies, and a surprising number of large corporations. Encyclopaedia Britannica Inc., operated successfully for many years in this mode, but it continued to rely on the door-to-door selling of its prestigious books long after dual-career couples made that marketing approach obsolete. Only after it was acquired in 1996 did the company change its door-to-door sales to television advertising and Internet marketing. The company now charges libraries and individual subscribers for complete access to Britannica.com and offers CD-ROMs in addition to a small number of its 32-volume print set.<sup>81</sup>
- ◆ **Planning mode:** This decision-making mode involves the systematic gathering of appropriate information for situation analysis, the generation of feasible alternative strategies, and the rational selection of the most appropriate strategy. It includes both the proactive search for new opportunities and the reactive solution of existing problems. IBM under CEO Louis Gerstner is an example of the planning mode. When Gerstner accepted the position of CEO in 1993, he realized that IBM was in serious difficulty. Mainframe computers, the company's primary product line, were suffering a rapid decline both in sales and market share. One of Gerstner's first actions was to convene a two-day meeting on corporate strategy with senior executives. An in-depth analysis of IBM's product lines revealed that the only part of the company that was growing was services, but it was a relatively small segment and not very profitable. Rather than focusing on making and selling its own computer hardware, IBM made the strategic decision to invest in services that integrated information technology. IBM thus decided to provide a complete set of services from building systems to defining architecture to actually running and managing the computers for the customer—regardless of who made the products. Because it was no longer important that the company be completely vertically integrated, it sold off its DRAM, disk-drive, and laptop computer businesses and exited software application development. Since making this strategic decision in 1993, 80% of IBM's revenue growth has come from services.<sup>82</sup>
- ◆ **Logical incrementalism:** A fourth decision-making mode can be viewed as a synthesis of the planning, adaptive, and, to a lesser extent, the entrepreneurial modes. In this mode,

top management has a reasonably clear idea of the corporation's mission and objectives, but, in its development of strategies, it chooses to use "an interactive process in which the organization probes the future, experiments and learns from a series of partial (incremental) commitments rather than through global formulations of total strategies."<sup>83</sup> Thus, although the mission and objectives are set, the strategy is allowed to emerge out of debate, discussion, and experimentation. This approach appears to be useful when the environment is changing rapidly and when it is important to build consensus and develop needed resources before committing an entire corporation to a specific strategy. In his analysis of the petroleum industry, Grant described strategic planning in this industry as "planned emergence." Corporate headquarters established the mission and objectives but allowed the business units to propose strategies to achieve them.<sup>84</sup>

## STRATEGIC DECISION-MAKING PROCESS: AID TO BETTER DECISIONS

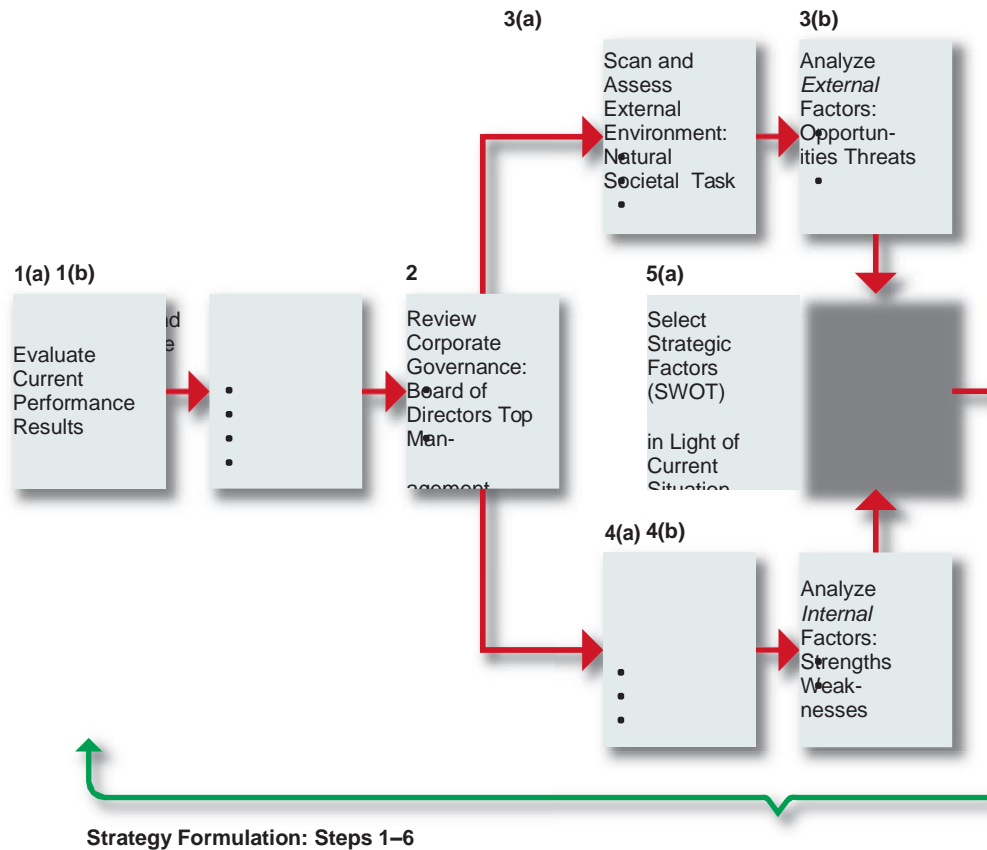
Good arguments can be made for using either the entrepreneurial or adaptive modes (or logical incrementalism) in certain situations.<sup>85</sup> This book proposes, however, that in most situations the planning mode, which includes the basic elements of the strategic management process, is a more rational and thus better way of making strategic decisions. Research indicates that the planning mode is not only more analytical and less political than are the other modes, but it is also more appropriate for dealing with complex, changing environments.<sup>86</sup> We therefore propose the following eight-step **strategic decision-making process** to improve the making of strategic decisions (see **Figure 1–5**):

1. **Evaluate current performance results** in terms of (a) return on investment, profitability, and so forth, and (b) the current mission, objectives, strategies, and policies.
2. **Review corporate governance**—that is, the performance of the firm's board of directors and top management.
3. **Scan and assess the external environment** to determine the strategic factors that pose Opportunities and Threats.
4. **Scan and assess the internal corporate environment** to determine the strategic factors that are Strengths (especially core competencies) and Weaknesses.
5. **Analyze strategic (SWOT) factors** to (a) pinpoint problem areas and (b) review and revise the corporate mission and objectives, as necessary.
6. **Generate, evaluate, and select the best alternative strategy** in light of the analysis conducted in step 5.
7. **Implement selected strategies** via programs, budgets, and procedures.
8. **Evaluate implemented strategies** via feedback systems, and the control of activities to ensure their minimum deviation from plans.

This rational approach to strategic decision making has been used successfully by corporations such as Warner-Lambert, Target, General Electric, IBM, Avon Products, Bechtel Group Inc., and Taisei Corporation.

FIGURE 1-5  
Strategic Decision- Making  
Process

Scan and  
Assess  
Internal  
Environment:  
Structure  
Culture  
Resources

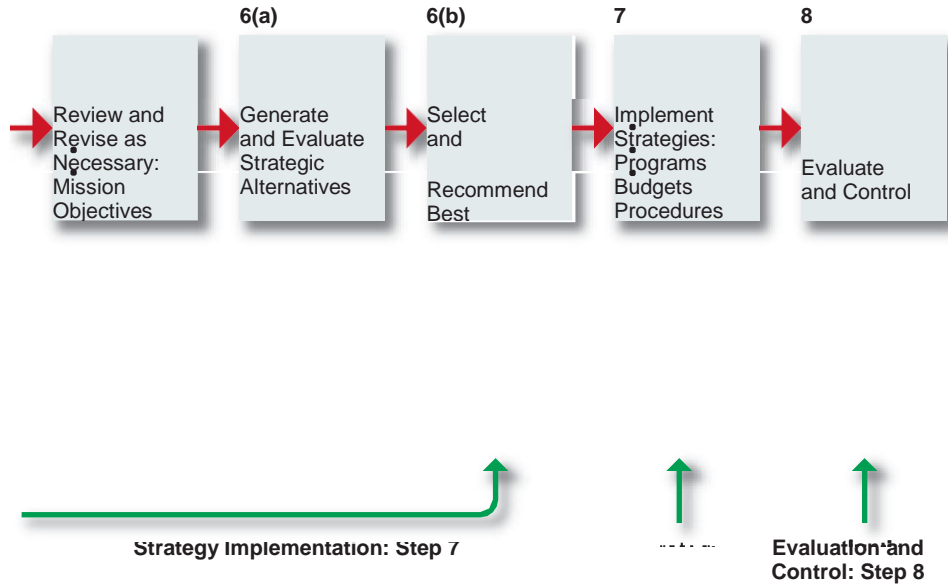


SOURCE: T. L. Wheelen and J. D. Hunger, *Strategic Decision-Making Process*. Copyright © 1994 and 1997 by Wheelen & Hunger Associates. Reprinted by permission.

## The Strategic Audit: Aid to Strategic Decision-Making

The strategic decision-making process is put into action through a technique known as the strategic audit. A **strategic audit** provides a checklist of questions, by area or issue, that enables a systematic analysis to be made of various corporate functions and activities. (See **Appendix 1.A** at the end of this chapter.) Note that the numbered primary headings in the audit are the same as the numbered blocks in the strategic decision-making process in **Figure 1-5**. Beginning with an evaluation of current performance, the audit continues with environmental scanning, strategy formulation, and strategy implementation, and it concludes with evaluation and control. A strategic audit is a type of management audit and is extremely useful as a diagnostic tool to pinpoint corporate-wide problem areas and to highlight organizational strengths and weaknesses.<sup>87</sup> A strategic audit can help determine why a certain area is creating problems for a corporation and help generate solutions to the problem. A strategic audit is not an all-inclusive list, but it presents many of the critical questions needed for a detailed strategic analysis of any business corporation. Some questions or even some areas might be inappropriate for a particular company; in other cases, the questions may

5(b)



be insufficient for a complete analysis. However, each question in a particular area of a strategic audit can be broken down into an additional series of sub-questions. An analyst can develop these sub-questions when they are needed for a complete strategic analysis of a company.

## End of Chapter SUMMARY

Strategy scholars Donald Hambrick and James Fredrickson propose that a good strategy has five elements, providing answers to five

1. Arenas: Where will we be active?
2. Vehicles: How will we get there?
3. Differentiators: How will we win in the marketplace?
4. Staging: What will be our speed and sequence of moves?
5. Economic logic: How will we obtain our returns?<sup>88</sup>

This chapter introduces you to a well-accepted model of strategic management (**Figure 1–2**) in which environmental scanning leads to strategy formulation, strategy implementation, and evaluation and control. It further shows how that model can be put into action

through the strategic decision-making process (**Figure 1–5**) and a strategic audit (**Appendix 1.A**). As pointed out by Hambrick and Fredrickson, “strategy consists of an integrated set of choices.”<sup>89</sup> The questions “Where will we be active?” and “How will we get there?” are dealt with by a company’s mission, objectives, and corporate strategy. The question “How will we win in the marketplace?” is the concern of business strategy. The question “What will be our speed and sequence of moves?” is answered not only by business strategy and tactics but also by functional strategy and by implemented programs, budgets, and procedures. The question “How will we obtain our returns?” is the primary emphasis of the evaluation and control element of the strategic management model. Each of these questions and topics will be dealt with in greater detail in the chapters to come. Welcome to the study of strategic management!

# environmental scanning and Industry Analysis

The Arctic is undergoing an extraordinary transformation—a transformation that will have global impact not only on wildlife, but upon many countries and a number of industries. Some of the most significant environmental changes are retreating sea ice, melting glaciers, thawing permafrost, increasing coastal erosion, and shifting vegetation zones. The average temperature of the Arctic has risen

at twice the rate of the rest of the planet. According to *Impacts of a Warming Arctic: Arctic Climate Impact Assessment*, a 2004 report by the eight-nation Arctic Council, the melting of the area's highly reflective snow and sea ice is uncovering darker land and ocean surfaces, further increasing the absorption of the sun's heat. Reductions in Arctic sea ice will drastically shrink marine habitats for polar bears, ice seals, and some seabirds. The warming of the tundra will likely boost greenhouse gases by releasing long-stored quantities of methane and carbon dioxide.

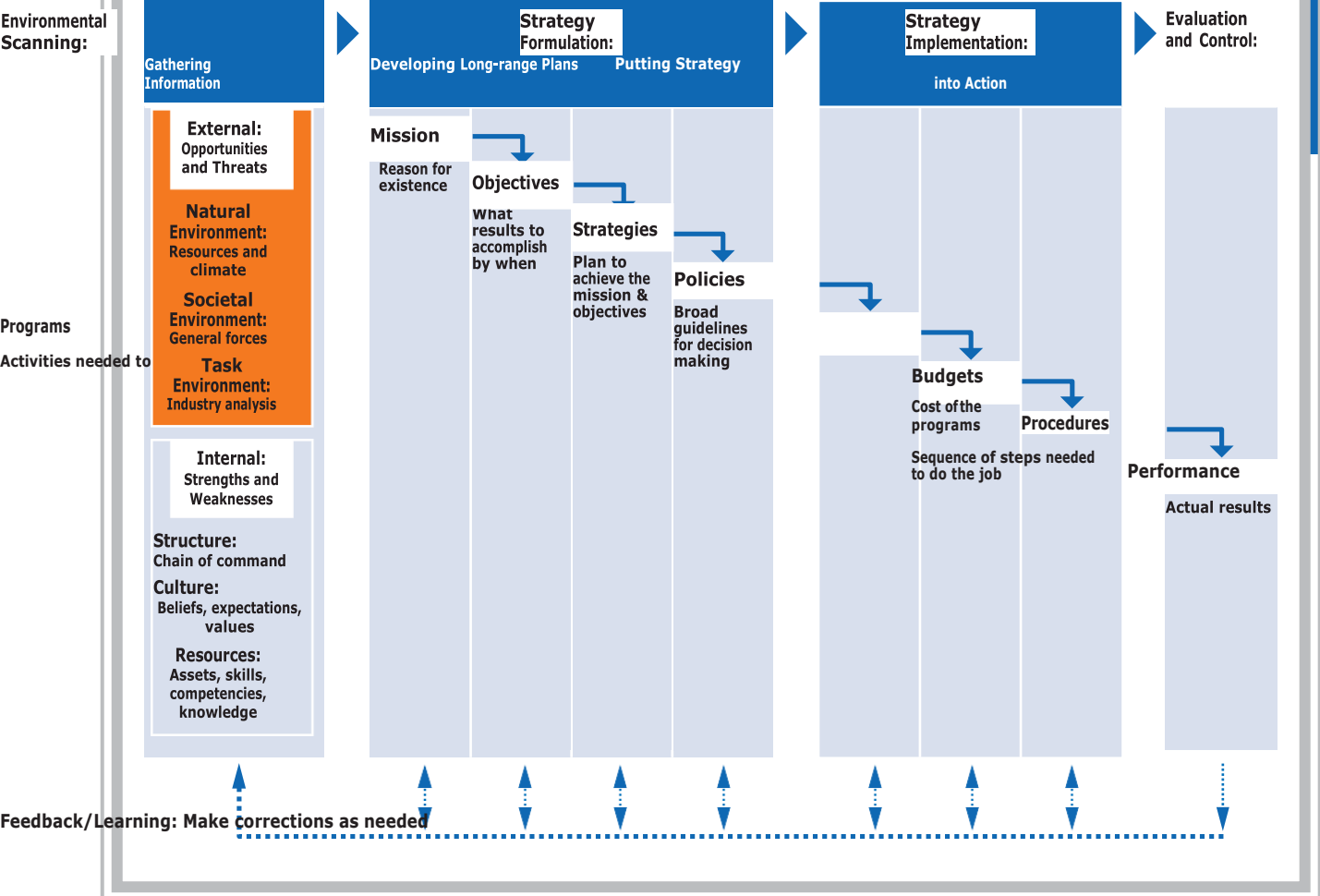
In addition to containing a large percentage of the world's water as ice, the Arctic is a large storehouse of natural resources. Given that the Arctic Ocean could be ice-free in the summer by 2040, countries bordering the Arctic are already positioning themselves for exploitation of these resources. Lawson Brigham, Alaska Office Director of the U.S. Arctic Research Commission and a former chief of strategic planning for the U.S. Coast Guard, examined how regional warming will affect transportation systems, resource development, indigenous Arctic peoples, regional environmental degradation and protection schemes, and overall geopolitical issues. From this, he proposes four possible scenarios for the Arctic in 2040:

1. **Globalized frontier:** In this scenario, the Arctic by 2040 has become an integral component of the global economic system, but is itself a semi-lawless frontier with participants jockeying for control. The summer sea ice has completely disappeared for a two-week period, allowing greater marine access and commercial shipping throughout the area. The famous "Northwest Passage" dreamed by 16th century navigators is now a reality. Rising prices for oil, natural gas, nickel, copper, zinc, and freshwater in conjunction with an easily accessible and less-harsh climate have made Arctic natural resource exploitation economically viable. Even though overfishing has reduced fish stocks, Arctic tourism is flourishing. By now, well-worn oil and gas pipelines in western Siberia and Alaska are experiencing recurring serious

# Learning Objectives

After reading this chapter, you should be able to:

- ◆ Recognize aspects of an organization's environment that can influence its long-term decisions
- ◆ Identify the aspects of an organization's environment that are most strategically important
- ◆ Conduct an industry analysis to understand the competitive forces that influence the intensity of rivalry within an industry
- ◆ Understand how industry maturity affects industry competitive forces
- ◆ Categorize international industries based on their pressures for coordination and local responsiveness
- ◆ Construct strategic group maps to assess the competitive positions of firms in an industry
- ◆ Identify key success factors and develop an industry matrix
- ◆ Use publicly available information to conduct competitive intelligence
- ◆ Know how to develop an industry scenario
- ◆ Be able to construct an EFAS table that summarizes external environmental factors



spills. By 2020, Canada, Denmark (Greenland), Norway, Russia, and the United States had asserted their sovereignty over sea bed resources beyond 200 nautical miles—leaving only two small regions in the central Arctic Ocean under international jurisdiction. Environmental concerns that once fostered polar cooperation have been replaced by economic and political interests. The protection, development, and governance of the Svalbard Islands became a problem when Russia refused to recognize Norway's 200-nautical mile exclusive economic zone around the islands. Issues regarding freedom of navigation and commercial access rights are highly contentious. The eight permanent members of the Arctic Council have increasingly excluded outside participation in the Council's deliberations.

2. **Adaptive frontier:** In this scenario, the Arctic in 2040 is being drawn much more slowly into the global economy. The area is viewed as an international resource. Competition among the Arctic countries for control of the region's resources never grew beyond a low level and the region is the scene of international cooperation among many international stakeholders. The indigenous peoples throughout the area have organized and now have significant influence over decisions relating to regional environmental protection and economic development. The exploitation of Arctic oil and gas is restricted to the few key areas that are most cost-competitive. Air and water transportation systems flourish throughout the area. Commercially viable fishing has continued, thanks to stringent harvesting quotas and other bilateral agreements. The Arctic Council is a proactive forum resolving several disputes and engaging the indigenous peoples in all deliberations. Nevertheless, the impact of global warming on the Arctic is widespread and serious. Contingency planning for manmade and natural emergencies is advanced and well coordinated. Sustainable development is widely supported by most stakeholders. The Arctic region has become a model for habitat protection. Arctic national parks have expanded modestly and adapted to deal with increased tourism.
3. **Fortress frontier:** In this scenario, widespread resource exploitation and increased international tension exist throughout the Arctic. The region is viewed by much of the global community as a storehouse of natural resources that is being jealously guarded by a handful of wealthy circumpolar nations. Although the Arctic is part of the global economic system, any linkage is controlled by the most powerful Arctic countries for their own benefit. By 2040, the Arctic is undergoing extreme environmental stress, as global warming continues unabated. Many indigenous peoples have been displaced from their traditional homelands due to extreme environmental events. Illegal immigration becomes an issue in many subarctic regions. Although air and marine transportation routes are open, foreign access has been periodically suspended for political or security reasons. Russia and Canada, in particular, continue to tightly control marine access through the Northern Sea Route and Northwest Passage. Fishing rights have been suspended to all but the Arctic countries. Oil and gas exploration and production has intensified throughout the Arctic. The Svalbard Islands, claimed



by Norway, have been a source of potential conflict over access to living and nonliving resources. Norway, Russia, and the United States have increased military forces in the region. Rather than dealing with sustainable development, the Arctic Council focuses on economic and security concerns, such as illegal immigrants and controlling the flow of exports from the Arctic consortium. Early in the 21st century, the five countries bordering the Arctic declared their sovereignty over resources beyond 200 nautical miles to the edge of the continental shelf extensions. By 2030, the Arctic Council unilaterally took jurisdiction over the two small regions that remained within international jurisdiction. Arctic tourism thrives, since many other traditional destinations are experiencing turmoil and a shortage of necessities.

- 4. Equitable frontier:** In this scenario, the Arctic is integrated with the global economic system by 2040, but international concern for sustainable development has slowed the region's economic development. Mutual respect and cooperation among the circum-polar nations allows for the development of a respected Arctic governance system. Even though the world is working hard to reduce greenhouse gas emissions, the Arctic continues to warm. Transport user fees and other eco-taxes are used to support endangered wildlife and impacted indigenous communities. The growth of the Northern Sea Route and Northwest Passage has enabled significant efficiencies in commercial shipping. Canada and Russia have maintained stringent marine regulations that emphasize environmental protection. Despite differences over freedom of navigation, the United States, Canada, and Russia have negotiated an agreement that allows a seamless voyage around Alaska and through the routes under a uniform set of operational procedures. The Arctic Council has created regional disaster teams to respond to maritime and other emergencies. Boundary disputes have been resolved and fishing rights have been allocated to various nations. The University of the Arctic has brought quality online education to easy reach of all northern citizens. The Arctic Council has brokered an agreement to allow 30,000 environmental refugees to settle in subarctic territories. Oil exploration and production in the Arctic has slowed considerably. Arctic tourism continues its steady growth, prompting national and regional parliaments to establish additional wilderness lands funded by tourist fees. There is low military presence in the region, thanks to the diplomatic efforts of the Arctic Council.

The Arctic is a complex, but relatively small region. These four scenarios suggest how climate change combined with a growing need for natural resources might impact this region and the world.<sup>1</sup>

- ◆ Which of the four preceding scenarios is most likely?
- ◆ Which industries are likely to be affected (either positively or negatively) by the warming of the Arctic?
- ◆ If in an affected industry, how could a business corporation prepare for each of these scenarios?

A changing environment can help as well as hurt a company. Many pioneering companies have gone out of business because of their failure to adapt to environmental change or, even worse, because of their failure to create change. For example, Baldwin Locomotive, the major manufacturer of steam locomotives, was very slow in making the switch to diesel locomotives. General Electric and General Motors soon dominated the diesel locomotive business and Baldwin went out of business. The dominant manufacturers of vacuum tubes failed to make the change to transistors and consequently lost this market. Eastman Kodak, the pioneer and market leader of chemical-based film photography, continues to struggle with its transition to the newer digital technology. Failure to adapt is, however, only one side of the coin. The aforementioned Arctic warming example shows how a changing environment can create new opportunities at the same time it destroys old ones. The lesson is simple: To be successful over time, an organization needs to be in tune with its external environment. There must be a strategic fit between what the environment wants and what the corporation has to offer, as well as between what the corporation needs and what the environment can provide.

Current predictions are that the environment for all organizations will become even more uncertain with every passing year. What is **environmental uncertainty**? It is the *degree of complexity* plus the *degree of change* that exists in an organization's external environment. As more and more markets become global, the number of factors a company must consider in any decision becomes huge and much more complex. With new technologies being discovered every year, markets change and products must change with them.

On the one hand, environmental uncertainty is a threat to strategic managers because it hampers their ability to develop long-range plans and to make strategic decisions to keep the corporation in equilibrium with its external environment. On the other hand, environmental uncertainty is an opportunity because it creates a new playing field in which creativity and innovation can play a major part in strategic decisions.

## Environmental Scanning

### 4.1

Before an organization can begin strategy formulation, it must scan the external environment to identify possible opportunities and threats and the internal environment for strengths and weaknesses. **Environmental scanning** is the monitoring, evaluation, and dissemination of information from the external and internal environments to key people within the corporation. A corporation uses this tool to avoid strategic surprise and to ensure its long-term health. Research has found a positive relationship between environmental scanning and profits.<sup>2</sup> Approximately 70% of executives around the world state that global social, environmental, and business trends are increasingly important to corporate strategy, according to a 2008 survey by McKinsey & Company.<sup>3</sup>

## IDENTIFYING EXTERNAL ENVIRONMENTAL VARIABLES

In undertaking environmental scanning, strategic managers must first be aware of the many variables within a corporation's natural, societal, and task environments (see **Figure 1–3**). The

**natural environment** includes physical resources, wildlife, and climate that are an inherent part of existence on Earth. These factors form an ecological system of interrelated life. The **societal environment** is mankind's social system that includes general forces that do not directly touch on the short-run activities of the organization that can, and often do, influence its long-run decisions. These factors affect multiple industries and are as follows:

- ◆ **Economic forces** that regulate the exchange of materials, money, energy, and information.
- ◆ **Technological forces** that generate problem-solving inventions.
- ◆ **Political–legal forces** that allocate power and provide constraining and protecting laws and regulations.
- ◆ **Sociocultural forces** that regulate the values, mores, and customs of society.

The **task environment** includes those elements or groups that directly affect a corporation and, in turn, are affected by it. These are governments, local communities, suppliers, competitors, customers, creditors, employees/labor unions, special-interest groups, and trade associations. A corporation's task environment is typically the industry within which the firm operates. **Industry analysis** (popularized by Michael Porter) refers to an in-depth examination of key factors within a corporation's task environment. The natural, societal, and task environments must be monitored to detect the strategic factors that are likely in the future to have a strong impact on corporate success or failure. Changes in the natural environment usually affect a business corporation first through its impact on the societal environment in terms of resource availability and costs and then upon the task environment in terms of the growth or decline of particular industries.

### Scanning the Natural Environment

The natural environment includes physical resources, wildlife, and climate that are an inherent part of existence on Earth. Until the 20th century, the natural environment was generally perceived by business people to be a given—something to exploit, not conserve. It was viewed as a free resource, something to be taken or fought over, like arable land, diamond mines, deep water harbors, or fresh water. Once they were controlled by a person or entity, these resources were considered assets and thus valued as part of the general economic system—a resource to be bought, sold, or sometimes shared. Side effects, such as pollution, were considered to be *externalities*, costs not included in a business firm's accounting system, but felt by others. Eventually these externalities were identified by governments, which passed regulations to force business corporations to deal with the side effects of their activities.

The concept of sustainability argues that a firm's ability to continuously renew itself for long-term success and survival is dependent not only upon the greater economic and social system of which it is a part, but also upon the natural ecosystem in which the firm is embedded.<sup>4</sup> A business corporation must thus scan the natural environment for factors that might previously have been taken for granted, such as the availability of fresh water and clean air. Global warming means that aspects of the natural environment, such as sea level, weather, and climate, are becoming increasingly uncertain and difficult to predict. Management must therefore scan not only the natural environment for possible strategic factors, but also include in its strategic decision-making processes the impact of its activities upon the natural environment. In a world concerned with global warming, a company should measure and reduce its *carbon footprint*—the amount of greenhouse gases it is emitting into the air. Research reveals that scanning the market for environmental issues is positively related to firm performance because it helps management identify opportunities to fulfill future market demand based upon environmentally friendly products or processes.<sup>5</sup> See the **Environmental Sustainability Issue** feature to learn how individuals can also measure and shrink their personal carbon footprints.

# ENVIRONMENTAL sustainability issue

## MEASURING AND SHRINKING YOUR PERSONAL CARBON FOOTPRINT

As people become more "green," that is more conscious of environmental sustainability, they wonder what they can do as individuals to reduce the emission of greenhouse gases. This is an important issue given that a typical American produces more than 20 tons of carbon dioxide annually—a very large carbon footprint. Even a homeless American has a carbon footprint of 8.5 tons, more than twice the global average! The first problem for concerned individuals is finding a way to measure the size of their own carbon footprint. The second problem is developing feasible programs to reduce that footprint in some meaningful way.

The Web site *carbonrally.com* solves these problems by presenting competitive environmental challenges and keeping score by translating green actions into pounds of carbon dioxide averted. For instance, cutting the time of a daily shower by two minutes a month reduces CO<sub>2</sub> emissions by 15.3 pounds. According to Kelsey Schroeder, who has logged savings of more than 1,000 pounds of emissions, "This has been a great motivational technique. We just want to keep going and see if we can do better." How does Carbonrally calculate someone's carbon footprint? Since everything a person does that is powered by fossil fuels has a carbon dioxide cost, many activities have the potential of being counted. Commuting in a gasoline powered car has obvious carbon costs, but so does eating a hamburger. livestock are responsible for an esti-

SOURCES: B. Walsh and T. Sharples, "Sizing Up Carbon Footprints," *Time* (May 26, 2008), pp. 53–55 and [www.carbonrally.com](http://www.carbonrally.com).

## Scanning the Societal Environment: STEEP Analysis

The number of possible strategic factors in the societal environment is very high. The number becomes enormous when we realize that, generally speaking, each country in the world can be represented by its own unique set of societal forces—some of which are very similar to those of neighboring countries and some of which are very different.

For example, even though Korea and China share Asia's Pacific Rim area with Thailand, Taiwan, and Hong Kong (sharing many similar cultural values), they have very different views about the role of business in society. It is generally believed in Korea and China (and to a lesser extent in Japan) that the role of business is primarily to contribute to national development; however in Hong Kong, Taiwan, and Thailand (and to a lesser extent in the Philippines, Indonesia, Singapore, and Malaysia), the role of business is primarily to make profits for the shareholders.<sup>6</sup> Such differences may translate into different trade regulations and varying difficulty in the *repatriation of profits* (the transfer of profits from a foreign subsidiary to a corporation's headquarters) from one group of Pacific Rim countries to another.

**STEEP Analysis: Monitoring Trends in the Societal and Natural Environments.** As shown in **Table 4–1**, large corporations categorize the societal environment in any one geographic region into four areas and focus their scanning in each area on trends that have corporatwide relevance. By including trends from the natural environment, this scanning can be called **STEEP Analysis**, the scanning of Sociocultural, Technological, Economic, Ecological, and Political-legal environmental forces.<sup>7</sup> (It may also be called *PESTEL Analysis* for Political, Economic, Sociocultural, Technological, Ecological, and Legal forces.) Obviously, trends in any one area may be very important to firms in one industry but of lesser importance to firms in other industries.

Trends in the *economic* part of the societal environment can have an obvious impact on business activity. For example, an increase in interest rates means fewer sales of major home appliances. Why? A rising interest rate tends to be reflected in higher mortgage rates. Because higher mortgage rates increase the cost of buying a house, the demand for new and used houses tends to fall. Because most major home appliances are sold when people change houses, a reduction in house sales soon translates into a decline in sales of refrigerators, stoves, and dishwashers and reduced profits for everyone in the appliance industry. Changes in the price of oil have a similar impact upon multiple industries, from packaging and automobiles to hospital-ity and shipping.

The rapid economic development of Brazil, Russia, India, and China (often called the *BRIC* countries) is having a major impact on the rest of the world. By 2007, China had become the world's second-largest economy according to the World Bank. With India graduating more English-speaking scientists, engineers, and technicians than all other nations combined, it has become the primary location for the outsourcing of services, computer software, and telecommunications.<sup>8</sup> Eastern Europe has become a major manufacturing supplier to the European Union countries. According to the International Monetary Fund, emerging markets make up less than one-third of total world gross domestic product (GDP), but account for more than half of GDP growth.<sup>9</sup>

### Some Important Variables in the Societal Environment

Economic	Technological	Political-Legal	Sociocultural
GDP trends	Total government spending for R&D	Antitrust regulations	Lifestyle changes
Interest rates	Total industry spending for R&D	Environmental protection laws	Career expectations
Money supply	Focus of technological efforts	Global warming legislation	Consumer activism
Inflation rates	Patent protection	Immigration laws	Rate of family formation
Unemployment levels	New products	Tax laws	Growth rate of population
Wage/price controls	New developments in technology transfer from lab to marketplace	Special incentives Foreign trade regulations	Age distribution of population
Devaluation/revaluation	Productivity improvements through automation	Attitudes toward foreign companies	Regional shifts in population
Energy alternatives	Internet availability	Laws on hiring and promotion	Life expectancies
Energy availability and cost	Telecommunication infrastructure	Stability of government	Birthrates Pension plans
Disposable and discretionary income	Computer hacking activity	Outsourcing regulation	Health care
Currency markets		Foreign "sweat shops"	Level of education
Global financial system			Living wage
			Unionization

Changes in the *technological* part of the societal environment can also have a great impact on multiple industries. Improvements in computer microprocessors have not only led to the widespread use of personal computers but also to better automobile engine performance in terms of power and fuel economy through the use of microprocessors to monitor fuel injection. Digital technology allows movies and music to be available instantly over the Internet or through cable service, but it also means falling fortunes for video rental shops such as the Movie Gallery and CD stores such as Tower Records. Advances in nanotechnology are enabling companies to manufacture extremely small devices that are very energy efficient. Developing biotechnology, including gene manipulation techniques, is already providing new approaches to dealing with disease and agriculture. Researchers at George Washington University have identified a number of technological breakthroughs that are already having a significant impact on many industries:

- ◆ **Portable information devices and electronic networking:** Combining the computing power of the personal computer, the networking of the Internet, the images of the television, and the convenience of the telephone, these appliances will soon be used by a majority of the population of industrialized nations to make phone calls, send e-mail, and transmit documents and other data. Even now, homes, autos, and offices are being connected (via wires and wirelessly) into intelligent networks that interact with one another. This trend is being supported by the development of *cloud computing*, in which a person can tap into computing power elsewhere through a Web connection.<sup>10</sup> The traditional stand-alone desktop computer may soon join the manual typewriter as a historical curiosity.
- ◆ **Alternative energy sources:** The use of wind, geothermal, hydroelectric, solar, biomass, and other alternative energy sources should increase considerably. Over the past two decades, the cost of manufacturing and installing a photovoltaic solar-power system has decreased by 20% with every doubling of installed capacity. The cost of generating electricity from conventional sources, in contrast, has been rising along with the price of petroleum and natural gas.<sup>11</sup>
- ◆ **Precision farming:** The computerized management of crops to suit variations in land characteristics will make farming more efficient and sustainable. Farm equipment dealers such as Case and John Deere add this equipment to tractors for an additional \$6,000 or so. It enables farmers to reduce costs, increase yields, and decrease environmental impact. The old system of small, low-tech farming is becoming less viable as large corporate farms increase crop yields on limited farmland for a growing population.
- ◆ **Virtual personal assistants:** Very smart computer programs that monitor e-mail, faxes, and phone calls will be able to take over routine tasks, such as writing a letter, retrieving a file, making a phone call, or screening requests. Acting like a secretary, a person's virtual assistant could substitute for a person at meetings or in dealing with routine actions.
- ◆ **Genetically altered organisms:** A convergence of biotechnology and agriculture is creating a new field of life sciences. Plant seeds can be genetically modified to produce more needed vitamins or to be less attractive to pests and more able to survive. Animals (including people) could be similarly modified for desirable characteristics and to eliminate genetic disabilities and diseases.
- ◆ **Smart, mobile robots:** Robot development has been limited by a lack of sensory devices and sophisticated artificial intelligence systems. Improvements in these areas mean that robots will be created to perform more sophisticated factory work, run errands, do household chores, and assist the disabled.<sup>12</sup>

Trends in the *political-legal* part of the societal environment have a significant impact not only on the level of competition within an industry but also on which strategies might be successful.<sup>13</sup> For example, periods of strict enforcement of U.S. antitrust laws directly affect corporate growth

strategy. As large companies find it more difficult to acquire another firm in the same or a related industry, they are typically driven to diversify into unrelated industries.<sup>14</sup> High levels of taxation and constraining labor laws in Western European countries stimulate companies to alter their competitive strategies or find better locations elsewhere. It is because Germany has some of the highest labor and tax costs in Europe that German companies have been forced to compete at the top end of the market with high-quality products or else move their manufacturing to lower-cost countries.<sup>15</sup> Government bureaucracy can create multiple regulations and make it almost impossible for a business firm to operate profitably in some countries. For example, the number of days needed to obtain the government approvals necessary to start a new business vary from only one day in Singapore to 14 in Mexico, 59 in Saudi Arabia, 87 in Indonesia, to 481 in the Congo.<sup>16</sup>

The \$66 trillion global economy operates through a set of rules established by the World Trade Organization (WTO). Composed of 153 member nations and 30 observer nations, the WTO is a forum for governments to negotiate trade agreements and settle trade disputes. Originally founded in 1947 as the General Agreement on Tariffs and Trade (GATT), the WTO was created in 1995 to extend the ground rules for international commerce. The system's purpose is to encourage free trade among nations with the least undesirable side effects. Among its principles is trade without discrimination. This is exemplified by its *most-favored nation* clause, which states that a country cannot grant a trading partner lower customs duties without granting them to all other WTO member nations. Another principle is that of lowering trade barriers gradually through negotiation. It implements this principle through a series of rounds of trade negotiations. As a result of these negotiations, industrial countries' tariff rates on industrial goods had fallen steadily to less than 4% by the mid-1990s. The WTO is currently negotiating its ninth round of negotiations, called the Doha Round. The WTO is also in favor of fair competition, predictability of member markets, and the encouragement of economic development and reform. As a result of many negotiations, developed nations have started to allow duty-free and quota-free imports from almost all products from the least-developed countries.<sup>17</sup> Demographic trends are part of the *sociocultural* aspect of the societal environment. Even though the world's population is growing from 3.71 billion people in 1970 to 6.82 billion in 2010 to 8.72 billion by 2040, not all regions will grow equally. Most of the growth will be in the developing nations. The population of the developed nations will fall from 14% of the total world population in 2000 to only 10% in 2050.<sup>18</sup> Around 75% of the world will live in a city by 2050 compared to little more than half in 2008.<sup>19</sup> Developing nations will continue to have more young than old people, but it will be the reverse in the industrialized nations. For example, the demographic bulge in the U.S. population caused by the baby boom in the 1950s continues to affect market demand in many industries. This group of 77 million people now in their 50s and 60s is the largest age group in all developed countries, especially in Europe. (See Table 4–2.) Although the median age in the United States will rise from 35 in 2000 to 40 by 2050, it will increase from 40 to 47 during the same time period in Germany, and it will increase to 50 in Italy as soon as 2025.<sup>20</sup> By 2050, one in three Italians will be over 65, nearly

TABLE 4–2	Generation	Born	Age in 2005	Number
Current U.S. Generations	WWII/Silent Generation	1932–1945	60–73	32 million
	Baby Boomers	1946–1964	41–59	77 million
	Generation X	1965–1977	28–40	45 million
	Generation Y	1978–1994	11–27	70 million

SOURCE: Developed from data listed in D. Parkinson, *Voices of Experience: Mature Workers in the Future Work-force* (New York: The Conference Board, 2002), p. 19.

double the number in 2005.<sup>21</sup> With its low birthrate, Japan's population is expected to fall from

127.6 million in 2004 to around 100 million by 2050.<sup>22</sup> China's stringent birth control policy is causing the ratio of workers to retirees to fall from 20 to 1 during the early 1980s to 2.5 to one by 2020.<sup>23</sup> Companies with an eye on the future can find many opportunities to offer products and services to the growing number of "woofies" (well-off old folks—defined as people over 50 with money to spend).<sup>24</sup> These people are very likely to purchase recreational vehicles (RVs), take ocean cruises, and enjoy leisure sports, such as boating, fishing, and bowling, in addition to needing financial services and health care. Anticipating the needs of seniors for prescription drugs is one reason the Walgreen Company has been opening a new corner pharmacy every 19 hours!<sup>25</sup>

To attract older customers, retailers will need to place seats in their larger stores so aging shoppers can rest. Washrooms need to be more accessible. Signs need to be larger. Restaurants need to raise the level of lighting so people can read their menus. Home appliances need simpler and larger controls. Automobiles need larger door openings and more comfortable seats. Zimmer Holdings, an innovative manufacturer of artificial joints, is looking forward to its market growing rapidly over the next 20 years. According to J. Raymond Elliot, chair and CEO of Zimmer, "It's simple math. Our best years are still in front of us."<sup>26</sup>

Eight current sociocultural trends are transforming North America and the rest of the world:

1. **Increasing environmental awareness:** Recycling and conservation are becoming more than slogans. Busch Gardens, for example, has eliminated the use of disposable styrofoam trays in favor of washing and reusing plastic trays.
2. **Growing health consciousness:** Concerns about personal health fuel the trend toward physical fitness and healthier living. As a result, sales growth is slowing at fast-food "burgers and fries" retailers such as McDonald's. Changing public tastes away from sugar-laden processed foods forced Interstate Bakeries, the maker of Twinkies and Wonder Bread, to declare bankruptcy in 2004. In 2008, the French government was considering increasing sales taxes on extra-fatty, salty, or sugary products.<sup>27</sup> The European Union forbade the importation of genetically altered grain ("Frankenfood") because of possible side effects. The spread of AIDS to more than 40 million people worldwide adds even further impetus to the health movement.
3. **Expanding seniors market:** As their numbers increase, people over age 55 will become an even more important market. Already some companies are segmenting the senior population into Young Matures, Older Matures, and the Elderly—each having a different set of attitudes and interests. Both mature segments, for example, are good markets for the health care and tourism industries; whereas, the elderly are the key market for long-term care facilities. The desire for companionship by people whose children are grown is causing the pet care industry to grow 4.5% annually in the United States. In 2007, for example, 71.1 million households in the U.S. spent \$41 billion on their pets—more than the gross domestic product of all but 16 countries in the world.<sup>28</sup>
4. **Impact of Generation Y Boomlet:** Born between 1978 and 1994 to the baby boom and X generations, this cohort is almost as large as the baby boom generation. In 1957, the peak year of the postwar boom, 4.3 million babies were born. In 1990, there were 4.2 million births in Generation Y's peak year. By 2000, they were overcrowding elementary and high schools and entering college in numbers not seen since the baby boomers. Now in its teens and 20s, this cohort is expected to have a strong impact on future products and services.
5. **Declining mass market:** Niche markets are defining the marketers' environment. People want products and services that are adapted more to their personal needs. For example, Estée Lauder's "All Skin" and Maybelline's "Shades of You" lines of cosmetic products are specifically made for African-American women. "Mass customization"—the making



and marketing of products tailored to a person's requirements (Dell for example, and Gateway computers)—is replacing the mass production and marketing of the same product in some markets. Only 10% of the 6,200 magazines sold in the United States in 2004 were aimed at the mass market, down from 30% in the 1970s.<sup>29</sup>

6. **Changing pace and location of life:** Instant communication via e-mail, cell phones, and overnight mail enhances efficiency, but it also puts more pressure on people. Merging the personal computer with the communication and entertainment industries through telephone lines, satellite dishes, and cable television increases consumers' choices and allows workers to leave overcrowded urban areas for small towns and telecommute via personal computers and modems.
7. **Changing household composition:** Single-person households, especially those of single women with children, could soon become the most common household type in the United States. Married-couple households slipped from nearly 80% in the 1950s to 50.7% of all households in 2002.<sup>30</sup> By 2007, for the first time in U.S. history, more than half of women were single.<sup>31</sup> Thirty-eight percent of U.S. children are currently being born out of wedlock.<sup>32</sup> A typical family household is no longer the same as it was once portrayed in *The Brady Bunch* in the 1970s or *The Cosby Show* in the 1980s.
8. **Increasing diversity of workforce and markets:** Between now and 2050, minorities will account for nearly 90% of population growth in the United States. Over time, group percentages of the total United States population are expected to change as follows: Non-Hispanic Whites—from 90% in 1950 to 74% in 1995 to 53% by 2050; Hispanic Whites—from 9% in 1995 to 22% in 2050; Blacks—from 13% in 1995 to 15% in 2050; Asians—from 4% in 1995 to 9% in 2050; American Indians—1%, with slight increase.<sup>33</sup> Heavy immigration from the developing to the developed nations is increasing the number of minorities in all developed countries and forcing an acceptance of the value of diversity in races, religions, and life style. For example, 24% of the Swiss population was born elsewhere.<sup>34</sup> Traditional minority groups are increasing their numbers in the workforce and are being identified as desirable target markets. For example, Sears, Roebuck transformed 97 of its stores in October 2004 into “multicultural stores” containing fashion lines for Hispanic, African-American, and Asian shoppers.<sup>35</sup>

**International Societal Considerations.** Each country or group of countries in which a company operates presents a unique societal environment with a different set of economic, technological, political–legal, and sociocultural variables for the company to face. International societal environments vary so widely that a corporation's internal environment and strategic management process must be very flexible. Cultural trends in Germany, for example, have resulted in the inclusion of worker representatives in corporate strategic planning. Because Islamic law (*sharia*) forbids interest (*riba*), loans of capital in Islamic countries must be arranged on the basis of profit-sharing instead of interest rates.<sup>36</sup>

Differences in societal environments strongly affect the ways in which a **multinational corporation (MNC)**, a company with significant assets and activities in multiple countries, conducts its marketing, financial, manufacturing, and other functional activities. For example, Europe's lower labor productivity, due to a shorter work week and restrictions on the ability to lay off unproductive workers, forces European-based MNCs to expand operations in countries where labor is cheaper and productivity is higher.<sup>37</sup> Moving manufacturing to a lower-cost location, such as China, was a successful strategy during the 1990s, but a country's labor costs rise as it develops economically. For example, China required all firms in January 2008 to consult employees on material work-related issues, enabling the country to achieve its stated objective of having trade unions in all of China's non-state-owned enterprises. By September 2008, the All-China Federation of Trade Unions had signed with 80% of the largest foreign companies.<sup>38</sup>

To account for the many differences among societal environments from one country to another, consider **Table 4–3**. It includes a list of economic, technological, political–legal, and sociocultural variables for any particular country or region. For example, an important economic variable for any firm investing in a foreign country is currency convertibility. Without convertibility, a company operating in Russia cannot convert its profits from rubles to dollars or euros. In terms of sociocultural variables, many Asian cultures (especially China) are less concerned with the values of human rights than are European and North American cultures. Some Asians actually contend that U.S. companies are trying to impose Western human rights requirements on them in an attempt to make Asian products less competitive by raising their costs.<sup>39</sup>

Before planning its strategy for a particular international location, a company must scan the particular country environment(s) in question for opportunities and threats, and it must compare those with its own organizational strengths and weaknesses. Focusing only on the developed nations may cause a corporation to miss important market opportunities in the developing nations of the world. Although those nations may not have developed to the point that they have significant demand for a broad spectrum of products, they may very likely be on the threshold of rapid growth in the demand for specific products like cell phones. This would be the ideal time for a company to enter this market—before competition is established. The key is to be able to identify the *trigger point* when demand for a particular product or service is ready to boom. See the **Global Issue** boxed highlight for an in-depth explanation of a technique to identify the optimum time to enter a particular market in a developing nation.


**Creating a Scanning System.** How can anyone monitor and keep track of all the trends and factors in the worldwide societal environment? With the existence of the Internet, it is now possible to scan the entire world. Nevertheless, the vast amount of raw data makes scanning

Some Important Variables in *International* Societal Environments

Economic	Technological	Political-Legal	Sociocultural
Economic development	Regulations on technology transfer	Form of government	Customs, norms, values
Per capita income	Energy availability/cost	Political ideology Tax laws	Language
Climate	Natural resource availability	Stability of government	Demographics
GDP trends	Transportation network	Government attitude toward foreign companies	Life expectancies
Monetary and fiscal policies	Skill level of workforce Patent-trademark protection	Regulations on foreign ownership of assets	Social institutions
Unemployment levels	Internet availability	Strength of opposition groups	Status symbols
Currency convertibility	Telecommunication infrastructure	Trade regulations	Lifestyle
Wage levels	Computer hacking technology	Protectionist sentiment	Religious beliefs
Nature of competition	New energy sources	Foreign policies	Attitudes toward foreigners
Membership in regional economic associations, e.g., EU, NAFTA, ASEAN		Terrorist activity	Literacy level
Membership in World Trade Organization (WTO)		Legal system	Human rights
		Global warming laws	Environmentalism
		Immigration laws	“Sweat shops”
			Pension plans
			Health care
			Slavery

# GLOBAL issue

## IDENTIFYING POTENTIAL MARKETS IN DEVELOPING NATIONS



Research by the Deloitte & Touche Consulting Group reveals that the demand for a specific product increases exponentially at certain points where the demand would effectively increase the Mexican GDP by \$5 million to \$10 million. Using PPP, China becomes the world's second-largest economy after the United States, followed by Japan, India, and Germany.

Identifying this trigger point of demand is thus critical to entering emerging markets at the best time. A *trigger point* is the time when enough people have enough money to buy what a company has to sell but before competition is established. This can be determined by using the concept of *purchasing power parity (PPP)*, which measures the cost in dollars of the U.S.–produced equivalent volume of goods that an economy produces.

PPP offers an estimate of the material wealth a nation can purchase, rather than the financial wealth it creates as typically measured by Gross Domestic Product (GDP). As a result, restating a nation's GDP in PPP terms reveals much greater spending power than market exchange rates would suggest. For example, a shoe shine costing \$5 to \$10 in New York City can be purchased for 50¢ in Mexico City. Consequently the people of Mexico City can enjoy the same standard of living (with respect to shoe shines) as people in New York City with only 5% to 10% of the money. Correcting for PPP restates all Mexican shoe shines at their U.S. purchase value of \$5.

Identifying this trigger point identifies when demand for a particular product is about to rapidly increase in a country. Identifying a trigger point can be a very useful technique for determining when to enter a new market in a developing nation. Trigger points vary for different products. For example, an apparent trigger point for long-distance telephone services is at \$7,500 in GDP per capita—a point when demand for telecommunications services increases rapidly. Once national wealth surpasses \$15,000 per capita, demand increases at a much slower rate with further increases in wealth. The trigger point for life insurance is around \$8,000 in GDP per capita. At this point, the demand for life insurance increases between 200% and 300% above those countries with GDP per capita below the trigger point.

SOURCE: D. Fraser and M. Raynor, "The Power of Parity," *Forecast* (May/June, 1996), pp. 8–12; "A Survey of the World Economy: The Dragon and the Eagle," Special Insert, *Economist* (October 2, 2004), p. 8; "The Big Mac Index: Food for Thought," *Economist* (May 29, 2004), pp. 71–72.

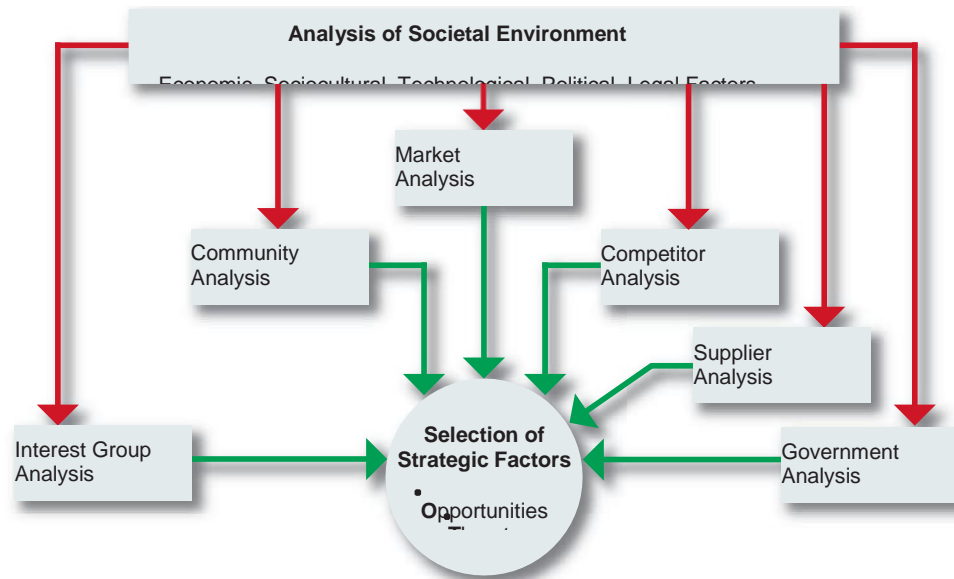
for information similar to drinking from a fire hose. It is a daunting task for even a large corporation with many resources. To deal with this problem, in 2002 IBM created a tool called *WebFountain* to help the company analyze the vast amounts of environmental data available on the Internet. WebFountain is an advanced information discovery system designed to help extract trends, detect patterns, and find relationships within vast amounts of raw data. For example, IBM sought to learn whether there was a trend toward more positive discussions about e-business. Within a week, the company had data that experts within the company used to replace their hunches with valid conclusions. The company uses WebFountain to:

- ◆ Locate negative publicity or investor discontent
- ◆ Track general trends
- ◆ Learn competitive information
- ◆ Identify emerging competitive threats
- ◆ Unravel consumer attitudes<sup>40</sup>

### Scanning the Task Environment

As shown in **Figure 4–1**, a corporation's scanning of the environment includes analyses of all the relevant elements in the task environment. These analyses take the form of individual reports written by various people in different parts of the firm. At Procter & Gamble (P&G), for

FIGURE 4-1  
Scanning External  
Environment



example, people from each of the brand management teams work with key people from the sales and market research departments to research and write a “competitive activity report” each quarter on each of the product categories in which P&G competes. People in purchasing also write similar reports concerning new developments in the industries that supply P&G. These and other reports are then summarized and transmitted up the corporate hierarchy for top management to use in strategic decision making. If a new development is reported regarding a particular product category, top management may then send memos asking people throughout the organization to watch for and report on developments in related product areas. The many reports resulting from these scanning efforts, when boiled down to their essentials, act as a detailed list of external strategic factors.

## IDENTIFYING EXTERNAL STRATEGIC FACTORS

The origin of competitive advantage lies in the ability to identify and respond to environmental change well in advance of competition.<sup>41</sup> Although this seems obvious, why are some companies better able to adapt than others? One reason is because of differences in the ability of managers to recognize and understand external strategic issues and factors. For example, in a global survey conducted by the Fuld-Gilad-Herring Academy of Competitive Intelligence, two-thirds of 140 corporate strategists admitted that their firms had been surprised by as many as three high-impact events in the past five years. Moreover, as recently as 2003, 97% stated that their companies had no early warning system in place.<sup>42</sup>

No firm can successfully monitor all external factors. Choices must be made regarding which factors are important and which are not. Even though managers agree that strategic importance determines what variables are consistently tracked, they sometimes miss or choose to ignore crucial new developments.<sup>43</sup> Personal values and functional experiences of a corporation’s managers as well as the success of current strategies are likely to bias both their perception of what is important to monitor in the external environment and their interpretations of what they perceive.<sup>44</sup>

This willingness to reject unfamiliar as well as negative information is called *strategic myopia*.<sup>45</sup> If a firm needs to change its strategy, it might not be gathering the appropriate external

**FIGURE 4-2 Probable Impact on Corporation**  
Issues Priority Matrix

	High	Medium	Low
High	High Priority	High Priority	Medium Priority
Medium	High Priority	Medium Priority	Low Priority
Low	Medium Priority	Low Priority	Low Priority

SOURCE: Reprinted from Long-Range Planning, Vol. 17, No. 3, 1984, Campbell, "Foresight Activities in the U.S.A.: Time for a Re-Assessment?" p. 46. Copyright © 1984 with permission from Elsevier.

information to change strategies successfully. For example, when Daniel Hesse became CEO of Sprint Nextel in December 2007, he assumed that improving customer service would be one of his biggest challenges. He quickly discovered that none of the current Sprint Nextel executives were even thinking about the topic. "We weren't talking about the customer when I first joined," said Hesse. "Now this is the No. 1 priority of the company."<sup>46</sup>

One way to identify and analyze developments in the external environment is to use the **issues priority matrix** (see **Figure 4-2**) as follows:

1. Identify a number of likely trends emerging in the natural, societal, and task environments. These are strategic environmental issues—those important trends that, if they occur, determine what the industry or the world will look like in the near future.
2. Assess the probability of these trends actually occurring, from low to medium to high.
3. Attempt to ascertain the likely impact (from low to high) of each of these trends on the corporation being examined.

A corporation's *external strategic factors* are the key environmental trends that are judged to have both a medium to high probability of occurrence and a medium to high probability of impact on the corporation. The issues priority matrix can then be used to help managers decide which environmental trends should be merely scanned (low priority) and which should be monitored as strategic factors (high priority). Those environmental trends judged to be a corporation's strategic factors are then categorized as opportunities and threats and are included in strategy formulation.

## Industry Analysis: Analyzing the Task Environment

An **industry** is a group of the important industry analysis

4.2

that produces a similar product or service, such as soft drinks or financial services. An examination of groups, such as suppliers and customers, in a particular corporation's task environment is a part of

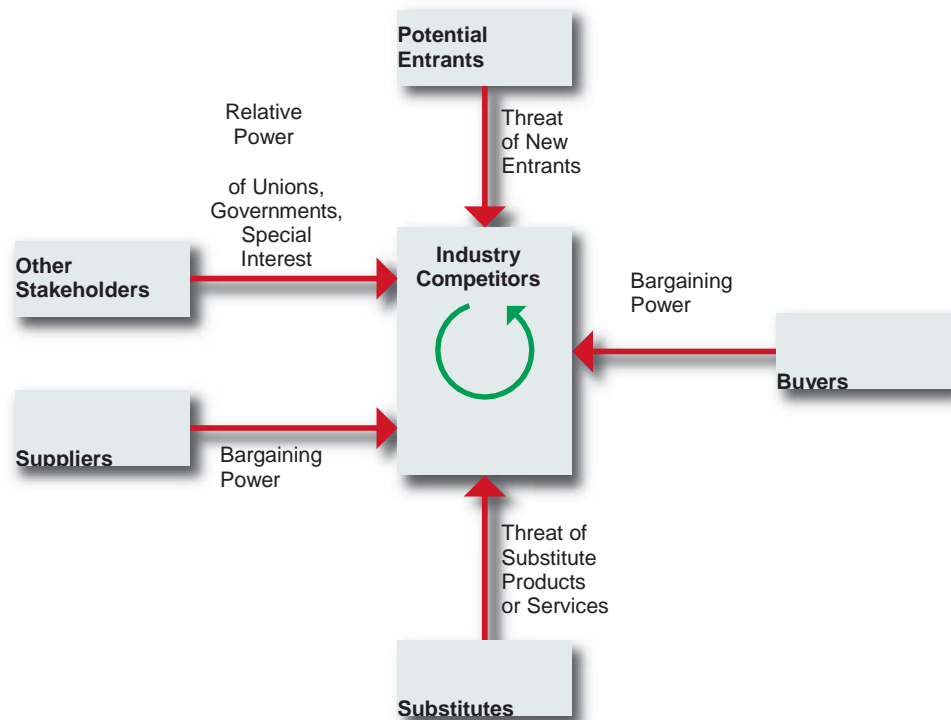
## PORTER'S APPROACH TO INDUSTRY ANALYSIS

Michael Porter, an authority on competitive strategy, contends that a corporation is most concerned with the intensity of competition within its industry. The level of this intensity is determined by basic competitive forces, as depicted in **Figure 4-3**. “The collective strength of these forces,” he contends, “determines the ultimate profit potential in the industry, where profit potential is measured in terms of long-run return on invested capital.”<sup>47</sup> In carefully scanning its industry, a corporation must assess the importance to its success of each of six forces: threat of new entrants, rivalry among existing firms, threat of substitute products or services, bargaining power of buyers, bargaining power of suppliers, and relative power of other stakeholders.<sup>48</sup> The stronger each of these forces, the more limited companies are in their ability to raise prices and earn greater profits. Although Porter mentions only five forces, a sixth—other stakeholders—is added here to reflect the power that governments, local communities, and other groups from the task environment wield over industry activities.

Using the model in **Figure 4-3**, a high force can be regarded as a threat because it is likely to reduce profits. A low force, in contrast, can be viewed as an opportunity because it may allow the company to earn greater profits. In the short run, these forces act as constraints on a company's activities. In the long run, however, it may be possible for a company, through its choice of strategy, to change the strength of one or more of the forces to the company's advantage. For example, Dell's early use of the Internet to market its computers was an effective way to negate the bargaining power of distributors in the PC industry.

A strategist can analyze any industry by rating each competitive force as high, medium, or low in strength. For example, the global athletic shoe industry could be rated as follows:

**FIGURE 4-3**  
Forces Driving  
Industry Competition



SOURCE: Reprinted with the permission of The Free Press, A Division of Simon & Schuster, from *COMPETITIVE ADVANTAGE: Techniques for Analyzing Industries and Competitors* by Michael E. Porter. Copyright © 1980, 1988 by The Free Press. All rights reserved.

rivalry is high (Nike, Reebok, New Balance, Converse, and Adidas are strong competitors worldwide), threat of potential entrants is low (the industry has reached maturity/sales growth rate has slowed), threat of substitutes is low (other shoes don't provide support for sports activities), bargaining power of suppliers is medium but rising (suppliers in Asian countries are increasing in size and ability), bargaining power of buyers is medium but increasing (prices are falling as the low-priced shoe market has grown to be half of the U.S. branded athletic shoe market), and threat of other stakeholders is medium to high (government regulations and human rights concerns are growing). Based on current trends in each of these competitive forces, the industry's level of competitive intensity will continue to be high—meaning that sales increases and profit margins should continue to be modest for the industry as a whole.<sup>49</sup>

### Threat of New Entrants

**New entrants** to an industry typically bring to it new capacity, a desire to gain market share, and substantial resources. They are, therefore, threats to an established corporation. The threat of entry depends on the presence of entry barriers and the reaction that can be expected from existing competitors. An **entry barrier** is an obstruction that makes it difficult for a company to enter an industry. For example, no new domestic automobile companies have been successfully established in the United States since the 1930s because of the high capital requirements to build production facilities and to develop a dealer distribution network. Some of the possible barriers to entry are:

- ◆ **Economies of scale:** Scale economies in the production and sale of microprocessors, for example, gave Intel a significant cost advantage over any new rival.
- ◆ **Product differentiation:** Corporations such as Procter & Gamble and General Mills, which manufacture products such as Tide and Cheerios, create high entry barriers through their high levels of advertising and promotion.
- ◆ **Capital requirements:** The need to invest huge financial resources in manufacturing facilities in order to produce large commercial airplanes creates a significant barrier to entry to any competitor for Boeing and Airbus.
- ◆ **Switching costs:** Once a software program such as Excel or Word becomes established in an office, office managers are very reluctant to switch to a new program because of the high training costs.
- ◆ **Access to distribution channels:** Small entrepreneurs often have difficulty obtaining supermarket shelf space for their goods because large retailers charge for space on their shelves and give priority to the established firms who can pay for the advertising needed to generate high customer demand.
- ◆ **Cost disadvantages independent of size:** Once a new product earns sufficient market share to be accepted as the *standard* for that type of product, the maker has a key advantage. Microsoft's development of the first widely adopted operating system (MS-DOS) for the IBM-type personal computer gave it a significant competitive advantage over potential competitors. Its introduction of Windows helped to cement that advantage so that the Microsoft operating system is now on more than 90% of personal computers worldwide.
- ◆ **Government policy:** Governments can limit entry into an industry through licensing requirements by restricting access to raw materials, such as oil-drilling sites in protected areas.

### Rivalry among Existing Firms

In most industries, corporations are mutually dependent. A competitive move by one firm can be expected to have a noticeable effect on its competitors and thus may cause retaliation. For

example, the entry by mail order companies such as Dell and Gateway into a PC industry previously dominated by IBM, Apple, and Compaq increased the level of competitive activity to such an extent that any price reduction or new product introduction was quickly followed by similar moves from other PC makers. The same is true of prices in the United States airline industry. According to Porter, intense rivalry is related to the presence of several factors, including:

- ◆ **Number of competitors:** When competitors are few and roughly equal in size, such as in the auto and major home appliance industries, they watch each other carefully to make sure that they match any move by another firm with an equal countermove.
- ◆ **Rate of industry growth:** Any slowing in passenger traffic tends to set off price wars in the airline industry because the only path to growth is to take sales away from a competitor.
- ◆ **Product or service characteristics:** A product can be very unique, with many qualities differentiating it from others of its kind or it may be a *commodity*, a product whose characteristics are the same, regardless of who sells it. For example, most people choose a gas station based on location and pricing because they view gasoline as a commodity.
- ◆ **Amount of fixed costs:** Because airlines must fly their planes on a schedule, regardless of the number of paying passengers for any one flight, they offer cheap standby fares whenever a plane has empty seats.
- ◆ **Capacity:** If the only way a manufacturer can increase capacity is in a large increment by building a new plant (as in the paper industry), it will run that new plant at full capacity to keep its unit costs as low as possible—thus producing so much that the selling price falls throughout the industry.
- ◆ **Height of exit barriers:** **Exit barriers** keep a company from leaving an industry. The brewing industry, for example, has a low percentage of companies that voluntarily leave the industry because breweries are specialized assets with few uses except for making beer.
- ◆ **Diversity of rivals:** Rivals that have very different ideas of how to compete are likely to cross paths often and unknowingly challenge each other's position. This happens often in the retail clothing industry when a number of retailers open outlets in the same location—thus taking sales away from each other. This is also likely to happen in some countries or regions when multinational corporations compete in an increasingly global economy.

### Threat of Substitute Products or Services

A **substitute product** is a product that appears to be different but can satisfy the same need as another product. For example, e-mail is a substitute for the fax, Nutrasweet is a substitute for sugar, the Internet is a substitute for video stores, and bottled water is a substitute for a cola. According to Porter, “Substitutes limit the potential returns of an industry by placing a ceiling on the prices firms in the industry can profitably charge.”<sup>50</sup> To the extent that switching costs are low, substitutes may have a strong effect on an industry. Tea can be considered a substitute for coffee. If the price of coffee goes up high enough, coffee drinkers will slowly begin switching to tea. The price of tea thus puts a price ceiling on the price of coffee. Sometimes a difficult task, the identification of possible substitute products or services means searching for products or services that can perform the same function, even though they have a different appearance and may not appear to be easily substitutable.

### Bargaining Power of Buyers

Buyers affect an industry through their ability to force down prices, bargain for higher quality or more services, and play competitors against each other. A buyer or a group of buyers is powerful if some of the following factors hold true:



- ◆ A buyer purchases a large proportion of the seller's product or service (for example, oil filters purchased by a major auto maker).
- ◆ A buyer has the potential to integrate backward by producing the product itself (for example, a newspaper chain could make its own paper).
- ◆ Alternative suppliers are plentiful because the product is standard or undifferentiated (for example, motorists can choose among many gas stations).
- ◆ Changing suppliers costs very little (for example, office supplies are easy to find).
- ◆ The purchased product represents a high percentage of a buyer's costs, thus providing an incentive to shop around for a lower price (for example, gasoline purchased for resale by convenience stores makes up half their total costs).
- ◆ A buyer earns low profits and is thus very sensitive to costs and service differences (for example, grocery stores have very small margins).
- ◆ The purchased product is unimportant to the final quality or price of a buyer's products or services and thus can be easily substituted without affecting the final product adversely (for example, electric wire bought for use in lamps).

### Bargaining Power of Suppliers

Suppliers can affect an industry through their ability to raise prices or reduce the quality of purchased goods and services. A supplier or supplier group is powerful if some of the following factors apply:

- ◆ The supplier industry is dominated by a few companies, but it sells to many (for example, the petroleum industry).
- ◆ Its product or service is unique and/or it has built up switching costs (for example, word processing software).
- ◆ Substitutes are not readily available (for example, electricity).
- ◆ Suppliers are able to integrate forward and compete directly with their present customers (for example, a microprocessor producer such as Intel can make PCs).
- ◆ A purchasing industry buys only a small portion of the supplier group's goods and services and is thus unimportant to the supplier (for example, sales of lawn mower tires are less important to the tire industry than are sales of auto tires).

### Relative Power of Other Stakeholders

A sixth force should be added to Porter's list to include a variety of stakeholder groups from the task environment. Some of these groups are governments (if not explicitly included elsewhere), local communities, creditors (if not included with suppliers), trade associations, special-interest groups, unions (if not included with suppliers), shareholders, and complementors. According to Andy Grove, Chairman and past CEO of Intel, a **complementor** is a company (e.g., Microsoft) or an industry whose product works well with a firm's (e.g., Intel's) product and without which the product would lose much of its value.<sup>51</sup> An example of complementary industries is the tire and automobile industries. Key international stakeholders who determine many of the international trade regulations and standards are the World Trade Organization, the European Union, NAFTA, ASEAN, and Mercosur.

The importance of these stakeholders varies by industry. For example, environmental groups in Maine, Michigan, Oregon, and Iowa successfully fought to pass bills outlawing disposable bottles and cans, and thus deposits for most drink containers are now required. This effectively raised costs across the board, with the most impact on the marginal producers who

could not internally absorb all these costs. The traditionally strong power of national unions in the United States' auto and railroad industries has effectively raised costs throughout these industries but is of little importance in computer software.

## INDUSTRY EVOLUTION

Over time, most industries evolve through a series of stages from growth through maturity to eventual decline. The strength of each of the six forces mentioned earlier varies according to the stage of industry evolution. The industry life cycle is useful for explaining and predicting trends among the six forces that drive industry competition. For example, when an industry is new, people often buy the product, regardless of price, because it fulfills a unique need. This usually occurs in a **fragmented industry**—where no firm has large market share, and each firm serves only a small piece of the total market in competition with others (for example, cleaning services).<sup>52</sup> As new competitors enter the industry, prices drop as a result of competition. Companies use the experience curve (discussed in **Chapter 5**) and economies of scale to reduce costs faster than the competition. Companies integrate to reduce costs even further by acquiring their suppliers and distributors. Competitors try to differentiate their products from one another's in order to avoid the fierce price competition common to a maturing industry.

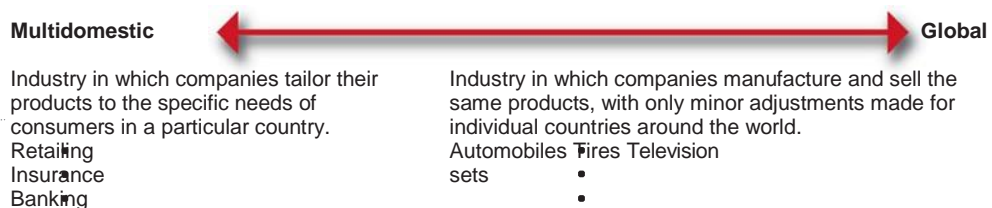
By the time an industry enters maturity, products tend to become more like commodities. This is now a **consolidated industry**—dominated by a few large firms, each of which struggles to differentiate its products from those of the competition. As buyers become more sophisticated over time, purchasing decisions are based on better information. Price becomes a dominant concern, given a minimum level of quality and features, and profit margins decline. The automobile, petroleum, and major home appliance industries are examples of mature, consolidated industries each controlled by a few large competitors. In the case of the United States major home appliance industry, the industry changed from being a fragmented industry (pure competition) composed of hundreds of appliance manufacturers in the industry's early years to a consolidated industry (mature oligopoly) composed of three companies controlling over 90% of United States appliance sales. A similar consolidation is occurring now in European major home appliances.

As an industry moves through maturity toward possible decline, its products' growth rate of sales slows and may even begin to decrease. To the extent that exit barriers are low, firms begin converting their facilities to alternate uses or sell them to other firms. The industry tends to consolidate around fewer but larger competitors. The tobacco industry is an example of an industry currently in decline.

## CATEGORIZING INTERNATIONAL INDUSTRIES

According to Porter, world industries vary on a continuum from multidomestic to global (see **Figure 4-4**).<sup>53</sup> **Multidomestic industries** are specific to each country or group of countries. This type of international industry is a collection of essentially domestic industries, such as

**FIGURE 4-4**  
Continuum  
of International  
Industries



retailing and insurance. The activities in a subsidiary of a multinational corporation (MNC) in this type of industry are essentially independent of the activities of the MNC's subsidiaries in other countries. Within each country, it has a manufacturing facility to produce goods for sale within that country. The MNC is thus able to tailor its products or services to the very specific needs of consumers in a particular country or group of countries having similar societal environments.

**Global industries**, in contrast, operate worldwide, with MNCs making only small adjustments for country-specific circumstances. In a global industry an MNC's activities in one country are significantly affected by its activities in other countries. MNCs in global industries produce products or services in various locations throughout the world and sell them, making only minor adjustments for specific country requirements. Examples of global industries are commercial aircraft, television sets, semiconductors, copiers, automobiles, watches, and tires. The largest industrial corporations in the world in terms of sales revenue are, for the most part, MNCs operating in global industries.

The factors that tend to determine whether an industry will be primarily multidomestic or primarily global are:

1. *Pressure for coordination* within the MNCs operating in that industry
2. *Pressure for local responsiveness* on the part of individual country markets

To the extent that the pressure for coordination is strong and the pressure for local responsiveness is weak for MNCs within a particular industry, that industry will tend to become global. In contrast, when the pressure for local responsiveness is strong and the pressure for coordination is weak for multinational corporations in an industry, that industry will tend to be multidomestic. Between these two extremes lie a number of industries with varying characteristics of both multidomestic and global industries. These are **regional industries**, in which MNCs primarily coordinate their activities within regions, such as the Americas or Asia.<sup>54</sup> The major home appliance industry is a current example of a regional industry becoming a global industry. Japanese appliance makers, for example, are major competitors in Asia, but only minor players in Europe or America. The dynamic tension between the pressure for coordination and the pressure for local responsiveness is contained in the phrase, “*Think globally but act locally.*”

## INTERNATIONAL RISK ASSESSMENT

Some firms develop elaborate information networks and computerized systems to evaluate and rank investment risks. Small companies may hire outside consultants, such as Boston's Arthur D. Little Inc., to provide political-risk assessments. Among the many systems that exist to assess political and economic risks are the Business Environment Risk Index, the Economist Intelligence Unit, and Frost and Sullivan's World Political Risk Forecasts. The Economist Intelligence Unit, for example, provides a constant flow of analysis and forecasts on more than 200 countries and eight key industries. Regardless of the source of data, a firm must develop its own method of assessing risk. It must decide on its most important risk factors and then assign weights to each.

## STRATEGIC GROUPS

A **strategic group** is a set of business units or firms that “pursue similar strategies with similar resources.”<sup>55</sup> Categorizing firms in any one industry into a set of strategic groups is very useful as a way of better understanding the competitive environment.<sup>56</sup> Research shows that some strategic groups in the same industry are more profitable than others.<sup>57</sup> Because a corporation's structure and culture tend to reflect the kinds of strategies it follows, companies or

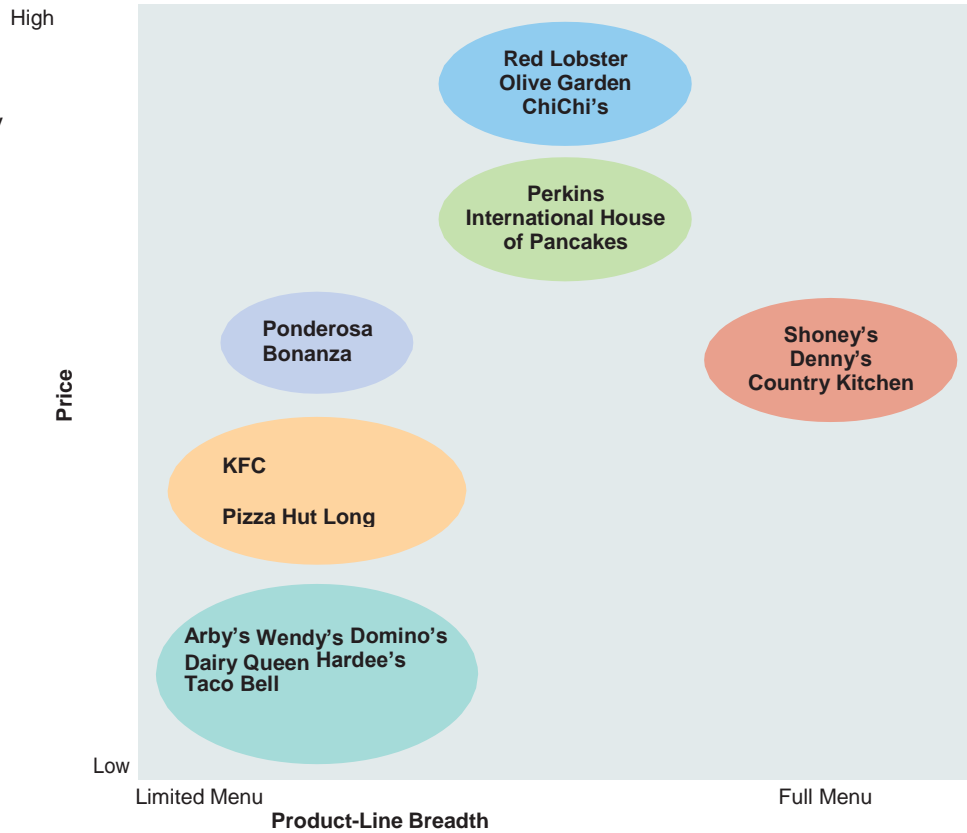
business units belonging to a particular strategic group within the same industry tend to be strong rivals and tend to be more similar to each other than to competitors in other strategic groups within the same industry.<sup>58</sup>

For example, although McDonald's and Olive Garden are a part of the same industry, the restaurant industry, they have different missions, objectives, and strategies, and thus they belong to different strategic groups. They generally have very little in common and pay little attention to each other when planning competitive actions. Burger King and Hardee's, however, have a great deal in common with McDonald's in terms of their similar strategy of producing a high volume of low-priced meals targeted for sale to the average family. Consequently, they are strong rivals and are organized to operate similarly.

Strategic groups in a particular industry can be mapped by plotting the market positions of industry competitors on a two-dimensional graph, using two strategic variables as the vertical and horizontal axes (See **Figure 4-5**):

1. Select two broad characteristics, such as price and menu, that differentiate the companies in an industry from one another.
2. Plot the firms, using these two characteristics as the dimensions.
3. Draw a circle around those companies that are closest to one another as one strategic group, varying the size of the circle in proportion to the group's share of total industry sales. (You could also name each strategic group in the restaurant industry with an identifying title, such as quick fast food or buffet-style service.)

**FIGURE 4-5**  
Mapping Strategic Groups  
in the  
U.S. Restaurant  
Chain Industry



Other dimensions, such as quality, service, location, or degree of vertical integration, could also be used in additional graphs of the restaurant industry to gain a better understanding of how the various firms in the industry compete. Keep in mind, however, that the two dimensions should not be highly correlated; otherwise, the circles on the map will simply lie along the diagonal, providing very little new information other than the obvious.

## STRATEGIC TYPES

In analyzing the level of competitive intensity within a particular industry or strategic group, it is useful to characterize the various competitors for predictive purposes. A **strategic type** is a category of firms based on a common strategic orientation and a combination of structure, culture, and processes consistent with that strategy. According to Miles and Snow, competing firms within a single industry can be categorized into one of four basic types on the basis of their general strategic orientation.<sup>59</sup> This distinction helps explain why companies facing similar situations behave differently and why they continue to do so over long periods of time.<sup>60</sup> These general types have the following characteristics:

- ◆ **Defenders** are companies with a limited product line that *focus on improving the efficiency of their existing operations*. This cost orientation makes them unlikely to innovate in new areas. With its emphasis on efficiency, Lincoln Electric is an example of a defender.
- ◆ **Prospectors** are companies with fairly broad product lines that *focus on product innovation and market opportunities*. This sales orientation makes them somewhat inefficient. They tend to emphasize creativity over efficiency. Rubbermaid's emphasis on new product development makes it an example of a prospector.
- ◆ **Analyzers** are corporations that *operate in at least two different product-market areas*, one stable and one variable. In the stable areas, efficiency is emphasized. In the variable areas, innovation is emphasized. Multidivisional firms, such as IBM and Procter & Gamble, which operate in multiple industries, tend to be analyzers.
- ◆ **Reactors** are corporations that *lack a consistent strategy-structure-culture relationship*. Their (often ineffective) responses to environmental pressures tend to be piecemeal strategic changes. Most major U.S. airlines have recently tended to be reactors—given the way they have been forced to respond to new entrants such as Southwest and JetBlue.

Dividing the competition into these four categories enables the strategic manager not only to monitor the effectiveness of certain strategic orientations, but also to develop scenarios of future industry developments (discussed later in this chapter).

## HYPERCOMPETITION

Most industries today are facing an ever-increasing level of environmental uncertainty. They are becoming more complex and more dynamic. Industries that used to be multidomestic are becoming global. New flexible, aggressive, innovative competitors are moving into established markets to rapidly erode the advantages of large previously dominant firms. Distribution channels vary from country to country and are being altered daily through the use of sophisticated information systems. Closer relationships with suppliers are being forged to reduce costs, increase quality, and gain access to new technology. Companies learn to quickly imitate the successful strategies of market leaders, and it becomes harder to sustain any competitive advantage for very long. Consequently, the level of competitive intensity is increasing in most industries.

Richard D’Aveni contends that as this type of environmental turbulence reaches more industries, competition becomes **hypercompetition**. According to D’Aveni:

*In hypercompetition the frequency, boldness, and aggressiveness of dynamic movement by the players accelerates to create a condition of constant disequilibrium and change. Market stability is threatened by short product life cycles, short product design cycles, new technologies, frequent entry by unexpected outsiders, repositioning by incumbents, and tactical redefinitions of market boundaries as diverse industries merge. In other words, environments escalate toward higher and higher levels of uncertainty, dynamism, heterogeneity of the players and hostility.<sup>61</sup>*


In hypercompetitive industries such as computers, competitive advantage comes from an up-to-date knowledge of environmental trends and competitive activity coupled with a willingness to risk a current advantage for a possible new advantage. Companies must be willing to *cannibalize* their own products (that is, replace popular products before competitors do so) in order to sustain their competitive advantage. See **Strategy Highlight 4.1** to learn how Microsoft is operating in the hypercompetitive industry of computer software. (Hypercompetition is discussed in more detail in **Chapter 6**.)

## USING KEY SUCCESS FACTORS TO CREATE AN INDUSTRY MATRIX

Within any industry there are usually certain variables—key success factors—that a company’s management must understand in order to be successful. **Key success factors** are variables that can significantly affect the overall competitive positions of companies within any particular industry. They typically vary from industry to industry and are crucial to determining a company’s ability to succeed within that industry. They are usually determined by the

### STRATEGY highlight 4.1

#### MICROSOFT IN A HYPERCOMPETITIVE INDUSTRY



Microsoft is a hypercompetitive firm operating in a hypercompetitive industry. It has used its dominance in operating systems (DOS and Windows) to Bill Gates, Microsoft’s co-founder, chair, and CEO, realized a very strong position in application programs such as word processing and spreadsheets (Word and Excel). Even with a better product, someone else would (such as Linux or IBM’s OS/2 Warp). He knew that success in the software operating systems in 1992, it still invested millions in developing the next generation—Windows 95 and Windows NT. These were moving aggressively to the next competitive advantage soon followed by Windows Me, XP, and Vista. Instead of trying to protect its advantage in the profitable DOS operating system, explained Gates. “Scale is not all positive in this business. Microsoft actively sought to replace DOS with various versions of Windows. Before hypercompetition, most experts argued against Microsoft still controlled over 90% of operating systems *cannibalization* of a company’s own product line because it destroys software and had achieved a dominant position in a very profitable product instead of harvesting it like a “cash cow.” applications software as well.

According to this line of thought, a company would be better off defending its older products. New products would be introduced only if it could be proven that they would not take sales away

SOURCE: Richard A. D’Aveni, “Hypercompetition: Managing the Dynamics of Strategic Maneuvering.” Copyright © 1994 by Richard A. D’Aveni. All rights reserved.

Industry Matrix **TABLE 4-4**

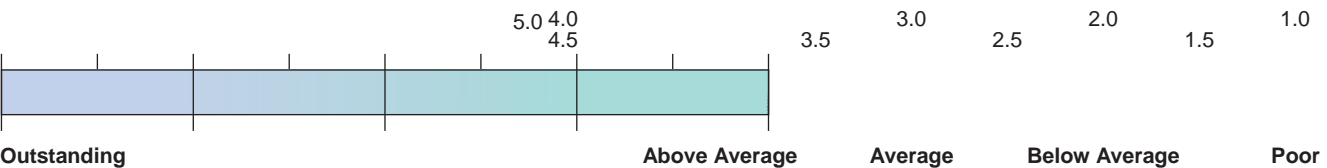
Key Success Factors	Weight	Company A Rating	Company A Weighted Score	Company B Rating	Company B Weighted Score	
	1	2	3	4	5	6
<b>Total</b>	<u>1.00</u>		==		==	

SOURCE: T. L. Wheelen and J. D. Hunger, *Industry Matrix*. Copyright © 1997, 2001, and 2005 by Wheelen & Hunger Associates. Reprinted with permission.

economic and technological characteristics of the industry and by the competitive weapons on which the firms in the industry have built their strategies.<sup>62</sup> For example, in the major home appliance industry, a firm must achieve low costs, typically by building large manufacturing facilities dedicated to making multiple versions of one type of appliance, such as washing machines. Because 60% of major home appliances in the United States are sold through “power retailers” such as Sears and Best Buy, a firm must have a strong presence in the mass merchandiser distribution channel. It must offer a full line of appliances and provide a just-in-time delivery system to keep store inventory and ordering costs to a minimum. Because the consumer expects reliability and durability in an appliance, a firm must have excellent process R&D. Any appliance manufacturer that is unable to deal successfully with these key success factors will not survive long in the U.S. market.

An **industry matrix** summarizes the key success factors within a particular industry. As shown in **Table 4-4**, the matrix gives a weight for each factor based on how important that factor is for success within the industry. The matrix also specifies how well various competitors in the industry are responding to each factor. To generate an industry matrix using two industry competitors (called A and B), complete the following steps for the industry being analyzed:

1. In **Column 1 (Key Success Factors)**, list the 8 to 10 factors that appear to determine success in the industry.
2. In **Column 2 (Weight)**, assign a weight to each factor, from **1.0 (Most Important)** to **0.0 (Not Important)** based on that factor’s probable impact on the overall industry’s current and future success. **(All weights must sum to 1.0 regardless of the number of strategic factors.)**
3. In **Column 3 (Company A Rating)**, examine a particular company within the industry—for example, Company A. Assign a rating to each factor from **5 (Outstanding)** to **1 (Poor)** based on Company A’s current response to that particular factor. Each rating is a judgment regarding how well that company is specifically dealing with each key success factor.



4. In **Column 4 (Company A Weighted Score)**, multiply the weight in **Column 2** for each factor by its rating in **Column 3** to obtain that factor’s weighted score for Company A.

5. In **Column 5 (Company B Rating)**, examine a second company within the industry - in this case, Company B. Assign a rating to each key success factor from **5.0 (Outstanding)** to **1.0 (Poor)**, based on Company B's current response to each particular factor.
6. In **Column 6 (Company B Weighted Score)**, multiply the weight in **Column 2** for each factor times its rating in **Column 5** to obtain that factor's weighted score for Company B.
7. Finally, add the weighted scores for all the factors in **Columns 4 and 6** to determine the total weighted scores for companies A and B. **The total weighted score indicates how well each company is responding to current and expected key success factors in the industry's environment.** Check to ensure that the total weighted score truly reflects the company's current performance in terms of profitability and market share. (An average company should have a total weighted score of 3.)

The industry matrix can be expanded to include all the major competitors within an industry through the addition of two additional columns for each additional competitor.

## Com 4.3 Intelligence

Much external scanning is done on an informal and individual basis. Information is obtained from a variety of sources—suppliers, customers, industry publications, employees, industry experts, industry conferences, and the Internet.<sup>63</sup> For example, scientists and engineers working in a firm's R&D lab can learn about new products and competitors' ideas at professional meetings; someone from the purchasing department, speaking with supplier-representatives' personnel, may also uncover valuable bits of information about a competitor. A study of product innovation found that 77% of all product innovations in scientific instruments and 67% in semiconductors and printed circuit boards were initiated by the customer in the form of inquiries and complaints.<sup>64</sup> In these industries, the sales force and service departments must be especially vigilant.

A recent survey of global executives by McKinsey & Company found that the single factor contributing most to the increasing competitive intensity in their industries was the improved capabilities of competitors.<sup>65</sup> Yet, without competitive intelligence, companies run the risk of flying blind in the marketplace. In a 2008 survey of global executives, the majority revealed that their companies typically learned about a competitor's price change or significant innovation too late to respond before it was introduced into the market.<sup>66</sup> According to work by Ryall, firms can have competitive advantages simply because their rivals have erroneous beliefs about them.<sup>67</sup> This is why competitive intelligence has become an important part of environmental scanning in most companies.

**Competitive intelligence** is a formal program of gathering information on a company's competitors. Often called *business intelligence*, it is one of the fastest growing fields within strategic management. Research indicates that there is a strong association between corporate performance and competitive intelligence activities.<sup>68</sup> According to a survey of competitive intelligence professionals, the primary reasons for practicing competitive intelligence are to build industry awareness (90.6%), support the strategic planning process (79.2%), develop new products (73.6%), and create new marketing strategies and tactics.<sup>69</sup> As early as the 1990s, 78% of large U.S. corporations conducted competitive intelligence activities.<sup>70</sup> In about a third of the firms, the competitive/business intelligence function is housed in its own unit, with the remainder being housed within marketing, strategic planning, information services, business development (merger & acquisitions), product development, or other units.<sup>71</sup> According to a



2007 survey of 141 large American corporations, spending on competitive intelligence activities was rising from \$1 billion in 2007 to \$10 billion by 2012.<sup>72</sup> At General Mills, for example, all employees have been trained to recognize and tap sources of competitive information. Janitors no longer simply place orders with suppliers of cleaning materials; they also ask about relevant practices at competing firms!

## SOURCES OF COMPETITIVE INTELLIGENCE

Most corporations use outside organizations to provide them with environmental data. Firms such as A. C. Nielsen Co. provide subscribers with bimonthly data on brand share, retail prices, percentages of stores stocking an item, and percentages of stock-out stores. Strategists can use this data to spot regional and national trends as well as to assess market share. Information on market conditions, government regulations, industry competitors, and new products can be bought from “information brokers” such as Market Research.com (Findex), LexisNexis (company and country analyses), and Finsbury Data Services. Company and industry profiles are generally available from the Hoover’s Web site, at [www.hoovers.com](http://www.hoovers.com). Many business corporations have established their own in-house libraries and computerized information systems to deal with the growing mass of available information.


The Internet has changed the way strategists engage in environmental scanning. It provides the quickest means to obtain data on almost any subject. Although the scope and quality of Internet information is increasing geometrically, it is also littered with “noise,” misinformation, and utter nonsense. For example, a number of corporate Web sites are sending unwanted guests to specially constructed bogus Web sites.<sup>73</sup> Unlike the library, the Internet lacks the tight bibliographic control standards that exist in the print world. There is no ISBN or Dewey Decimal System to identify, search, and retrieve a document. Many Web documents lack the name of the author and the date of publication. A Web page providing useful information may be accessible on the Web one day and gone the next. Unhappy ex-employees, far-out environmentalists, and prank-prone hackers create “blog” Web sites to attack and discredit an otherwise reputable corporation. Rumors with no basis in fact are spread via chat rooms and personal Web sites. This creates a serious problem for researchers. How can one evaluate the information found on the Internet? For a way to evaluate intelligence information, see **Strategy Highlight 4.2**.

Some companies choose to use industrial espionage or other intelligence-gathering techniques to get their information straight from their competitors. According to a survey by the American Society for Industrial Security, PricewaterhouseCoopers, and the United States Chamber of Commerce, Fortune 1000 companies lost an estimated \$59 billion in one year alone due to the theft of trade secrets.<sup>74</sup> By using current or former competitors’ employees and private contractors, some firms attempt to steal trade secrets, technology, business plans, and pricing strategies. For example, Avon Products hired private investigators to retrieve from a public dumpster documents (some of them shredded) that Mary Kay Corporation had thrown away. Oracle Corporation also hired detectives to obtain the trash of a think tank that had defended the pricing practices of its rival Microsoft. Studies reveal that 32% of the trash typically found next to copy machines contains confidential company data, in addition to personal data (29%) and gossip (39%).<sup>75</sup> Even P&G, which defends itself like a fortress from information leaks, is vulnerable. A competitor was able to learn the precise launch date of a concentrated laundry detergent in Europe when one of its people visited the factory where machinery was being made. Simply asking a few questions about what a certain machine did, whom it was for, and when it would be delivered was all that was necessary.

Some of the firms providing investigatory services are Kroll Inc. with 4,000 employees in 25 countries, Fairfax, Security Outsourcing Solutions, Trident Group, and Diligence Inc.<sup>76</sup> Trident, for example, specializes in helping American companies enter the Russian market and

## STRATEGY highlight 4.2

### EVALUATING COMPETITIVE INTELLIGENCE



A basic rule of competitive intelligence is that before a piece of information found through library research in sources such as Moody's Industrials, Standard & Poor's, or Value Line can generally be used in any report or briefing, it must first be evaluated in two ways. *First*, the source of the information data can still range anywhere from 1 to 5, but in most instances is likely to be either 1 or 2, but probably no worse than 3 or 4. Web sites are quite different. How trustworthy is the source? How well can a researcher rely upon it for truthful and correct information? One approach is to rank the reliability of the source on a scale from A (extremely reliable), B and Exchange Commission (www.sec.gov), the Economist (reliable), C (unknown reliability), D (probably unreliable), to E (very questionable reliability). The reliability of a source can be judged on the basis of the author's credentials, the organization sponsoring the information, and past performance, among other factors. trade secrets, strategic plans, or proprietary information. *Second*, the information or data should be judged in terms of its likelihood of being correct. The correctness of the data may be ranked on a scale from 1 (correct), 2 (probably correct), 3 (unknown), 4 (doubtful), to 5 (extremely doubtful). The correctness of a piece of data or information can be judged on the basis of its agreement with other bits of separately-obtained information or with a general trend supported by previous data. For every piece of information found on the Internet, for example, list competitor's domain name are thus screened before they are not only the URL of the Web page, but also the evaluation of the information from A1 (good stuff) to E5 (bad doodoo). Information sent to a bogus Web site containing misinformation. Cisco Systems, for example, uses its Web site to send visitors from other high-tech firms to a special Web page asking if they would like to apply for a job at Cisco!

is a U.S.-based corporate intelligence firm founded and managed by former veterans of Russian intelligence services, like the KGB.<sup>77</sup>

To combat the increasing theft of company secrets, the United States government passed the Economic Espionage Act in 1996. The law makes it illegal (with fines up to \$5 million and 10 years in jail) to steal any material that a business has taken "reasonable efforts" to keep secret and that derives its value from not being known.<sup>78</sup> The Society of Competitive Intelligence Professionals (www.scip.org) urges strategists to stay within the law and to act ethically when searching for information. The society states that illegal activities are foolish because the vast majority of worthwhile competitive intelligence is available publicly via annual reports, Web sites, and libraries. Unfortunately, a number of firms hire "kites," consultants with questionable reputations, who do what is necessary to get information when the selected methods do not meet SPIC ethical standards or are illegal. This allows the company that initiated the action to deny that it did anything wrong.<sup>79</sup>

### MONITORING COMPETITORS FOR STRATEGIC PLANNING

The primary activity of a competitive intelligence unit is to monitor **competitors**—organizations that offer same, similar, or substitutable products or services in the business area in which a particular company operates. To understand a competitor, it is important to answer the following 10 questions:

1. Why do your competitors exist? Do they exist to make profits or just to support another unit?
2. Where do they add customer value—higher quality, lower price, excellent credit terms, or better service?
3. Which of your customers are the competitors most interested in? Are they cherry-picking your best customers, picking the ones you don't want, or going after all of them?
4. What is their cost base and liquidity? How much cash do they have? How do they get their supplies?
5. Are they less exposed with their suppliers than your firm? Are their suppliers better than yours?
6. What do they intend to do in the future? Do they have a strategic plan to target your market segments? How committed are they to growth? Are there any succession issues?
7. How will their activity affect your strategies? Should you adjust your plans and operations?
8. How much better than your competitor do you need to be in order to win customers? Do either of you have a competitive advantage in the marketplace?
9. Will new competitors or new ways of doing things appear over the next few years? Who is a potential new entrant?
10. If you were a customer, would you choose your product over those offered by your competitors? What irritates your current customers? What competitors solve these particular customer complaints?<sup>80</sup>

To answer these and other questions, competitive intelligence professionals utilize a number of analytical techniques. In addition to the previously discussed SWOT analysis, Michael Porter's industry forces analysis, and strategic group analysis, some of these techniques are Porter's four-corner exercise, Treacy and Wiersema's value disciplines, Gilad's blind spot analysis, and war gaming.<sup>81</sup> See **Appendix 4.A** for more information about these competitive analysis techniques.

Done right, competitive intelligence is a key input to strategic planning. Avnet Inc., one of the world's largest distributors of electronic components, uses competitive intelligence in its growth by acquisition strategy. According to John Hovis, Avnet's senior vice president of corporate planning and investor relations:

*Our competitive intelligence team has a significant responsibility in tracking all of the varied competitors, not just our direct competitors, but all the peripheral competitors that have a potential to impact our ability to create value. . . . One of the things we are about is finding new acquisition candidates, and our competitive intelligence unit is very much involved with our acquisition team, in helping to profile potential acquisition candidates.<sup>82</sup>*

## Forecasting 4.4

Environmental scanning provides reasonably hard data on the present situation and current trends, but intuition and luck are needed to accurately predict these trends will continue. The resulting forecasts are, however, usually based on a set of assumptions that may or may not be valid.

### DANGER OF ASSUMPTIONS

Faulty underlying assumptions are the most frequent cause of forecasting errors. Nevertheless, many managers who formulate and implement strategic plans rarely consider that their success is based on a series of basic assumptions. Many strategic plans are simply based on

projections of the current situation. For example, few people in 2007 expected the price of oil (light, sweet crude, also called West Texas intermediate) to rise above \$80 per barrel and were extremely surprised to see the price approach \$150 by July 2008, especially since the price had been around \$20 per barrel in 2002. U.S. auto companies, in particular, had continued to design and manufacture large cars, pick-up trucks, and SUVs under the assumption of gasoline being available for around \$2.00 a gallon. Market demand for these types of cars collapsed when the price of gasoline passed \$3.00 to reach \$4.00 a gallon in July 2008. In another example, many banks made a number of questionable mortgages based on the assumption that housing prices would continue to rise as they had in the past. When housing prices fell in 2007, these “sub-prime” mortgages were almost worthless—causing a number of banks to sell out or fail in 2008. Assumptions like these can be dangerous to your health!

## USEFUL FORECASTING TECHNIQUES

Various techniques are used to forecast future situations. They do not tell the future; they merely state what can be, not what will be. As such, they can be used to form a set of reasonable assumptions about the future. Each technique has its proponents and its critics. A study of nearly 500 of the world’s largest corporations revealed trend extrapolation to be the most widely practiced form of forecasting—over 70% use this technique either occasionally or frequently.<sup>83</sup> Simply stated, *extrapolation* is the extension of present trends into the future. It rests on the assumption that the world is reasonably consistent and changes slowly in the short run. Time-series methods are approaches of this type; they attempt to carry a series of historical events forward into the future. The basic problem with extrapolation is that a historical trend is based on a series of patterns or relationships among so many different variables that a change in any one can drastically alter the future direction of the trend. As a rule of thumb, the further back into the past you can find relevant data supporting the trend, the more confidence you can have in the prediction. Brainstorming, expert opinion, and statistical modeling are also very popular forecasting techniques. *Brainstorming* is a non-quantitative approach that requires simply the presence of people with some knowledge of the situation to be predicted. The basic ground rule is to propose ideas without first mentally screening them. No criticism is allowed. “Wild” ideas are encouraged. Ideas should build on previous ideas until a consensus is reached.<sup>84</sup> This is a good technique to use with operating managers who have more faith in “gut feel” than in more quantitative number-crunching techniques. *Expert opinion* is a nonquantitative technique in which experts in a particular area attempt to forecast likely developments. This type of forecast is based on the ability of a knowledgeable person(s) to construct probable future developments based on the interaction of key variables. One application, developed by the RAND Corporation, is the *Delphi technique*, in which separated experts independently assess the likelihoods of specified events. These assessments are combined and sent back to each expert for fine-tuning until agreement is reached. These assessments are most useful if they are shaped into several possible scenarios that allow decision makers to more fully understand their implication.<sup>85</sup> *Statistical modeling* is a quantitative technique that attempts to discover causal or at least explanatory factors that link two or more time series together. Examples of statistical modeling are regression analysis and other econometric methods. Although very useful in the grasping of historic trends, statistical modeling, such as trend extrapolation, is based on historical data. As the patterns of relationships change, the accuracy of the forecast deteriorates. *Prediction markets* is a recent forecasting technique enabled by easy access to the Internet. As emphasized by James Surowiecki in *The Wisdom of Crowds*, the conclusions of large groups can often be better than those of experts because such groups can aggregate a large amount of dispersed wisdom.<sup>86</sup> Prediction markets are small-scale electronic markets, frequently open to any employee, that tie payoffs to measurable future events, such as sales data

for a computer workstation, the number of bugs in an application, or a product usage patterns. These markets yield prices on prediction contracts—prices that can be interpreted as market-aggregated forecasts.<sup>87</sup> Companies including Microsoft, Google, and Eli Lilly have asked their employees to participate in prediction markets by betting on whether products will sell, when new offices will open, and whether profits will be high in the next quarter. Early predictions have been exceedingly accurate.<sup>88</sup> Intrade.com offers a free Web site in which people can buy or sell various predictions in a manner similar to buying or selling common stock. On May 26, 2008, for example, Intrade.com listed the buying price for democratic presidential candidate Barack Obama as \$91.50 compared to \$8.00 for Hillary Clinton, and \$37.70 for John McCain. Thus far, prediction markets have not been documented for long-term forecasting, so its value in strategic planning has not yet been established. Other forecasting techniques, such as *cross-impact analysis (CIA)* and *trend-impact analysis (TIA)*, have not established themselves successfully as regularly employed tools.<sup>89</sup>

*Scenario writing* is the most widely used forecasting technique after trend extrapolation. Originated by Royal Dutch Shell, *scenarios* are focused descriptions of different likely futures presented in a narrative fashion. A scenario thus may be merely a written description of some future state, in terms of key variables and issues, or it may be generated in combination with other forecasting techniques. Often called scenario planning, this technique has been successfully used by 3M, Levi-Strauss, General Electric, United Distillers, Electrolux, British Airways, and Pacific Gas and Electricity, among others.<sup>90</sup> According to Mike Eskew, Chairman and CEO of United Parcel Service, UPS uses scenario writing to envision what its customers might need five to ten years in the future.<sup>91</sup> The four Arctic scenarios that began this chapter are an example of scenario writing that should be an input to a transportation company's strategic planning.

An **industry scenario** is a forecasted description of a particular industry's likely future. Such a scenario is developed by analyzing the probable impact of future societal forces on key groups in a particular industry. The process may operate as follows:<sup>92</sup>

1. Examine possible shifts in the natural environment and in societal variables globally.
2. Identify uncertainties in each of the six forces of the task environment (that is, potential entrants, competitors, likely substitutes, buyers, suppliers, and other key stakeholders).
3. Make a range of plausible assumptions about future trends.
4. Combine assumptions about individual trends into internally consistent scenarios.
5. Analyze the industry situation that would prevail under each scenario.
6. Determine the sources of competitive advantage under each scenario.
7. Predict competitors' behavior under each scenario.
8. Select the scenarios that are either most likely to occur or most likely to have a strong impact on the future of the company. Use these scenarios as assumptions in strategy formulation.

## 4.5 The Strategic Audit:

### A Checklist for Environmental Scanning

One way of scanning the environment to identify opportunities and threats is by using the Strategic Audit found in **Appendix 1.A** at the end of Chapter 1. The audit provides a checklist of questions by area of concern. For example, Part III of the audit examines the natural, societal, and task environments. It looks at the societal environment in terms of economic, technological, political-legal, and sociocultural forces. It also considers the task environment

(industry) in terms of threat of new entrants, bargaining power of buyers and suppliers, threat of substitute products, rivalry among existing firms, and the relative power of other stakeholders.

## Synthesis 4.6 External Factors—EFAS

After strategists have scanned the societal and task environments and identified a number of likely external factors for their corporation, they may want to refine their analysis of these factors by using a form such as that given in **Table 4-5**. Using an **EFAS (External Factors Analysis Summary) Table** is one way to organize the external factors into the generally accepted categories of opportunities and threats as well as to analyze how well a particular company's management (rating) is responding to these specific factors in light of the perceived importance (weight) of these factors to the company. To generate an EFAS Table for the company being analyzed, complete the following steps:

1. In **Column 1 (External Factors)**, list the eight to ten most important opportunities and threats facing the company.

External Factor Analysis Summary (EFAS Table): Maytag as Example

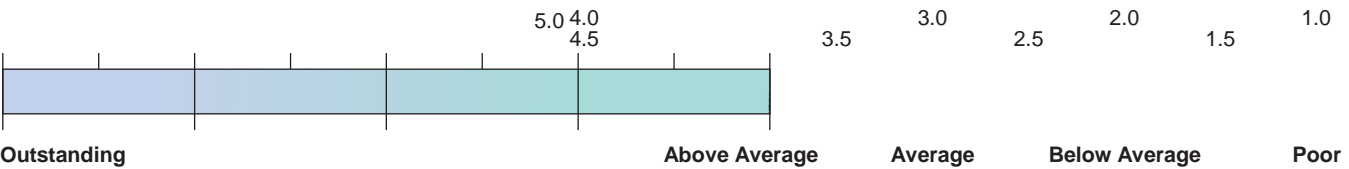
External Factors	Weight		Rating		Weighted Score		Comments
	1	2	3	4	5		
<b>Opportunities</b>							
♦ Economic integration of European Community		.20	4.1		.82		Acquisition of Hoover
♦ Demographics favor quality appliances		.10	5.0		.50		Maytag quality
♦ Economic development of Asia		.05	1.0		.05		Low Maytag presence
♦ Opening of Eastern Europe		.05	2.0		.10		Will take time
♦ Trend to "Super Stores"		.10	1.8		.18		Maytag weak in this channel
<b>Threats</b>							
♦ Increasing government regulations		.10	4.3		.43		Well positioned
♦ Strong U.S. competition		.10	4.0		.40		Well positioned
♦ Whirlpool and Electrolux strong globally		.15	3.0		.45		Hoover weak globally
♦ New product advances		.05	1.2		.06		Questionable
♦ Japanese appliance companies		.10	1.6		.16		Only Asian presence in Australia
<b>Total Scores</b>		<u>1.00</u>			<u>3.15</u>		

### NOTES:

1. List opportunities and threats (8–10) in Column 1.
2. Weight each factor from 1.0 (Most Important) to 0.0 (Not Important) in Column 2 based on that factor's probable impact on the company's strategic position. **The total weights must sum to 1.00.**
3. Rate each factor from 5.0 (Outstanding) to 1.0 (Poor) in Column 3 based on the company's response to that factor.
4. Multiply each factor's weight times its rating to obtain each factor's weighted score in Column 4.
5. Use Column 5 (comments) for rationale used for each factor.
6. Add the individual weighted scores to obtain the total weighted score for the company in Column 4. This tells how well the company is responding to the factors in its external environment.

SOURCE: T.L. Wheelen, J.D. Hunger, "External Factors Analysis Summary (EFAS)". Copyright © 1987, 1988, 1989, 1990, and 2005 by R.L. Wheelen. Copyright © 1991, 2003, and 2005 by Wheelen & Hunger Associates. Reprinted by permission.

2. In **Column 2 (Weight)**, assign a weight to each factor from **1.0 (Most Important)** to **0.0 (Not Important)** based on that factor's probable impact on a particular company's current strategic position. The higher the weight, the more important is this factor to the current and future success of the company. (**All weights must sum to 1.0 regardless of the number of factors.**)
3. In **Column 3 (Rating)**, assign a rating to each factor from **5.0 (Outstanding)** to **1.0 (Poor)** based on that particular company's specific response to that particular factor. Each rating is a judgment regarding how well the company is currently dealing with each specific external factor.



4. In **Column 4 (Weighted Score)**, multiply the weight in **Column 2** for each factor times its rating in **Column 3** to obtain that factor's weighted score.
5. In **Column 5 (Comments)**, note why a particular factor was selected and how its weight and rating were estimated.
6. Finally, add the weighted scores for all the external factors in **Column 4** to determine the total weighted score for that particular company. The **total weighted** score indicates how well a particular company is responding to current and expected factors in its external environment. The score can be used to compare that firm to other firms in the industry. Check to ensure that the total weighted score truly reflects the company's current performance in terms of profitability and market share. **The total weighted score for an average firm in an industry is always 3.0.**

As an example of this procedure, **Table 4-5** includes a number of external factors for Maytag Corporation with corresponding weights, ratings, and weighted scores provided. This table is appropriate for 1995, long before Maytag was acquired by Whirlpool. Note that Maytag's total weight was 3.15, meaning that the corporation was slightly above average in the major home appliance industry at that time.

## End of Chapter SUMMARY

Wayne Gretzky was one of the most famous people ever to play professional ice hockey. He wasn't very fast. His shot was fairly accurate. He was a great leader on his team in strength training. He tended to operate in the back of his opponent's goal, anticipating where the puck would go long before they got there and fed them passes so unsuspected that he would often surprise his own team. In an interview with *Time* magazine, Gretzky stated that the key to winning is skating not to where the puck is but to where it will be. "People talk about skating, puck handling and shooting, but the whole sport is angles and caroms, forgetting the puck is going, calculating where it will be diverted, factoring in all the interruptions," explained Gretzky.<sup>93</sup>

Environmental scanning involves monitoring, collecting, and evaluating information in order to understand the current trends in the natural, societal, and task environments. The

information is then used to forecast whether these trends will continue or whether others will take their place. How will developments in the natural environment affect the world? What kind of developments can we expect in the societal environment to affect our industry? What will an industry look like in 10 to 20 years? Who will be the key competitors? Who is likely to fall by the wayside? We use this information to make certain assumptions about the future— assumptions that are then used in strategic planning. In many ways, success in the business world is like ice hockey: The key to winning is not to assume that your industry will continue as it is now but to assume that the industry will change and to make sure that your company will be in position to take advantage of those changes.