

Key Terms

Benchmarking (p. 40)	Deliverables (p. 25)	Project life cycle (p. 33)	Project success (p. 36)
Client acceptance (p. 36)	Performance (p. 36)	Project management (p. 28)	Stakeholders (p. 33)
Clients (p. 34)	Process (p. 25)	Project management maturity models (p. 39)	Time (p. 36)
Budget (p. 36)	Project (p. 25)		Triple constraint (p. 36)

Discussion Questions

- Describe the features of a project. How do they differ from day-to-day processes within an organization?
- What do you see as being the primary challenges to introducing a project management philosophy in most organizations? That is, why is it difficult to shift to a project-based approach in many companies?
- What are the advantages and disadvantages of using project management?
- What key characteristics do all projects possess?
- Consider and debate the usefulness of a project's life cycle as illustrated in Figure 1.4. What does this model suggest about the characteristics of projects and the impact they have on a project's life cycle?
- Think of a successful project and an unsuccessful project with which you are familiar. What distinguishes the two, both in terms of the process used to develop them and their outcomes?
- Consider the case on the BBC's Digital Initiative Media in this chapter. What do you see as some of the main problems associated with the BBC's approach to project management? What challenges did the project management team face in this project, and how can a firm responsible for large IT transformation projects overcome some of these challenges?
- Consider the six criteria for successful IT projects. Why is IT project success often so difficult to assess? Make a case for some factors being more important than others.
- As organizations seek to become better at managing projects, they often engage in benchmarking with other companies in similar industries. Discuss the concept of benchmarking. What are its goals? How does benchmarking work?
- Explain the concept of a project management maturity model. What purpose does it serve?
- Compare and contrast the four project management maturity models shown in Table 1.3. What strengths and weaknesses do you perceive in each of the models?

CASE STUDY 1.1

MegaTech, Inc.

MegaTech, Inc., designs and manufactures automotive components. For years, the company enjoyed a stable marketplace, a small but loyal group of customers, and a relatively predictable environment. Though slowly, annual sales continued to grow until recently hitting \$300 million. MegaTech products were popular because they required little major updating or yearly redesign. The stability of its market, coupled with the consistency of its product, allowed MegaTech to forecast annual demand accurately, to rely on production runs with long lead times, and to concentrate on internal efficiency.

Then, with the advent of the North American Free Trade Agreement (NAFTA) and other international trade agreements, MegaTech found itself competing with auto parts suppliers headquartered in countries around the world. The company was thrust into an

unfamiliar position: It had to become customer-focused and quicker to market with innovative products. Facing these tremendous commercial challenges, top management at MegaTech decided to recreate the company as a project-based organization.

The transition, though not smooth, has nonetheless paid big dividends. Top managers determined, for instance, that product updates had to be much more frequent. Achieving this goal meant yearly redesigns and new technologies, which, in turn, meant making innovative changes in the firm's operations. In order to make these adjustments, special project teams were formed around each of the company's product lines and given a mandate to maintain market competitiveness.

At the same time, however, MegaTech wanted to maintain its internal operating efficiencies. Thus

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CASE STUDY 1.3

Disney's Expedition Everest

One of the newest thrill rides to open in the Walt Disney World Resort may just be the most impressive. As Disney approached its 50th anniversary, the company wanted to celebrate in a truly special way. What was its idea? Create a park attraction that would, in many ways, serve as the link between Disney's amazing past and its promising future. Disney showed that it was ready to pull out all stops in order to get everything just right.

In 2006, The Walt Disney Company introduced Expedition Everest in Disney's Animal Kingdom Park at Lake Buena Vista, Florida. Expedition Everest is more than just a roller coaster. It is the embodiment of the Disney spirit: a ride that combines Disney's trademark thrills, unexpected twists and turns, incredible attention to detail, and impressive project management skills.

First, let's consider some of the technical details of Expedition Everest:

- With a peak of just under 200 feet, the ride is contained within the tallest of 18 mountains created by Disney's Imagineers at Disney parks worldwide.
- The ride contains nearly a mile of track, with twists, tight turns, and sudden drops.
- The Disney team created a Yeti: an enormous, fur-covered, Audio-Animatronics monster powered by a set of hydraulic cylinders whose combined thrust equals that of a Boeing 747 airliner. Through a series of sketches, computer-animated drawings, sculptures, and tests that took more than two years to perfect, Disney created and programmed its Abominable Snowman to stand over 10 feet tall and serve as the focal point of the ride.
- More than 900 bamboo plants, 10 species of trees, and 110 species of shrubs were planted to re-create the feeling of the Himalayan lowlands surrounding Mount Everest.
- More than 1,800 tons of steel were used to construct the mountain. The covering of the framework was done using more than 3,000 prefabricated "chips" created from 25,000 individual computer-molded pieces of steel.
- To create the proper color schemes, 2,000 gallons of stain and paint were used on rockwork and throughout the village Disney designed to serve as a backdrop for the ride.
- More than 2,000 handcrafted items from Asia are used as props, cabinetry, and architectural ornamentation.

Building an attraction does not come easily or quickly for Disney's Imagineers. Expedition Everest

was several years in development as Disney sent teams, including Walt Disney Imagineering's Creative Executive Joe Rohde, on repeated trips to the Himalayas in Nepal to study the lands, architecture, colors, ecology, and culture in order to create the most authentic setting for the new attraction. Disney's efforts reflect a desire to do much more than provide a world-class ride experience; they demonstrate the Imagineers' eagerness to tell a story—a story that combines the mythology of the Yeti figure with the unique history of the Nepalese living in the shadow of the world's tallest mountain. Ultimately, the attraction, with all its background and thematic elements, took nearly five years to complete.

Riders on Expedition Everest gain a real feel for the atmosphere that Disney has worked so hard to create. The guests' adventure starts by entering the building of the "Himalayan Escape" tour company, complete with Norbu and Bob's booking office to obtain permits for their trip. Overhead flutter authentic prayer flags from monasteries in Nepal. Next, guests pass through Tashi's General Store and Bar to stock up on supplies for their journey to the peak of the mountain. Finally, guests pass through an old tea warehouse that contains a remarkable museum of artifacts reflecting Nepal's culture, a history of the Himalayas, and tales of the Yeti, which is said to inhabit the slopes of Mount Everest. It is only now that guests are permitted to board the Anandapur Rail Service for their trip to the peak. Each train is modeled after an aging, steam-engine train, seating 34 guests per train.

Over the next several minutes, guests are transported up the roller coaster track, through a series of winding turns, until their encounter with the Yeti. At this point another unique feature of the attraction emerges: The train begins rushing backward down the track, as though it were out of control. Through the balance of the ride, guests experience a landscape of sights and sounds culminating in a 50 mph final dash down the mountain and back to the safety of the Nepalese village.

Disney's approach to the management of projects such as Expedition Everest is to combine careful planning, including schedule and budget preparation, with the imagination and vision for which the company is so well known. Creativity is a critical element in the development of new projects at Disney. The company's Imagineers include some of the most skilled artists and computer-animation experts in the world. Although it is easy to be impressed by the technical knowledge of Disney's personnel, it is important to remember that each new project is approached with an understanding

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Key Terms

Balanced matrix (p. 74)	Intervenor groups (p. 62)	Project management office (p. 77)	Stakeholder analysis (p. 61)
Culture (p. 80)	Matrix organization (p. 73)	Project organizations (p. 70)	Strategic management (p. 59)
Escalation of commitment (p. 85)	Matrix structure (p. 73)	Project stakeholders (p. 61)	Strong matrix (p. 74)
External environment (p. 68)	Objectives (p. 59)	Project structure (p. 71)	Technology (p. 82)
Functional structure (p. 68)	Organizational culture (p. 80)	Resources (p. 73)	TOWS matrix (p. 60)
Heavyweight project organization (p. 75)	Organizational structure (p. 67)		Weak matrix (p. 74)

Discussion Questions

- 2.1 The chapter suggests that it is critical for projects to be aligned with the strategic focus of an organization. Table 2.1 gives some examples of projects that reflect strategy. Consider the following strategic objectives of a hotel chain:
- Be a leader in customer service
 - Grow customer base by 20%
 - Improve employee satisfaction
 - Reduce energy costs
- What project ideas can you identify to help achieve these objectives?
- 2.2 Your company is planning to upgrade a key piece of software that is used daily across the organization. Identify the potential stakeholders for this project and discuss some of the reasons why these stakeholders might influence the success of the project.
- 2.3 Your company is planning to construct a nuclear power plant in Oregon. Why is stakeholder analysis important as a precondition of the decision whether or not to follow through with such a plan? Conduct a stakeholder analysis for a planned upgrade to a successful software product. Who are the key stakeholders?
- 2.4 Consider a medium-sized company that has decided to begin using project management in a wide variety of its operations. As part of its operational shift, it is going to adopt a project management office somewhere within the organization. Make an argument for the type of PMO it should adopt (weather station, control tower, or resource pool). What are some key decision criteria that will help it determine which model makes the most sense?
- 2.5 The chapter presents three basic forms of organizational structure: functional, project, and matrix. Suppose you are responsible for advising an IT company on changes to an organizational structure, to embrace the growing need for effective project management in creating new software products. Conduct an assessment of the advantages and limitations of each of the three structure types. Which would you recommend?
- 2.6 You are a member of the senior management staff at XYZ Corporation. You have historically been using a functional structure setup with five departments: finance, human resources, marketing, production, and engineering.
- Create a drawing of your simplified functional structure, identifying the five departments.
 - Assume you have decided to move to a project structure. What might be some of the environmental pressures that would contribute to your belief that it is necessary to alter the structure?
 - With the project structure, you have four ongoing projects: stereo equipment, instrumentation and testing equipment, optical scanners, and defense communications. Draw the new structure that creates these four projects as part of the organizational chart.
- 2.7 Suppose you now want to convert the structure from that in Question 6 to a matrix structure, emphasizing dual commitments to function and project.
- Re-create the structural design to show how the matrix would look.
 - What behavioral problems could you begin to anticipate through this design? That is, do you see any potential points of friction in the dual hierarchy setup?

CASE STUDY 2.1

Rolls-Royce Corporation

Although the name Rolls-Royce is inextricably linked with its ultra-luxurious automobiles, the modern Rolls-Royce operates in an entirely different competitive environment. A leading manufacturer of power systems for aerospace, marine, and power companies, Rolls's market is focused on developing jet engines for a variety of uses, both commercial and defense-related.

In this market, the company has two principal competitors, General Electric and Pratt & Whitney (owned by United Technologies). There are a limited number of smaller, niche players in the jet engine market, but their impact from a technical and commercial perspective is minor. Rolls, GE, and Pratt & Whitney routinely engage in fierce competition for sales to defense contractors

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