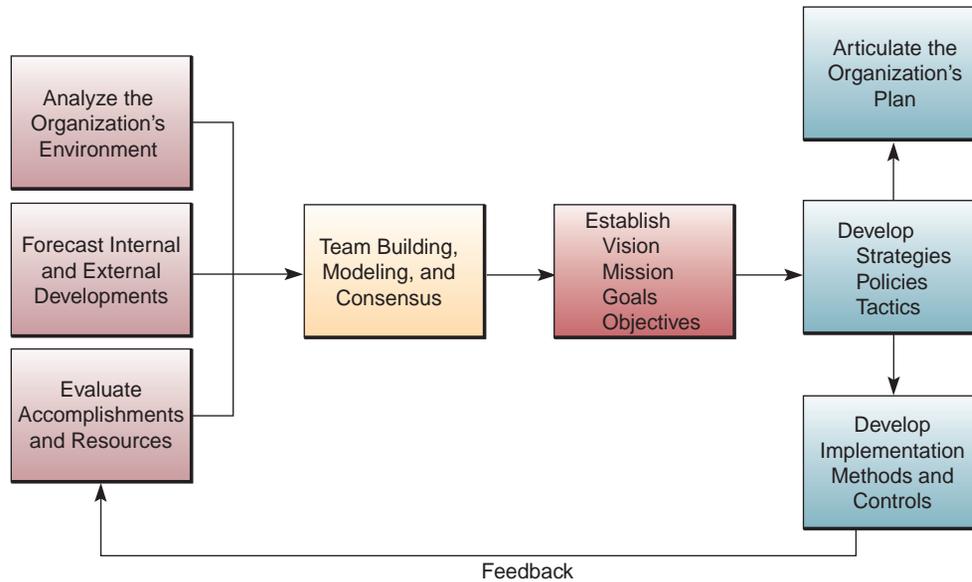


FIGURE 11.2 The components of an organizational planning process.



The **scenario approach to planning** has gained in popularity as a less formal, but more realistic, strategic planning methodology for use by business professionals.

In the scenario approach, teams of managers and other planners participate in what management author Peter Senge calls *microworld*, or *virtual world*, exercises. A microworld is a simulation exercise that is a microcosm of the real world. In a microworld exercise, managers can safely create, experience, and evaluate a variety of scenarios of what might be happening, or what might happen in the real world.

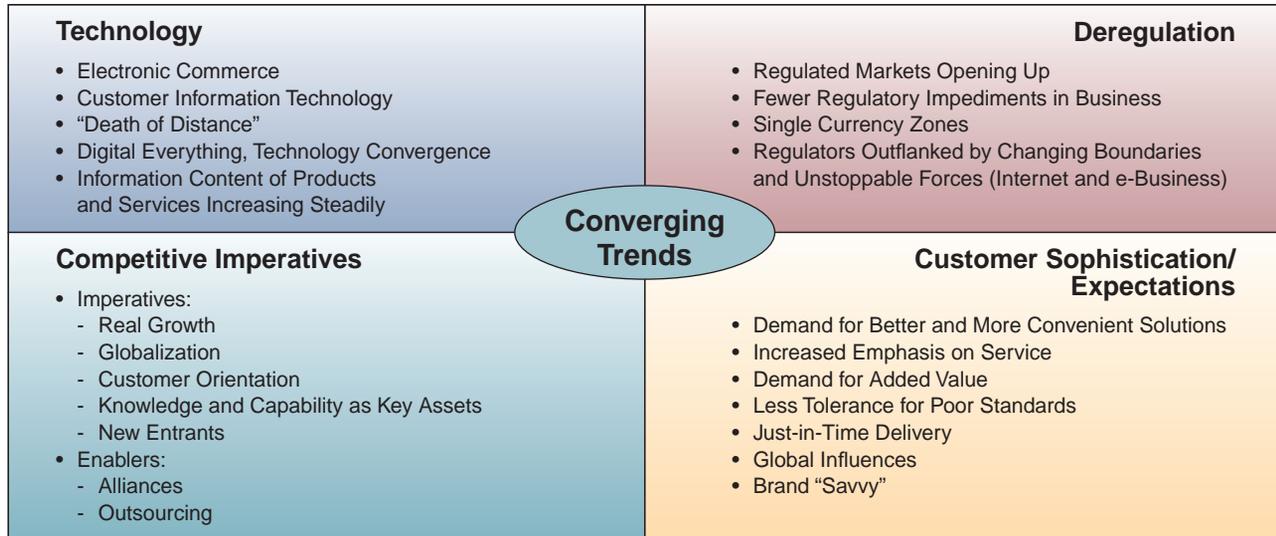
*When a work team goes white-water rafting or engages in some other outdoor team-building exercise, the team members are creating a microworld to reflect on and improve the way they work together. When personnel staff create a role-playing exercise to be used in a supervisory training, they are creating a microworld. Many team retreats serve as microworlds.*

Thus, in the scenario approach to strategic IS planning, teams of business and IS managers create and evaluate a variety of business scenarios. For example, they make assumptions about what a business will be like three to five years or more into the future, and the role that information technology can or will play in those future scenarios.

FIGURE 11.3 Examples of strategic visioning questions in planning for e-business initiatives.

Strategic Business Visioning	
• <b>Understanding the Customer</b>	Who are our customers? How are our customers' priorities shifting? Who should be our target customers? How will an e-business help reach our target customer segments?
• <b>Customer Value</b>	How can we add value for the customer with e-business services? How can we become the customer's first choice?
• <b>Competition</b>	Who are our real competitors? What is our toughest competitor's business model? What are they doing in e-business and e-commerce? Are our competitors potential partners, suppliers, or customers in an e-business venture?
• <b>Value Chain</b>	How would we design a value chain if we were just starting an e-business? Who would be our supply chain partners? What roles should we play: e-commerce Web site, B2C portal, B2B marketplace, or partner in an e-commerce alliance?

FIGURE 11.4 Converging business, political, and technological trends that are shaping strategic business/IT planning.



Alternative scenarios are created by the teams or by business simulation software, based on combining a variety of developments, trends, and environmental factors, including political, social, business, and technological changes that might occur. For example, Figure 11.4 outlines key business, political, and technological trends that could help guide business/IT planning.

## Risk Assessment and Mitigation

CIOs are frequently asked, “What are our IT risks?” Unfortunately, this question is too generic because there are multiple kinds of risk. Before starting any risk assessment, IT needs to understand both the concern prompting the request and which risks need to be assessed. Moreover, everyone needs to understand that nearly all risks that affect an IT organization affect the entire business. Risks fall into four categories that require different mitigation tools:

**Business operations risk.** An assessment determines the risks involved in addressing or ignoring a particular competitive threat. Analyzing competitive threats helps the company decide whether to invest the resources necessary to combat the threat. Determining appropriate responses to competitive threats from nontraditional sources can be particularly difficult. The appropriate mitigation tool is a good business case that evaluates all associated risks. For new business opportunities, a thorough risk assessment may be as important to success as accurate financial projections.

**Program risk.** For approved or existing programs, management concerns focus on whether the program or project will be delivered on time, within budget, and with high quality. Effective project management and regular monitoring mitigate risk.

**Business interruption risk.** This type of risk affects the company’s ability to continue operating under difficult circumstances. Scenarios run the gamut from a failed server to a destroyed building. In most cases, a failed server causes minor problems for certain people. In contrast, a destroyed building can bring all company operations to a halt. A continuity-of-operations plan that describes how the business will function in the event of various difficulties mitigates risk.

**Market risk.** This category is divided into geopolitical and industry-specific risks. Geopolitical risks include war, terrorism, and epidemics, as well as nationalization and import restrictions. These risks vary depending on the country, the complexity of the corporate supply chain, and the importance of the industry to political leadership. Industry-specific risks also vary. Scenario planning mitigates risk by developing responses

to various unlikely events. Most important, it attempts to discover previously unknown risks because the most dangerous risk is often the one you don't identify.

Before embarking on any risk assessment, clarify which types of risk are of concern to your executive management; then select the appropriate mitigation tools to address potential difficulties. Depending on the financial consequences, risk insurance may be warranted. Thorough risk assessments leverage creative thinking into constructive preparations for addressing potential threats, and they're essential to success. As the old adage goes, "Forewarned is forearmed."

Source: Adapted from Bart Perkins, "Know Which Risks Matter," *Computerworld*, December 17, 2007.

## Planning for Competitive Advantage

*Betting on new IT innovations can mean betting the future of the company. Leading-edge firms are sometimes said to be on the "bleeding edge." Almost any business executive is aware of disastrous projects that had to be written off, often after large cost overruns, because the promised new system just did not work.*

**Planning for competitive advantage** is especially important in today's competitive business arena and complex information technology environment. So, strategic business/IT planning involves an evaluation of the potential benefits and risks a company faces when using IT-based strategies and technologies for competitive advantage. In Chapter 2, we introduced a model of *competitive forces* (competitors, customers, suppliers, new entrants, and substitutes) and *competitive strategies* (cost leadership, differentiation, growth, innovation, and alliances), as well as a value chain model of basic business activities. These models can be used in a strategic planning process to help generate ideas for the strategic use of information technologies to support new e-business initiatives.

Also popular in strategic business/IT planning is the use of a *strategic opportunities matrix* to evaluate the strategic potential of proposed business/IT opportunities, as measured by their risk/payoff probabilities. See Figure 11.5.

## SWOT Analysis

**SWOT analysis** (strengths, weaknesses, opportunities, and threats) is used to evaluate the impact that each possible strategic opportunity can have on a company and its use of information technology. A company's strengths are its core competencies and resources in which it is one of the market or industry leaders. Weaknesses are areas of substandard business performance compared to others in the industry or market segments. Opportunities are the potential for new business markets or innovative breakthroughs that might greatly expand present markets. Threats are the potential for

**FIGURE 11.5**

A strategic opportunities matrix helps to evaluate the strategic risk/payoff potential of proposed business/IT opportunities.



TABLE 11.1 Example of a SWOT Analysis by a Human Resources Consulting Firm

Strengths	Weaknesses	Opportunities	Threats
<b>Market reputation</b>	Shortage of trained consultants at the operating level	Well-established market niche	Large consultancies operating at a minor market level
<b>Partner-level expertise in HRM</b>	Lack of ability to manage multidisciplinary assignments	New market opportunities for consulting in areas other than HRM	Many small consultancies looking to invade the marketplace

business and market losses posed by the actions of competitors and other competitive forces, changes in government policies, disruptive new technologies, and so on.

An example of SWOT analysis might come from a marketing problem. In competitor analysis, marketers build detailed profiles of each competitor in the market, focusing especially on their relative competitive strengths and weaknesses. Marketing managers may examine each competitor's cost structure; sources of profits, resources, and competencies; competitive positioning and product differentiation; degree of vertical integration; historical responses to industry developments; and other factors.

Marketing management often finds it necessary to invest in research to collect the data required to perform accurate marketing analysis. As such, they often conduct market research to obtain this information; although marketers use a variety of techniques, some of the more common methods include:

- Qualitative marketing research, such as focus groups.
- Quantitative marketing research, such as statistical surveys.
- Experimental techniques, such as test markets.
- Observational techniques, such as ethnographic (on-site) observation.
- Marketing managers may also design and oversee various environmental scanning and competitive intelligence processes to help identify trends and inform the company's marketing analysis.

Table 11.1 shows the content of a typical SWOT analysis. Now let's look at a real-world example of how a company used technology to support SWOT analyses, and much more.

### Bristow Helicopters: Technology-Supported SWOT, and Much More



When Bristow Helicopters Ltd. started losing market share in the 1990s, executives moved to improve business processes across the Redhill, England-based company. "We needed to change facilities and maintenance processes, improve the efficiencies of the staff, improve the interface between sales and clients," says John Cloggie, technical director at the European business unit of Houston-based Bristow Group Inc., which provides helicopter services to the oil and gas industry.

A key goal of this reengineering effort was to cut several million dollars from the operating budget of Bristow Helicopters. The company managed the project using MindGenius, "mind-mapping" software from East Kilbride, Scotland-based Gael Ltd. The product enabled it to conduct a SWOT analysis (an assessment of its strengths, weaknesses, opportunities, and threats), carve out various process reengineering tasks, and delegate them to appropriate groups. Each team then took the high-level version of the map and created its own subcategories, tasks, and deadlines for its designated work segment. Since beginning the project in 2004, says Cloggie, the company has managed to cut \$6 million from its operating budget.

"Mind mapping, of course, didn't directly create our \$6 million savings, but it did allow us to control the project while it was being delivered," he says. "The speed with which you can map processes and capture knowledge is a huge return."