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Project Team Building, Conflict, and Negotiation

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Chapter Objectives

After completing this chapter, you should be able to:

1. Understand the steps involved in project team building.
2. Know the characteristics of effective project teams and why teams fail.
3. Know the stages in the development of groups.
4. Describe how to achieve cross-functional cooperation in teams.
5. See the advantages and challenges of virtual project teams.
6. Understand the nature of conflict and evaluate response methods.
7. Understand the importance of negotiation skills in project management.

PROJECT MANAGEMENT BODY OF KNOWLEDGE CORE CONCEPTS COVERED IN THIS CHAPTER

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PROJECT PROFILE

Engineers Without Borders: Project Teams Impacting Lives

In 2000, Bernard Amadei, a civil engineering professor at the University of Colorado at Boulder, visited San Pablo, Belize, where the sight of little girls hauling water instead of attending school broke his heart. Upon his return to Boulder, he recruited eight civil and environmental engineering students to design and install a clean water system powered by a local waterfall. The total cost, including airfare for him and his students, came to US\$14,000.

It was just the beginning for Amadei, who went on to found Engineers Without Borders–USA in 2002. The organization now inspires nearly 14,000 members in over 250 chapters around the country. The more than 350 programs currently underway lean heavily toward civil engineering—a farm irrigation system in Bolivia, a geothermal heating system for a Native American tribe in South Dakota—but some, such as small hydroelectric systems and rooftop solar panel installations, require the skills of electrical engineers. By the latest reckoning, EWB-USA has impacted for the better the lives of over 2.5 million people worldwide.

The U.S. organization follows in the footsteps of a movement that began in France in the 1980s and then spread to Spain, Italy, Canada, and many other countries. The organizations were quite independent, though, sharing only a name and a mission, so in 2004 Amadei created an informal network, EWB-International. Today it has 45 member groups, including ones in Kosovo, Rwanda, and Iran.

"Amadei tapped into a previously unexploited humanitarian passion within the U.S. engineering community," says Peter Coats, a civil engineer and cofounder of EWB-USA's San Francisco chapter, the first to consist of professionals instead of students. That higher purpose is particularly attractive to women, who make up more than 40 percent of student volunteers, twice the proportion of female engineering graduates. "They identify more with people and humanity," says Cathy Leslie, a civil engineer who serves as the executive director of EWB-USA. "Women don't thrive on creating technology for technology's sake."

Communities or local non-government organizations (NGOs) provide EWB-USA with a wish list of needs, and the organization plays matchmaker, helping pair chapters with specific projects. Clean water tops the list—establishing sewage systems, sanitation systems for collecting and disposing of waste, and irrigation canals. Cheap, renewable sources of electricity are also a common need.

These projects can't be built in a day, and like almost all engineering work, they need to be maintained and upgraded, so there is an emphasis on imparting knowledge to local community members and NGOs. For this, project teams include trainers and business folks in addition to engineers. "You establish a sort of trust, which is really powerful," says Eyleen Chou, the president of the University of Wisconsin–Madison's student chapter. "There's no reason why you shouldn't stay 10 years or longer."

Leslie says that successful chapters such as Chou's can build and maintain many projects despite a constant rotation of entering freshmen and departing seniors. They establish training programs and mentorships, devise ways for

(continued)



FIGURE 6.1 EWB Project Team Laying Water Pipes with Local Workers

Source: Dieter Heinemann/Westend61/Corbis

new students to contribute, and find sustainable funding. Chapters are expected to raise the majority of project money themselves, but they work under basic guidelines. At a project's onset, they consult with an EWB-USA technical advisory committee to tweak and finalize plans. Teams must commit five years to a project.

In addition to the student chapters at universities, EWB-USA maintains a number of professional chapters around the country. However, maintaining effective, temporary teams is a challenge; especially for a volunteer organization. Professional chapters have problems of bringing new volunteers up to speed while experienced ones drop out—and their members face the additional challenge of juggling their project work with full-time jobs. For example, the San Francisco chapter's members typically spend at least five hours per week, but this can spike during special events or an actual field visit. Members have on occasion spent over 30 hours a week on EWB activities in addition to working their regular jobs.

In the process of improving others' lives, EWB is also creating a better brand of engineer, says Leslie. "The work we do has educational value for the student," she says, and taking a professional out of the office "makes for a more well-rounded engineer."¹

INTRODUCTION

The difficulties involved in building and coordinating an effective team can be daunting and highly complex. Becoming technically proficient at scheduling, budgeting, and project evaluation is essential in developing the necessary project management skills; however, it is equally important to develop an appreciation for and willingness to undertake the human challenges of the job. **Team building** and conflict management are two of the most important *people skills* that project managers can cultivate, but they are also two of the most difficult undertakings. We must use our leadership skills to negotiate with department managers for access to skilled personnel for team staffing; we must recognize that no project team comes "fully assembled" and ready to go. Simply grouping a collection of diverse individuals together is not the same thing as building a team.

This chapter offers an overview of some of the key behavioral tasks facing project managers: staffing a project team, building a sense of common purpose and shared commitment, encouraging cross-functional cooperation among team members, and recognizing the causes of and resolving conflicts among all project stakeholders. The bad news is that this is not an easy process; it does not involve formulas or calculations in the same way that task duration estimation does. The "rules of

human behavior often consist of broad generalizations, at best, which should be used only to suggest appropriate managerial actions. The good news is that when carefully evaluated and applied, managing the people side of project management can be just as effective, rewarding, and important for project success as any of the technical duties.

Project staffing, team building, cross-functional cooperation, and conflict management are not supplementary topics in project management; the study of these skills is central to our ability to become proficient in a highly complex and challenging profession. This chapter will not only analyze the team building and conflict processes, but it will also offer some prescriptive advice to readers on how to improve these processes and skills in managing human behavior. One point is clear: If we undertake projects with a project team as our principal resource for getting work done and the project completed, it is vital that we learn everything possible about how to mold people into a high-performing team and how to control the inevitable conflicts that are likely to emerge along the way.

6.1 BUILDING THE PROJECT TEAM

Effective project teams do not happen by accident. A great deal of careful work and preparation goes into the steps necessary to first staff and then develop project team members to the point where they begin to function jointly and the project reaps positive dividends from their collective performance. The best-case scenario for project managers is to take over a project with a unified team composed of individuals who lobbied for and were awarded with membership on the team. Unfortunately, in many organizations, project teams are put together based on other criteria, most notably whoever is available. Regardless of the circumstances, the project manager is faced with the challenge of creating from a set of diverse individuals a high-performing, cohesive project team. The preferred process, however, should be as structured as possible; staffing is ideally aligned with the project manager's judgment of what is best for the project.

Figure 6.2 illustrates how project team personnel may be assigned. Within many organizations, this process emerges as the result of protracted negotiations with functional or departmental supervisors, as we discussed in Chapter 2. The flowchart in Figure 6.2 illustrates several key decision points or critical interfaces in developing a project team.²

Identify Necessary Skill Sets

The first stage in project team development is to conduct a realistic assessment of the types of skills the team members will need in order to complement each other and perform their project duties as effectively as possible. For example, in projects with a high technical complexity, it is imperative to ascertain the availability of skilled human resources and their capability of adding value to the project development. No one would seriously embark on a software development project without first ensuring that the technical steps in the project are clearly understood.

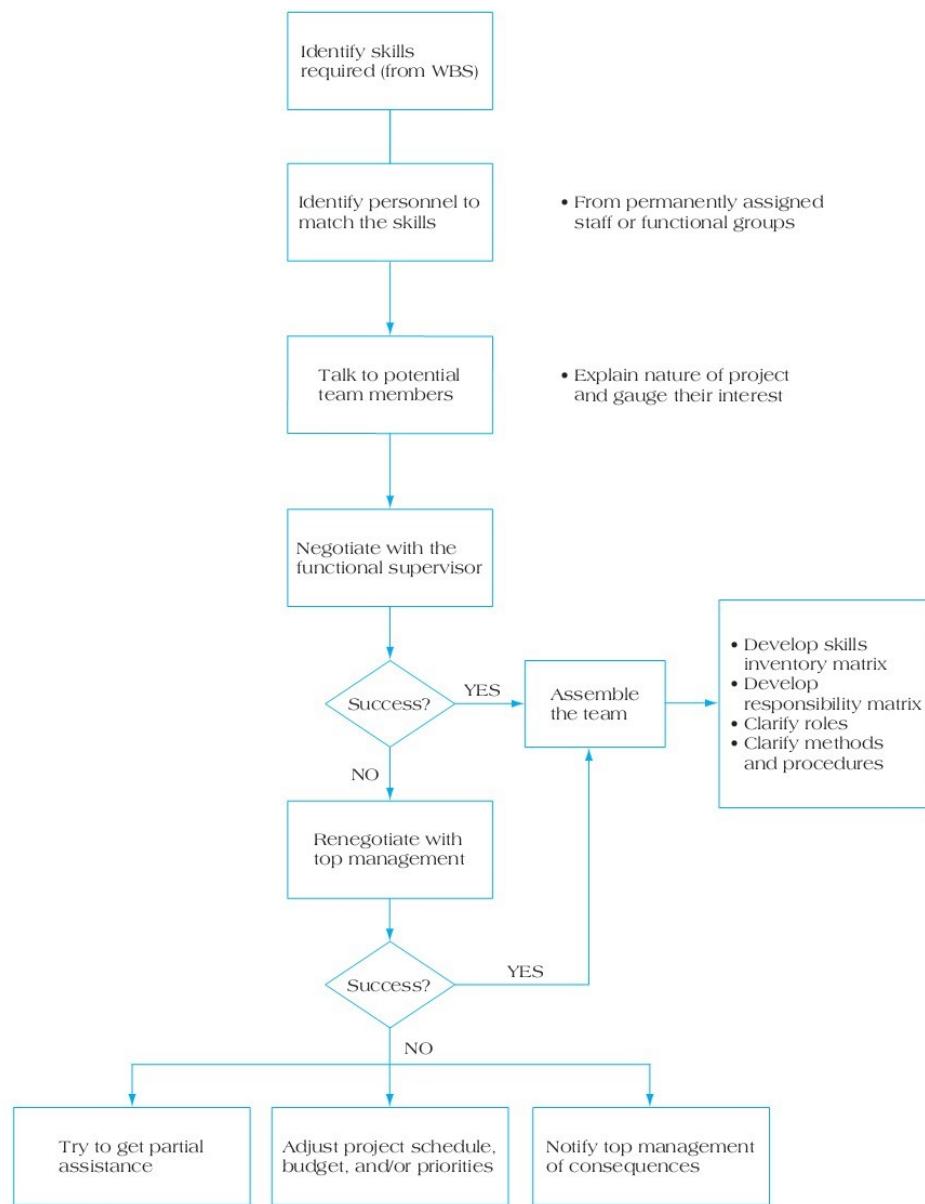
Identify People Who Match the Skills

Once a reasonable assessment of the required project skills has been completed, a complementary assessment of the availability of personnel with the requisite skills is necessary. We have two options: (1) hire new personnel for the project (e.g., in many cases, companies will hire contractors on a fixed-term basis for the life of a project), or (2) train current personnel to become proficient in the skills they will need to perform the tasks. The final decision often comes down to a cost/benefit assessment: Who can do the work? Is the cost of hiring or training the person to do the job prohibitively expensive? Once the person has been trained/hired, will these skills be of continuing benefit to the company?

Talk to Potential Team Members and Negotiate with Functional Heads

The third step in the process of building the project team involves opening communication with likely candidates for the team and assessing their level of interest in joining the project. In some cases, personnel have a great deal of authority in assigning their own time to projects. However, in most cases (particularly within functional organizations), all functional specialists are under the authority of departmental heads. Consequently, at some point the project manager must begin

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**FIGURE 6.2 Basic Steps in Assembling a Project Team**

Source: V. K. Verma. (1997). *Managing the Project Team*, p. 127. Upper Darby, PA: Project Management Institute. Copyright and all rights reserved. Material from this publication has been reproduced with the permission of PMI.

to enter into negotiations with these functional heads for the services of prospective project team members. These negotiations can be complex and lengthy.

Departmental managers generally are not opposed to the use of their personnel on projects. They are, however, primarily concerned with the smooth operations of their organizations. Depriving a functional manager of key personnel to serve on a project team can be seen as threatening a smoothly operating department. Hence, negotiations are required. Among the issues to be decided are:

- 1. How long are the team members services required?** Project team members can be assigned on a full-time basis (40 hours per week) or a part-time basis (less than 40 hours per week). Further, the team member may be assigned for a fixed period (e.g., six months) or for the duration of the project.

2. ***Who should choose the person to be assigned to the project?*** Another point of negotiation is the question of who should select the individual to serve on the project team. The functional manager may have her own ideas as to the best choice, while the project manager may employ different criteria and come up with other possible candidates.
3. ***What happens when special circumstances arise?*** In the event of some emergency or special circumstance, the functional department head may wish to retain control of the team member or have the option of suddenly recalling that individual back to work on departmental activities. How will "emergencies" be defined? If the team member is recalled, how will the department provide a replacement? What is the maximum amount of time a team member can be removed from his project duties? All these questions are important and should be resolved prior to the appointment of project team members.

Most project resources are negotiated with department managers. This point is critical: For the majority of project managers, their outright control over project team members may be limited, particularly early in the process when project team assignments are being made. The best strategy a project manager can engage in at this point is to have thought carefully about the types of expertise and skills that will be required for successful completion of the project and begin bargaining with these clear goals in mind. Treat functional managers as allies, not opponents. The organization supports the project; functional departments will support it as well, but their level of support must be carefully planned in advance.

Build in Fallback Positions

What are your options as the project manager when resources are not available? Suppose, for example, that you need three highly trained design engineers for the project and the head of engineering is unwilling to part with them or negotiate a compromise. As Figure 6.2 demonstrates, in the event that negotiations with functional managers and top managers are not fruitful, the project manager is faced with three basic alternatives.

TRY TO NEGOTIATE FOR PARTIAL ASSISTANCE The best alternative to an outright refusal is to seek some limited assistance. One reason for this approach is that it gets your foot in the door. Once the personnel are assigned to the project, even on limited terms, it forms the basis for your returning to the department head at a later point to ask for them again, while only slowing down the project marginally. This principle argues, in effect, that it is better to have half a loaf than none.

ADJUST PROJECT SCHEDULES AND PRIORITIES ACCORDINGLY When critical resources are not available, the project schedule must be adjusted to reflect this fact. As we will note in Chapter 12, "Resource Management," there is no point in developing a sophisticated project schedule if it is not supported by resources. Or, to put it another way, until we can match people to project tasks, we cannot make progress. With a failure to convince functional managers that their resources are needed to support the project, serious and honest adjustments must be made to all project plans, including scope documents, schedules, risk assessment, and so forth.

NOTIFY TOP MANAGEMENT OF THE CONSEQUENCES Failing to gain necessary resources must be reported to top management, the ultimate sponsors of the project. They may, in the end, become the final arbiters of the resource and staffing question. In the face of persistent resistance from a functional manager, the only recourse may be to present to top management, as candidly as possible, the implications for project success without sufficient support. The final decision then comes down to top management: They will either support the project and require that staffing be completed as requested, suggest a compromise, or support the functional manager. In the first two cases, the project will proceed; in the third, top management is effectively ending the project before it has begun.

Assemble the Team

When the project has been staffed and approved, the final step is assembling the project team. This involves developing a skills inventory matrix that identifies the skills needed for the project against the skills we have acquired and a responsibility matrix using the Responsibility Activity

Matrix (RAM) methodology (discussed in Chapter 5). Also, all project team roles and responsibilities must be clarified, along with all project team methods, expectations, and standard operating procedures. Where any of these do not exist, it will be necessary to begin establishing them.

6.2 CHARACTERISTICS OF EFFECTIVE PROJECT TEAMS

A great deal of research has investigated the qualities that effective teams possess and how those same qualities are missing from less effective groups. Successful teams share common underlying features, including a clear sense of mission, an understanding of team interdependencies, cohesiveness, a high level of trust, a shared sense of enthusiasm, and a results orientation.

A Clear Sense of Mission

A key determinant of project success is a clear project mission.³ Further, that sense of mission must be mutually understood and accepted by all team members. Research has demonstrated that a clearly understood project mission is the number one predictor of success as the project is being developed.⁴ Two important issues are clear: First, project teams perform well when there is a clear sense of purpose or objectives for their project; and second, the more widely shared and understood those goals, the better the project performance. The alternative is to allow the project manager to function as the hub of a wheel, with each team member as a separate spoke, interacting only through the project manager. This arrangement is not nearly as useful or successful as one in which all project team members understand the overall project objectives and how their performance contributes to achieving those objectives.

A mistake sometimes made by project managers is to segment the team in terms of their duties, giving each member a small, well-specified task but no sense of how that activity contributes to the overall project development effort. This approach is a serious mistake for several important reasons. First, the project team is the manager's best source for troubleshooting problems, both potential and actual. If the team is kept in the dark, members who could potentially help with the smooth development of the project through participating in other aspects of the installation are not able to contribute in helpful ways. Second, team members know and resent it when they are being kept in the dark about various features of the project on which they are working. Consciously or not, when project managers keep their team isolated and involved in fragmented tasks, they are sending out the signal that they either do not trust their team or do not feel that their team has the competence to address issues related to the overall implementation effort. Finally, from a "firefighting" perspective, it simply makes good sense for team leaders to keep their people abreast of the status of the project. The more time spent defining goals and clarifying roles in the initial stages of the team's development, the less time will be needed to resolve problems and adjudicate disputes down the road.

A Productive Interdependency

Interdependency refers to the degree of joint activity among team members that is required in order to complete a project. If, for example, a project could be completed through the work of a small number of people or one department in an organization, the interdependence needed would be considered low. In most situations, however, a project manager must form a team out of members from various functional areas within the organization. For example, an IT project introduction at a large corporation could conceivably require the input or efforts of a team that included members from the Information Systems department, engineering, accounting, marketing, and administration. As the concept of **differentiation** suggests, these individuals each bring to the team their pre-conceived notions of the roles that they should play, the importance of their various contributions, and other parochial attitudes.

Interdependencies refer to the degree of knowledge that team members have and the importance they attach to the interrelatedness of their efforts. Developing an understanding of mutual interdependencies implies developing a mutual level of appreciation for the strengths and contributions that each team member brings to the table and is a precondition for team success. Team members must become aware not only of their own contributions but also of how their work fits into the overall scheme of the project and, further, of how it relates to the work of team members from other departments.

Cohesiveness

Cohesiveness, at its most basic level, simply refers to the degree of mutual attraction that team members hold for one another and their task. It is the strength of desire all members have to remain a team. It is safe to assume that most members of the project team need a reason or reasons to contribute their skills and time to the successful completion of a project. Although they have been assigned to the project, for many individuals, this project may compete with other duties or responsibilities pulling them in other directions. Project managers work to build a team that is cohesive as a starting point for performing their tasks. Since cohesiveness is predicated on the attraction that the group holds for each individual member, managers need to make use of all resources at their disposal, including reward systems, recognition, performance appraisals, and any other sources of organizational reward, to induce team members to devote time and energy in furthering the team's goals.

Trust

Trust means different things to different people.⁵ For a project team, **trust** can best be understood as the team's comfort level with each individual member. Given that comfort level, trust is manifested in the team's ability and willingness to squarely address differences of opinion, values, and attitudes and deal with them accordingly. Trust is the common denominator without which ideas of group cohesion and appreciation become moot. The interesting point about trust is that it can actually encourage disagreement and conflict among team members. When members of a project team have developed a comfort level where they are willing to trust the opinions of others, no matter how much those opinions diverge from their own, it is possible to air opposing views, to discuss issues, and even to argue. Because we trust one another, the disagreements are never treated as personal attacks; we recognize that views different from our own are valuable and can contribute to the project. Of course, before positive results can come from disagreement, we have to develop trust.

There are a number of ways in which project team members begin to trust one another. First, it is important for the project manager to create a "What happens here, stays here" mentality in which team members are not worried that their views will be divulged or confidences betrayed. Trust must first be demonstrated by the professionalism of the project manager and the manner in which she treats all team members. Second, trust develops over time. There is no way to jump-start trust among people. We are tested continuously to ensure that we are trustworthy. Third, trust is an "all-or-nothing" issue. Either we are trustworthy or we are not. There is no such thing as being slightly trustworthy. Finally, trust occurs on several levels:⁶ (1) trust as it relates to professional **interaction** and the expectation of another person's competence ("I trust you to be able to accomplish the task"), (2) trust that occurs on an integrity level ("I trust you to honor your commitments"), and (3) trust that exists on an emotional level based on intuition ("It feels right to allow you to make this decision"). Hence, it is important to recognize that trust among team members is complex, takes time to develop, is dependent on past history, and can occur on several levels, each of which is important to developing a high-performing team.

Enthusiasm

Enthusiasm is the key to creating the energy and spirit that drive effective project efforts. One method for generating team enthusiasm is to promote the idea of efficacy, the belief that if we work toward certain goals, they are attainable. Enthusiasm is the catalyst for directing positive, high energy toward the project while committing to its goals. Project managers, therefore, are best able to promote a sense of enthusiasm within the project team when they create an environment that is:

- **Challenging**—Each member of the project perceives his role to offer the opportunity for professional or personal growth, new learning, and the ability to stretch professionally.
- **Supportive**—Project team members gain a sense of team spirit and group identity that creates the feeling of uniqueness with regard to the project. All team members work collaboratively, communicate often, and treat difficulties as opportunities for sharing and joint problem solving.
- **Personally rewarding**—Project team members become more enthusiastic as they perceive personal benefits arising from successful completion of the project. Linking the opportunity for personal advancement to project team performance gives all team members a sense of ownership of the project and a vested interest in its successful completion.

The importance of enthusiasm among project team members is best illustrated by a recently witnessed example. A team leader had been charged with reengineering a manufacturing process at a large production plant in New England. Despite his initial enthusiasm and energy, he was getting increasingly frustrated with his project team, most of them having been assigned to him without any of his input on the assignments. His chief concern became how to deal with the constant litany of "We can't do that here" that he heard every time he offered a suggestion for changing a procedure or trying anything new. One Monday morning, his team members walked into the office to the vision of the words "YES WE CAN!" painted in letters three feet high across one wall of the office. (Over the weekend, the project manager had come in and done a little redecorating.) From that point on, the motto YES WE CAN! became the theme of the team and had a powerful impact on project success.

Results Orientation

Results orientation suggests that each member of the project team is committed to achieving the project's goals. The project manager can influence team performance in many ways, but it is through constantly emphasizing the importance of task performance and project **outcomes** that all team members are united toward the same **orientation**. Some have referred to this phenomenon as the "eyes on the prize" attitude, a commonly held characteristic among successful project teams. The benefit of a results orientation is that it serves to continually rally team members toward the important or significant issues, allowing them to avoid squandering time and resources on problems that may be only peripheral to the major project goals.

6.3 REASONS WHY TEAMS FAIL

Because the challenges involved in creating high-performing project teams are so profound, it is not surprising that project teams fail to perform to their potential in many circumstances. Teams operate at less than optimum performance for a number of reasons, including poorly developed or unclear goals, poorly defined project team roles and interdependencies, lack of project team motivation, poor communication or leadership, turnover among team members, and dysfunctional behavior.⁷

Poorly Developed or Unclear Goals

One of the most common causes of project team failure is the absence of clear and commonly understood project goals. When the project goals are fragmented, constantly changing, or poorly communicated, the result is a high degree of ambiguity. This ambiguity is highly frustrating for project team members for a number of reasons.

UNCLEAR GOALS PERMIT MULTIPLE INTERPRETATIONS The most common problem with poorly developed goals is that they allow each team member to make separate and often differing interpretations of project objectives. As a result, rather than helping the team to focus on the project at hand, these goals actually serve to increase disagreements as each team member interprets the project's goals in different ways.

UNCLEAR GOALS IMPEDE THE WILLINGNESS OF TEAM MEMBERS TO WORK TOGETHER When team members are faced with ambiguous goals, it is common for each person to interpret the goals in the most advantageous way. When goals are used to support individuals rather than team objectives, it often leads to situations in which one person's desire to satisfy the project goals as *he interprets them* actually conflicts with another team member's desire to satisfy her goals.

UNCLEAR GOALS INCREASE CONFLICT Project team conflict is heightened by vague goals that allow for multiple, self-centered interpretations. Rather than working on completing the project, team members expend energy and time in conflict with one another sifting through project objectives.

Poorly Defined Project Team Roles and Interdependencies

Team interdependencies is a state where team members' activities coordinate with and complement other team members' work. To some degree, all team members depend on each other and must work in collaboration in order to accomplish project goals. High-performing teams are well

structured in ways that leave little ambiguity about individual roles and responsibilities. When team member assignments or responsibilities are not made clear, it is natural for disagreements to occur or for time to be wasted in clarifying assignments. Another serious problem with poorly defined roles is that it allows for significant time to be lost between project activities. When team members are unaware of their roles and interdependencies in relation to other team members, it is common to lose time on the project through poor transitions, as tasks are completed and successors are expected to begin.

Lack of Project Team Motivation

A common problem with poorly performing project teams is a lack of motivation among team members. Motivation is typically a highly individualistic phenomenon, suggesting that the factors that motivate one member of the project (e.g., technical challenge, opportunities for advancement) may not be motivating for another member. When overall project team motivation is low, however, the project's performance will naturally suffer as team members work at below-optimal performance. Some of the reasons why project team motivation may be low include the following.

THE PROJECT IS PERCEIVED AS UNNECESSARY When projects are viewed by team members as less than critical, their motivation to perform well will naturally be affected. Whether the project team members' perception of a project as "unnecessary" is correct or not, if the organization and the project manager allow this interpretation to become fixed, it is extremely difficult to achieve high motivation from the team. Consequently, project managers need to communicate to the project team, as honestly as possible, the benefits of the project, its goals, and why they are important for the organization.

THE PROJECT MAY HAVE LOW PRIORITY Team members within organizations are often aware of which project initiatives are considered high priority and which are not. Internal company communications, including newsletters, e-mails, and other methods for highlighting activities, clearly identify the projects that top management views as critical. When project team members perceive that they are working on a project of low priority, they adopt a low level of commitment to the project and have low motivation to perform well.

Poor Communication

Poor communication comes about for a variety of reasons. For example, project team members may be uncertain about the structure of the project and the interdependencies among team members so they do not know with whom they are expected to share information. Another reason communication within the project team can break down is that some team members are unwilling to share information, viewing it as a source of power over other members of the team. Communication also may be impeded within the project team due to the different functional or professional orientations of project team members. Technical personnel, such as engineers, are comfortable employing scientific or technical jargon that is hard for nontechnical personnel to understand. Likewise, professionals with financial backgrounds may use business-related terminology that is not clear to technical team members.

The key to resolving many communication problems lies in the project manager's willingness to establish and enforce standards for information sharing among team members, creating an atmosphere within the project team that encourages frank and open exchanges. Other mechanisms for encouraging cross-functional cooperation are examined in greater detail later in this chapter.

Poor Leadership

Chapter 4 discussed the importance of the project manager's approach to leadership in great detail. Because this individual is often the linchpin holding the team together, the leadership style chosen by the project manager is a key promoter or inhibitor of project team effectiveness. Project managers who adopt a "one-style-fits-all" approach to leadership fail to recognize that different leadership styles are required in order to get the best performance out of each team

member. Further, some project managers adopt a leadership approach that may be completely antithetical to the project team, browbeating, bullying, or threatening team members in the belief that the key to high project team performance is to create an atmosphere of fear and anxiety. Successful project leaders understand that leadership styles depend upon a number of relevant criteria within the project team—including makeup of the team, motivation levels, and experience and skill levels of team members—and modify their leadership style accordingly.

Turnover Among Project Team Members

A common problem in many organizations is that team members are assigned to a project and then unexpectedly pulled off the project for reassignment. The higher the turnover among project team members, the more it disrupts the project manager's ability to create project team cohesion. Further, the act of continually adding to and removing personnel from project teams causes problems with team learning and functioning. Research has found that because of learning curve effects, the act of adding team members to an ongoing project often has the effect of delaying the project. New team members need time to get caught up with the project, they are not clear on structure or team interrelationships, and they do not understand internal team dynamics.

Although the best-case scenario for project managers is to run projects in which team members do not turn over, the practical reality is that we must anticipate the potential for turnover and consider strategies that allow for minimal disruption to the project schedule when turnover does occur. One method of minimizing disruption is for the project manager to require that everyone on the team understands, as clearly as possible, not only her own role but also the roles of other team members to allow the members to support activities that could be delayed due to staff "pullaways." Another option is for the project manager to work closely with functional department heads in order to anticipate the possibility of project team members leaving the team prematurely and to begin prepping possible replacements.

Dysfunctional Behavior

Dysfunctional behavior refers to the disruptive acts of some project team members due to personality issues, hidden agendas, or interpersonal problems. Sometimes the solution simply calls for recognizing which members are engaging in these behaviors and taking steps to correct the problem. Other times, serious cases of dysfunctional behavior may require that a team member be removed from the project team.

6.4 STAGES IN GROUP DEVELOPMENT

The process of group development is a dynamic one.⁸ Groups go through several maturation stages that are often readily identifiable, are generally found across a variety of organizations, and involve groups formed for a variety of different purposes. These stages are illustrated in Table 6.1 and Figure 6.3.⁹

TABLE 6.1 Stages of Group Development

Stage	Defining Characteristics
Forming	Members get to know one another and lay the basis for project and team ground rules.
Storming	Conflict begins as team members begin to resist authority and demonstrate hidden agendas and prejudices.
Norming	Members agree on operating procedures and seek to work together, develop closer relationships, and commit to the project development process.
Performing	Group members work together to accomplish their tasks.
Adjourning	Groups may disband either following the completion of the project or through significant reassignment of team personnel.

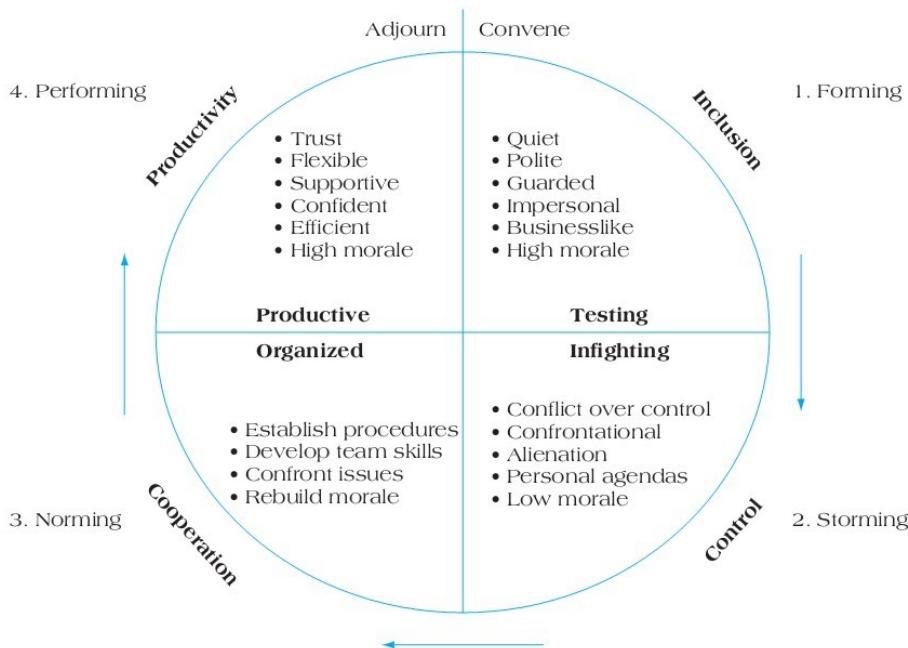


FIGURE 6.3 Stages of Team Development

Source: V. K. Verma. (1997). *Managing the Project Team*, p. 71. Upper Darby, PA: Project Management Institute. Copyright and all rights reserved. Material from this publication has been reproduced with the permission of PMI.

Stage One: Forming

Forming consists of the process or approaches used to mold a collection of individuals into a coherent project team. This stage has sometimes been referred to as the “floundering” stage, because team members are unsure about the project’s goals, may not know other team members, and are confused about their own assignments.¹⁰ Team members begin to get acquainted with one another and talk about the purposes of the project, how they perceive their roles, what types of communication patterns will be used, and what will be acceptable behaviors within the group. During the forming stage, some preliminary standards of behavior are established, including rules for interaction (who is really in charge and how members are expected to interact) and activity (how productive members are expected to be). The earlier this stage is completed, the better, so that ambiguities further along are avoided. In these early meetings, the role of the team leader is to create structure and set the tone for future cooperation and positive member attitudes.

Stage Two: Storming

Storming refers to the natural reactions members have to the initial ground rules. Members begin to test the limits and constraints placed on their behavior. Storming is a conflict-laden stage in which the preliminary leadership patterns, reporting relationships, and norms of work and interpersonal behavior are challenged and, perhaps, reestablished. During this stage, it is likely that the team leader will begin to see a number of the group members demonstrating personal agendas, attempting to defy or rewrite team rules, and exhibiting prejudices toward teammates from other functional backgrounds. For example, a team member may unilaterally decide that it is not necessary for her to attend all team meetings, proposing instead to get involved later in the project when she is “really needed.” Other behaviors may involve not-so-subtle digs at members from other departments (“Gee, what are you marketing people doing here on a technical project?”) or old animosities between individuals that resurface. Storming is a very natural phase through which all groups go. The second half of this chapter addresses ways to handle all types of conflict.

Stage Three: Norming

A *norm* is an unwritten rule of behavior. **Norming** behavior in a group implies that the team members are establishing mutually agreed-upon practices and attitudes. Norms help the team determine how it should make decisions, how often it should meet, what level of openness and trust members will have, and how conflicts will be resolved. Research has shown that it is during the norming stage that the cohesiveness of the group grows to its highest level. Close relationships develop, a sense of mutual concern and appreciation emerges, and feelings of camaraderie and shared responsibility become evident. The norming stage establishes the healthy basis upon which the actual work of the team will commence.

Stage Four: Performing

The actual work of the project team is done during the **performing stage**. It is only when the first three phases have been properly dealt with that the team will have reached the level of maturity and confidence needed to effectively perform their duties. During the performing stage, team relationships are characterized by high levels of trust, a mutual appreciation for one another's performance and contributions, and a willingness to actively seek to collaborate. Morale has continued to improve over the project team's development cycle to this point, at which all team members are working confidently and efficiently. As long as strong task-oriented group norms were established early in the team development and conflict was resolved, the performing stage is one of high morale and strong performance.

Stage Five: Adjourning

Adjourning recognizes the fact that projects and their teams do not last forever. At some point, the project has been completed and the team is disbanded to return to their other functional duties within the organization. In some cases, the group may downsize slowly and deliberately. For example, in the case of developing a systems engineering project, as various components of the system come online, the services of the team's design engineer may no longer be needed and he will be reassigned. In other circumstances, the team will complete its tasks and be disbanded all at once. In either case, it is important to remember that during the final stages of the implementation process, group members are likely to exhibit some concern about their future assignments and/or new duties. Project managers need to be sensitive to the real concerns felt by these team members and, where possible, help smooth the transition from the old team to the new assignments.

Punctuated Equilibrium

In the late 1980s, UCLA researcher Connie Gersick challenged the validity of the standard model of project team development.¹¹ Through a series of studies, she observed a dramatically different process by which project teams evolve. She referred to her model as *punctuated equilibrium*, based on a similar scientific model proposed by Stephen J. Gould to explain macroevolutionary change in the natural world. **Punctuated equilibrium** proposes that rather than evolution occurring as a steady state of gradual change, real natural change comes about through long periods of stasis, interrupted by some cataclysmic event that propels upward, evolutionary adjustment.

This phenomenon of punctuated equilibrium frequently occurs in the field of group dynamics. Gersick's work suggests that the timing of group process changes is quite consistent across teams and situations. Most teams, she discovered, develop a set of operating norms very quickly, at the time of the first team meeting and on the basis of limited interaction and knowledge of one another or the project mission. These norms, which are often less than optimal, tend to guide group behavior and performance for a substantial period of the project's life. The group will continue to operate as a result of these norms until some trigger event occurs, almost precisely at the halfway point between the initial meeting and the project deadline (see Figure 6.4). The trigger event may be general dissatisfaction with the project's progress to date, a boiling over of interpersonal antagonisms, or some other external force. Nevertheless, once this eruption has occurred, it serves as the motivation to revise group norms, develop better intragroup procedures, and promote better task performance. It is typically during this second phase of the group's life that the majority of effective work gets done and the group begins to function more as a team and less as a collection of individuals.

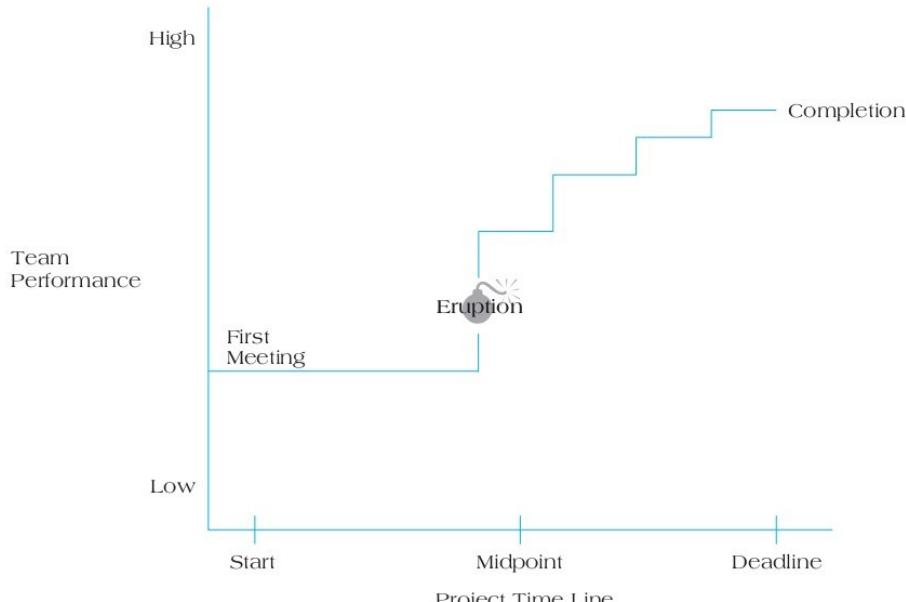


FIGURE 6.4 Model of Punctuated Equilibrium

Punctuated equilibrium has some very important implications for project team leaders. First, it suggests that initial impressions are often lasting, as early behaviors and norms quickly solidify and become the controlling force behind the team's behavior. Project team leaders, therefore, need to take a hard look at how they run kickoff meetings and the messages they send (intentional or otherwise) regarding appropriate task and interpersonal behavior. Second, the model suggests that groups collectively experience a form of "midlife crisis" in running their project, because a lack of concrete results, coupled with escalating interpersonal tensions, tends to build to a state of dissatisfaction that finally overflows midway through the development process. Leaders need to plan for these behaviors, recognize the warning signs of their approach, and proactively chart the steps needed for more positive outcomes from the transition. Finally, Gersick's research found that group members tended to feel increased frustration because they lacked a real sense of where the project stood at any point in time. Hence, project managers who wish to avoid the more damaging effects of midlife project transitions need to recognize that the more they plan for interim milestones and other indications of progress, the more they can mitigate the adverse effects of project team blowups.

6.5 ACHIEVING CROSS-FUNCTIONAL COOPERATION

What are some tactics that managers can use for effective team development? One research project on project teams uncovered a set of critical factors that contribute to **cross-functional cooperation**.¹² Figure 6.5 shows a two-stage model: The first set of factors influences cooperation, and the second set influences outcomes. Critical factors that influence cooperation and behavior are superordinate goals, rules and procedures, physical proximity, and accessibility. Through cross-functional cooperation, these influence both high task outcomes (making sure the project is done right) and psycho-social outcomes (the emotional and psychological effects that strong performance will have on the project team).

Superordinate Goals

A **superordinate goal** refers to an overall goal or purpose that is important to all functional groups involved, but whose attainment requires the resources and efforts of more than one group.¹³ When Apple developed its iPad tablet, that venture included a number of subprojects, including the creation of a user-friendly operating system, graphical-user interface, a number of unique features and application for running multiple programs, 4G and wireless capabilities, and so forth.

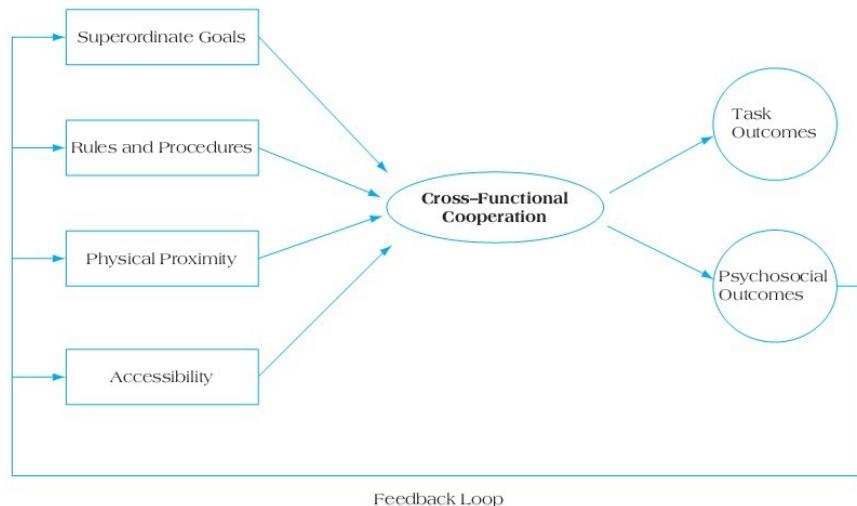


FIGURE 6.5 Project Team Cross-Functional Cooperation

Source: M. B. Pinto, J. K. Pinto, and J. E. Prescott. (1993). "Antecedents and consequences of project team cross-functional cooperation." *Management Science*, 39: 1281–97, p. 1283. Copyright 1993, the Institute for Operations Research and the Management Sciences, 7240 Parkway Drive, Suite 300, Hanover, MD 21076 USA. Reprinted by permission, Project Team Cross-Functional Cooperation.

Each of these subprojects was supported by dozens of electronics engineers, IT professionals, programmers and coding specialists, graphics designers, marketing research personnel, and operations specialists, all working together collaboratively. The iPad could not have been successful if only some of the projects succeeded—they all had to be successful, requiring that their developers maintain strong collaborative working relationships with one another.

The superordinate goal is an addition to, not a replacement for, other goals the functional groups may have set. The premise is that when project team members from different functional areas share an overall goal or common purpose, they tend to cooperate toward this end. To illustrate, let us consider an example of creating a new software project for the commercial marketplace. A superordinate goal for this project team may be "to develop a high-quality, user-friendly, and generally useful system that will enhance the operations of various departments and functions." This overall goal attempts to enhance or pull together some of the diverse function-specific goals for cost-effectiveness, schedule adherence, quality, and innovation. It provides a central objective or an overriding goal toward which the entire project team can strive.

Rules and Procedures

Rules and procedures are central to any discussion of cross-functional cooperation because they offer a means for coordinating or integrating activities that involve several functional units.¹⁴ Organizational rules and procedures are defined as formalized processes established by the organization that mandate or control the activities of the project team in terms of team membership, task assignment, and performance evaluation. For years, organizations have relied on rules and procedures to link together the activities of organizational members. Rules and procedures have been used to assign duties, evaluate performance, solve conflicts, and so on. Rules and procedures can be used to address formalized rules and procedures established by the organization for the performance of the implementation process, as well as project-specific rules and procedures developed by the project team to facilitate its operations.

The value of rules and procedures suggests that in the absence of cooperation among team members, the company can simply mandate that it occur. In cases where project teams cannot rely on established, organizationwide rules and procedures to assist members with their tasks, they often must create their own rules and procedures to facilitate the progress of the project. For example, one such rule could be that all project team members will make themselves available to one another regarding project business.

Physical Proximity

Physical proximity refers to project team members' perceptions that they are located within physical or spatial distances that make it convenient for them to interact. Individuals are more likely to interact and communicate with others when the physical characteristics of buildings or settings encourage them to do so.¹⁵ For example, the sheer size and spatial layout of a building can affect working relationships. In a small building or when a work group is clustered on the same floor, relationships tend to be more intimate, since people are in close physical proximity to one another. As people spread out along corridors or in different buildings, interactions may become less frequent and/or less spontaneous. In these situations, it is harder for employees to interact with members of either their own department or other departments.

Many companies seriously consider the potential effects of physical proximity on project team cooperation. In fact, some project organizations relocate personnel who are working together on a project to the same office or floor. The term "war room" is sometimes used to illustrate this deliberate regrouping of project team members into a central location. When project team members work near one another, they are more likely to communicate and, ultimately, cooperate.

Accessibility

While physical proximity is important for encouraging cross-functional cooperation, another factor, accessibility, appears to be an equally important predictor of the phenomenon. **Accessibility** is the perception by others that a person is approachable for communicating and interacting with on problems or concerns related to the success of a project. Separate from the issue of physical proximity, accessibility refers to additional factors that can inhibit the amount of interaction that occurs between organizational members (e.g., an individual's schedule, position in an organization, or out-of-office commitments). These factors often affect the accessibility among organizational members. For example, consider a public-sector organization in which a member of the engineering department is physically located near a member of the city census department. Although these individuals are in proximity to each other, they may rarely interact because of different work schedules, varied duties and priorities, and commitment to their own agendas. Such factors often create a perception of inaccessibility among the individuals involved.

Outcomes of Cooperation: Task and Psychosocial Results

As Figure 6.5 suggests, the goal of promoting cross-functional cooperation among members of a project team is not an end unto itself; it reflects a means toward better project team performance and ultimately better project outcomes. Two types of project outcomes are important to consider: task outcomes and psychosocial outcomes. **Task outcomes** refer to the factors involved in the actual implementation of the project (time, schedule, and project functionality). **Psychosocial outcomes**, on the other hand, represent the team member's assessment that the project experience was worthwhile, satisfying, and productive. It is possible, for example, to have a project "succeed" in terms of completing its task outcomes while all team members are so disheartened due to conflict and bad experiences that they have nothing but bad memories of the project. Psychosocial outcomes are important because they represent the attitudes that project team members will carry with them to subsequent projects (as shown in the feedback loop in Figure 6.5). Was the project experience satisfying and rewarding? If so, we are much more likely to start new projects with a positive attitude than in circumstances where we had bad experiences on previous projects. Regardless of how carefully we plan and execute our project team selection and development process, our efforts may take time to bear fruit.

Finally, what are some general conclusions we can draw about methods for building high-performing teams? Based on research, project managers can take three practical steps to set the stage for teamwork to emerge:¹⁶

1. **Make the project team as tangible as possible.** Effective teams routinely develop their own unique identity. Through publicity, promoting interaction, encouraging unique terminology and language, and emphasizing the importance of project outcomes, project managers can create a tangible sense of team identity.

2. **Reward good behavior.** There are many nonmonetary methods for rewarding good performance. The keys are (1) flexibility—recognizing that everyone views rewards differently, (2) creativity—providing alternative means to get the message across, and (3) pragmatism—recognizing what can be rewarded and being authentic with the team about how superior performance will be recognized.
3. **Develop a personal touch.** Project managers need to build one-on-one relationships with project team members. If they lead by example, provide positive feedback to team members, publicly acknowledge good performance, show interest in the team's work, and are accessible and consistent in applying work rules, project team members will come to value both the manager's efforts and his work on the project.

These suggestions are a good starting point for applying the concept of team building in the difficult setting of project management. Given the temporary nature of projects, the dynamic movement of team members on and off the team, and the fact that in many organizations team members are working on several projects simultaneously, building a cohesive project team that can work in harmony and effectively to achieve project goals is extremely valuable.¹⁷ Using these guidelines for team building should allow project managers to more rapidly achieve a high-performing team.

6.6 VIRTUAL PROJECT TEAMS

The globalization of business has had some important effects on how projects are being run today. Imagine a multimillion-dollar project to design, construct, and install an oil-drilling platform in the North Atlantic. The project calls on the expertise of partner organizations from Russia, Finland, the United States, France, Norway, and Great Britain. Each of the partners must be fully represented on the project team, all decisions should be as consensual as possible, and the project's success will require continuous, ongoing communication between all members of the project team. Does this sound difficult? In fact, such projects are undertaken frequently. Until recently, the biggest challenge was finding a way for managers to meet and stay in close contact. Constant travel was the only option. However, now more organizations are forming virtual project teams.

Virtual teams, sometimes referred to as *geographically dispersed* teams, involve the use of electronic media, including e-mail, the Internet, and teleconferencing, to link together members of a project team that are not collocated to the same physical place. Virtual teams start with the assumption that physical barriers or spatial separation make it impractical for team members to meet in a regular, face-to-face manner. Hence, the virtual team involves establishing alternative communications media that enable all team members to stay in contact, make contributions to the ongoing project, and communicate all necessary project-related information with all other members of the project team. Virtual teams are using technology to solve the thorny problem of productively linking geographically dispersed project partners.

Virtual teams present two main challenges: building trust and establishing the best modes of communication.¹⁸ Trust, as we have discussed, is a key ingredient needed to turn a disparate group of individuals into an integrated project team. Physical separation and disconnection can make trust slower to emerge. Communications media may create formal and impersonal settings, and the level of comfort that permits casual banter takes time to develop. This can slow down the process of creating trust among team members.

What are some suggestions for improving the efficiency and effectiveness of virtual team meetings? Following are some options available to project teams as they set out to use virtual technology.¹⁹

- **When possible, find ways to augment virtual communication with face-to-face opportunities.** Try not to rely exclusively on virtual technology. Even if it occurs only at the beginning of a project and after key milestones, create opportunities to get the team together to exchange information, socialize, and begin developing personal relationships.
- **Don't let team members disappear.** One of the problems with virtual teams is that it becomes easy for members to "sign off" for extended periods of time, particularly if regular communication schedules are not established. The best solution to this problem is to ensure that communications include both regular meetings and ad hoc get-togethers, either through videoconferencing or through e-mail and Internet connections.

- **Establish a code of conduct among team members.** While it can be relatively easy to get agreement on the types of information that need to be shared among team members, it is equally important to establish rules for when contact should be made and the length of acceptable and unacceptable delays in responding to messages.
- **Keep all team members in the communication loop.** Virtual teams require a hyperawareness by the project manager of the need to keep communication channels open. When team members understand how they fit into the big picture, they are more willing to stay in touch.
- **Create a clear process for addressing conflict, disagreement, and group norms.** When projects are conducted in a virtual setting, the actual ability of the project manager to gauge team members' reactions and feelings about the project and one another may be minimal. It is helpful to create a set of guidelines for allowing the free expression of misgivings or disagreements among team members. For example, one virtual team composed of members of several large organizations established a Friday-afternoon complaint session, which allowed a two-hour block each week for team members to vent their feelings or disagreements. The only rule of the session was that everything said must remain within the project—no one could carry these messages outside the project team. Within two months of instituting the sessions, project team members felt that the sessions were the most productive part of project communication and looked forward to them more than to formal project meetings.

Beyond the challenges of creating trust and establishing communication methods for dispersed teams, there are other considerations that should be addressed.²⁰ For example, selecting the appropriate technology tools is an important process. There is no “one best” means for communicating with all team members on all occasions. Communications options include synchronous (occurring in real time) and asynchronous (occurring outside of real time). An example of synchronous communication would be a direct conversation with another party. Asynchronous communication may include e-mail or posting to someone’s Facebook wall. The underlying intent behind the communication may be either social or informational. We can use these communication tools to establish relationships with team members in the same way they are useful for passing along important project information.²¹

Other suggestions for effectively using technology to manage a dispersed team include:²¹

- No one technology works for everything; use the technology that fits the task at hand.
- Vary how your team meets; always using teleconferences becomes routine and boring.
- Make sure to intermix meeting types and purposes to keep the team experience fresh. Overemphasizing just one type of meeting (social or informational) can lead to assumptions about the only types of meetings worth having.
- Communication technologies can be combined in various ways; for example, virtual whiteboards work well with videoconferencing.
- Asynchronous technologies tend to become the dominant forms as time-zone differences grow. Find methods for adding a synchronous element whenever possible.
- Training in the proper use of technology is critical to its effectiveness. Whoever facilitates the meetings must be an expert on the technologies employed.

PROJECT PROFILE

Tele-Immersion Technology Eases the Use of Virtual Teams

For many users of videoconferencing technology, the benefits and drawbacks may sometimes seem about equal. Although there is no doubt that teleconferencing puts people into immediate contact with each other from great geographical distances, the current limitations on how far the technology can be applied lead to some important qualifications. As one writer noted:

I am a frequent but reluctant user of videoconferencing. Human interaction has both verbal and nonverbal elements, and videoconferencing seems precisely configured to confound the nonverbal ones. It is impossible to make eye contact properly, for instance, in today's videoconferencing systems, because the camera and the display screen cannot be in the same spot. This usually leads to a deadened and formal affect in interactions, eye contact being a nearly ubiquitous subconscious method of affirming trust. Furthermore, participants aren't able to establish a sense of position relative to one another and therefore have no clear way to direct attention, approval or disapproval.²²

(continued)

**FIGURE 6.6** Tele-Immersion Technology

HO Marketwire Photos/Newscom

It was to address these problems with teleconferencing that tele-immersion technology was created. Tele-immersion, a new medium for human interaction enabled by digital technologies, creates the illusion that a user is in the same physical space as other people, even though the other participants might in fact be thousands of miles away. It combines the display and interaction techniques of virtual reality with new vision technologies that transcend the traditional limitations of a camera. The result is that all the participants, however distant, can share and explore a life-sized space.

This fascinating new technology, which has emerged very recently, offers the potential to completely change the nature of how virtual project teams communicate with each other. Pioneered by Advanced Network & Services as part of the National Tele-Immersion Initiative (NTII), tele-immersion enables users at geographically distributed sites to collaborate in real time in a shared, simulated environment as if they were in the same physical room. Tele-immersion is the long-distance transmission of life-sized, three-dimensional synthesized scenes, accurately sampled and rendered in real time using advanced computer graphics and vision techniques. The use of this sophisticated representation of three-dimensional modeling has allowed teleconferencing to take on a whole new look; all members of the project literally appear in a real-time, natural setting, almost as if they were sitting across a conference table from one another.

With enhanced bandwidth and the appropriate technology, tele-immersion video conferencing offers an enormous leap forward compared to the current two-dimensional industry standards in use. In its current form, the tele-immersion technology requires the videoconference member to wear polarizing glasses and a silvery head-tracking device that can move around and see a computer-generated 3D stereoscopic image of the other teleconferencers, whereby the visual content of a block of space surrounding each participant's upper body and some adjoining workspace is essentially reproduced with computer graphics. This results in a more fully dimensional and compressible depiction of such real-world environments than is possible with existing video technology. Just how far this technology is likely to go in the years ahead is impossible to predict, but no one is betting against it becoming the basis for an entirely new manner of conducting virtual team meetings.²³

As Figure 6.6 demonstrates, recent advances in technology have allowed tele-immersion conferencing to sometimes dispense with extra equipment link goggles or tracking devices. The ability to translate and communicate sophisticated images of people, blueprints, or fully rendered three-dimensional models makes this technology unique and highly appealing as an alternative to standard telephone conferencing.

Virtual teams, though not without their limitations and challenges, offer an excellent method for applying the technical advances in the field of telecommunications to the problems encountered with global, dispersed project teams. The key to using them effectively lies in a clear recognition of what virtual technologies can and cannot do. For example, while the Internet can link team members, it cannot convey nonverbals or feelings that team members may have about the project or other members of the project. Likewise, although current videoconferencing allows for real-time, face-to-face interactions, it is not a perfect substitute for genuine "face time" among project team members. Nevertheless, the development of virtual technologies has been a huge benefit for project organizations, coming as it has at the same time that teams have become more global in their makeup and that partnering project organizations are becoming the norm for many project challenges.

6.7 CONFLICT MANAGEMENT

One study has estimated that the average manager spends over 20% of his time dealing with conflict.²⁴ Because so much of a project manager's time is taken up with active conflict and its residual aftermath, we need to understand this natural process within the project management

context. This section of the chapter is intended to more formally explore the process of conflict, examine the nature of conflict for project teams and managers, develop a model of conflict behavior, and foster an understanding of some of the most common methods for de-escalating conflict.

What Is Conflict?

Conflict is a process that begins when you perceive that someone has frustrated or is about to frustrate a major concern of yours.²⁵ There are two important elements in this definition. First, it suggests that conflict is not a state, but a process. As such, it contains a dynamic aspect that is very important. Conflicts evolve.²⁶ Further, the one-time causes of a conflict may change over time; that is, the reasons why two individuals or groups developed a conflict initially may no longer have any validity. However, because the conflict process is dynamic and evolving, once a conflict *has* occurred, the reasons behind it may no longer matter. The process of conflict has important ramifications that we will explore in greater detail.

The second important element in the definition is that conflict is perceptual in nature. In other words, it does not ultimately matter whether or not one party has truly wronged another party. The important thing is that one party *perceives* that state or event to have occurred. That perception is enough because for that party, perception of frustration defines reality.

In general, most types of conflict fit within one of three categories,²⁷ although it is also common for some conflicts to involve aspects of more than one category.

Goal-oriented conflict is associated with disagreements regarding results, project scope outcomes, performance specifications and criteria, and project priorities and objectives. Goal-oriented conflicts often result from multiple perceptions of the project and are fueled by vague or incomplete goals that allow project team members to make their own interpretations.

Administrative conflict arises through management hierarchy, organizational structure, or company philosophy. These conflicts are often centered on disagreements about reporting relationships, who has authority and administrative control for functions, project tasks, and decisions. A good example of administrative conflict arises in matrix organization structures, in which each project team member is responsible to two bosses, the project manager and the functional supervisor. In effect, this structure promotes the continuance of administrative conflict.

Interpersonal conflict occurs with personality differences between project team members and important project stakeholders. Interpersonal conflict sources include different work ethics, behavioral styles, egos, and personalities of project team members.

At least three schools of thought exist about how conflicts should be perceived and addressed. These vary dramatically, depending upon the prevailing view that a person or an organization holds.²⁸

The first view of conflict is the *traditional* view, which sees conflict as having a negative effect on organizations. Traditionalists, because they assume that conflict is bad, believe that conflict should be avoided and resolved as quickly and painlessly as possible when it does occur. The emphasis with traditionalists is conflict suppression and elimination.

The second view of conflict is the *behavioral* or contemporary school of thought. Behavioral theorists view conflict as a natural and inevitable part of organizational life. Differentiation across functional departments and different goals, attitudes, and beliefs are natural and permanent states among members of a company, so it is natural that conflict will result. The solution to conflict for behavioral theorists is to manage conflict effectively rather than attempt to eliminate or suppress it.

The third view of conflict, the *interactionist* view, takes behavioral attitudes toward conflict one step further. Where a behavioral view of conflict accepts it when it occurs, interactionists encourage conflict to develop. Conflict, to an interactionist, prevents an organization from becoming too stagnant and apathetic. Conflict actually introduces an element of tension that produces innovation, creativity, and higher productivity. The interactionists do not intend that conflict should continue without some controls, however; they argue that there is an optimal level of conflict that improves the organization. Beyond that point, conflict becomes too intense and severe and begins hurting the company. The trick, to an interactionist, is to find the optimal level of conflict—too little leads to inertia and too much leads to chaos.

Sources of Conflict

Potential sources of conflict in projects are numerous. Some of the most common sources include the competition for scarce resources, violations of group or organizational norms, disagreements over goals or the means to achieve those goals, personal slights and threats to job security, long-held biases and prejudices, and so forth. Many of the sources of conflict arise out of the project management situation itself. That is, the very characteristics of projects that make them unique contribute some important triggers for conflict to erupt among project stakeholders.

ORGANIZATIONAL CAUSES OF CONFLICT Some of the most common causes of organizational conflict are reward systems, scarce resources, uncertainty, and differentiation. *Reward systems* are competitive processes some organizations have set up that pit one group or functional department against another. For example, when functional managers are evaluated on the performance of their subordinates within the department, they are loath to allow their best workers to become involved in project work for any length of time. The organization has unintentionally created a state in which managers perceive that either the project teams *or* the departments will be rewarded for superior performance. In such cases, they will naturally retain their best people for functional duties and offer their less-desirable subordinates for project teamwork. The project managers, on the other hand, will also perceive a competition between their projects and the functional departments and develop a strong sense of animosity toward functional managers whom they perceive, with some justification, are putting their own interests above the organization.

Scarce resources are a natural cause of conflict as individuals and departments compete for the resources they believe are necessary to do their jobs well. Because organizations are characterized by scarce resources sought by many different groups, the struggle to gain these resources is a prime source of organizational conflict. As long as scarce resources are the natural state within organizations, groups will be in conflict as they seek to bargain and negotiate to gain an advantage in their distribution.

Uncertainty over lines of authority essentially asks the tongue-in-cheek question, "Who's in charge around here?" In the project environment, it is easy to see how this problem can be badly exacerbated due to the ambiguity that often exists with regard to formal channels of authority. Project managers and their teams sit "outside" the formal organizational hierarchy in many organizations, particularly in functional structures. As a result, they find themselves in a uniquely fragile position of having a great deal of autonomy but also responsibility to the functional department heads who provide the personnel for the team. For example, when a project team member from R&D is given orders by her functional manager that directly contradict directives from the project manager, she is placed in the dilemma of having to find (if possible) a middle ground between two nominal authority figures. In many cases, project managers do not have the authority to conduct performance evaluations of their team members—that control is kept within the functional department. In such situations, the team member from R&D, facing role conflict brought on by this uncertainty over lines of authority, will most likely do the expedient thing and obey her functional manager because of his "power of the performance appraisal."

Differentiation reflects the fact that different functional departments develop their own mind-sets, attitudes, time frames, and value systems, which can conflict with those of other departments. Briefly, differentiation suggests that as individuals join an organization within some functional specialty, they begin to adopt the attitudes and outlook of that functional group. For example, a member of the finance department, when asked her opinion of marketing, might reply, "All they ever do is travel around and spend money. They're a bunch of cowboys who would give away the store if they had to." A marketing member's opinion of finance department personnel might be similarly unflattering: "Finance people are just a group of bean counters who don't understand that the company is only as successful as it can be at selling its products. They're so hung up on their margins that they don't know what goes on in the real world." The interesting point about these views is that, within their narrow frames of reference, they both are essentially correct: Marketing is interested primarily in making sales, and finance is devoted to maintaining high margins. However, these opinions are by no means completely true; they simply reflect the underlying attitudes and prejudices of members of the respective functional departments. The more profound the differentiation within an organization, the greater the likelihood that individuals and groups will divide into "*us*" versus "*them*" encampments, which will continue to promote and provoke conflict.

INTERPERSONAL CAUSES OF CONFLICT *Faulty attributions* refer to our misconceptions of the reasons behind another's behavior. When people perceive that their interests have been thwarted by another individual or group, they typically try to determine why the other party has acted as it did. In making attributions about another's actions, we wish to determine if their motives are based on personal malevolence, hidden agendas, and so forth. Often groups and individuals will attribute motives to another's actions that are personally most convenient. For example, when one member of a project team has his wishes frustrated, it is common to perceive the motives behind the other party's actions in terms of the most convenient causes. Rather than acknowledge the fact that reasonable people may differ in their opinions, it may be more convenient for the frustrated person to assume that the other is provoking a conflict for personal reasons: "He just doesn't like me." This attribution is convenient for an obvious and psychologically "safe" reason; if we assume that the other person disagrees with us for valid reasons, it implies a flaw in our position. Many individuals do not have the ego strength to acknowledge and accept objective disagreement, preferring to couch their **frustration** in personal terms.

Faulty communication is a second and very common interpersonal cause of conflict. Faulty communication implies the potential for two mistakes: communicating in ways that are ambiguous and lead to different interpretations, thus causing a resulting conflict, and unintentionally communicating in ways that annoy or anger other parties. Lack of clarity can send out mixed signals: the message the sender intended to communicate and that which was received and interpreted by the receiver. Consequently, the project manager may be surprised and annoyed by the work done by a subordinate who genuinely thought she was adhering to the project manager's desires. Likewise, project managers often engage in criticism in the hopes of correcting and improving project team member performance. Unfortunately, what the project manager may consider to be harmless, constructive criticism may come across as a destructive, unfair critique if the information is not communicated accurately and effectively.

Personal grudges and prejudices are another main cause of interpersonal conflict. Each of us brings attitudes into any work situation. These attitudes arise as the result of long-term experiences or lessons taught at some point in the past. Often these attitudes are unconsciously held; we may be unaware that we nurture them and can feel a genuine sense of affront when we are challenged or accused of holding biases. Nevertheless, these grudges or prejudices, whether they are held against another race, sex, or functional department, have a seriously debilitating effect on our ability to work with others in a purposeful team and can ruin any chance at project team cohesion and subsequent project performance.

Table 6.2 illustrates some of the findings from two studies that investigated the major sources of conflict in project teams.²⁹ Although the studies were conducted more than a decade apart, the findings are remarkably consistent across several dimensions. Conflicts over schedules and project priorities tend to be the most common and intense sources of disagreement. Interestingly, Posner's research found that cost and budget issues played a much larger role in triggering conflict than did the earlier work of Thamhain and Wilemon. The significant changes in the rank ordering of sources of conflict and their intensity may be due to shifts in priorities or practices of project management over time, making issues of cost of greater concern and conflict.³⁰ Nevertheless, Table 6.2 gives some clear indications about the chief causes of conflict within project teams and the intensity level (1 being the highest and 7 being the lowest) of these conflicts.

TABLE 6.2 Sources of Conflict in Projects and Their Ranking by Intensity Level

Sources of Conflict	Conflict Intensity Ranking	
	Thamhain & Wilemon	Posner
Conflict over project priorities	2	3
Conflict over administrative procedures	5	7
Conflict over technical opinions and performance trade-offs	4	5
Conflict over human resources	3	4
Conflict over cost and budget	7	2
Conflict over schedules	1	1
Personality conflicts	6	6

Methods for Resolving Conflict

A number of methods for resolving group conflict are at the project manager's disposal. Before making a decision about which approach to follow, the project manager needs to consider several issues.³¹ For example, will the project manager's siding with one party to the dispute alienate the other person? Is the conflict professional or personal in nature? Does any sort of intervention have to occur or can team members resolve the issue on their own? Does the project manager have the time and inclination to mediate the dispute? All of these questions play an important role in determining how to approach a conflict situation. Project managers must learn to develop flexibility in dealing with conflict, knowing when to intervene versus when to remain neutral. We can choose to manage conflict in terms of five alternatives.³²

MEDIATE THE CONFLICT In this approach, the project manager takes a direct interest in the conflict between the parties and seeks to find a solution. The project manager may employ either defusion or confrontation tactics in negotiating a solution. Defusion implies that the project manager is less concerned with the source of the conflict than with a mutually acceptable solution. She may use phrases such as "We are all on the same team here" to demonstrate her desire to defuse the conflict without plumbing its underlying source. Confrontation, which typically involves working with both parties to get at the root causes of the conflict, is more emotional, time-intensive, and, in the short term, may actually exacerbate the conflict as both sides air their differences. In the long run, however, confrontation can be more effective as a mediating mechanism because it seeks to determine underlying causes of the conflict so they can be corrected. Project managers mediate solutions when they are not comfortable imposing a judgment but would rather work with both parties to come to some common agreement.

ARBITRATE THE CONFLICT In choosing to arbitrate a conflict, the project manager must be willing to impose a judgment on the warring parties. After listening to both positions, the project manager renders his decision. Much as a judge would do, it is best to minimize personalities in the decision and focus instead on the judgment itself. For example, saying, "You were wrong here, Phil, and Susan was right," is bound to lead to a negative emotional response from Phil. By imposing an impersonal judgment, however, the project manager can stick with the specifics of the case at hand rather than getting into personalities. "Company policy states that all customers must receive copies of project revision orders within three working days" is an example of an impersonal judgment that does not point the finger of guilt at either party.

CONTROL THE CONFLICT Not all conflicts can be (nor should be) quickly resolved. In some cases, a pragmatic response to a conflict might be to wait a couple of days for the two parties to cool down. This is not a cowardly response; instead it recognizes that project managers must be selective about how they intervene and the optimal manner in which they can intervene. Another way to control conflict is through limiting the interaction between two parties. For example, if it is common knowledge that one member of the project team and the customer have a long history of animosity, good sense dictates that they should not be allowed to communicate directly except under the most controlled of circumstances.

ACCEPT THE CONFLICT Not all conflicts are manageable. Sometimes the personalities of two project team members are simply not compatible. They disliked each other before the project and will continue to dislike each other long after the project has been completed.

ELIMINATE THE CONFLICT We need to critically evaluate the nature and severity of conflicts that occur continually within a project. In some situations, it is necessary, for the good of the project, to transfer a team member or make other changes. If there is a clearly guilty party, a common response is to sanction that person, remove him from the project, or otherwise punish him. If two or more people share a collective guilt for the ongoing conflict, it is often useful to transfer them all—sending a signal that you intend to run the project as impartially as possible.

The important point to bear in mind is that different approaches may be appropriate in different situations. Do not assume that a problem-solving session is always beneficial or warranted, nor is ignoring conflict always “lazy” management. Project managers have to learn to understand their own preferences when it comes to handling conflict. Once we have achieved a greater sense of self-awareness, we will be in a better position first to resolve our own conflicts constructively and then to deal more effectively with subordinate conflicts. The key is flexibility. It is important not to lock into any particular conflict style nor favor one resolution tactic to the exclusion of all others. Each has its strengths and drawbacks and can be an important part of the project manager’s tool chest.

Conflict often is evidence of project team progress. As we begin to assemble a group of disparate individuals with various functional backgrounds into a project team, a variety of conflicts are bound to be sparked. Team conflict is natural. Remember, however, that the approaches we choose to employ to deal with conflict say a great deal about us: Are we intolerant, authoritarian, and intransigent, or do we really want to find mutually beneficial solutions? We can send many messages—intentional and unintentional, clear and mixed—to the rest of the project team by the manner in which we approach team building and conflict management.

6.8 NEGOTIATION

One of the central points that this chapter has made is to suggest that much of our future success will rest with our ability to appreciate and manage the variety of “people” issues that are central to life in projects. **Negotiation** is a process that is predicated on a manager’s ability to use his influence productively.

Negotiation skills are so important because much of a project manager’s life is taken up in bargaining sessions of one type or another. Indeed, stakeholder management can be viewed as the effective and constant mutual negotiation across multiple parties. Project managers negotiate for additional time and money, to prevent excessive interference and specification changes from clients, the loan or assignment to the team of important project team personnel with functional managers, and so forth. Negotiation represents the art of influence taken to its highest level. Because effective negotiation is an imperative for successful project management, it is vital that project managers understand the role negotiation plays in their projects, how to become better negotiators, and some of the important elements in negotiation.

Questions to Ask Prior to the Negotiation

Anyone entering a negotiation needs to consider three questions: How much power do I have? What sort of time pressures are there? Do I trust my opponent?³³

A realistic self-assessment concerning power and any limiting constraints is absolutely vital prior to sitting down to negotiate. One important reason is that it can show the negotiators where they are strong and, most importantly, what their weaknesses are. A project manager once related this story:

It was early in June and we were involved in the second week of pretty intense negotiations with a vendor for site considerations before starting a construction project. Unfortunately, the vendor discovered that we do our accounting books on a fiscal basis, ending June 30th, and he figured, correctly, that we were desperate to record the deal prior to the end of the month. He just sat on his hands for the next 10 days. Now it’s June 21st and my boss is having a heart attack about locking in the vendor. Finally, we practically crawled back to the table in late June and gave him everything he was asking for in order to record the contract.

This project manager lost out in the power *and* time departments!

How much power do you have going into the negotiation? You are not necessarily looking for a dominant position but a defensive one, that is, one from which the other party cannot dominate you. How much time do you have? The calendar can be difficult to overcome. So, too, can a domineering boss who is constantly telling you to “solve the problem with R&D, marketing, or whomever.” Once word gets out that you have a time constraint, just watch your opponent slow down the pace, reasoning correctly that you will have to agree sooner rather than later, and on her terms. not yours.

Is it possible to trust the other party? Will the firm abide by its word, or does it have a reputation for changing agreements after the fact? Is it forthcoming with accurate information? Does it play negotiation hardball? Note that not all of these questions indicate someone who is untrustworthy. Indeed, it is appropriate to play hardball on occasion. On the other hand, the essential question is whether you can sit across a table from your opponent and believe that you both have a professional, vested interest in solving a mutual problem. If the answer is no, it is highly unlikely that you will negotiate with the same degree of enthusiasm or openness toward the other party.

Principled Negotiation

One of the most influential books on negotiation in recent years is *Getting to Yes*, by Roger Fisher and William Ury.³⁴ They offer excellent advice on **principled negotiation**, the art of getting agreement with the other party while maintaining a principled, win-win attitude. Among the suggestions they offer for developing an effective negotiating strategy are the following.

SEPARATE THE PEOPLE FROM THE PROBLEM One of the most important ideas of negotiation is to remember that negotiators are people first. What this dictum means is that negotiators are no different from anyone else in terms of ego, attitudes, biases, education, experiences, and so forth. We all react negatively to direct attacks, we all become defensive at unwarranted charges and accusations, and we tend to personalize opposing viewpoints, assuming that their objections are aimed at us, rather than at the position we represent. Consequently, in observing the saliency of the notion that negotiators are people first, we must seek ways in which we can keep people (along with their personalities, defensiveness, egos, etc.) out of the problem itself. The more we can focus on the issues that separate us and pay less attention to the people behind the issues, the greater the likelihood of achieving a positive negotiated outcome.

Put yourself in their shoes. An excellent starting point in negotiations is to discuss not only our own position but also our understanding of the other party's position early in the negotiation process. When the other party hears a reasoned discussion of both positions, two important events occur: (1) It establishes a basis of trust because our opponent discovers that we are willing to openly discuss perceptions in the beginning, and (2) it reconstructs the negotiation as a win-win, rather than a winner-take-all, exercise.

Don't deduce their intentions from your fears. A common side effect of almost all negotiations, particularly early in the process, is to construct supporting stereotypes of the other side. For example, in meeting with the accountant to negotiate additional funding for our project, we may adopt a mind-set in which all accountants are penny-pinching bean counters who are only waiting for the opportunity to cancel the project. Notice that even before the negotiation takes place, we have created an image of the accounting department's members and their mind-set based on our own misperception and fears, rather than on any objective reality. When we assume that they will act in certain ways, we subconsciously begin negotiating with them as though money is their sole concern, and before we know it, we have created an opponent based on our worst fears.

Don't blame them for your problems. In negotiations, it is almost always counterproductive to initiate a finger-pointing episode as we seek to attach blame for difficulties our project has encountered. It is far more effective to move beyond the desire to assign blame and search for win-win solutions. For example, suppose that a company has just developed a software program for internal reporting and control that continually crashes in mid-operation. One approach would be for the exasperated accounting manager to call in the head of the software development project and verbally abuse him: "Your program really stinks. Every time you claim to have fixed it, it dumps on us again. If you don't get the bugs out of it within two weeks we're going to go back to the old system and make sure that everyone knows the reason why."

Although it may be satisfying for the accounting manager to react in this manner, it is unlikely to solve the problem, particularly in terms of relations with the software development project team. A far better approach would be less confrontational, seeking to frame the problem as a mutual issue that needs correction. For example, "The reporting program crashed again in midstride. Every time it goes down, my people have to reenter data and use up time that could be spent in other ways. I need your advice on how to fix the problem with the software. Is it just not ready for beta testing, are we using it incorrectly, or what?" Note that in this case, the head of the accounting department is careful not to point fingers. He refrains from taking the easy way

out through simply setting blame and demanding correction, and instead treats the problem as a problem that will require cooperation if it is to be resolved.

Recognize and understand emotion: theirs and yours. Although it is often easy to get emotional during the course of a negotiation, the impulse must be resisted as much as possible.³⁵ It is common in a difficult, protracted negotiation to see emotions begin to come to the surface, often due to anger or frustration with the tactics or attitudes of the other party. Nevertheless, it is usually not a good idea to respond in an emotional way, even when the other party becomes emotional. They may be using emotion as a tactic to get your team to respond in an equally emotional way and allow your heart to begin guiding your head—always a dangerous course. Although emotions are a natural side effect of lengthy negotiations, we need to understand precisely what is making us unhappy, stressed, tense, or angry. Further, are we astute enough to take note of the emotions emanating from our opponent? We need to be aware of what we are doing that is making the other person upset or irritable.

Listen actively. Active listening means our direct involvement in the conversation with our opponent, even when the other party is actually speaking. Most of us know from experience when people are really listening to us and when they are simply going through the motions. In the latter case, our frustration at their seeming indifference to our position can be a tremendous source of negative emotion. For example, suppose a client is negotiating with the project manager for a performance enhancement on a soon-to-be-released piece of manufacturing equipment. The project manager is equally desirous to leave the project alone because any reconfigurations at this time will simply delay the release of the final product and cost a great deal of extra money. Every time the client voices her issues, the project manager speaks up and says, “I hear what you’re saying, but....” In this case, the project manager clearly is not hearing a word the client is saying but is simply paying lip service to the client’s concerns.

Active listening means working hard to understand not simply the words but the underlying motivations of the other party. One effective technique involves interrupting occasionally to ask a pointed question: “As I understand it, then, you are saying....” Tactics such as this convince your opponent that you are trying to hear what is being said rather than simply adhering to your company’s party line no matter what arguments or issues the other side raises. Remember that demonstrating that you clearly understand the other party’s position is not the same thing as agreeing with it. There may be many points with which you take issue. Nevertheless, a constructive negotiation can only proceed from the point of complete and objective information, not from preconceived notions or entrenched and intransigent positions.

Build a working relationship. The idea of negotiating as though you are dealing with a party with whom you would like to maintain a long-term relationship is key to effective negotiations. We think of long-term relationships as those with individuals or organizations that we value and, hence, are inclined to work hard to maintain. The stronger the working relationship, the greater the level of trust that is likely to permeate its character.

FOCUS ON INTERESTS, NOT POSITIONS There is an important difference between the positions each party adopts and the interests that underscore and mold those positions. When we refer to “interests,” we mean the fundamental motivations that frame each party’s positions. As Fisher and Ury note, “Interests define the problem.”³⁶ It is not the positions taken by each party that shape the negotiation nearly as much as it is the interests that are the source of the parties’ fears, needs, and desires.

Why look for underlying interests as opposed to simply focusing on the positions that are placed on the table? Certainly, it is far easier to negotiate with another party from the point of our position versus theirs. However, there are some compelling reasons why focusing on interests rather than positions can offer us an important “leg up” in successful negotiations. First, unlike positions, for every interest there are usually several alternatives that can satisfy it. For example, if my major interest is to ensure that my company will be in business over the years to come, I can look for solutions other than simply squeezing every drop of profit from the contractor in this negotiation. For example, I could enter into a long-term relationship with the contractor in which I am willing to forgo some profit on this job while locking the contractor into a sole-source agreement for the next three years. The contractor would then receive the additional profit from the job by paying me less than I desire (my position) while supplying me with long-term work (my interest).

Another reason for focusing on interests argues that negotiating from positions often leads to roadblocks as each party tries to discover their opponent's position while concealing their own. We consume valuable time and resources in making visible our various positions while hiding as long as possible our true intentions. In focusing on interests, on the other hand, we adopt a partnering mentality that acknowledges the legitimacy of both sides' interests and seeks to find solutions that will be mutually satisfying.

Invent Options for Mutual Gain

Managers sometimes put up roadblocks for themselves, making it difficult to consider win-win options when negotiating.

Managers can have premature judgment. We quickly arrive at conclusions about the other side and anything they say usually serves to solidify our impressions. Further, rather than seek to broaden our various options early in the negotiation, we typically go the other direction and put limits on how much we are willing to give up, how far we are willing to go, and so forth. Every premature judgment we make limits our freedom of action and puts us deeper into an adversarial, winners-losers exchange.

Some managers search only for the best answer. A common error made is to assume that buried underneath all the negotiating ploys and positions is one "best" answer that will eventually emerge. In reality, most negotiations, particularly if they are to result in win-win outcomes, require us to broaden our search, not limit and focus it. For example, we may erroneously define the "best" answer to typically mean the best for our side, not the other party. It is important to acknowledge that all problems lend themselves to multiple solutions. Indeed, it is through consideration of those multiple solutions that we are most likely to attain one that is mutually satisfying.

Managers assume that there's only a "fixed pie." Is there really only a fixed set of alternatives available? Maybe not. It is common to lock into a "I win, you lose" scenario that virtually guarantees hardball negotiating with little or no effort made to seek creative solutions that are mutually satisfying.

Thinking that "solving their problem is their problem" is another roadblock. Negotiation breeds egocentrism. The greater our belief that negotiation consists of simply taking care of ourselves, the greater the likelihood that we will be unwilling to engage in any win-win solutions. Our position quickly becomes one of pure self-interest.

If these are some common problems that prevent win-win outcomes, what can be done to improve the negotiation process? There are some important guidelines that we can use to strengthen the relationship between the two parties and improve the likelihood of positive outcomes. Briefly, some options to consider when searching for win-win alternatives include positive and inclusive brainstorming, broadening options, and identification of shared interests.

The use of *positive and inclusive brainstorming* implies that once a negotiation process begins, *during its earliest phase* we seek to include the other party in a problem-solving session to identify alternative outcomes. This approach is a far cry from the typical tactic of huddling to plot negotiation strategies to use against the other team. In involving the other party in a brainstorming session, we seek to convince them that we perceive the problem as a mutually solvable one that requires input and creativity from both parties. Inviting the other party to a brainstorming session of this type has a powerfully disarming effect on their initial defensiveness. It demonstrates that we are interested not in beating the other side, but in solving the problem. Further, it reinforces the earlier point about the necessity of separating the people from the problem. In this way, both parties work in cooperation to find a mutually satisfactory solution that also serves to strengthen their relationship bonds.

The concept of *broadening options* is also a direct offshoot of the notion of brainstorming. Broadening our options requires us to be open to alternative positions and can be a natural result of focusing on interests rather than positions. The more I know about the other party's interests and am willing to dissect my own, the greater the probability that together we can work to create a range of options far broader than those we may initially be tempted to lock ourselves into.

Finally, a third technique for improving chances for win-win outcomes is to *identify shared interests*. A common negotiating approach employed by experienced bargainers is to sometimes

table the larger items to a later point in the negotiation, focusing instead on minor or peripheral issues that offer a greater likelihood of reaching agreement. Once the two parties begin to work together to identify their shared interests and gain some confidence from working in a collaborative way, it is possible to reintroduce the larger sticking points. By this time both sides have begun to develop a working rhythm and a level of harmony that makes it easier to look for shared interests within these larger issues.

Insist on Using Objective Criteria

One of the best methods for ensuring that a negotiation proceeds along substantive lines is to frame the discussion around objective criteria.³⁷ Do not get bogged down in arguing perceptions or subjective evaluations. For example, a project manager recently almost had his new product development (NPD) project canceled because of protracted negotiations with a client over delivering an “acceptable” working prototype. Obviously, the project manager had a far different interpretation of the word *acceptable* than did the client. The project manager assumed that *acceptable* included normal bugs and preliminary technical problems whereas the client had used the word to imply error-free. In their desire to pin the onus of responsibility on the other, neither was willing to back away from her interpretation of the nebulous “acceptable.”

Objective data and other measurable criteria often form the best basis for accurate negotiations. When firms or individuals argue costs, prices, work hours, and so on, they are using established standards and concepts that both parties can understand with a minimum of interpretation error. On the other hand, the more vague the terms employed or the more subjective the language, the greater the potential to be arguing at cross-purposes, even if both parties assume that the other is using the same interpretations of these terms.

Develop fair standards and procedures. Whatever standards are used as the basis of the negotiation need to be clearly spelled out and put in terms that are equally meaningful to both parties. This point is particularly relevant in cross-cultural negotiations in that different countries and cultures often attach different meaning to terms or concepts. For example, several American heavy construction firms, including Bechtel Corporation, lodged a protest against a number of Japanese construction firms for their collusion in dividing up biddable contracts (bid rigging) prior to a major airport project in Tokyo Bay. The Japanese companies argued in turn that they were fulfilling the terms of recent free-competition agreements by simply allowing Bechtel to submit a bid. Further, in Japanese society, there is nothing inherently illegal or unethical about engaging in this form of bid rigging. Clearly, both parties had very different interpretations of the idea of fair and clear bidding practices.

Fair standards and procedures require that both parties come together and negotiate from the same basic understanding of the terms and liabilities. In project management, this concept is particularly relevant because construction contracting requires a universally understood set of terms and standards. When the two parties are engaged in negotiating from the point of appropriate standards, it effectively eliminates the source of many potential misunderstandings or misinterpretations.

In visualizing the need to become adept at team building, conflict management, and negotiation, it is important to remember that the greatest challenges project managers typically face in running their projects are the myriad “people” challenges that result from the process of forming a diverse set of project members into a unified and collaborative team, whose goal is to pursue project success. Creating a team and initiating the project development process sows the seeds for a wide variety of conflicts among all project stakeholders. These conflicts are inevitable. They should be treated not as a liability, however, but as an opportunity. Conflict can lead to positive outcomes by solidifying team member commitment and motivation, and generating the energy to complete project activities.

Nevertheless, channeling conflict in appropriate ways requires a sure touch on the part of the project manager. Our ability to sustain influence and use negotiation in skillful ways is a great advantage in ensuring that team development and conflict serve not to derail the project but to renew it. Conflict is inevitable; it is not disastrous. Indeed, the degree to which a conflict disrupts a project’s development depends upon the project manager’s willingness to learn enough about conflict to deal with it effectively.

Summary

- 1. Understand the steps involved in project team building.** The first step in project team building is the selection of personnel to staff the project team. This process can be complicated, particularly due to the high potential for conflict and negotiation with functional managers who may retain effective control over project team members. Following an analysis of skill requirements and staff availability, the team-building process typically involves matching the best people to the identified project tasks, while at the same time understanding the need to make these staffing decisions in collaboration with other top managers or departmental heads.
- 2. Know the characteristics of effective project teams and why teams fail.** High-performing teams are typically characterized by (1) a clear sense of mission, (2) an understanding of interdependencies, (3) cohesiveness, (4) trust, (5) enthusiasm, and (6) a results orientation. On the other hand, teams that fail often do so due to poorly developed goals, poorly defined team roles, lack of motivation, poor communication, poor leadership, high project team turnover, and dysfunctional behavior.
- 3. Know the stages in the development of groups.** Project teams do not begin their assignments as a unified, cohesive, and motivated body. Rather, their development is a challenge that must be effectively managed if we are to get maximum performance from the team. Teams go through some identifiable stages in their development process, and project managers need to recognize and seek to manage these developmental stages as efficiently as they can. One model of team development posits a five-stage approach—forming, storming, norming, performing, and adjourning—each with its unique challenges and group behaviors. An alternative model that has been validated through research argues that groups adopt a process of “punctuated equilibrium” as they evolve.
- 4. Describe how to achieve cross-functional cooperation in teams.** Superordinate goals, rules and procedures, physical proximity, and accessibility are all important factors in motivating people to collaborate. The effects of this cross-functional cooperation are twofold: They can positively impact both project task outcomes and psychosocial project team results. Task outcomes positively affect the project at hand, while psychosocial outcomes mean that team members retain high positive attitudes toward the project experience and will enter new projects with strong motivation to succeed again.
- 5. See the advantages and challenges of virtual project teams.** Virtual project teams are defined as the use of electronic media, including e-mail, the Internet, and teleconferencing, to link together members of a geographically dispersed project team, largely because of the globalization of project management. As multinational firms attempt to manage projects from geographically dispersed units, they need sophisticated technical media that support their communications and networking. The sheer physical barriers caused by globalization, coupled with the increase in multiorganizational project teams, have led to the increased use of virtual technologies to link team members. Two of the biggest challenges in effectively creating and managing virtual teams are establishing and reinforcing trust among team members and establishing effective communication patterns.
- 6. Understand the nature of conflict and evaluate response methods.** Conflict is an inevitable result when team members with diverse functional backgrounds, personalities, experiences, and attitudes are brought together and expected to work collaboratively. Among the organizational causes of conflict are scarce resources, uncertainty over lines of authority, and differentiation. Interpersonal causes of conflict include faulty attributions, faulty communication, and personal grudges and prejudice. Conflict can be addressed through mediation, arbitration, control, acceptance, or elimination.
- 7. Understand the importance of negotiation skills in project management.** Project managers routinely negotiate with a wide variety of organizational stakeholders for resources, contractual considerations, terms and conditions, and so forth. Effective project managers are often those individuals who approach negotiations in a systematic manner, taking the time to carefully analyze the nature of the negotiation, what they hope to achieve, and how much they are willing to offer to achieve their important goal. In principled negotiation, the primary objective is to seek win-win alternatives that allow both parties to negotiate to gain their goals.

Key Terms

Accessibility (p. 201)	Cross-functional cooperation (p. 199)	Interaction (p. 193)	Orientation (p. 194)
Adjourning (p. 198)	Differentiation (p. 192)	Interdependencies (p. 192)	Outcomes (p. 194)
Administrative conflict (p. 205)	Forming stage (p. 197)	Interpersonal conflict (p. 205)	Performing stage (p. 198)
Cohesiveness (p. 193)	Frustration (p. 207)	Negotiation (p. 209)	Physical proximity (p. 201)
Conflict (p. 205)	Goal-oriented conflict (p. 205)	Norming stage (p. 198)	Principled negotiation (p. 210)

Psychosocial outcomes (p. 201)	Storming stage (p. 197) Superordinate goal (p. 199)	Task outcomes (p. 201) Team building (p. 188)	Trust (p. 193) Virtual teams (p. 202)
Punctuated equilibrium (p. 198)			

Discussion Questions

- 6.1 This chapter discussed the characteristics of high-performing project teams. List the factors that characterize these teams and give examples of each one.
- 6.2 "Trust can actually encourage disagreement and conflict among team members." Explain why this could be the case.
- 6.3 Identify the stages of group development. Why is it necessary for project teams to move through these stages in order to be productive?
- 6.4 Gersick's model of punctuated equilibrium offers an alternative view of group development. Why does she suggest that some defining moment (such as an explosion of emotion) often occurs about midpoint in the project? What does this defining event accomplish for the team?
- 6.5 Explain the concepts of "task" and "psychosocial" outcomes for a project. Why are psychosocial outcomes so important for project team members?
- 6.6 Distinguish between the traditional, behavioral, and interactionist views of team conflict. How might each explain and treat a project team conflict episode?
- 6.7 Identify the five major methods for resolving conflict. Give an example of how each might be applied in a hypothetical project team conflict episode.
- 6.8 What are some of the guidelines for adopting a strategy of "principled negotiation"?
- 6.9 Explain the idea that we should "focus on interests, not positions." Can you think of an example in which you successfully negotiated with someone else using this principle?

CASE STUDY 6.1

Columbus Instruments

Problems have been building at Columbus Instruments, Inc. (CIC) (not its real name) for several years now with the new product development process. The last six high-visibility projects were either scrapped outright after excessive cost and schedule overruns or, once released to the marketplace, were commercial disasters. The company estimates that in the past two years, it has squandered more than \$15 million on poorly developed or failed projects. Every time a new project venture failed, the company conducted extensive post-project review meetings, documentation analysis, and market research to try to determine the underlying cause. To date, all CIC has been able to determine is that the problems appear to lie with the project management and development process. Something somewhere is going very wrong.

You have been called into the organization as a consultant to try to understand the source of the problems that are leading to widespread demoralization across the firm. After spending hours interviewing the senior project management staff and technical personnel, you are convinced that the problem does not lie with their processes, which are up-to-date and logical. On the other hand, you have some questions about project team productivity. It seems that every project has run late, has been over budget, and has had suboptimal functionality, regardless of the skills of the project

manager in charge. This information suggests to you that there may be some problems in how the project teams are operating.

As you analyze CIC's project development process, you note several items of interest. First, the company is organized along strictly functional lines. Projects are staffed from the departments following negotiations between the project manager and the department heads. Second, the culture of CIC seems to place little status or authority on the project managers. As evidence of this fact, you note that they are not even permitted to write a performance evaluation on project team members: That right applies only to the functional department heads. Third, many projects require that team members be assigned to them on an exclusive basis; that is, once personnel have been assigned to a project, they typically remain with the project team on a full-time basis for the term of the project. The average project lasts about 14 months.

One morning, as you are walking the hallways, you notice a project team "war room" set up for the latest new product development initiative within the company. The war room concept requires that project team members be grouped together at a central location, away from their functional departments, for the life of the project. What intrigues you is a hand-lettered sign you see taped to the door of the project

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