



Conducting the Project Review

For all the intellect and technique a manager can muster, his success turns on a subtle and elusive quality—the degree to which he can stimulate people to make the most of their own inherent capabilities.

—LESTER R. BITTEL—

“I think there’s too much bureaucracy in this company,” one manager confided to another. “Last month, the president formed a task force to figure out why projects weren’t being finished on schedule.”

“I know. It struck me as a good idea,” the other manager replied.

“Except for one thing. They haven’t submitted their report yet, and it was due three weeks ago.”

One very successful project manager explained how she never went over budget or missed a deadline: constant review and monitoring. Never satisfied with the plan as originally conceived, she spent at least

as much time following the team's progress as she spent involved in the work itself.

Your role, of course, is to keep your team working toward the final deadline, within the budget, and in line with the goals of the project—and on a broader field, to produce a result of the highest possible quality and accuracy. This effort may take more time than actual participation in the work of the project; and perhaps it should.

Defining Success

The importance of leading your team, staying within the budget, and meeting schedule deadlines may prevent you from the broader question: How do you know whether your project is a success? In all organizational efforts, but especially in projects, defining success goes beyond the schedule and budget, even when these issues dominate the interests of management and even of project managers and team members.

Remember these attributes to define success for your own projects:

1. *Expectations have been met on all levels.* Although often overlooked, everyone with an interest in the project has a set of expectations. For this reason, it makes sense to start out the project by making a list of stakeholders' expectations and then build these into the desired results. No matter how effectively you lead your team, meet your deadlines, and come in under budget, the project succeeds only if the stakeholders are pleased with the final results.

2. *Everyone wins based on the final outcome.* Stakeholder expectations form a foundation for defining success, but it is also important for all of your team members to have a sense of accomplishment and for management to appreciate the outcome. This means not only that all involved are happy with the effort, but also that no one is deprived along the way. A project creating benefit for one group at the expense of another is only going to add to the political tension and rivalry within the organization. Looking for the win/win outcome always works out better.

3. *Quality has been created as part of the new procedure.* The Six Sigma approach requires that quality dominates all processes

and that all projects are focused on this ideal. Whether you use a formalized Six Sigma program or not, quality has to be maintained or improved. A project that streamlines time and costs but also reduces quality is not successful, because the lower quality is ultimately going to more than offset any apparent savings.

4. *New value was created through risk management and controls.* The most successful projects create new value without adding new expense. For example, simple changes in processing may reduce defects without adding to costs or time; they may even reduce the cost elements of processes. This usually requires the installation of risk management as part of the process, through improved controls within the process itself, not as an outside auditing or oversight function.

5. *The goals of the project have been met.* Finally, the big question comes down to whether your efforts have reached management's original goals. If a goal of your project was to reduce expenses, cut processing time, improve customer responses, or eliminate repetitive defects, your question has to be whether the project accomplished those goals. It is interesting that, as some projects evolve, you may begin with one set of goal assumptions only to discover a more expanded set of problems that need to be addressed. So project management often is a dynamic process that requires continual communication with management, redefinition, and perhaps revision of schedules and budgets. A periodic progress review is essential for this reason; you may need to ensure that your project is moving along scheduling and budgetary expectations; you may also need to change the goals of the original project.

The Progress Review

It may appear that a “successful” project is one that is completed on time and within budget. In fact, though, these obvious objectives can be controlled and are more likely to come about when your team members have a sense of their own participation. It helps greatly if team members have a sense of ownership in the project and not merely a reporting role. Problems leading to schedule and budget failure are not

always merely chance events, but reflect other problems your team has to face. These problems can include inadequate supervision or training, low morale (coming from a sense of not having a real stake in the outcome), or inadequate time to devote to the project (often due to departmental demands or lack of support from a team member's supervisor). It is never a pleasant experience to be involved in a project that has been given inadequate time, a minimal budget, and no support from above.

Certainly, anyone in a managerial role is all too familiar with what can go wrong in a project, not to mention in a department, division, or even companywide. As project manager, you can effectively overcome the internal problems that are inherent in all efforts, assuming that you are not facing an impossible deadline with an overworked staff and no budget! That may be a rather larger assumption; however, even with those handicaps, you can take steps to review progress and control the project's budgeting and scheduling issues in three primary ways:

- 1. *Define standards of performance.*** What do you expect from your team? The obvious answer—meeting phase and project deadlines within budget—are always primary objectives. Beyond these questions, however, are the equally critical objectives of quality, cooperation, and results. Thus, your project review needs to consist of checking for accuracy and thoroughness (e.g., correct interpretation of raw data), achievement of team ideals (e.g., removal of bias in applying results), and comprehensive results (e.g., double-checking all numerical reports).

- 2. *Find appropriate applications of the standards.*** As your project moves forward, how do you test the standards you have set, and what do your tests reveal? This is where project review is most likely to be lacking. It is not enough to remain on schedule and within budget. You may work well with your core team in defining standards at the beginning of the project; you also need to monitor the progress of the project with those standards in mind.

- 3. *Decide what actions, if any, you need to take.*** What should you do upon discovering problems? Your team may be falling behind

schedule, for example. That is a problem in itself, but it often is a symptom of a broader team problem as well. Getting back on schedule often is not as difficult as solving the underlying problem. It could be related to teamwork, ability, communication, effort, authority, or motivation. Identifying what is really going on and then taking action to solve it are two areas where your leadership insight will be keenly tested.

Difficult-to-Define Problem Areas

Understanding what is going on at the team level—in the trenches, so to speak—may seem easy and obvious. But one aspect of being a leader is that you lose touch, at least to a degree, with the realities the team members face. The most severe of problems are sometimes kept from the manager for a variety of reasons, and these often are the least visible and most difficult issues to solve. You will discover, however, that by making a sincere effort to make your team's work easy and successful, you will have a significant and positive effect on team morale. Improvement in morale (or attitude) often solves all of the other problems on your project.

Another question faced by every project manager is that of quality control. How do you determine whether your team is adhering to the standards you have set? Is your team working as a team, or as a group of individuals forced together in the name of the project? Are some people doing more than their share and others less? These are the questions you need to ask continuously, because only by inquiring in these areas can you prevent the kinds of less tangible problems from occurring that often prevent the team from complying with the more obvious goals of finishing the project on time and within budget. It's in those intangible and difficult-to-define areas that your leadership insight is tested and proved.

Your standards vary from one project to another, naturally. For example, a project involving research (e.g., compiling, interpreting, and reporting information) demands a particular adherence to accuracy, removal of bias, and attention to detail. The same high level of team operational standards will not apply to every other project. If your work results in a report to be presented to management, you need to ensure

that all of the details have been checked. This means the report should be professional in every aspect. Information should be arranged logically, cross-referenced where necessary, and indexed if required by the volume of information. It should also be checked for spelling and grammar as well as mathematical accuracy. These small details define the professionalism of the report and will determine whether the reader places confidence in the report.

These small but important details define “excellence” as you apply it to your project. The way that you apply these standards reflects not only your team’s work overall, but your leadership abilities as well.

Period versus Ongoing Review

How frequently should you review your team’s progress? Some managers approach review in a formal manner; others see review as an ongoing part of their function as project manager. However you approach the review process, keep the important questions in mind, relating not only to budget and schedule, but also to the less tangible questions about quality control, standards, and team morale.

The ongoing approach makes more sense than the periodic review. Remember, the project does not run like a department. Virtually all of the functions of the project are exceptional, whereas departments run on routine. Problems tend to arise in projects suddenly and unexpectedly, become irreversible too quickly, and can have a significant impact on the entire flow of work. The best project manager is always striving to remain one step ahead of such problems, solving them before they get out of hand. Waiting until a problem comes to your attention often means it is too late. Take a preventive approach, looking for the emerging problem and attacking it in order to protect your team from disruption and delay.

Project Leadership Attributes

As project manager, you are continually expected to prevent problems by anticipating them and taking the right steps before the relatively

simple problem turns into a crisis. Project leadership varies considerably from department supervision or management, in several ways:

1. *The team is a focus in the project; the routine is the focus in the department.* The project is a unique structure due to the non-recurring nature of its work. Because of this, it is a mistake for a manager experienced in supervising or managing a department to proceed on the assumption that a project team is merely a form of specialized departmentlike unit. In fact, the team is quite different because it is expected to perform specialized, nonrecurring work. As project manager, your focus has to be on working closely with, training, mentoring, and helping the team; the routine itself is secondary to this.

2. *Project goals are specific to the project and are finite; the department's goals are more generalized and permanent.* The project goals you and your team need to accomplish are nonrecurring and quite specific. A department may not even operate on specific goals because it has a generalized purpose, a series of recurring tasks and routines, and a permanent requirement for repetitive cyclical task completion.

3. *Project leadership involves skillful oversight of people who do not work together; departmental leadership is more like an organizational family.* Even the most experienced supervisor should expect to encounter some problems getting project teams to work together harmoniously. People within a department tend to work together as a sort of family unit, with varying levels of power and influence at play. The project team is a new and different structure. Just as strangers sharing a house are going to have to work out their rules for getting along with each other, team members are all new to the scene. The project team is not the same as the familylike department.

4. *Managers of projects often have to be more involved with team members because tasks are not repetitive; in a department, employees often generate their work and complete tasks as a matter of routine.* As project manager, you may need to also train and teach team members. Supervisors in departments rely on rou-

tine and repetition to handle most issues, and the exceptions that arise require them to step in and help. A project is *all* management by exception; none of the tasks you expect team members to perform are repetitive, and some team members are not going to know how to innovate in an unfamiliar environment.

5. *Project managers have to rely on team members for their own weak areas; supervisors are expected to have all of the skills.* Project managers are expected to possess organizational and leadership skills, even when they do not have all the experience required for each phase of a project. Thus, you have to rely on team members to supply specialized expertise. In comparison, the supervisor of a department is expected to be familiar with every possible situation that is going to arise within the departmental routines. Supervisors are experts in a limited venue, and project managers are generalists with management skills.

6. *Schedules and budgets are short term in projects, but cycle driven in departments.* Some project managers make the mistake of tying budgets and schedules to the familiar cyclical deadline they use in a department. A project, however, has its own cycles, and these are never the same as the business or accounting cycle, in which a budget and sales month end on the last day of the month. So the control aspects of your project have to be freed from the normal cyclical norms of the organization, and operated on an entirely unique schedule, dictated by the requirements of the project, not by a monthly closing date.

Monitoring and Reporting

You need to report progress on two levels. First, you communicate with the team, which is an opportunity to acknowledge effort, motivate individuals, and demonstrate your desire for team participation. It also serves as a chance to identify emerging problems, propose solutions, and make adjustments in the schedule for conflicts. Second, you report to management, either to the person who gave you the project assignment or to a group of executives.

Reporting to the Team

Your report to the team is a form of performance review. Since you expect core team members to work together under your leadership, it also makes sense to report to the entire group. This can take place during periodic team meetings. These should be brief and action-oriented.

Schedule team meetings at critical junctures in the schedule. For example, at a point where a particularly complex phase is about to begin, a team meeting can address problems you anticipate. Large, especially complicated projects lend themselves to several report/review meetings; smaller, less complex projects require only one or two set meetings and additional ones if needed. If you are working with a large team and there is concurrent phasing, meetings may have to be included in the schedule as part of the phase itself.

Reporting to Management

Your report to management is likely to be more formal but less detailed than the team meetings. Here, your concern is not with the minutiae of execution and interim problems, but more with the broad overview. Bigger questions of overall schedule and budget and any problems connected to those concerns should be a part of the progress report.

Even though you may not be required to present a progress report, you may consider suggesting such a policy, especially for longer-term, larger-budget projects. Budget and schedule review are essential in larger projects. Whether you are required to make such a report or you suggest it yourself, be sure you are prepared. Present your status report in writing, even if you are also giving a verbal summary. For larger projects, also ask for brief reports from team subgroup leaders, and include these with your report.

What should your status report contain, and how long should it be? The report to management should contain only the information required to convey the information necessary. Avoid putting in details that really aren't of concern to management. Limit your report to four broader topics:

1. Describe the project and its deadline briefly.
2. Describe the current status of schedule and budget.
3. Explain any variances and their causes, or schedule delays.
4. Summarize your expectations for the future (i.e., the completion and deadline).

The discussion of schedule and budget can be summarized on a single page of your report. It helps to include a Gantt chart that provides a nice overview of the project. Don't include the network diagram, which is far too much detail and unnecessary for reporting to management.

If your project is on schedule and within budget, the entire report can be very brief. When further explanation is required, try to identify specific problems in terms of possible solutions. Demonstrate that whatever problems you are facing, you are trying to overcome those problems, rather than delegating upward by merely presenting the problem in your report.

Example

You are presenting a report on the status of your project. You are on schedule, but you expect to run into problems in the coming month. The accounting department was supposed to provide information to you, but the manager of that department recently told you that it was going to be late. She had been given an unexpected job and its deadline is a priority. She simply doesn't have the staff to complete the work promised to you, and it will delay your project two weeks.

An important point to remember concerning your report to management is this: Missing a promised deadline is not always a disaster. In fact, in some cases, management accepts delays as normal. To a degree, a deadline is a standard against which to measure progress; it isn't necessarily a hard-and-fast requirement. As project manager, however, you should always know whether the deadline is intended to be only a guideline or whether it is a mandate. It is a disaster, in any case, to fail

to inform management that a deadline cannot be met. Your report should be as accurate as possible and should not leave out any important information—even when it is bad news.

In the previous example, there are two ways to disclose the problem. One is to place blame, which does not solve the problem; in fact, it makes matters worse because it puts management in the position of having to decide what to do about it. Another method is to offer constructive solutions. For example, your report might read, “The project will be delayed two weeks; a scheduling conflict will prevent the production of essential information from the accounting department.” It may also state, “Based on the current schedule, the project will be two weeks late in completion. A possible solution is to provide additional staffing to assist the accounting department so that the project can remain on schedule.”

In this last case, you propose a solution to the problem without placing blame. Chances are, the other manager can do nothing to solve your schedule delay, and who is to blame is not a constructive topic for your report. Proposed solutions are far more revealing about the character of the project—and of the project manager.

If you make recommendations that would affect another department, it is also wise to first consult with the manager and mention that you want to proceed with that idea. This gives the manager the chance to offer other alternatives or to advise why the recommendation could cause problems. Maintain good communication to avoid introducing new problems in the future.

The Missed Deadline

You might speculate on the question of deadlines and conclude that management is not overly concerned with timely completion. This is the unfortunate state of affairs in many companies. Deadlines are missed so regularly that it has become the norm; it is a surprise when a project is completed on time.

Set a standard. Take every deadline seriously as a promise to deliver, and consider delays as unacceptable unless they also are unavoi-

able. If unavoidable, management should be informed as soon as possible that the deadline cannot be met.

Remember these important points about deadlines:

■ ***The deadline may have been set early on purpose.*** If managers are used to missed deadlines, it could become a matter of practice to set them early—in the hope that projects will be completed by the time they really need them. For example, the president needs your report by May 1. You are given a deadline of April 1 so that the extra month provides time to meet the “real” deadline.

Setting early deadlines only encourages continuing failure to meet them. Thus, the problem is intensified rather than solved and a culture of not keeping promises goes into effect. The same problem is seen in budgets; allowances are set at one level, but management has a higher level in mind, accepting the supposedly inevitable fact that departments always exceed their budgets. This attitude, whether relating to deadlines or to budgets, only makes matters worse and subverts the intended purpose of managerial controls. Ask for a realistic deadline and then get the reputation as a project manager who meets that deadline.

■ ***Management may accept missed deadlines.*** Top management may not be happy about the fact that deadlines are missed more often than not, but it lives with the situation because it has become the norm. This is a symptom of a greater problem and should never be used as an excuse to miss a deadline. Management should impose realistic deadlines and then expect them to be met. Project managers should agree to that policy and strive to enforce it.

■ ***Management may depend on timely delivery to decide other important matters.*** To a project manager deeply involved in the details of keeping a project on schedule, the immediate phase deadline may seem like the highest priority. Remember, though, that management may be waiting for the results of your project to decide other matters. If you miss your final deadline, the consequences will be more far-reaching than your project.

■ ***One of your responsibilities is to keep management up to date.*** As a project manager, you are charged with the duty of advising management. Just as you are responsible for departmental schedules, budgets, and reports, you are responsible for the same matters as project manager. Missed deadlines and emerging problems (along with proposed solutions) should be communicated up the chain. The lines of communication between you and management should be characterized by constant dialogue; hopefully, information will flow in both directions.

■ ***Delays may be acceptable not because they occur frequently, but because of other delays beyond your project.*** Management may express little concern when you advise that your project will be delayed. Don't assume that this means your missed deadline is not a problem. It could be that other delays outside of your knowledge have made your original deadline less critical. Delay is chronic, so chances are that management is far behind schedule and your project fits into the scheme of things even with its missed deadline.

■ ***You can ask for an extension.*** Some project managers hesitate to advise management about delays, so they take the worst possible course: saying nothing. When you are under pressure to complete your project, you can ask for an extension if you run into unexpected problems. This is preferable to not communicating the problem at all.

■ ***You might overcome delays by looking for shortcuts.*** Upon review, you may be able to cut time from upcoming phases by taking shortcuts. Running phases concurrently, getting partial phases completed early, adding staff, and cutting work levels are examples of ways to reduce time. If you have built in a time cushion for later phases, that also helps. However, be sure that you do not cut into the quality or accuracy of your outcome just to meet the deadline. It's better to deliver the goods later than expected than to compromise your standards.

The Accelerated Schedule

Here is a problem you'll encounter time and again: Your project is going along efficiently and on schedule with no signs of delay. Then a

single unexpected problem (e.g., discovering that a phase involves more complexity and time than anticipated) throws your whole schedule into disarray.

Being able to anticipate problems of this nature requires experience. The more time you spend managing projects, the more you'll be able to anticipate unexpected delays. You will know how to recognize the symptoms in advance. For example, if two or more weak links occur at the same schedule point, chances are higher than average that a delay will occur. Or if you are waiting for crucial information from a department or outside resource, you do not have control over the timing of delivery.

Even the most experienced project manager will encounter scheduling problems; that is unavoidable. However, skill comes into play in the way that you respond to delays. Fast action helps make up for lost time. Not only is every project different, but every instance of delay and every cause will be different as well.

You cannot always depend on acceleration of the schedule as a solution to delays. Even when you build in slack time in later phases, delays can quickly outrun a two- to three-day allowance so that you are likely to have little flexibility toward the end. However, by improving efficiency and teamwork, you can still make up for lost time.

In addition to the common delays associated with outside resources, you may also have to overcome internal political problems. A department manager may resist cooperating with you for a variety of reasons, react in a negative way to you and your project, or refuse to provide resources or information in a timely manner, citing departmental priorities. Solutions to these problems are elusive. You can try a direct meeting, or you can ask management to intervene. Between these two choices, it is not a question of which approach is best; rather, you have to decide which is worse. Internal political problems persist because at least one side doesn't want the problem solved. So whether or not you accelerate your project, you cannot quickly overcome resistance justified by internal conflict. All you can do is try and work around the roadblock, seeking ways to finish the project without help from the other manager.

The Changing Objective

Although delays are difficult enough to deal with, they often can be anticipated. However, one of the most frustrating experiences a project manager can suffer is having the project's very definition changed while it is under way. It seems illogical that management would alter an assignment after you invest your team's efforts for many weeks (or even months) of endeavor. Realistically, though, the project's objective and definition can change for several reasons.

The ever-changing climate in your company can cause a particular project to become obsolete very rapidly, owing to economic, competitive, and capital reasons, for example. A change in management will be accompanied by a change in priorities. If turnover among executives is common in your company, your project's priority—even its existence—could be subject to turnover as well.

Even without the consequences of personnel changes, management may waver in its course. While this is disruptive and has a negative effect on team morale, it is also beyond your control. In companies led by people who lack a strong sense of purpose, indecision can become a characteristic of the entire corporate culture. Managers of departments and projects, and their subordinates, suffer directly under indecisive leadership. However, in that environment, the reality is that your original project objective may be replaced, perhaps more than once.

There is little purpose in arguing to retain the original objective once management has decided it is no longer valid. Resisting change, even illogical and disruptive change, only marks you as a troublemaker and does little for the reputation you want to encourage—namely, that you are a member of the “team” as management defines it. The fact that its definition changes frequently makes this one of the more difficult working situations; however, you need to go along until the current chaotic leadership is replaced with a more reasoned approach.

Appropriate responses to changed project definitions and objectives should include taking the following important steps:

1. ***Immediately inform your team.*** Avoid adopting an antimanagement attitude when your project's objective is changed. Explain why

the change is being made to the best of your ability. Remember that even when you disagree with management or its approach, you should never convey that feeling to subordinates. As a member of the chain of command, you are responsible for representing management's interests to your team. Keep them informed of the facts, but avoid expressing your personal feelings about the change.

2. Concentrate on executing the change. Avoid letting a negative attitude affect your work or your team's. Channel your energy into adjusting your efforts with the new project goal in mind. Even when your morale is low, you have a responsibility to present a role model of leadership to your team. That means maintaining a professional approach even when management has thrown your work into chaos and you have to go over the same ground again.

3. Revise your schedule and budget. If you need to make substantial changes (e.g., delay the project's deadline), write a brief report and submit it to management. If the change will make it necessary to change the schedule, it would be unreasonable to expect you to meet the original deadline. Keep the report positive and explain the reasons that more time will be needed.

4. Revise your control forms. Remember to change your Gantt chart, Critical Path Method (CPM), and network diagram to reflect the change in project objective. Essentially, a change makes the original project obsolete and replaces it with another one. Substantial change has to be carried through to all of your control systems.

You can avoid the majority of changed objectives by working to obtain a clear definition at the very beginning of the project. Most changes in objective result not from outside influences beyond your control but from lack of definition. This problem is found at all levels in the company. However, to ensure your project's success, you need to insist on a clear definition of what your project is intended to achieve. If management is unable or unwilling to be that precise, offer an objective (in writing) and ask for clarification. It is management's job to provide you with clear definition, but that doesn't mean you will receive it automatically.

When an executive avoids being pinned down to precise objectives, the greater the chances that the course of your work will be changed during the project or, even worse, the result will not be what the executive wanted. It is crucial to get a clear definition at the beginning in order to avoid wasting time on the project itself.

Staying on Course

Successful project review can be accomplished only when the project's objective remains unchanged. Once you are given a revised definition, your judgment has to be revised as well. When you begin your project, you have to assume that it will be continued through to the end as defined. That means you need guidelines and team standards, as well as a course for review. Here are five guidelines to follow:

1. *Make sure everyone on your team has a specific range of duties (i.e., an area of responsibility) and that relationships between team members are defined clearly.* With a concise and complete definition of duties for all team members or subgroups, your team will be better equipped to work together and avoid the conflicts and confusion that are seen in ill-defined projects.

2. *Do not restrict your tests of successful progress only to questions of schedules and budgets.* You also need to look for signs of team conflict or confusion and be prepared to mediate, train, and support your team as needed. The intangible problems a team faces during the course of the project can cause more severe problems than a budget variance or missed deadline. The very quality of result, not to mention overall team satisfaction, will be affected by how well the team works together and understands its assignment.

3. *Test what you can control.* Problems created by outsiders cannot be solved by any actions you might take. You can only anticipate such problems and do your best to work around them. Testing is useful only to the extent that it allows you to manage the project and to prevent problems from arising.

4. Tackle the project with an action orientation. Take steps to solve short-term problems while keeping one eye on the final deadline. Encourage core team members to communicate with you regularly and advise you of upcoming problems.

5. Support your team in every important way. Review core team members' work, but also remember that the project's success depends on your being available when team members need help. Your availability to train and instruct, and to back up team members in every way, are leadership attributes that are essential in every project.



The success of your project—and, to a greater extent, your team's sense of success—depends on how well you communicate and the tone you set for the team effort. In addition to the functions of monitoring and reviewing, you must provide for your team members' needs by offering strong leadership and direction and maintaining team and individual morale. The next chapter tackles the all-important subject of communication in the project environment.

WORK PROJECT

1. Describe the three problems you face in progress review, and explain how solving each one improves the review process.
2. Explain why it is important to review your team's progress continually. Compare project and department reviews.
3. Describe the four elements you should include in a review report to management for ongoing projects.



The Communication Challenge

When two men communicate with each other by word of mouth, there is a twofold hazard in that communication.

—SAM ERVIN—

A manager received a written memo. It read in part: “We must keep the lines of communication open between our departments in order to ensure the success of this project. Please call me as soon as possible so that we can discuss schedules and deadlines.”

The manager told his assistant, “I’d like to answer, but whoever wrote this memo forgot to include his name.”

We have all heard the clichés about communication. But putting the ideas into practice often is much harder than applying the theories. This is more true for project management than in the department.

When you manage a department, you are in constant contact with your staff. Their tasks are well defined and recurring. Your subordinates are focused on performance, and their evaluation depends on how well they execute a narrowly defined range of tasks. A project, by comparison, may be viewed as an intrusion into a well-ordered depart-

mental rhythm, a departure from what is considered “normal”—even when the ideal of normality is difficult to achieve for any length of time.

In addition to the manager-team dynamics, you must also contend with communication on three additional levels:

1. *The Assignment.* The executive (or committee) that first assigned the project to you may not agree with your idea of what the project should achieve; the same person may have a change of mind about the outcome, sometimes without letting you know.

2. *Other Departments.* The managers of other departments have their own priorities and can be expected to have problems with your schedule, especially if it affects their workload and timing. Two situations are of special concern to you: when members of other departments are on your team, and when you need to receive information from another department.

3. *Outside Resources.* Your project could depend on help or information from outside resources—companies, consultants, suppliers, or agencies that are not part of your organization or division.

Your budget and schedule are your best communications tools. They are effective in conveying what you need to your core team members, other departments, outside resources, and management. Budgets and schedules can be used to communicate in different ways.

Communication Skills Project Managers Need

The word “communication” is often used without a true understanding of its meaning. The basic ability to express yourself in e-mail, letters, documentation, verbal discussions, and meetings describes what is usually called “communication.” Some people are better at it than others, and those who do not communicate as well as they would like need to work harder to ensure that they express themselves clearly and specifically.

The lack of effective communications invariably leads to misunderstandings. A team member who does not complete a task as you ask or

runs over budget may explain that you as project manager did not make yourself clear enough. Management may also blame a project manager for the same shortcomings because, upon discovery of problems, management was not informed in a timely manner.

These communications issues are usually well understood by managers and supervisors and handled as part of the normal routine or organizational life, sometimes effectively and sometimes less so. As project manager, you are going to be held to a higher standard, however. A supervisor who does not communicate well is often compensated for by employees, who know they have to ask for clarification, anticipate a supervisor's lack of ability, or work around this problem in other ways. You cannot expect the same consideration from project team members. Your communication skills have to be expanded to include four additional skill areas:

1. *You need to master the basics of project management.* Remember, managing a project is not the same as managing a department. The project team is not a temporary department, but a collection of people who do not work together all the time and who are going to require extensive knowledge from you. This demands that you become familiar with the organizational principles of project management. This is gained not only from on-the-job experience, but also from reading and from internal or external training courses. (The Project Management Institute offers courses specializing in project management skills: go to www.pmi.org and click on the link "Get Certified.")

2. *You are expected to have the technical expertise required for the job.* Every project involves a specialized area and processes, and as a basic assumption you were picked for the role of project manager because you possess the technical skills to know what needs to be changed or fixed. However, if you were given the assignment merely because you managed a different project successfully, you may need to add members to your team to provide you with this technical knowledge.

3. *Your basic management skills have to be excellent.* Project managers are in some ways expected to be supermanagers, bringing to the job not only leadership abilities, technical skills, and organizational

knowledge, but also the ability to adjust to the unexpected, overcome team conflicts, and anticipate and prevent risks. This all requires very sharp basic management skills, including abilities in budgeting, team management, training, and talent in mastering new and unexpected tasks as the project moves through its phases.

4. *Project managers are expected to exemplify the basics of good leadership.* Finally, the intangible ability to lead effectively is all-important to project managers. Natural leaders make it look easy, but strong leadership rarely comes to anyone naturally. It requires an expanded knowledge area, experience, and the respect of team members, stakeholders, management, and anyone else you need to work with while performing your project management role.

The Budget as a Communication Tool

The budget defines a financial commitment and is intended to set a standard for measuring expenditures. If variances occur, they often are accompanied by a scheduling problem.

Your project budget also measures degrees of risk involved with your project. All change involves risk, and when time and money are being committed and spent, the decision to proceed is made with an awareness of risk. Management will proceed with a project if it believes that the risk is justified by the outcome or necessary in the course of operations. So, for example, if you propose a project, you can communicate the idea in terms of risk and potential reward (i.e., cost savings, improved service, greater efficiency). Approval will be granted if and when you convince management that the risk is worthwhile based on potential reward. Thus, using the budget as a means for communicating a risk/reward scenario is an effective method for making proposals to management.

The same argument applies when you want to alter the scope of a project. For example, in the course of executing the project, you may discover a potential for greater benefits than anticipated in the original assignment. Using budgetary arguments to express the risk/reward scenario in proposing a broadened scope is an effective method of communication.

The Schedule as a Communication Tool

The schedule defines your project and should be shared with management to ensure that your definition conforms with theirs. When the project is broken down into phases, management has the opportunity to validate your direction and approve the proposed deadline. This not only defines what the project will achieve, it also demonstrates why you may need a longer deadline than the one proposed with the initial assignment.

The schedule is useful during later phases in conjunction with review meetings both to ensure that you are on the right course and to verify that the direction is the one that management still expects. It also can be used to explain why an original deadline needs to be extended.

Finally, the schedule improves your communication with the core team and helps to avoid delays. By identifying weak links and communicating with other departments and outside resources well in advance of critical dates, you avoid many problems later on.

Working with Department Managers

For relatively uncomplicated, short-term projects executed strictly within a single department, you have direct control over the time commitment and priorities of each team member. Because you are aware of departmental deadlines and workload variations, you can construct a working schedule that anticipates heavier than average volume and make adjustments as needed. You also are able to balance departmental and project demands on the basis of your knowledge of each, as well as your knowledge of the different abilities among departmental staff members. The ability to control both departmental and project priorities gives you maximum control.

Your communication skills are tested, though, when you have to coordinate your project schedule with the requirements of other departments. A common complaint from managers is, “You didn’t tell me in time.” Regardless of the cause—deadlines, time management problems, or commitment conflicts—the problem invariably returns to a lapse in communication. You can solve the majority of the problems

you will encounter working with departments by remembering one key point: Your project will have the best chance of staying on schedule when you keep department managers informed at all times.

By applying a few basic rules of communication between departments, you can defuse the problems that beset all managers at one time or another: territorial attitude, power struggles, and—in cases where communication fails altogether—outright refusal to cooperate. Most of the time, a breakdown of cooperation arises not from political or personality problems, but from a severe failure in the communication link. If you have attempted to communicate only once, that may not be enough. People need reminding, so don't assume that a single message is adequate.

Figure 12-1 summarizes the following important rules for improving and maintaining communication with other departments:

■ ***Visit the other manager before you finalize the schedule.***

From your point of view, it is apparent that your schedule has to go into effect as designed. For example, the deadline leaves little room for adjustment, and an employee from another department has been placed on your team by the company president. Why contact that department's manager, you think, when everything has been settled?

Figure 12-1. Outside department checklist.

1. Visit the other manager before you finalize the schedule.
2. Keep in touch while the project is under way.
3. Work with the manager to anticipate problems.
4. Remain as flexible as possible.
5. Confront the problems, not the people.

This approach will lead to problems. No matter how restricted you are by an imposed deadline, and no matter how little say you had in picking your team, you have to be prepared to accommodate your team member's manager. Plan to discuss your schedule with that manager before you finalize it. Take this approach: Ask for a meeting and present your initial schedule, explaining that it is only preliminary. Ask whether the proposed schedule will cause any conflict with the employee's recurring duties in the department. If there is a scheduling problem, work with the manager to resolve it.

■ ***Keep in touch while the project is under way.*** Continue keeping the lines of communication open, even after the initial meeting. Even when the manager agrees with your schedule, unexpected conflicts can and do come up.

You can avoid conflict by staying in touch with the department manager throughout the project period. A weekly status check may be all you need. A three-minute telephone discussion should be enough to double-check schedules. By working together, you and the department manager will be able to resolve any conflicts that arise, such as the manager being given a project to complete at the same time as yours. By staying in touch, you avoid the kinds of breakdowns that lead to serious conflicts, both work-related and personal.

■ ***Work with the manager to anticipate problems.*** In addition to the periodic review, look toward the end of your project. Point out the phases that will require an especially heavy time commitment, and make sure it won't present any conflicts in coming phases.

Most managers appreciate the consideration of being kept informed and will gladly work out any scheduling problems. It's only when you don't anticipate future problems that conflicts are going to arise, obscuring your priorities and jeopardizing your relationship with the manager.

■ ***Remain as flexible as possible.*** Remember that few departments can judge very far in advance the demands that will be placed on them from above. Even anticipating a single monthly cycle is difficult in some departments. It's frustrating when another manager affects

your scheduling by pulling an employee out to work on other jobs. This is not necessarily because he or she is devious or disorganized; it may simply be characteristic of the department and its workload.

Stop and think whenever you find yourself about to say, “You told me this wouldn’t be a problem.” It probably was true at the time, but since then, the department’s assignments, deadlines, and priorities have probably changed. Successful project managers stay on schedule and within budget to the extent possible, even when team members from other departments are pulled suddenly. You will have to shift duties to someone else or do the work yourself. Regardless of the obvious inconvenience, remain as flexible as possible when dealing with other managers.

■ **Confront the problems, not the people.** In some cases, managers will seem unreasonable, unyielding, defensive, and uncooperative. They may resent having an employee removed from their jurisdiction to work on your project, and this can create an array of hostile reactions.

The territorial reaction is one form of “corporate neurosis.” Refusing to tolerate it will not solve the problem; nor will confronting the manager directly, because that only aggravates the situation. Egos are at play, and no matter how strong a manager is, egos are fragile things. The best solution is to concentrate on the problem the reaction creates, not on getting distracted and involved with the personal aspects of the conflict.

When a manager resists your efforts to commit an employee, emphasize the schedule and the deadline. Ask the manager to suggest a solution that satisfies the departmental needs as well as the project needs. Avoid discussing the matter on a personal level; concentrate on executing the task.

Working with Other Department Employees

The communication challenge is not limited to managers. You could also face resistance from team members who come from other departments. Conflicts arise in three general areas:

1. **Career priorities.** Employees tend to identify their personal career paths—thus priorities—in terms of their departments, not outside projects. They do not always appreciate the potential advancement opportunities that can arise by taking part in projects outside of their departments, especially those managed by someone other than their immediate supervisor.

2. **Temporary assignments.** Because the project is temporary, it often will be viewed as nothing more than an inconvenience, a disruption, extra work. Since it isn't their "real" job, employees may come to your project with a negative attitude.

3. **Supervisory problems.** As manager of a project, you may have more than the usual degree of problems supervising someone from another department. One reason is that you cannot determine the quality of corporate life to the same degree as an immediate supervisor. When the project is over, the employee returns to the department.

To overcome these problems apply the same rules you use in dealing with managers of other departments. Be aware of team members' priorities and conflicts. As long as they are working on your project, they are in the difficult position of reporting to two people. Do all that you can to minimize the problems associated with this situation, rather than aggravating it.

Remember, your team members have to meet deadlines on two levels: those of their department and those of your project. Work with core team members to solve scheduling conflicts and to anticipate upcoming problems as well.

Once you discover an emerging problem with a schedule, take immediate steps to solve it. Never assume the attitude that "You're on my team; I expect you to meet all deadlines." Instead, sit down with the team member and work together to figure out how to get around the problem. Either reassign work or adjust your schedule.

The project schedule is your problem and your responsibility. So even when a team member can't deliver as promised, it's up to you to do something about it. You create a positive reputation as a project manager by establishing two-way loyalty—from the team by working

together and meeting deadlines, and to the team by remaining as flexible as possible.

Since project leadership is limited when you work with employees from other departments, you also need to adjust your leadership style. If you are accustomed to supervising people only on the departmental level, you may run into problems applying the same standards—and expecting the same response—on your project. Team members from other departments will not relate to you as a permanent supervisor and will not act as department employees.

You may need to put considerable thought into how to alter your style. What works best on the particular project? The answer will vary. It depends on the attitude and support of the department manager, the clarity of the assignment from management, the size and scope of the project and the team, the project's complexity, the deadline, and all of the individuals involved.

For example, when your project is relatively small and short term, you can act rather informally with the entire team, even members loaned from another department. Keep the lines of communication open and ensure that everyone understands their role. For a longer-term project, you are likely to be sharing employee hours with the department. This situation requires structuring a daily or weekly schedule. Not only must the employee be given time to work on the project in those scheduled hours, but other team members and your time has to be free during those hours as well, because the team needs to work together. Thus, your supervisory style needs to be more flexible for projects, considering team members' schedules and training requirements.

Working with Outside Consultants

Your communication skills will be further tested if you need to work with an outside consultant. You will need to contend with the independence of that adviser as well as with the question of who is running the project.

Consultants are oriented toward projects because of the nature of their work. They often are retained specifically to head up a project,

whether it is called a project or something else. Their work is temporary, usually relatively short term, and does not fit within the work guidelines or style of departments, which means you may run into problems and conflicts working with them. Their role should be clearly defined to avoid such problems. While you might view your role as project manager and the consultant a member of your resource team, the consultant may see the roles in reverse. This potential problem has to be anticipated and cleared up at the very beginning.

Example

A manager was assigned a project that required working with an outside consultant. From the first day, it was apparent that the consultant viewed his role as project manager. When the manager met with the vice president who made the initial assignment, she was told that her role was to act as liaison between the consultant and management. In fact, she was not the project manager. This changed her approach entirely.

This is an example of very poor communication from upper management. Whenever management is unclear about the roles of individuals in a project, it is inviting conflict. From a consultant's point of view, an internal manager can become a distraction and intrusion to executing a project. Because the consultant is an outsider, he has no scheduling conflicts. Consultants probably have their own resources and time frame for completing the project. They do not report to management in the same way as employees, so their attitude is vastly different. As a result, communication between manager and consultant is likely to be strained. If, in fact, you are assigned the role of project manager, the consultants you are working with must understand that their role is advisory, or conflict will characterize the entire relationship.

The problem arises in some cases because management is itself conflicted about the roles of the internal manager and the external consultant. Management recognizes the need for both in the project; however, it feels compelled to call the internal manager the "project manager" even though it depends on the consultant to actually pilot

the project. In this situation, even if you hash out the problem directly with the consultant, you are likely to have problems getting a firm commitment of time from an outsider. Consultants are not going to respond to your internal authority, a fact that some managers have trouble understanding at first. The fact that consultants do not think like employees can cause problems, since your schedule depends on a coordinated effort with all team members and other resources. With this in mind, you may need to get the participation from a consultant as early as possible and work your schedule around that. If problems arise, be sure to communicate them to management as part of your periodic review.

Even though you are responsible for meeting the deadline for your project, management needs to understand that some delays are beyond your control. This rule applies whenever you work with other departments, and even more when you work with independent outside resources. You can deal with this problem by following these three general guidelines:

- 1. *Design your schedule so that the consultant is given an early deadline.*** Whenever possible, ask for the work from an outside consultant earlier than your actual deadline. This is not always practical, since the consultant's participation may depend on completion of a particular phase. But as a general rule, any work that does not depend on other phases should be completed as early as possible. Of course, making this request does not ensure that you get the results when you ask for them. Remember, because consultants are independent, they do not have the same point of view about reporting to you as an employee would.

- 2. *Be prepared to complete the work without the consultant.*** In some cases, you can execute the phase that management expects from a consultant without holding up your schedule. The consultant may have been retained because management believes an outsider's point of view will be superior to that of an insider. It is unfortunate but true that some people think the more you pay per hour, the higher the quality of the work, even though that is not necessarily the truth. You

and your core team may be able to get the work done with little or no problem. When this is the case, be sure to advise management that the work was completed internally—not to undo the relationship between the consultant and management, but to keep open the lines of communication. If you do the work with your internal team to remain on deadline, that is important information that management needs.

3. *Accept the delay as being beyond your control.* You cannot control the consultant's schedule, nor can you enforce a deadline. That is a reality. And you cannot always work around the consultant, either. You sometimes have to accept a delay, not only of a phase the consultant is responsible for completing, but as a consequence for the entire project. Once you realize that the project will be delayed as a result, inform management at once.

Weak Links in Communication

Weak links in scheduling and execution of tasks are obvious. They can be spotted easily as points where phases begin and end, or where the work process moves from one area of responsibility to another. A weak link in communication is a little more difficult to spot, but it can have an equally serious effect on the smooth operation of your project.

Such a weak link occurs whenever you have to communicate with someone outside your team, or even when information has to be conveyed within the core team, between individuals or subgroups. Effective communication, ensured by your careful oversight, is the best way to overcome communication weak links. There are five primary areas where the potential problem of communication weak links can occur:

1. *Team Member to Team Member.* Any time a team member needs to discuss the work of the project with another individual, another subgroup, or an outside resource, a communication weak link is possible. Even a one-day delay resulting because someone is waiting for an answer to a question is a potentially serious weak link. It throws the schedule off by one day, a problem that becomes cumulative if it happens frequently. Identify such weak links and look for them; also

ask your core team members to advise you when their work is delayed because they are waiting for information from someone else.

2. *Manager to Team Member.* Whenever you talk to a team member, there is the possibility that you will create a weak link. You have to be sure that assignments are understood and that deadlines are specific. If you do not communicate clearly, work will not be done correctly or in a timely manner. Thus, it will have to be revised, meaning delays. It pays to make sure that every communication from you to a team member is clear in all respects.

3. *Manager to Outside Department Manager.* Another weak link occurs when you communicate with the manager of another department—either as a resource for your project or because a member of your team reports to that manager. You depend on cooperation from that manager to stay on schedule, so your communication skills are essential. You need to convey information clearly in any discussion of this type and be alert to the personal conflicts and attitudes you may encounter. Because that manager has a conflicting set of priorities, you must work out any differences to avoid delays.

4. *Manager to Outside Resource.* No matter how urgent your deadlines or how important the project is to your company, you should expect to have problems getting a timely response from an outside resource. Consultants, vendors, other divisions, and government agencies all have one thing in common: They do not report to you. Their priorities are not the same as yours, so your urgency about deadlines won't always be shared. This is a significant potential weak link. The solution is effective and careful communication. Don't wait until a deadline is pending to ask for outside information; anticipate delays and plan ahead so that the work will be there on time.

5. *Manager to Executive.* Once you are given a project assignment, your first task should be to ensure that you and management are in complete agreement. What is the purpose and desired end result? You may be able to meet a schedule and budget effectively, but if the outcome is not what management expected, then what is the point? You need to check with the people who gave you the assignment to

ensure that you are doing what they expect. Unfortunately, an executive may not always communicate effectively; so you need to ask for clarification and definition to make sure the project is what you think it is.

Another potential problem arises when the executive changes your assignment after you have begun. This could even occur without your knowledge. For example, a decision is made by the board, but priorities change and no one tells you. The solution is to continue making periodic reports concerning schedule, budget, and overall progress. If a change has occurred, it is the executive's responsibility to inform you; the periodic report may serve as a reminder.

How Flowcharting Helps

The communication challenge exists on every level and stays with you throughout your project. It cannot be solved in isolation during the initial definition phase and then abandoned. Your role as controller and leader requires ongoing, unending communication—to dissolve weak links, soothe conflict, and revise your schedule when necessary.

Although primarily designed to serve as a working document for team members, your network diagram also works as an aid to effective communication—on all levels. For example, when discussing an upcoming schedule conflict for team members with their department manager, you can use the network diagram to work out reassignment, change the timing of a phase, or change work sequences. If the network diagram is too complex for this purpose, it could inhibit communication rather than help. If numerous concurrent phases will be under way during the problematical time, anyone not accustomed to using horizontal flowcharts could be confused by its design. In these cases, create a simplified top-to-bottom variation of the network diagram. This is more familiar to most people, and it will help in communicating the problems with isolated segments—whether phases or a segment of a longer phase.

Besides flowcharting tasks and identifying their deadlines, time factors can also be expressed with the use of flowcharts. For example, an upcoming deadline can be placed on paper in flowchart form, making

it easier to work with another manager to identify possible ways to resolve conflict.

Flowcharts help other people to visualize the complexity of a project. They are effective for pointing out weak links, especially those arising out of scheduling conflicts between your project and a department. They help, too, when communicating with an outside resource. A consultant may not respond to your explanation about deadlines, but demonstrating the broader view of a project on a flowchart shows the consultant's role in the bigger picture. Because your job is to coordinate the efforts of many people and ensure multiple interim deadlines, the flowchart can clarify your point in ways that would not be possible in a face-to-face discussion.

The flowchart also paints a picture of the overall responsibility for managing a project. No one is going to appreciate all of the things you need to do without extra information, because people tend to understand what you say only to the degree that it affects them. If you simply state, "This is a tough job; I have to monitor the efforts of several people at the same time," that does not convey the real complexity of your role. The flowchart, however, shows people what you are up against, and how their role affects the whole schedule.

Meetings with Outside Resources

You will need to meet with your team, with the executive who assigns the project, and with outside resources—at the onset of the project and possibly while the project is under way. The meetings should be short and carefully limited in agenda, or you will spend so much time in discussion that the project will be delayed unreasonably.

Meetings with outside resources or department managers should be held primarily to anticipate problems and solve them. Your agenda should be designed with six goals in mind, as listed below and summarized in Figure 12-2.

1. ***Express the goals of the project.*** Never forget the ultimate goals of your project. You must state these goals more than once to remind outside resources what you are trying to achieve. Keeping the

Figure 12-2. Agenda when meeting with outsiders.

1. Express the goals of the project.
2. Explain the level of team commitment you need.
3. Specify deadlines for phases and final completion.
4. Identify critical phases.
5. Point out likely problem areas.
6. Agree on priorities for the project.

goal at the forefront of your discussion helps avoid sidetracking your agenda, and it also is an effective method for confronting problems, defusing arguments, and avoiding conflict. A goal orientation keeps discussions on track.

2. Explain the level of team commitment you need. You may face a confrontation with a department manager concerning the time requirements of an employee. The best response is not to argue about whose priorities are higher, but to explain the time demands of the project. You have a number of alternatives: reassignment, schedule adjustment, or extended deadlines, for example. The problem should never be derailed by making it an argument between two managers. Promote a joint effort and a professional approach to solve mutual problems with everyone's needs in mind.

3. Specify deadlines for phases and final completion. Avoid surprises when dealing with departments and other outside resources. If you face the argument, "You didn't tell me," either you didn't communicate a deadline or, if you did, the message did not get through. The solution is to base communications around the interim and final deadlines and emphasize them frequently.

4. Identify critical phases. Emphasize which deadlines are the least flexible, thus pivotal to your schedule. In this way you will improve your chances for staying on schedule throughout the project. These deadlines are the ones that have to be met before any additional work can proceed, and they often are the greatest weak links in your schedule. Convey this information to everyone concerned so that your requirements are known well in advance.

5. Point out the likely problem areas. Don't wait for someone else to discover problems. Anticipate them and then verbalize your concerns. The project manager's job is to look for problems before they occur. Department managers will appreciate your attention to detail when the problem affects them as well. For example, you might say, "During this phase, I will depend on the employee from your department. But I think it is scheduled during the high-volume period in your department's cycle." This gives both of you the opportunity to work out the problem before a deadline is upon you. It helps eliminate a scheduling problem and also improves your working relationship with the other manager.

6. Agree on priorities for the project. Some project managers try to meet deadlines and work toward an atmosphere of teamwork and cooperation, only to be faced with unending conflict on many levels: between team members, with outside resources, and with department managers. This problem arises because the priorities of the project were never expressed clearly or coordinated with others. The solution is to work on that all-important coordination of your priorities and the priorities of others.

Once you get people working together, the communication process works quite well. It is largely a matter of definition. However, in some projects the perceptions of various people and departments are at odds to the point that conflict is continuous. For example, your priority may be to gather information quickly, even if it means putting more people on the job; someone else's priority might be to reduce expenses. Whose priority should rule?

These are the kinds of difficult questions that have to be addressed. Solutions can, in fact, come in the form of compromise. Leave nothing unexplained or else wrong assumptions will fill in the gaps. If you expect to get any cooperation at all, it is up to you to explain what you are doing and what you need.

Running the Meeting

You might view meetings as usually being long, drawn-out exercises in discussion, leading to little in the way of results or decisions. Or you may view them simply as inefficient ways to get things done. However, a well-organized and controlled meeting—especially a short one—can improve communication and efficiency on all levels.

Your first task is to control the scope and time of the meeting in three ways:

1. **Invite only those people who are absolutely essential to the agenda.** The more people in your meeting, the more difficult it will be to stay on the subject or to get anything done.
2. **Limit the time.** If your meeting runs too long, you won't achieve the desired results.
3. **Set meeting goals yourself.** Write out an agenda—not just by topics but also by goals. What do you hope to accomplish in your meeting? People should be able to read the agenda and know exactly what is going to take place.

Next, you need to get your message across to attendees—whether team members, department managers, executives, consultants, or others. You maintain control of the meeting by moving through your agenda as quickly as possible and ensuring that decisions are made and actions assigned (with specific deadlines for completion). Some projects are helped with periodic five-minute team meetings, which are used to discuss the week's assignments. Other meetings can be called

for specific conflicts and other problems. Remember to make use of communication tools during your meeting, including:

■ **The agenda.** The agenda itself is a powerful communication tool, if used properly. Each agenda item can be listed with a start/stop time or the number of minutes set aside for discussion. Limit the meeting by being as specific as possible, and then keep to the agenda. Any business that comes up that isn't on the agenda can be discussed one-on-one after the meeting has ended.

■ **Simplified flowchart.** Many people have problems understanding something as complex and detailed as the network diagram. They relate more easily to a traditional format top-to-bottom flowchart. This is a useful visual aid for discussion of isolated phases or work segments.

■ **Gantt chart.** To explain scheduling problems on a broad basis, the Gantt chart is the most effective visual aid. This is especially true when communicating with executives or outside resources who do not need to see the detailed breakdown by area of responsibility, but will be interested in overall scheduling questions.

■ **Network diagram.** For team meetings, the network diagram is probably the most effective visual aid. If you expect problems in the near future, the diagram is a practical format for a discussion of the problem and possible solutions.



In all phases of project management, the degree to which you are able to communicate your priorities determines the success of your efforts. Identifying problems well in advance, expressing your understanding of someone else's priorities, and confronting issues rather than people are all attributes of effective communicators and successful project managers.

Your ability to overcome communication problems affects your role as employee and manager in a larger sense than your role as proj-

ect manager. The next chapter discusses project management and its potential positive effects on your career.

WORK PROJECT

- 1.** Explain the communication challenge on three levels:
 - a.** The assignment
 - b.** Working with other departments
 - c.** Working with outside resources
- 2.** Describe at least three ideas for improving communication when working with other departments.
- 3.** List at least three goals to include on your agenda for a project meeting with another department.