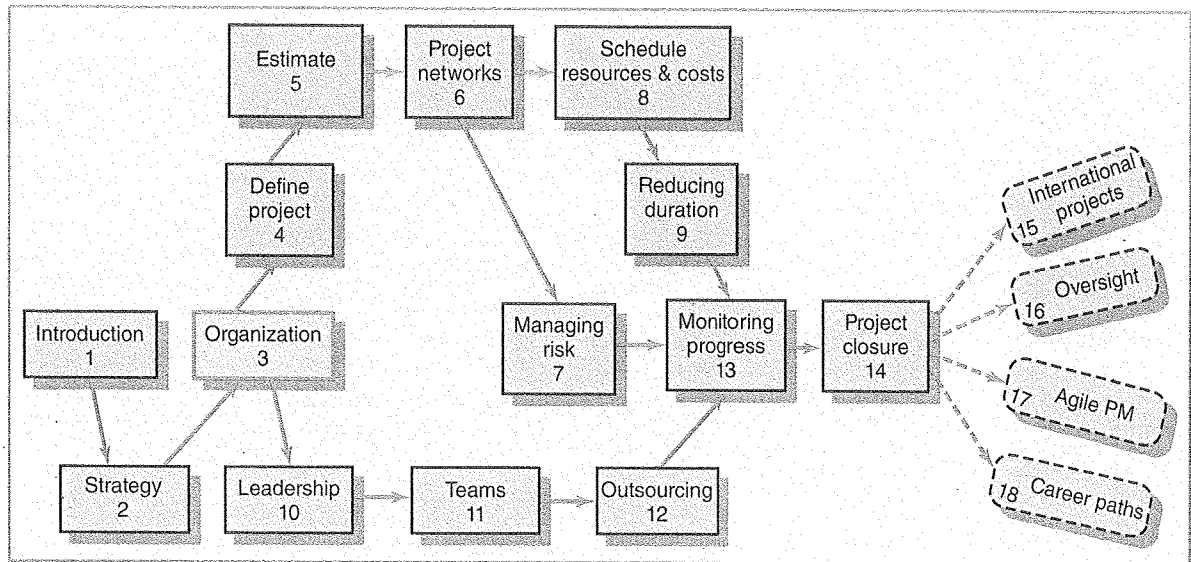


## Organization: Structure and Culture



### Organization: Structure and Culture

Project Management Structures

What Is the Right Project Management Structure?

Organizational Culture

Implications of Organizational Culture for Organizing Projects

Summary

*Matrix management works, but it sure is difficult at times. All matrix managers must keep up their health and take Stress-Tabs.*

—A Project Manager

Once management approves a project then the question becomes, how will the project be implemented? This chapter examines three different project management structures used by firms to implement projects: functional organization, dedicated project teams, and matrix structure. Although not exhaustive, these structures and their variant forms represent the major approaches for organizing projects. The advantages and disadvantages of each of these structures are discussed as well as some of the critical factors that might lead a firm to choose one form over others.

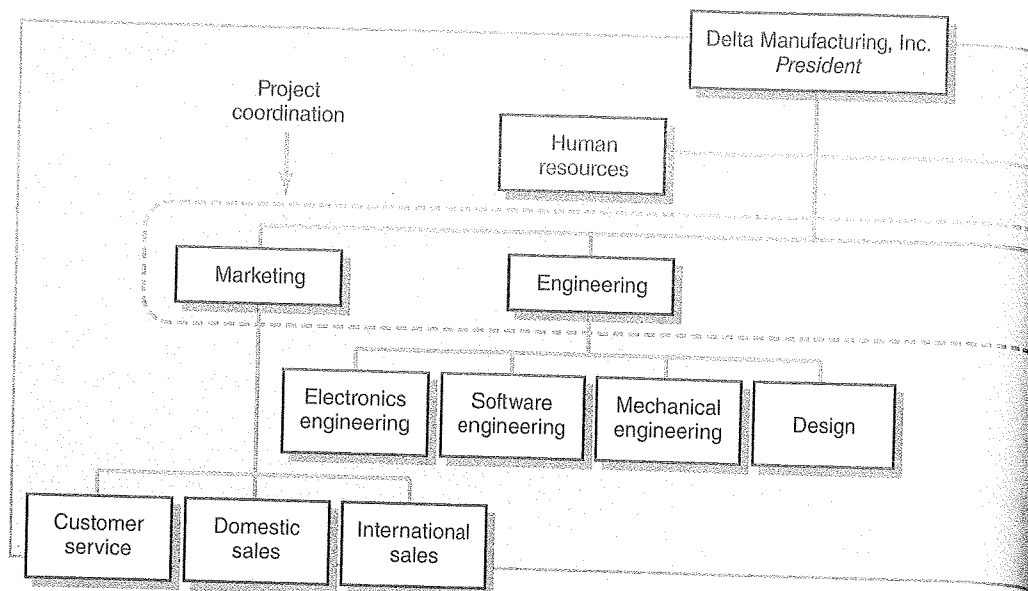
Whether a firm chooses to complete projects within the traditional functional organization or through some form of matrix arrangement is only part of the story. Anyone who has worked for more than one organization realizes that there are often considerable differences in how projects are managed within certain firms even with similar structures. Working in a matrix system at AT&T is different from working in a matrix environment at Hewlett-Packard. Many researchers attribute these differences to the organizational culture at AT&T and Hewlett-Packard. A simple explanation of *organizational culture* is that it reflects the “personality” of an organization. Just as each individual has a unique personality, so each organization has a unique culture. Toward the end of this chapter, we examine in more detail what organizational culture is and the impact that the culture of the parent organization has on organizing and managing projects.

Both the project management structure and the culture of the organization constitute major elements of the enterprise environment in which projects are implemented. It is important for project managers and participants to know the “lay of the land” so that they can avoid obstacles and take advantage of pathways to complete their projects.

## Project Management Structures

A project management system provides a framework for launching and implementing project activities within a parent organization. A good system appropriately balances the needs of both the parent organization and the project by defining the interface between the project and parent organization in terms of authority, allocation of resources, and eventual integration of project outcomes into mainstream operations. With this in mind, we will start the discussion of project management structures.

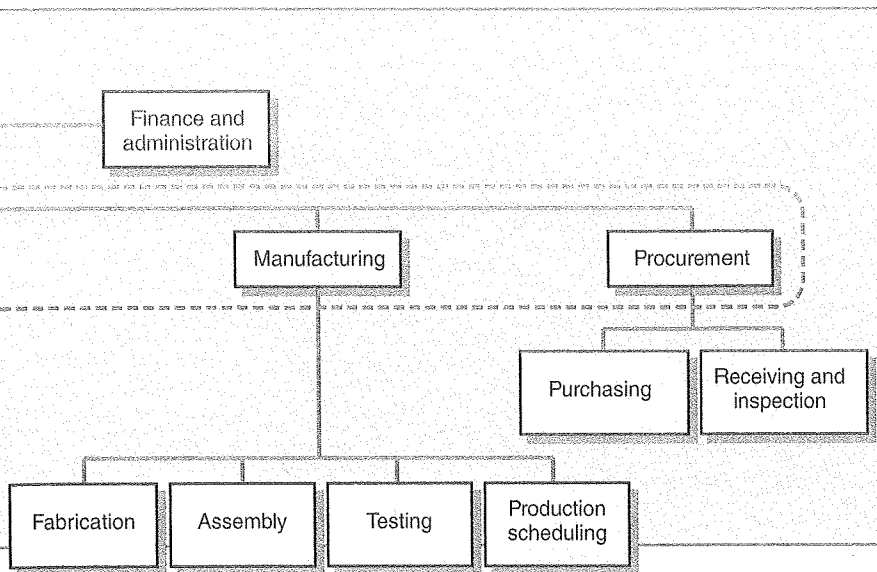
**FIGURE 3.1**  
**Functional**  
**Organizations**



### Organizing Projects within the Functional Organization

One approach to organizing projects is to simply manage them within the existing functional hierarchy of the organization. Once management decides to implement a project, the different segments of the project are delegated to the respective functional units with each unit responsible for completing its segment of the project (see Figure 3.1). Coordination is maintained through normal management channels. For example, a tool manufacturing firm decides to differentiate its product line by offering a series of tools specially designed for left-handed individuals. Top management decides to implement the project, and different segments of the project are distributed to appropriate areas. The industrial design department is responsible for modifying specifications to conform to the needs of left-handed users. The production department is responsible for devising the means for producing new tools according to these new design specifications. The marketing department is responsible for gauging demand and price as well as identifying distribution outlets. The overall project will be managed within the normal hierarchy, with the project being part of the working agenda of top management.

The functional organization is also commonly used when, given the nature of the project, one functional area plays a dominant role in completing the project or has a dominant interest in the success of the project. Under these circumstances, a high-ranking manager in that area is given the responsibility of coordinating the project. For example, the transfer of equipment and personnel to a new office would be managed by a top-ranking manager in the firm's facilities department. Likewise, a project involving the upgrading of the management information system would be managed by the information systems department. In both cases, most of the project work would be done within the specified department and coordination with other departments would occur through normal channels.



There are advantages and disadvantages for using the existing functional organization to administer and complete projects (Larson, 2004). The major advantages are the following:

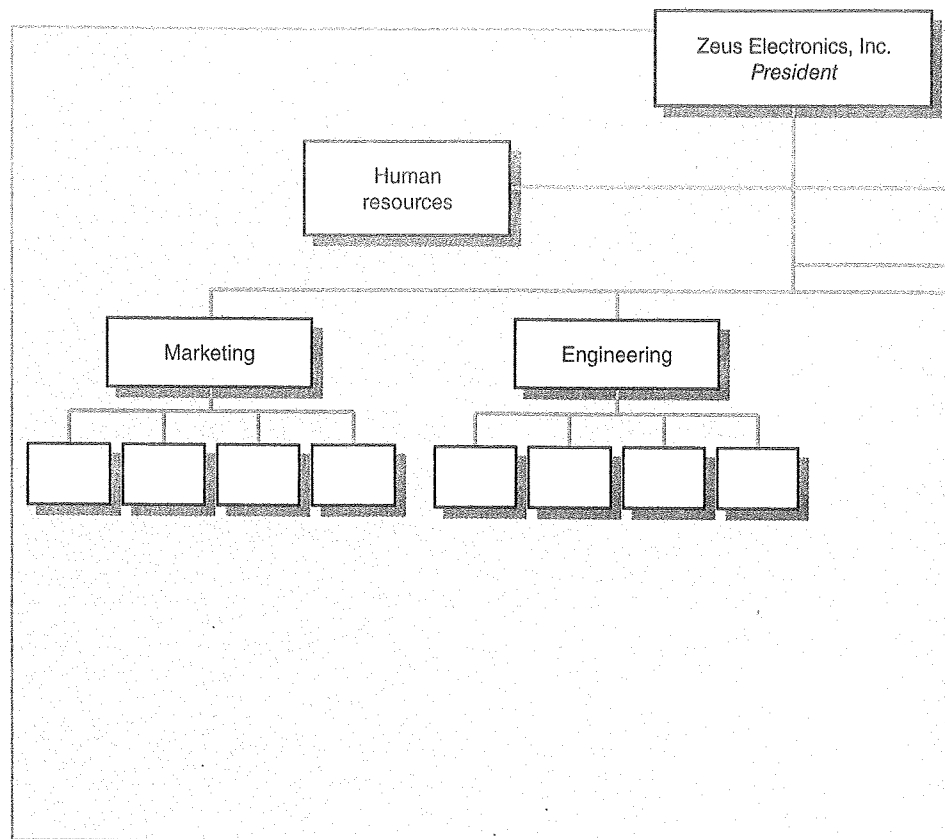
1. **No Change.** Projects are completed within the basic functional structure of the parent organization. There is no radical alteration in the design and operation of the parent organization.
2. **Flexibility.** There is maximum flexibility in the use of staff. Appropriate specialists in different functional units can temporarily be assigned to work on the project and then return to their normal work. With a broad base of technical personnel available within each functional department, people can be switched among different projects with relative ease.
3. **In-Depth Expertise.** If the scope of the project is narrow and the proper functional unit is assigned primary responsibility, then in-depth expertise can be brought to bear on the most crucial aspects of the project.
4. **Easy Post-Project Transition.** Normal career paths within a functional division are maintained. While specialists can make significant contributions to projects, their functional field is their professional home and the focus of their professional growth and advancement.

Just as there are advantages for organizing projects within the existing functional organization, there are also disadvantages. These disadvantages are particularly pronounced when the scope of the project is broad and one functional department does not take the dominant technological and managerial lead on the project:

1. **Lack of Focus.** Each functional unit has its own core routine work to do; sometimes project responsibilities get pushed aside to meet primary obligations. This difficulty is compounded when the project has different priorities

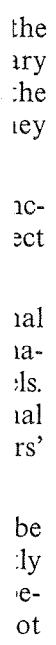


**FIGURE 3.2**  
**Dedicated Project**  
**Team**



for different units. For example, the marketing department may consider the project urgent while the operations people considered it only of secondary importance. Imagine the tension if the marketing people have to wait for the operations people to complete their segment of the project before they proceed.

2. **Poor Integration.** There may be poor integration across functional units. Functional specialists tend to be concerned only with their segment of the project and not with what is best for the total project.
3. **Slow.** It generally takes longer to complete projects through this functional arrangement. This is in part attributable to slow response time—project information and decisions have to be circulated through normal management channels. Furthermore, the lack of horizontal, direct communication among functional groups contributes to rework as specialists realize the implications of others' actions after the fact.
4. **Lack of Ownership.** The motivation of people assigned to the project can be weak. The project may be seen as an additional burden that is not directly linked to their professional development or advancement. Furthermore, because they are working on only a segment of the project, professionals do not identify with the project.



At the other end of the structural spectrum is the creation of **dedicated project teams**. These teams operate as separate units from the rest of the parent organization. Usually a full-time project manager is designated to pull together a core group of specialists who work full time on the project. The project manager recruits necessary personnel from both within and outside the parent company. The subsequent team is physically separated from the parent organization and given marching orders to complete the project (see Figure 3.2).

In the case of firms where projects are the dominant form of business, such as a construction firm or a consulting firm, the entire organization is designed to support project teams. Instead of one or two special projects, the organization consists of sets of quasi-independent teams working on specific projects. The main responsibility of traditional functional departments is to assist and support these project teams. For example, the marketing department is directed at generating

## SNAPSHOT FROM PRACTICE

## Skunk Works at Lockheed Martin\*



In project management folklore, skunk works is code for a small, dedicated team assigned to a breakthrough project. The first skunk works was created more than a half a century ago by Clarence L. "Kelly" Johnson at Lockheed Aerospace Corporation. Kelly's project had two objectives: 1) to create a jet fighter, the Shooting Star, and 2) to do it as fast as possible. Kelly and a small band of engineering mavericks operated as a dedicated team unencumbered by red tape and the bureaucratic delays of the normal R&D process. The name was coined by team member Irvin Culver after the moonshine brewery deep in the forest in the popular cartoon strip *Lil' Abner*. The homemade whisky was euphemistically called kickapoo joy juice.

The project was a spectacular success. In just 43 days, Johnson's team of 23 engineers and teams of support personnel put together the first American fighter to fly at more than 500 miles per hour. Lockheed has continued to use Skunk Works to develop a string of high speed jets, including the F117 Stealth Fighter. Lockheed Martin has an official Skunk Works division. Their charter is:

The Skunk Works is a concentration of a few good people solving problems far in advance—and at a fraction of



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the cost—by applying the simplest, most straightforward methods possible to develop and produce new products.

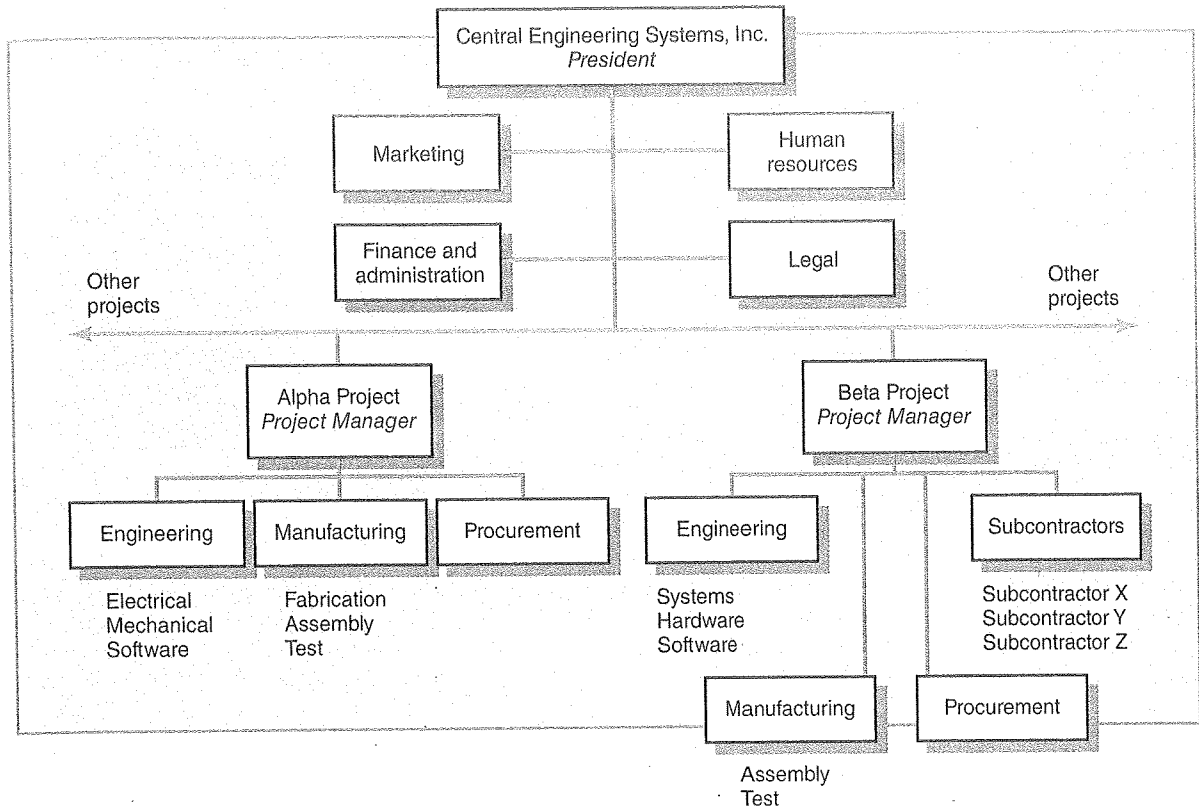
\* J. Miller, *Lockheed Martin's Skunk Works* (New York: Specialty Publications, 1996).

new business that will lead to more projects, while the human resource department is responsible for managing a variety of personnel issues as well as recruiting and training new employees. This type of organization is referred to in the literature as a **Projectized Organization** and is graphically portrayed in Figure 3.3. It is important to note that not all projects are dedicated project teams; personnel can work part-time on several projects.

As in the case of functional organization, the dedicated project team approach has strengths and weaknesses (Larson, 2004). The following are recognized as strengths:

1. **Simple.** Other than taking away resources in the form of specialists assigned to the project, the functional organization remains intact with the project team operating independently.
2. **Fast.** Projects tend to get done more quickly when participants devote their full attention to the project and are not distracted by other obligations and duties. Furthermore, response time tends to be quicker under this arrangement because most decisions are made within the team and are not deferred up the hierarchy.
3. **Cohesive.** A high level of motivation and cohesiveness often emerges within the project team. Participants share a common goal and personal responsibility toward the project and the team.

FIGURE 3.3 Projectized Organization Structure



4. **Cross-Functional Integration.** Specialists from different areas work closely together and, with proper guidance, become committed to optimizing the project, not their respective areas of expertise.

In many cases, the project team approach is the optimum approach for completing a project when you view it solely from the standpoint of what is best for completing the project. Its weaknesses become more evident when the needs of the parent organization are taken into account:

1. **Expensive.** Not only have you created a new management position (project manager), but resources are also assigned on a full-time basis. This can result in duplication of efforts across projects and a loss of economies of scale.
2. **Internal Strife.** Sometimes dedicated project teams take on an entity of their own and conflict emerges between the team and the remainder of the organization (see Snapshot from Practice: The Birth of the Mac). This divisiveness can undermine not only the integration of the eventual outcomes of the project into mainstream operations but also the assimilation of project team members back into their functional units once the project is completed.
3. **Limited Technological Expertise.** Creating self-contained teams inhibits maximum technological expertise being brought to bear on problems. Technical expertise is limited somewhat to the talents and experience of the specialists assigned to the project. While nothing prevents specialists from consulting with others in the functional division, the we-they syndrome and the fact that such

## SNAPSHOT FROM PRACTICE

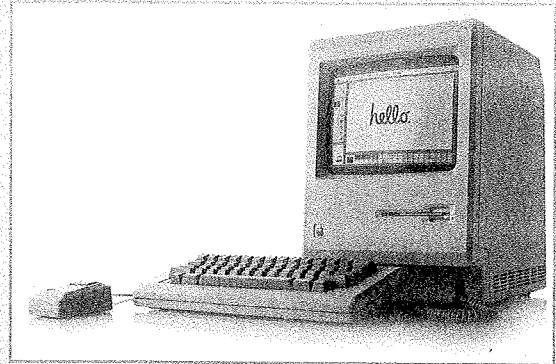
## The Birth of the Mac\*



One of the advantages of creating dedicated project teams is that project participants from different functional areas can develop into a highly cohesive work team that is strongly committed to completing the project. While such teams often produce Herculean efforts in pursuit of project completion, there is a negative dimension to this commitment that is often referred to in the literature as **projectitis**. A we-they attitude can emerge between project team members and the rest of the organization. The project team succumbs to *hubris* and develops a holier-than-thou attitude that antagonizes the parent organization. People not assigned to the project become jealous of the attention and prestige being showered on the project team, especially when they believe that it is their hard work that is financing the endeavor. The tendency to assign project teams exotic titles such as "Silver Bullets" and "Tiger Teams," as well as give them special perks, tends to intensify the gap between the project team and the parent organization.

Such appears to have been the case with Apple's highly successful Macintosh development team. Steve Jobs, who at the time was both the chairman of Apple and the project manager for the Mac team, pampered his team with perks including at-the-desk massages, coolers stocked with freshly squeezed orange juice, a Bosendorfer grand piano, and first-class plane tickets. No other employees at Apple got to travel first class. Jobs considered his team to be the elite of Apple and had a tendency to refer to everyone else as "Bozos" who "didn't get it." Engineers from the Apple II division, which was the bread and butter of Apple's sales, became incensed with the special treatment their colleagues were getting.

One evening at Ely McFly's, a local watering hole, the tensions between Apple II engineers seated at one table and



© Apic/Getty Images

those of a Mac team at another boiled over. Aaron Goldberg, a long-time industry consultant, watched from his barstool as the squabbling escalated. "The Mac guys were screaming, 'We're the future!' The Apple II guys were screaming, 'We're the money!'" Then there was a geek brawl. Pocket protectors and pens were flying. I was waiting for a notebook to drop, so they would stop and pick up the papers."

Although comical from a distance, the discord between the Apple II and Mac groups severely hampered Apple's performance during the 1980s. John Sculley, who replaced Steve Jobs as chairman of Apple, observed that Apple had evolved into two "warring companies" and referred to the street between the Apple II and Macintosh buildings as "the DMZ" (demilitarized zone).

\* J. Carlton, *Apple: The Inside Story of Intrigue, Egomania, and Business Blunders* (New York: Random House, 1997), pp. 13-14; J. Sculley, *Odyssey: Pepsi to Apple... A Journey of Adventure, Ideas, and the Future* (New York: Harper & Row, 1987), pp. 270-79.

help is not formally sanctioned by the organization discourage this from happening.

4. **Difficult Post-Project Transition.** Assigning full-time personnel to a project creates the dilemma of what to do with personnel after the project is completed. If other project work is not available, then the transition back to their original functional departments may be difficult because of their prolonged absence and the need to catch up with recent developments in their functional area.

### Organizing Projects within a Matrix Arrangement

One of the biggest management innovations to emerge in the past 40 years has been the matrix organization. **Matrix** management is a hybrid organizational form in which a horizontal project management structure is "overlaid" on the normal functional hierarchy. In a matrix system, there are usually two chains of

command, one along functional lines and the other along project lines. Instead of delegating segments of a project to different units or creating an autonomous team, project participants report simultaneously to both functional and project managers.

Companies apply this matrix arrangement in a variety of different ways. Some organizations set up temporary matrix systems to deal with specific projects, while "matrix" may be a permanent fixture in other organizations. Let us first look at its general application and then proceed to a more detailed discussion of finer points. Consider Figure 3.4. There are three projects currently under way: A, B, and C. All three project managers (PM A-C) report to a director of project management, who supervises all projects. Each project has an administrative assistant, although the one for project C is only part time.

Project A involves the design and expansion of an existing production line to accommodate new metal alloys. To accomplish this objective, project A has assigned to it 3.5 people from manufacturing and 6 people from engineering. These individuals are assigned to the project on a part-time or full-time basis, depending on the project's needs during various phases of the project. Project B involves the development of a new product that requires the heavy representation of engineering, manufacturing, and marketing. Project C involves forecasting changing needs of an existing customer base. While these three projects, as well as others, are being completed, the functional divisions continue performing their basic, core activities.

The matrix structure is designed to optimally utilize resources by having individuals work on multiple projects as well as being capable of performing normal functional duties. At the same time, the matrix approach attempts to achieve greater integration by creating and legitimizing the authority of a project manager. In theory, the matrix approach provides a dual focus between functional/technical expertise and project requirements that is missing in either the project team or functional approach to project management. This focus can most easily be seen in the relative input of functional managers and project managers over key project decisions (see Table 3.1).

### Different Matrix Forms

In practice there are really different kinds of matrix systems, depending on the relative authority of the project and functional managers (Larson & Gobeli, 1985; Bowen et al., 1994). Here is a thumbnail sketch of the three kinds of matrices:

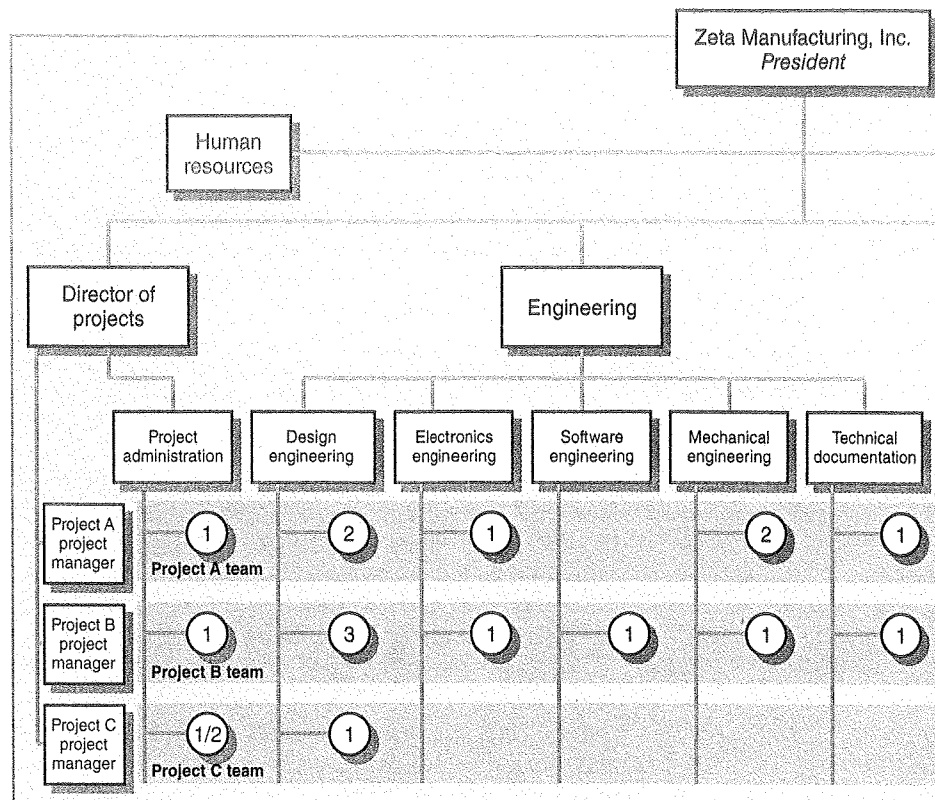
- **Weak matrix**—This form is very similar to a functional approach with the exception that there is a formally designated project manager responsible for coordinating project activities. Functional managers are responsible for

**TABLE 3.1**  
Division of Project  
Manager and  
Functional Manager  
Responsibilities in a  
Matrix Structure

Project Manager	Negotiated Issues	Functional Manager
What has to be done?	Who will do the task?	How will it be done?
When should the task be done?	Where will the task be done?	
How much money is available to do the task?	Why will the task be done?	How will the project involvement impact normal functional activities?
How well has the total project been done?	Is the task satisfactorily completed?	How well has the functional input been integrated?

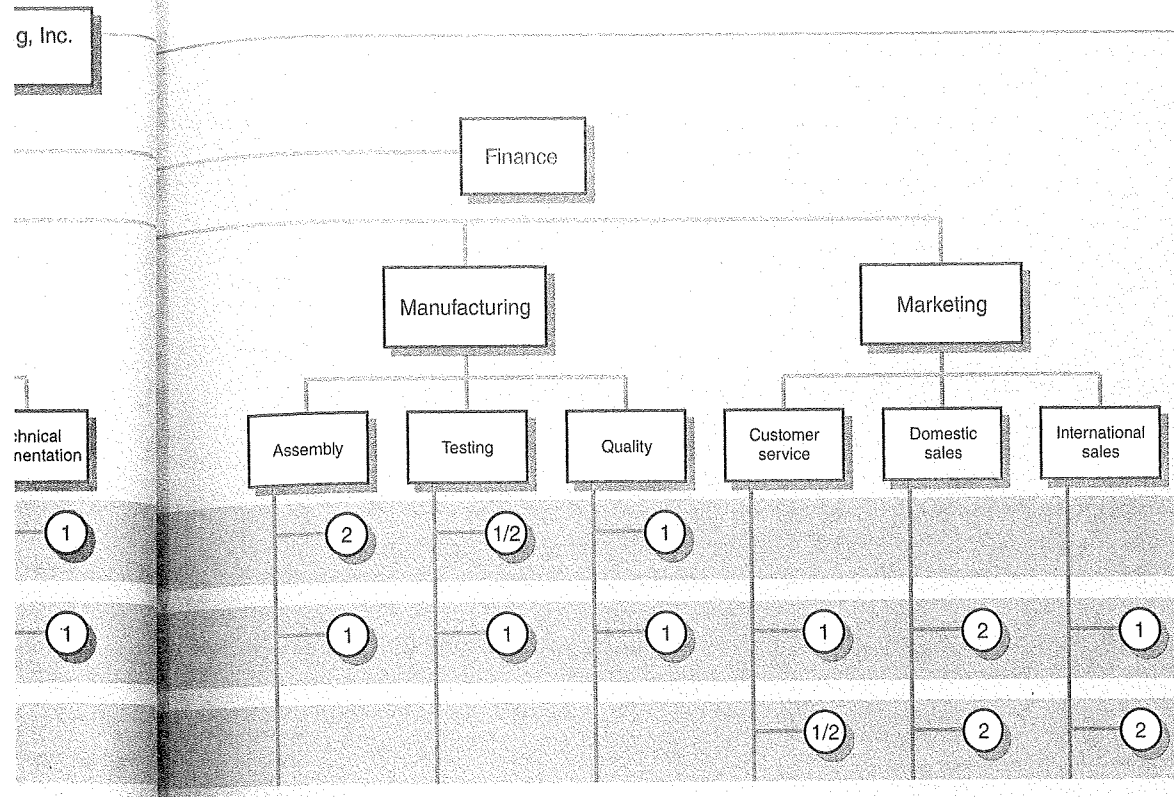


FIGURE 3.4  
Matrix Organization  
Structure



managing their segment of the project. The project manager basically acts as a staff assistant who draws the schedules and checklists, collects information on status of work, and facilitates project completion. The project manager has indirect authority to expedite and monitor the project. Functional managers call most of the shots and decide who does what and when the work is completed.

- **Balanced matrix**—This is the classic matrix in which the project manager is responsible for defining what needs to be accomplished while the functional managers are concerned with how it will be accomplished. More specifically, the project manager establishes the overall plan for completing the project, integrates the contribution of the different disciplines, sets schedules, and monitors progress. The functional managers are responsible for assigning personnel and executing their segment of the project according to the standards and schedules set by the project manager. The merger of “what and how” requires both parties to work closely together and jointly approve technical and operational decisions.
- **Strong matrix**—This form attempts to create the “feel” of a project team within a matrix environment. The project manager controls most aspects of the project, including scope trade-offs and assignment of functional personnel. The project manager controls when and what specialists do and has final say on major project decisions. The functional manager has title over her people and is



consulted on a need basis. In some situations a functional manager's department may serve as a "subcontractor" for the project, in which case they have more control over specialized work. For example, the development of a new series of laptop computers may require a team of experts from different disciplines working on the basic design and performance requirements within a project matrix arrangement. Once the specifications have been determined, final design and production of certain components (i.e., power source) may be assigned to respective functional groups to complete.

Matrix management both in general and in its specific forms has unique strengths and weaknesses (Larson & Gobeli, 1987). The advantages and disadvantages of matrix organizations in general are noted below, while only briefly highlighting specifics concerning different forms:

1. **Efficient.** Resources can be shared across multiple projects as well as within functional divisions. Individuals can divide their energy across multiple projects on an as-needed basis. This reduces duplication required in a projectized structure.
2. **Strong Project Focus.** A stronger project focus is provided by having a formally designated project manager who is responsible for coordinating and integrating contributions of different units. This helps sustain a holistic approach to problem solving that is often missing in the functional organization.

3. **Easier Post-Project Transition.** Because the project organization is overlaid on the functional divisions, specialists maintain ties with their functional group, so they have a homeport to return to once the project is completed.
4. **Flexible.** Matrix arrangements provide for flexible utilization of resources and expertise within the firm. In some cases functional units may provide individuals who are managed by the project manager. In other cases the contributions are monitored by the functional manager.

The strengths of the matrix structure are considerable. Unfortunately, so are the potential weaknesses. This is due in large part to the fact that a matrix structure is more complicated and the creation of multiple bosses represents a radical departure from the traditional hierarchical authority system.

Furthermore, one does not install a matrix structure overnight. Experts argue that it takes 3–5 years for a matrix system to fully mature. So many of the problems described below represent growing pains.

1. **Dysfunctional Conflict.** The matrix approach is predicated on tension between functional managers and project managers who bring critical expertise and perspectives to the project. Such tension is viewed as a necessary mechanism for achieving an appropriate balance between complex technical issues and unique project requirements. While the intent is noble, the effect is sometimes analogous to opening Pandora's box. Legitimate conflict can spill over to a more personal level, resulting from conflicting agendas and accountabilities. Worthy discussions can degenerate into heated arguments that engender animosity among the managers involved.
2. **Infighting.** Any situation in which equipment, resources, and people are being shared across projects and functional activities lends itself to conflict and competition for scarce resources. Infighting can occur among project managers, who are primarily interested in what is best for their project.
3. **Stressful.** Matrix management violates the management principle of unity of command. Project participants have at least two bosses—their functional head and one or more project managers. Working in a matrix environment can be extremely stressful. Imagine what it would be like to work in an environment in which you are being told to do three conflicting things by three different managers.
4. **Slow.** In theory, the presence of a project manager to coordinate the project should accelerate the completion of the project. In practice, decision making can get bogged down as agreements have to be forged across multiple functional groups. This is especially true for the balanced matrix.

When the three variant forms of the matrix approach are considered, we can see that advantages and disadvantages are not necessarily true for all three forms of matrix. The Strong matrix is likely to enhance project integration, diminish internal power struggles, and ultimately improve control of project activities and costs. On the downside, technical quality may suffer because functional areas have less control over their contributions. Finally, projectitis may emerge as the members develop a strong team identity.

The Weak matrix is likely to improve technical quality as well as provide a better system for managing conflict across projects because the functional manager assigns personnel to different projects. The problem is that functional control is often maintained at the expense of poor project integration. The Balanced matrix

can achieve better balance between technical and project requirements, but it is a very delicate system to manage and is more likely to succumb to many of the problems associated with the matrix approach.

### What Is the Right Project Management Structure?

There is empirical evidence that project success is directly linked to the amount of autonomy and authority project managers have over their projects (Gray et al., 1990; Larson & Gobeli, 1988; Larson & Gobeli, 1987). However, most of this research is based on what is best for managing specific projects. It is important to remember what was stated in the beginning of the chapter—that the best system balances the needs of the project with those of the parent organization. So what project structure should an organization use? This is a complicated question with no precise answers. A number of issues need to be considered at both the organization and project level.

#### Organization Considerations

At the organization level, the first question that needs to be asked is how important is project management to the success of the firm? What percentage of core work involves projects? If over 75 percent of work involves projects, then an organization should consider a fully projectized organization. If an organization has both standard products and projects, then a matrix arrangement would appear to be appropriate. If an organization has very few projects, then a less formal arrangement is probably all that is required. Dedicated teams could be created on an as-needed basis and the organization could outsource project work.

A second key question is resource availability. Remember, matrix evolved out of the necessity to share resources across multiple projects and functional domains while at the same time creating legitimate project leadership. For organizations that cannot afford to tie up critical personnel on individual projects, a matrix system would appear to be appropriate. An alternative would be to create a dedicated team but outsource project work when resources are not available internally.

Within the context of the first two questions, an organization needs to assess current practices and what changes are needed to more effectively manage projects. A strong project matrix is not installed overnight. The shift toward a greater emphasis on projects has a host of political implications that need to be worked through, requiring time and strong leadership. For example, we have observed many companies that make the transition from a functional organization to a matrix organization begin with a weak functional matrix. This is due in part to resistance by functional and department managers toward transferring authority to project managers. With time, these matrix structures eventually evolve into a project matrix. Many organizations have created Project Management Offices to support project management efforts. See Snapshot from Practice: POs: Project Offices.

#### Project Considerations

At the project level, the question is how much autonomy the project needs in order to be successfully completed. Hobbs and Ménard (1993) identify seven factors that should influence the choice of project management structure:

- Size of project.
- Strategic importance.

## SNAPSHOT FROM PRACTICE

## POs: Project Offices



**Project offices (POs)** were originally developed as a response to the poor track record many companies had in completing projects on time, within budget, and according to plan.

They were often established to help matrix systems mature into more effective project delivery platforms.

Today, POs come in many different shapes and forms. One interesting way of classifying POs was set forth by Casey and Peck, who describe certain POs in terms of being (1) a weather station, (2) a control tower, or (3) a resource pool. Each of these models performs a very different function for its organization.

- **Weather Station.** The primary function of the weather station PO is to track and monitor project performance. It is typically created to satisfy top management's need to stay on top of the portfolio of projects under way in the firm. Staff provides an independent forecast of project performance. The questions answered for specific projects include:
  - How are our projects progressing? Which ones are on track? Which ones are not?

- How are we doing in terms of cost? Which projects are over or under budget?
- What are the major problems confronting projects? Are contingency plans in place? What can the organization do to help the project?
- **Control Tower.** The primary function of the control tower PO is to improve project execution. It considers project management as a profession to be protected and advanced. Staff at the PO identify best practices and standards for project management excellence. They work as consultants and trainers to support project managers and their teams.
- **Resource Pool.** The goal of the resource pool PO is to provide the organization with a cadre of trained project managers and professionals. It operates like an academy for continually upgrading the skills of a firm's project professionals. In addition to training, this kind of PO also serves to elevate the stature of project management within the organization.

\* W. Casey and W. Peck, "Choosing the Right PMO Setup," *PM Network*, vol. 15, no. 2(2001), pp. 40-47.

- Novelty and need for innovation.
- Need for integration (number of departments involved).
- Environmental complexity (number of external interfaces).
- Budget and time constraints.
- Stability of resource requirements.

The higher the levels of these seven factors, the more autonomy and authority the project manager and project team need to be successful.<sup>1</sup> This translates into using either a dedicated project team or a project matrix structure. For example, these structures should be used for large projects that are strategically critical and are new to the company, thus requiring much innovation. These structures would also be appropriate for complex, multidisciplinary projects that require input from many departments, as well as for projects that require constant contact with customers to assess their expectations. Dedicated project teams should also be used for urgent projects in which the nature of the work requires people working steadily from beginning to end.

Many firms that are heavily involved in project management have created a flexible management system that organizes projects according to project requirements. For example, Chaparral Steel, a mini-mill that produces steel bars and beams from scrap metal, classifies projects into three categories: advanced

<sup>1</sup> For a more sophisticated discussion of contingency factors related to managing specific projects see: A. J. Shenhar and D. Dvir, *Reinventing Project Management: The Diamond Approach to Successful Growth and Innovation* (Boston: Harvard Press, 2007).

development, platform, and incremental. Advanced development projects are high-risk endeavors involving the creation of a breakthrough product or process. Platform projects are medium-risk projects involving system upgrades that yield new products and processes. Incremental projects are low-risk, short-term projects that involve minor adjustments in existing products and processes. At any point in time, Chaparral might have 40–50 projects underway, of which only one or two are advanced, three to five are platform projects, and the remainder are small, incremental projects. The incremental projects are almost all done within a weak matrix with the project manager coordinating the work of functional subgroups. A strong matrix is used to complete the platform projects, while dedicated project teams are typically created to complete the advanced development projects. More and more companies are using this “mix and match” approach to managing projects.

### Organizational Culture

The decision for combining a discussion of project management structures and organizational cultures in this chapter can be traced to a conversation we, the authors, had with two project managers who work for a medium-sized information technology firm.

The managers were developing a new operating platform that would be critical to the future success of their company. When they tried to describe how this project was organized, one manager began to sketch out on a napkin a complicated structure involving 52 different teams, each with a project leader and a technical leader! In response to our further probing to understand how this system worked, the manager stopped short and proclaimed, “The key to making this structure work is the culture in our company. This approach would never work at company Y, where I worked before. But because of our culture here we are able to pull it off.”

This comment, our observations of other firms, and research suggest there is a strong connection between project management structure, organizational culture, and project success.<sup>2</sup> We have observed organizations successfully manage projects within the traditional functional organization because the culture encouraged cross-functional integration. Conversely we have seen matrix structures break down because the culture of the organization did not support the division of authority between project managers and functional managers. We have also observed companies relying on independent project teams because the dominant culture would not support the innovation and speed necessary for success.

### What Is Organizational Culture?

**Organizational culture** refers to a system of shared norms, beliefs, values, and assumptions which binds people together, thereby creating shared meanings (Deal & Kennedy, 1982). This system is manifested by customs and habits that exemplify the values and beliefs of the organization. For example, egalitarianism may be expressed in the informal dress worn at a high-tech firm. Conversely, mandated uniforms at a department store reinforce respect for the hierarchy.

<sup>2</sup> See, for example: Kerzner, H., *In Search of Excellence in Project Management* (New York: Von Nostrand Reinhold, 1997); Matheson, D., and J. Matheson, *The Smart Organization* (Boston: HBS Press, 1998).



Culture reflects the personality of the organization and, similar to an individual's personality, can enable us to predict attitudes and behaviors of organizational members. Culture is also one of the defining aspects of an organization that sets it apart from other organizations even in the same industry.

Research suggests that there are 10 primary characteristics which, in aggregate, capture the essence of an organization's culture:<sup>3</sup>

1. **Member identity**—the degree to which employees identify with the organization as a whole rather than with their type of job or field of professional expertise.
2. **Team emphasis**—the degree to which work activities are organized around groups rather than individuals.
3. **Management focus**—the degree to which management decisions take into account the effect of outcomes on people within the organization.
4. **Unit integration**—the degree to which units within the organization are encouraged to operate in a coordinated or interdependent manner.
5. **Control**—the degree to which rules, policies, and direct supervision are used to oversee and control employee behavior.
6. **Risk tolerance**—the degree to which employees are encouraged to be aggressive, innovative, and risk seeking.
7. **Reward criteria**—the degree to which rewards such as promotion and salary increases are allocated according to employee performance rather than seniority, favoritism, or other nonperformance factors.
8. **Conflict tolerance**—the degree to which employees are encouraged to air conflicts and criticisms openly.
9. **Means versus end orientation**—the degree to which management focuses on outcomes rather than on techniques and processes used to achieve those results.
10. **Open-systems focus**—the degree to which the organization monitors and responds to changes in the external environment.

As shown in Figure 3.5, each of these dimensions exists on a continuum. Assessing an organization according to these 10 dimensions provides a composite picture of the organization's culture. This picture becomes the basis for feelings of shared understanding that the members have about the organization, how things are done, and the way members are supposed to behave.

Culture performs several important functions in organizations. An organization's culture *provides a sense of identity* for its members. The more clearly an organization's shared perceptions and values are stated, the more strongly people can identify with their organization and feel a vital part of it. Identity generates commitment to the organization and reasons for members to devote energy and loyalty to the organization.

A second important function is that culture *helps legitimize the management system* of the organization. Culture helps clarify authority relationships. It provides reasons why people are in a position of authority and why their authority should be respected.

<sup>3</sup>Harrison, M. T., and J. M. Beyer, *The Culture of Organizations* (Englewood Cliffs, NJ: Prentice Hall, 1993); O'Reilly, C. A., J. Chatman, and D. F. Caldwell, "People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit," *Academy of Management Journal*, vol. 34, no. 3, September 1991, pp. 487–516; and Schein, E., *Organizational Culture and Leadership: A Dynamic View* (San Francisco, CA: Jossey-Bass, 2010).

**FIGURE 3.5**  
**Key Dimensions**  
**Defining an**  
**Organization's**  
**Culture**

	1. Member identity	
Job		Organization
	2. Team emphasis	
Individual		Group
	3. Management focus	
Task		People
	4. Unit integration	
Independent		Interdependent
	5. Control	
Loose		Tight
	6. Risk tolerance	
Low		High
	7. Reward criteria	
Performance		Other
	8. Conflict tolerance	
Low		High
	9. Means-ends orientation	
Means		Ends
	10. Open-system focus	
Internal		External

Most importantly, organizational culture *clarifies and reinforces standards of behavior*. Culture helps define what is permissible and inappropriate behavior. These standards span a wide range of behavior from dress code and working hours to challenging the judgment of superiors and collaborating with other departments. Ultimately, culture *helps create social order* within an organization. Imagine what it would be like if members didn't share similar beliefs, values, and assumptions—chaos! The customs, norms, and ideals conveyed by the culture of an organization provide the stability and predictability in behavior that is essential for an effective organization. See Snapshot from Practice: Google-y for an example of this.

Although our discussion of organizational culture may appear to suggest one culture dominates the entire organization, in reality this is rarely the case. “Strong” or “thick” are adjectives used to denote a culture in which the organization's core values and customs are widely shared within the entire organization. Conversely, a “thin” or “weak” culture is one that is not widely shared or practiced within a firm.

Even within a strong organizational culture, there are likely to be subcultures often aligned within specific departments or specialty areas. As noted earlier in our discussion of project management structures, it is not uncommon for norms, values, and customs to develop within a specific field or profession such as marketing, finance, or operations. People working in the marketing department may have a different set of norms and values than those working in finance.

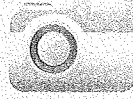
Countercultures sometimes emerge within organizations that embody a different set of values, beliefs, and customs—often in direct contradiction with the culture espoused by top management. How pervasive these subcultures and countercultures are affect the strength of the culture of the organization and the extent to which culture influences members' actions and responses.

### Identifying Cultural Characteristics

Deciphering an organization's culture is a highly interpretative, subjective process that requires assessment of both current and past history. The student of culture cannot simply rely on what people report about their culture. The physical

## SNAPSHOT FROM PRACTICE

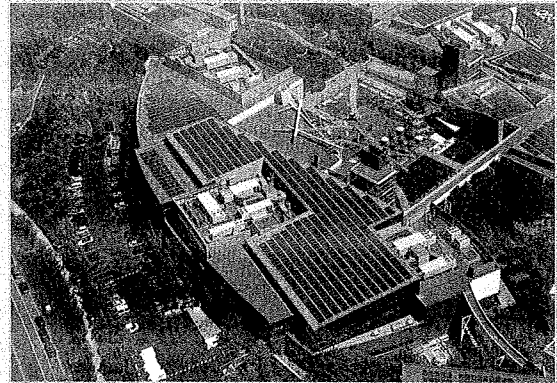
Google-y



In 2012 Google Inc. topped *Fortune* magazine's list of best companies to work at for the third time in the past five years. When one enters the 24-hour Googleplex located in Mountain View, California, you feel that you are walking through a new-age college campus rather than the corporate office of a billion-dollar business. The collection of interconnected low-rise buildings with colorful, glass-encased offices feature upscale trappings—free gourmet meals three times a day, free use of an outdoor wave pool, indoor gym and large child care facility, private shuttle bus service to and from San Francisco and other residential areas—that are the envy of workers across the Bay area. These perks and others reflect Google's culture of keeping people happy and thinking in unconventional ways.

The importance of corporate culture is no more evident than in the fact that the head of Human Resources, Stacy Savides Sullivan, also has the title of Chief Culture Officer. Her task is to try to preserve the innovative culture of a start-up as Google quickly evolves into a mammoth international corporation. Sullivan characterizes Google culture as "team-oriented, very collaborative and encouraging people to think nontraditionally, different from where they ever worked before—work with integrity and for the good of the company and for the good of the world, which is tied to our overall mission of making information accessible to the world." Google goes to great lengths to screen new employees to not only make sure that they have outstanding technical capabilities but also that they are going to fit Google's culture. Sullivan goes on to define a Google-y employee as somebody who is "flexible, adaptable, and not focusing on titles and hierarchy, and just gets stuff done."

Google's culture is rich with customs and traditions not found in corporate America. For example, project teams typically have daily "stand-up" meetings seven minutes after the hour. Why seven minutes after the hour? Because Google co-founder Sergey Brin once estimated that it took seven minutes



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to walk across the Google campus. Everybody stands to make sure no one gets too comfortable and no time is wasted during the rapid-fire update. As one manager noted, "The whole concept of the stand-up is to talk through what everyone's doing, so if someone is working on what you're working on, you can discover and collaborate not duplicate."

Another custom is "dogfooding." This is when a project team releases the functional prototype of a future product to Google employees for them to test drive. There is a strong norm within Google to test new products and provide feedback to the developers. The project team receives feedback from thousands of Google-ys. The internal focus group can log bugs or simply comment on design or functionality. Fellow Google-ys do not hold back on their feedback and are quick to point out things they don't like. This often leads to significant product improvements.

\* Walters, H., "How Google Got Its New Look," *BusinessWeek*, May 10, 2010; Goo, S. K., "Building a 'Googley' Workforce," *Washington Post*, October 21, 2006; Mills, E., "Meet Google's Culture Czar," *CNET News.com*, April 27, 2007.

environment in which people work, as well as how people act and respond to different events that occur, must be examined. Figure 3.6 contains a worksheet for diagnosing the culture of an organization. Although by no means exhaustive, the checklist often yields clues about the norms, customs, and values of an organization:

1. **Study the physical characteristics of an organization.** What does the external architecture look like? What image does it convey? Is it unique? Are the buildings and offices the same quality for all employees? Or are modern buildings and fancier offices reserved for senior executives or managers from a specific department? What are the customs concerning dress? What symbols does the

**FIGURE 3.6**  
Organizational  
Culture Diagnosis  
Worksheet

**Power Corp.**

**I. Physical Characteristics:**

Architecture, office layout, décor, attire

*Corporate HQ is 20 story modern building—president on top floor. Offices are bigger in the top floors than lower floors. Formal business attire (white shirts, ties, power suits, . . .). Power appears to increase the higher up you are.*

**II. Public Documents:**

Annual reports, internal newsletters, vision statements

*At the heart of the Power Corp. way is our vision . . . to be the global energy company most admired for its people, partnership, and performance.*

*Integrity. We are honest with others and ourselves. We meet the highest ethical standards in all business dealings. We do what we say we will do.*

**III. Behavior:**

Pace, language, meetings, issues discussed, decision-making style, communication patterns, rituals

*Hierarchical decision-making, pace brisk but orderly, meetings start on time and end on time, subordinates choose their words very carefully when talking to superiors, people rarely work past 6:00 P.M., president takes top performing unit on a boat cruise each year . . .*

**IV. Folklore:**

Stories, anecdotes, heroines, heroes, villains

*Young project manager was fired after going over his boss's head to ask for additional funds.*

*Stephanie C. considered a hero for taking complete responsibility for a technical error.*

*Jack S. was labeled a traitor for joining chief competitor after working for Power Corp. for 15 years.*

organization use to signal authority and status within the organization? These physical characteristics can shed light on who has real power within the organization, the extent to which the organization is internally differentiated, and how formal the organization is in its business dealings.

2. **Read about the organization.** Examine annual reports, mission statements, press releases, and internal newsletters. What do they describe? What principles are espoused in these documents? Do the reports emphasize the people who work for the organization and what they do or the financial performance of the firm? Each emphasis reflects a different culture. The first demonstrates concern for the people who make up the company. The second may suggest a concern for results and the bottom line.
3. **Observe how people interact within the organization.** What is their pace—is it slow and methodical or urgent and spontaneous? What rituals exist within the organization? What values do they express? Meetings can often yield insightful information. Who are the people at the meetings? Who does the talking? To whom do they talk? How candid is the conversation? Do people speak for the organization or for the individual department? What is the focus of the meetings? How much time is spent on various issues? Issues that are discussed repeatedly and at length are clues about the values of the organization's culture.
4. **Interpret stories and folklore surrounding the organization.** Look for similarities among stories told by different people. The subjects highlighted in recurring stories often reflect what is important to an organization's culture. For example, many of the stories that are repeated at Versatec, a Xerox subsidiary that makes

graphic plotters for computers, involve their flamboyant cofounder, Renn Zaphiropoulos. According to company folklore, one of the very first things Renn did when the company was formed was to assemble the top management team at his home. They then devoted the weekend to handmaking a beautiful teak conference table around which all future decisions would be made. This table came to symbolize the importance of teamwork and maintaining high standards of performance, two essential qualities of the culture at Versatec. Try to identify who the heroes and villains are in the folklore company. What do they suggest about the culture's ideals? Returning to the Versatec story, when the company was eventually purchased by Xerox many employees expressed concern that Versatec's informal, play hard/work hard culture would be overwhelmed by the bureaucracy at Xerox. Renn rallied the employees to superior levels of performance by arguing that if they exceeded Xerox's expectations they would be left alone. Autonomy has remained a fixture of Versatec's culture long after Renn's retirement.

It is also important to pay close attention to the basis for promotions and rewards. What do people see as the keys to getting ahead within the organization? What contributes to downfalls? These last two questions can yield important insights into the qualities and behaviors which the organization honors as well as the cultural taboos and behavioral land mines that can derail a career. For example, one project manager confided that a former colleague was sent to project management purgatory soon after publicly questioning the validity of a marketing report. From that point on, the project manager was extra careful to privately consult the marketing department whenever she had questions about their data.

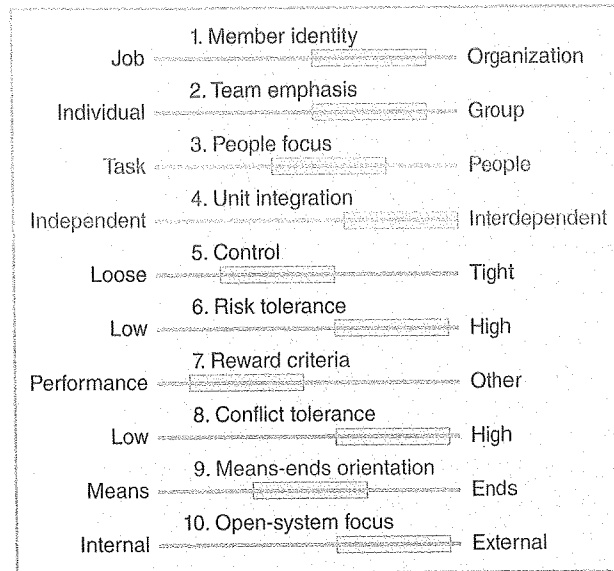
With practice an observer can assess how strong the dominant culture of an organization is and the significance of subcultures and countercultures. Furthermore, learners can discern and identify where the culture of an organization stands on the 10 cultural dimensions presented earlier and, in essence, begin to build a cultural profile for a firm. Based on this profile, conclusions can be drawn about specific customs and norms that need to be adhered to as well as those behaviors and actions that violate the norms of a firm.

### Implications of Organizational Culture for Organizing Projects

Project managers have to be able to operate in several, potentially diverse, organizational cultures. First, they have to interact with the culture of their parent organization as well as the subcultures of various departments (e.g., marketing, accounting). Second, they have to interact with the project's client or customer organizations. Finally, they have to interact in varying degrees with a host of other organizations connected to the project. These organizations include suppliers and vendors, subcontractors, consulting firms, government and regulatory agencies, and, in many cases, community groups. Many of these organizations are likely to have very different cultures. Project managers have to be able to read and speak the culture they are working in to develop strategies, plans, and responses that are likely to be understood and accepted. Still, the emphasis of this chapter is on the relationship between organizational culture and project management structure, and it is necessary to defer further discussion of these implications until Chapters 10–12, which focus on leadership, team building, and outsourcing.



**FIGURE 3.7**  
**Cultural Dimensions**  
**of an Organization**  
**Supportive of Project**  
**Management**



Earlier we stated that we believe there are strong relationships among project management structure, organizational culture, and successful project management. To explore these relationships further, let us return to the dimensions that can be used to characterize the culture of an organization. When examining these dimensions we could hypothesize that certain aspects of the culture of an organization would support successful project management while other aspects would deter or interfere with effective management. Figure 3.7 attempts to identify which cultural characteristics create an environment conducive to completing most complex projects involving people from different disciplines.

Note that, in many cases, the ideal culture is not at either extreme. For example, a fertile project culture would likely be one in which management balances its focus on the needs of both the task and the people. An optimal culture would balance concern with output (ends) and processes to achieve those outcomes (means). In other cases, the ideal culture would be on one end of a dimension or the other. For example, because most projects require collaboration across disciplines, it would be desirable that the culture of the organization emphasize working in teams and identifying with the organization, not just the professional domain. Likewise, it is important that the culture support a certain degree of risk taking and a tolerance for constructive conflict.

One organization that appears to fit this ideal profile is 3M. 3M has received acclaim for creating an entrepreneurial culture within a large corporate framework. The essence of its culture is captured in phrases that have been chanted often by 3Mers throughout its history: "Encourage experimental doodling." "Hire good people and leave them alone." "If you put fences around people, you get sheep. Give people the room they need." Freedom and autonomy to experiment are reflected in the "15 percent rule," which encourages technical people to spend up to 15 percent of their time on projects of their own choosing and initiative. This fertile culture has contributed to 3M's branching out into more than 60,000 products and 35 separate business units (Collins & Porras, 1994).



The metaphor we choose to describe the relationship between organizational culture and project management is that of a riverboat trip. Culture is the river and the project is the boat. Organizing and completing projects within an organization in which the culture is conducive to project management is like paddling downstream: much less effort is required. In many cases, the current can be so strong that steering is all that is required. Such is the case for projects that operate in a project-friendly environment where team-work and cross-functional cooperation are the norms, where there is a deep commitment to excellence, and where healthy conflict is voiced and dealt with quickly and effectively.

Conversely, trying to complete a project in a toxic culture is like paddling upstream: much more time, effort, and attention are needed to reach the destination. This would be the situation in cultures that discourage teamwork and cooperation, that have a low tolerance for conflict, and where getting ahead is based less on performance and more on cultivating favorable relationships with superiors. In such cases, the project manager and her people not only have to overcome the natural obstacles of the project but also have to overcome the prevailing negative forces inherent in the culture of the organization.

The implications of this metaphor are important. Greater project authority and time are necessary to complete projects that encounter a strong, negative cultural current. Conversely, less formal authority and fewer dedicated resources are needed to complete projects in which the cultural currents generate behavior and cooperation essential to project success.

The key issue is the degree of interdependency between the parent organization and the project team. In cases where the prevalent organizational culture supports the behaviors essential to project completion, a weaker, more flexible project management structure can be effective. For example, one of the major reasons Chaparral Steel is able to use a functional matrix to successfully complete incremental projects is that its culture contains strong norms for cooperation (Bowen et al., 1994). See the Research Highlight: The Secret of Success for another example of how culture supports successful project management.

When the dominant organization culture inhibits collaboration and innovation, it is advisable to insulate the project team from the dominant culture. Here it becomes necessary to create a self-sufficient project team. If a dedicated project team is impossible because of resource constraints, then at least a project matrix should be used where the project manager has dominant control over the project. In both cases, the managerial strategy is to create a distinct team subculture in which a new set of norms, customs, and values evolve that will be conducive to project completion.

Under extreme circumstances this project culture could even represent a counterculture in that many of the norms and values are the antithesis of the dominant, parent culture. Such was the case when IBM decided to develop their personal computer quickly in 1980 (Smith & Reinertsen, 1995). They knew that the project could get bogged down by the overabundance of computer knowledge and bureaucracy in the company. They also realized that they would have to work closely with suppliers and make use of many non-IBM parts if they were to get to the market quickly. This was not the IBM way at the time, so IBM established the PC project team in a warehouse in Boca Raton, Florida, far from corporate headquarters and other corporate development facilities that existed within the organization.



In *The Secret of Success: The Double Helix of Formal and Informal Structures in an R&D Laboratory* Polly Rizova revealed the results of a year-long investigation into the inner workings of a Fortune 500 R&D Lab. Through interviews with key participants and analysis of social networking data, Rizova assessed the efficacy of six high-tech development projects.

Four critical success factors emerged from her research. One element that is crucial to success is a heavy reliance on open and unrestricted patterns of communication, coupled with a low degree of formal reporting. In other words, team members freely interacted with each other regardless of title, experience, or discipline. A second key is having individuals on the project who are highly respected across the laboratory for their exceptional technical skills and experience. Similarly, it is also vital to have individuals involved in the project who are highly respected for their organizational expertise and experience. Having both "technical stars" and "organizational stars" on the project team were essential to success. The final factor is a strong and sustained support for the project from the company's corporate management. What's more, her analysis revealed interactive nature of the four conditions; namely that no one condition was likely to produce successful outcomes on its own, but only when put together in a way in which they reinforce each other. Here the culture of the laboratory was seen as the key catalyst.

Rizova describes a matrix system in which people work on multiple projects simultaneously but with a different wrinkle. Individuals occupy different positions and play different roles

depending upon the project. For example, it is common for a senior engineer to be the manager of one project and a researcher on another that is led by his or her subordinate. In essence one must "boss" his or her own boss. At first glance this formal structure should create destructive tensions. However, Rizova argues that the organizational culture of the lab is the glue that keeps things running smoothly.

She described a culture in which the social norms of cooperation, respect, and civility are upheld and reproduced. It is a culture characterized by trust and a strong drive toward superior individual and organizational learning and achievement. The culture is captured in the comments of researchers:

That is one of the nicest things around here. Your opinions are listened to. Superiors consider our advice. You will find that most of the projects here are a team effort.

What I like most is the positive thinking and the "whatever it takes" attitude. Personality conflicts can be devastating. Here everyone helps you and supports you. There is no "I" in the word team.

Very friendly environment. . . . I met new people and learned a lot from them. They do not mind sharing their expertise.

\* Polly S. Rizova, *The Secret of Success: The Double Helix of Formal and Informal Structures in an R&D Laboratory* (Stanford, CA: Stanford University Press, 2007).

## Summary

This chapter examined two major characteristics of the parent organization that affect the implementation and completion of projects. The first is the formal structure of the organization and how it chooses to organize and manage projects. Although the individual project manager may have very little say as to how the firm chooses to manage projects, he or she must be able to recognize the options available as well as the inherent strengths and weaknesses of different approaches.

Three basic project management structures were described and assessed as to their weaknesses and strengths. Only under unique circumstances can a case be made for managing a project within the normal functional hierarchy. When thinking only in terms of what is best for the project, the creation of an independent project team is clearly favored. However, the most effective project management system appropriately balances the needs of the project with those of the parent organization. Matrix structures emerged out of the parent organization's need to share personnel and resources across multiple projects and operations while creating legitimate project focus. The matrix approach is a hybrid organizational form that combines elements of both the functional and project team forms in an attempt to realize the advantages of both.

The second major characteristic of the parent organization that was discussed in this chapter is the concept of organizational culture. Organizational culture is

the pattern of beliefs and expectations shared by an organization's members. Culture includes the behavioral norms, customs, shared values, and the "rules of the game" for getting along and getting ahead within the organization. It is important for project managers to be "culture sensitive" so that they can develop appropriate strategies and responses and avoid violating key norms that would jeopardize their effectiveness within the organization.

The interaction between project management structure and organizational culture is a complicated one. We have suggested that in certain organizations, culture encourages the implementation of projects. In this environment the project management structure used plays a less decisive role in the success of the project. Conversely, for other organizations in which the culture stresses internal competition and differentiation, just the opposite may be true. The prevailing norms, customs, and attitudes inhibit effective project management, and the project management structure plays a more decisive role in the successful implementation of projects. At a minimum, under adverse cultural conditions, the project manager needs to have significant authority over the project team; under more extreme conditions firms should physically relocate dedicated project teams to complete critical projects. In both cases, the managerial strategy should be to insulate project work from the dominant culture so that a more positive "subculture" can emerge among project participants.

The project management structure of the organization and the culture of the organization are major elements of the environment in which a project is initiated. Subsequent chapters will examine how project managers and professionals work within this environment to successfully complete projects.

### Key Terms

Balanced matrix, 76  
Dedicated project team, 71  
Matrix, 74

Organizational culture, 81  
Projectized organization, 72

Project office (PO), 80  
Strong matrix, 76  
Weak matrix, 75

### Review Questions

1. What are the relative advantages and disadvantages of the functional, matrix, and dedicated team approaches to managing projects?
2. What distinguishes a weak matrix from a strong matrix?
3. Under what conditions would it be advisable to use a strong matrix instead of a dedicated project team?
4. How can project management offices (POs) support effective project management?
5. Why is it important to assess the culture of an organization before deciding what project management structure should be used to complete a project?
6. Other than culture, what other organizational factors should be used to determine which project management structure should be used?
7. What do you believe is more important for successfully completing a project—the formal project management structure or the culture of the parent organization?

## Exercises

1. Going to college is analogous to working in a matrix environment in that most students take more than one class and must distribute their time across multiple classes. What problems does this situation create for you? How does it affect your performance? How could the system be better managed to make your life less difficult and more productive?
2. You work for LL Company, which manufactures high-end optical scopes for hunting rifles. LL Company has been the market leader for the past 20 years and has decided to diversify by applying its technology to develop a top-quality binocular. What kind of project management structure would you recommend they use for this project? What information would you like to have to make this recommendation, and why?
3. You work for Barbata Electronics. Your R&D people believe they have come up with an affordable technology that will double the capacity of existing MP3 players and uses audio format that is superior to MP3. The project is code named KYSO (Knock Your Socks Off). What kind of project management structure would you recommend they use for the KYSO project? What information would you like to have to make this recommendation and why?
4. This chapter discussed the role of values and beliefs in forming an organization's culture. The topic of organization culture is big business on the Internet. Many companies use their Web pages to describe their mission, vision, and corporate values and beliefs. There also are many consulting firms that advertise how they help organizations to change their culture. The purpose of this exercise is for you to obtain information pertaining to the organizational culture for two different companies. You can go about this task by very simply searching on the key words "organizational culture" or "corporate vision and values." This search will identify numerous companies for you to use to answer the following questions. You may want to select companies that you would like to work for in the future.
  - a. What are the espoused values and beliefs of the companies?
  - b. Use the worksheet in Figure 3.6 to assess the Web page. What does the Web page reveal about the culture of this organization? Would this culture be conducive to effective project management?
5. Use the cultural dimensions listed in Figure 3.5 to assess the culture of your school. Instead of employees, consider students, and instead of management, use faculty. For example, member identity refers to the degree to which students identify with the school as a whole rather than their major or option. Either as individuals or in small groups rate the culture of your school on the 10 dimensions.
  - a. What dimensions were easy to evaluate and which ones were not?
  - b. How strong is the culture of your school?
  - c. What functions does the culture serve for your school?
  - d. Do you think the culture of your school is best suited to maximizing your learning? Why or why not?
  - e. What kind of projects would be easy to implement in your school and what kind of projects would be difficult given the structure and culture of your school? Explain your answer.
6. You work as an analyst in the marketing department for Springfield International (SI). SI uses a weak matrix to develop new services. Management has created an extremely competitive organizational culture that places an emphasis



upon achieving results above everything else. One of the project managers that you have been assigned to help has been pressuring you to make his project your number one priority. He also wants you to expand the scope of your work on his project beyond what your marketing manager believes is necessary or appropriate. The project manager is widely perceived as a rising star within SI. Up to now you have been resisting the project manager's pressure and complying with your marketing manager's directives. However, your most recent interchange with the project manager ended by his saying, "I'm not happy with the level of help I am getting from you and I will remember this when I become VP of Marketing." How would you respond and why?

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## Case

### Moss and McAdams Accounting Firm

Bruce Palmer had worked for Moss and McAdams (M&M) for six years and was just promoted to account manager. His first assignment was to lead an audit of Johnsonville Trucks. He was quite pleased with the five accountants who had been assigned to his team, especially Zeke Olds. Olds was an Army vet who returned to school to get a double major in accounting and computer sciences. He was on top of the latest developments in financial information systems and had a reputation for coming up with innovative solutions to problems.

M&M was a well-established regional accounting firm with 160 employees located across six offices in Minnesota and Wisconsin. The main office, where Palmer worked, was in Green Bay, Wisconsin. In fact, one of the founding members, Seth Moss, played briefly for the hometown NFL Packers during the late 1950s. M&M's primary services were corporate audits and tax preparation. Over the last two years the partners decided to move more aggressively into the consulting business. M&M projected that consulting would represent 40 percent of their growth over the next five years.

M&M operated within a matrix structure. As new clients were recruited, a manager was assigned to the account. A manager might be assigned to several accounts, depending on the size and scope of the work. This was especially true in the case of tax preparation projects, where it was not uncommon for a manager to be assigned to 8 to 12 clients. Likewise, senior and staff accountants were assigned to multiple account teams. Ruby Sands was the office manager responsible for assigning personnel to different accounts at the Green Bay office. She did her best to assign staff to multiple projects under the same manager. This wasn't always possible, and sometimes accountants had to work on projects led by different managers.

M&M, like most accounting firms, had a tiered promotion system. New CPAs entered as junior or staff accountants. Within two years, their performance was reviewed and they were either asked to leave or promoted to senior accountant. Sometime during their fifth or sixth year, a decision was made to promote them to account manager. Finally, after 10 to 12 years with the firm, the manager was considered for promotion to partner. This was a very competitive position. During the last five years, only 20 percent of account managers at M&M had been promoted to partner. However, once a partner, they were virtually guaranteed the position for life and enjoyed significant increases in salary, benefits, and prestige. M&M had a reputation for being a results-driven organization; partner promotions were based on meeting deadlines, retaining clients, and generating revenue. The promotion team based its decision on the relative performance of the account manager in comparison to his or her cohorts.

One week into the Johnsonville audit, Palmer received a call from Sands to visit her office. There he was introduced to Ken Crosby, who recently joined M&M after working nine years for a Big 5 accounting firm. Crosby was recruited to manage special consulting projects. Sands reported that Crosby had just secured a major consulting project with Springfield Metals. This was a major coup for the firm: M&M had competed against two Big 5 accounting firms for the project. Sands went on to explain that she was working with Crosby to put together his team. Crosby insisted that Zeke Olds be assigned to his team. Sands told him that this would be impossible because Olds was already assigned to work on the Johnsonville audit. Crosby persisted, arguing that Olds's expertise was essential to the Springfield project. Sands decided to work out a compromise and have Olds split time across both projects.

At this time Crosby turned to Palmer and said, "I believe in keeping things simple. Why don't we agree that Olds works for me in the mornings and you in the afternoons. I'm sure we can work out any problems that come up. After all, we both work for the same firm."

### SIX WEEKS LATER

Palmer could scream whenever he remembered Crosby's words, "After all, we both work for the same firm." The first sign of trouble came during the first week of the new arrangement when Crosby called, begging to have Olds work all of Thursday on his project. They were conducting an extensive client visit, and Olds was critical to the assessment. After Palmer reluctantly agreed, Crosby said he owed him one. The next week when Palmer called Crosby to request that he return the favor, Crosby flatly refused and said any other time but not this week. Palmer tried again a week later and got the same response.

At first Olds showed up promptly at 1:00 P.M. at Palmer's office to work on the audit. Soon it became a habit to show up 30 to 60 minutes late. There was always a good reason. He was in a meeting in Springfield and couldn't just leave, or an urgent task took longer than planned. One time it was because Crosby took his entire team out to lunch at the new Thai restaurant—Olds was over an hour late because of slow service. In the beginning Olds would usually make up the time by working after hours, but Palmer could tell from conversations he overheard that this was creating tension at home.

What probably bothered Palmer the most were the e-mails and telephone calls Olds received from Crosby and his team members during the afternoons when he

was supposed to be working for Palmer. A couple of times Palmer could have sworn that Olds was working on Crosby's project in his (Palmer's) office.

Palmer met with Crosby to talk about the problem and voice his complaints. Crosby acted surprised and even a little bit hurt. He promised things would change, but the pattern continued.

Palmer was becoming paranoid about Crosby. He knew that Crosby played golf with Olds on the weekends and could just imagine him badmouthing the Johnsonville project and pointing out how boring auditing work was. The sad fact was that there probably was some truth to what he was saying. The Johnsonville project was getting bogged down, and the team was slipping behind schedule. One of the contributing factors was Olds's performance. His work was not up to its usual standards. Palmer approached Olds about this, and Olds became defensive. Olds later apologized and confided that he found it difficult switching his thinking from consulting to auditing and then back to consulting. He promised to do better, and there was a slight improvement in his performance.

The last straw came when Olds asked to leave work early on Friday so that he could take his wife and kids to a Milwaukee Brewers baseball game. It turned out Springfield Metals had given Crosby their corporate tickets, and he decided to treat his team with box seats right behind the Brewers dugout. Palmer hated to do it, but he had to refuse the request. He felt guilty when he overheard Olds explaining to his son on the telephone why they couldn't go to the game.

Palmer finally decided to pick up the phone and request an urgent meeting with Sands to resolve the problem. He got up enough nerve and put in the call only to be told that Sands wouldn't be back in the office until next week. As he put the receiver down, he thought maybe things would get better.

## TWO WEEKS LATER

Sands showed up unexpectedly at Palmer's office and said they needed to talk about Olds. Palmer was delighted, thinking that now he could tell her what had been going on. But before he had a chance to speak, Sands told him that Olds had come to see her yesterday. She told him that Olds confessed that he was having a hard time working on both Crosby's and Palmer's projects. He was having difficulty concentrating on the auditing work in the afternoon because he was thinking about some of the consulting issues that had emerged during the morning. He was putting in extra hours to try to meet both of the projects' deadlines, and this was creating problems at home. The bottom line was that he was stressed out and couldn't deal with the situation. He asked that he be assigned full-time to Crosby's project. Sands went on to say that Olds didn't blame Palmer, in fact he had a lot of nice things to say about him. He just enjoyed the consulting work more and found it more challenging. Sands concluded by saying, "I told him I understood, and I would talk to you about the situation and see what could be done. Frankly, I think we should pull him from your project and have him work full-time on Crosby's project. What do you think?"

1. If you were Palmer at the end of the case, how would you respond?
2. What, if anything, could Palmer have done to avoid losing Olds?
3. What advantages and disadvantages of a matrix type organization are apparent from this case?
4. What could the management at M&M do to more effectively manage situations like this?



## Case

## Horizon Consulting

Patti Smith looked up at the bright blue Carolina sky before she entered the offices of Horizon Consulting. Today was Friday, which meant she needed to prepare for the weekly status report meeting. Horizon Consulting is a **custom software development company** that offers fully integrated **mobile application services** for **iPhone™**, **Android™**, **Windows Mobile®** and **BlackBerry®** platforms. Horizon was founded by James Thrasher, a former Marketing executive, who quickly saw the potential for digital marketing via smartphones. Horizon enjoyed initial success in sports marketing, but quickly expanded to other industries. A key to their success was the decline in cost for developing smartphone applications which expanded the client base. The decline in cost was primarily due to learning curve and ability to build customized solutions on established platforms.

Patti Smith was a late bloomer who went back to college after working in the restaurant business for nine years. She and her former husband had tried unsuccessfully to operate a vegetarian restaurant in Golden, Colorado. After her divorce, she returned to University of Colorado where she majored in Management Information Systems with a minor in Marketing. While she enjoyed her marketing classes much more than her MIS classes, she felt the IT know-how acquired would give her an advantage in the job market. This turned out to be true as Horizon hired her to be an Account Manager soon after graduation.

Patti Smith was hired to replace Stephen Stills who had started the restaurant side of the business at Horizon. Stephen was “let go” according to one Account Manager for being a *prima donna* and hoarding resources. Patti’s clients ranged from high-end restaurants to hole in wall Mom and Pop shops. She helped develop smartphone apps that let users make reservations, browse menus, receive alerts on daily specials, provide customer feedback, order take-out and in some cases order delivery. As an Account Manager she worked with clients to assess their needs, develop a plan, and create customized smartphone apps.

Horizon appeared to be a good fit for Patti. She had enough technical training to be able to work with software engineers and help guide them to produce client-ready products. At the same time she could relate to the restaurateurs and enjoyed working with them on web design and digital marketing.

Horizon was organized into three departments: Sales, Software Development, and Graphics, with Account Managers acting as project managers. Account Managers generally came from Sales, and would divide their time between projects and making sales pitches to potential new clients. Horizon employed a core group of software engineers and designers, supplemented by contracted programmers when needed.

The first step in developing a smartphone application involved the Account Manager meeting with the client to define the requirements and vision for the application. The Account Manager would then work with a Graphic User Interface (GUI) designer to come up with a preliminary story board of how the application would function and look. Once the initial concept and requirements were approved the Account Manager was assigned two pairs of software engineers. The first pair (app engineers) would work on the smartphone side of the application while the second pair would work on the client side of the application. Horizon

preferred to have software engineers work in tandem so they could check each other's work. The two app engineers would typically work full time on the application until it was completed while the other engineers would work on multiple projects as needed. Likewise, GUI designers would work on the project at certain key stages in the product development cycle when their expertise was needed.

The head of Graphics manages the GUI designers' schedule while the head of Software manages the software engineer assignments. At the end of each project Account Managers submitted performance reviews of their team. The Director of Sales was responsible for the Account Managers' performance reviews based on customer satisfaction, generation of sales, and project performance.

Horizon believed in iterative development and every two to three weeks Account Managers were expected to demonstrate the latest version of applications to clients. This led to useful feedback and in many cases redefining the scope of the project. Often clients wanted to add more functionality to their application once they realized what the software could do. Depending upon the complexity of the application and changes introduced once the project was under way, it typically took Horizon two to four months to deliver a finished product to a client.

Patti was currently working on three projects. One was for Shanghai Wok, a busy Chinese mom and pop restaurant located in downtown Charlotte, North Carolina. The owners of Shanghai Wok wanted Horizon to create a smartphone app that would allow customers to order and pay in advance for meals they would simply pick up at a walk-up window. The second project was for Taste of India that operated in Kannapolis, North Carolina. They wanted Horizon to create a phone app that would allow staff at the nearby bio-tech firms to order food that would be delivered on-site during lunch and dinner hours. The last project was for Nearly Normal, a vegetarian restaurant which wanted to send out e-mail alerts to subscribers that would describe in detail their daily fresh specials.

James Thrasher was an admirer of Google and encouraged a playful but focused environment at work. Employees were allowed to decorate their work spaces, bring pets to work, and play ping pong or pool when they needed a break. Horizon paid its employees well but the big payoff was the annual Christmas bonus. This bonus was based on overall company profits, which were distributed proportionately based on pay grade and performance reviews. It was not uncommon for employees to receive a 10–15 percent boost in pay at the end of the year.

## STATUS REPORT MEETING

As was her habit Patti entered the status report meeting room early. David Briggs was in the midst of describing the game-winning catch John Lorsch had made in last night's softball game. Horizon sponsored a co-ed city league softball team which most of the Account Managers played on. Patti had been coaxed to play to ensure that the requisite number of "females" were on the field. She balked at the idea at first; softball wasn't really her sport, but she was glad she did. Not only was it fun, but it gave her a chance to get to know the other managers.

James Thrasher entered the room and everyone settled down to business. He started off as he always did by asking if anybody had important news to bring to everyone's attention. Jackson Browne slowly raised his hand and said, "I am afraid I do. I just received notification from Apple IOS that they have rejected our TAT app." TAT was a phone app that Jackson was the project lead on that allowed subscribers to reserve and see in real time what swimming lanes were



available at a prestigious athletic club. This announcement was followed by a collective groan. Before an Apple app could go operational it had to be submitted and approved by Apple. Usually this was not a problem, but lately Apple had been rejecting apps for a variety of reasons. Jackson went on to circulate the list of changes that had to be made before Apple would approve the app. The group studied the list, and in some cases ridiculed the new requirements.

Ultimately, James Thrasher asked Jackson how long it would take to make the necessary changes and resubmit the app for approval. Jackson felt it would probably take two to three weeks at most. Thrasher asked who the engineers that worked on this project were. Patti's heart fell. One of the app engineers who had developed the TAT app was working on her Shanghai Wok project. She knew what was going to happen next. Thrasher announced, "OK everyone, it only makes sense that these engineers are the best ones to finish what they had started so they are all going to have to be reassigned back to the TAT project. Those affected are going to have to get together after this meeting and figure how you are going to replace them." The meeting then proceeded as planned with each account manager reporting the status of their projects, and sharing relevant issues with the group.

### POST-MEETING

As everyone filed out, Patti looked around to see who else was in her same boat. There were three other Account Managers as well as Jackson Browne. Resource assignments were a reoccurring issue at Horizon given the nature of their work. Horizon had developed a policy where decisions were made based on project priority. Each project was assigned a Green, Blue or Purple designation based on the company priority. Priority status was based on the extent the project contributed to the mission of the firm. The Shanghai Wok project given its limited size and scope was a Purple project, which was the lowest ranking. The list of available software engineers was displayed on the big screen. Patti was only familiar with a few of the names.

Leigh Taylor who had the only Green project immediately selected Jason Wheeler from the list. She had used him before and was confident in his work. Tom Watson and Samantha Stewart both had Blue Projects and both needed to replace a mobile app engineer. They both immediately jumped on the name of Prem Mathew, claiming he was the best person for their project. After some friendly jousting, Tom said, "OK, Sam, you can have him; I remember when you helped me out on the Argos project; besides my project is just beginning. I'll take Shin Chen." Everyone looked at Patti; she started by saying, "You know, I am only familiar with a few of these names; I guess I'll go with Mike Thu." Jackson interjected, "Hey everyone, I am really sorry this happened, and I am sure Mike is a good programmer, but I recommend you work with Axel Gerthoff. I have used him before, and he is a very quick study and a joy to work with." This was a relief to Patti and she quickly took his advice. They left to submit a report to Thrasher detailing the decisions they each had made and the impact on their project.

1. How successful was the post-meeting?
2. What factors contributed to the success or failure of this meeting?
3. What kind of project management structure does Horizon use? Is it the right structure? Explain.