



Congratulations ... You're the Project Manager!

Brad picks up the phone before the second ring. It's his boss, Susan. "Brad, I'd like you to stop by my office right after lunch today."

Brad is not really sure why the boss is calling him into her office, which makes for a long lunch hour. He knows he's been doing a good job lately. As a matter of fact, he knows that he's probably the most technically capable person in the group.

Brad's mind begins to race.... Maybe it's an award? Could it be a promotion?

"No, wait," he says to himself in a frenzy of self-doubt. "Maybe I did something I wasn't supposed to? Or maybe I didn't do something I should have?"

Countless positive and negative scenarios run through Brad's overworked mind until one o'clock finally rolls around and he cautiously enters Susan's office.

"Brad, I've got some great news for you," Susan begins. "Since it's so closely related to what we do here, Project Apex has been assigned to our group." Brad smiles without knowing why.

2 Project Management

Susan continues, “You’re one of the best engineers I have.” Brad’s smile widens in anticipation. And then—without warning—Susan utters those fateful words. “Congratulations, Brad, I’m assigning you as the project manager for Project Apex.”

Great news? Did she say great news? “What do I know about managing projects?” Brad thinks to himself.

As Brad begins to leave Susan’s office, she delivers the knockout punch. “By the way, Brad,” Susan says with a curious inflection in her voice, “I think you should be aware ... management is *really* going to be watching closely. There’s an awful lot resting on the success of your project.”

As Brad slips out of Susan’s office, the same two words keep ringing in his ears—“*your project.*”

The Accidental Project Manager

The story above is not an isolated incident. Every day, engineers, salespeople, technicians, and countless others are thrust into the role of project manager. They’re very good at what they

do. In fact, they’re typically the most technically knowledgeable engineers or the most successful salespeople. Now they’re about to become project managers.

Actually it’s probably appropriate to refer to them by their more popular (however informal) name—*accidental project managers*. An accidental project manager is a person who is placed into the role by organizational

necessity and chance, rather than by design or through choice of career path.



Project “A temporary endeavor undertaken to create a unique product or service,” according to the Project Management Institute.

Project manager The person ultimately responsible for the success or failure of a project.

Accidental project manager A person who is placed into the role of project manager by organizational necessity and chance, rather than by design or through choice of career path.

The Pros and Cons of Becoming a Project Manager



Pros:

- It can often be a steppingstone to promotion.
- It provides a strong sense of accomplishment.
- There's considerable variety; no two days are alike.
- There's significant freedom of choice.
- It affords the opportunity to effect change across the organization.

Cons:

- It requires significant tolerance for politics.
- It requires significant tolerance for ambiguity and uncertainty.
- There's a lot of responsibility, but little or no authority.
- You may feel "disconnected" from your technical discipline.
- You may be perceived by some as not having "a real job."

If you're an accidental project manager, one of the first things you should do is pause to consider whether or not you're cut out to be a project manager and try to determine whether it's what you really want to do. Why? Because if you do a reasonably good job leading your first project, chances are you'll be asked again. And again. And again. In other words, if you're finding yourself in the same position as Brad, you might be embarking upon a new career. You'd be wise to consider some of the pros and cons before saying yes to that career move.

The information, tools, and techniques presented in this book will move you well along in understanding the mechanics of managing projects. But it's important that you enter this new world with your eyes wide open. With that thought in mind, let's take a closer look at what you might expect to experience as a project manager.

What Can You Expect to Encounter "Out There"?

Although you won't often see it addressed in project management reference books, the reality is that *mental preparedness* may prove to be just as critical to your ultimate success as a project manager as your knowledge base or skill set. And gaining a sound understanding of what's involved in this new role is

a critical step toward being mentally prepared. So let's explore those pros and cons in a bit more detail by describing the life of a typical project manager—assuming there is such a thing.

However Brad may feel about taking on his first project, the truth is that life as a project manager can be extremely rewarding. You'll find it to be different from most any other thing you've ever done. It's complex, varied, and interesting. If done well, it can lead to a very strong sense of accomplishment. These are among the aspects that project managers identify as the main draws to the job.

At the same time, however, being a project manager will test you in ways you may not be able to imagine now. You will become a focal point in the organization. Everyone will look to you for the answers, but you must be careful not to try to provide all the answers; after all, that's why you have a team.

And speaking of the team, one of the biggest shifts in behavior (and thinking) you'll encounter will be the need to rely upon others to get things done. In most cases, that's your team. You'll quickly discover that there's far too much for you to do alone, yet delegation will prove to be a challenge for you. Empowering others, and then trusting them to follow through, may be a bit unsettling. You'll find yourself uncomfort-



**Smart
Managing**

Hang in There, Baby!

If you can get experienced project managers to let their guard down for a few moments, they'll probably admit that their first few projects didn't go very well—and that's the sugar-coated version. So be prepared for a rough start as you begin to manage projects. But if you hang in there, you'll find yourself moving up the learning curve rapidly. In the world of project management, experience is a particularly powerful and effective teacher.

able with the idea that others are doing things for which you will be held responsible.

You'll have lots of responsibility, but you'll be missing the authority often perceived as being required to discharge that responsibility. You'll have to get things done through the people on your team without having any *direct* control over them. Among

your most valued tools will be the ability to persuade and influence, as you seek to form a group of diverse personalities into a unified team with commonality of purpose.

Unfortunately, not everyone on your team will be as knowledgeable and skilled as you would like. Nonetheless, you've got to get the job done using whatever resources have been provided. Project management lore is full of tales of project managers who were able to take "the hand that was dealt" and turn it into project success. For you to succeed, you'll have to rely on your ability to coach, mentor, and motivate in order to get the level of performance you need from those assigned to work on your project.

What will you have to know as a project manager? Well, you'll have to know a little bit about just about everything. You'll have to learn to pay attention to the details, but not get wrapped up in them. You'll have to make countless decisions with insufficient information and despite conflicting signals. You'll have to condition yourself to seek *acceptable* solutions, rather than *perfect* ones. You'll have to blend technical expertise with a keen sense of human nature. You'll have to handle administrative matters.

And while you're busy doing your own thing, you'll have to cultivate and maintain a smooth working relationship with *many* other people, both inside and outside your organization. Unfortunately, as you seek to carry out the objectives of the project, it's unlikely that everyone you encounter will be an ally. Organizational politics and reality dictate that not everyone will like project management or project managers (that's you!). Many people will admire your role, respect your position, and appreciate your involvement; others will not. You will need to figure out who's who—real fast.

But at the end of the project, you'll be able to look back and feel a deep sense of pride that comes with producing a successful outcome and creating positive change. Project leadership requires the use of many different skill sets. It involves tasks of limitless variety. You must live by a curious combination of



Uncovering the Potholes on the Road to Success

Be proactive in determining who's likely to work with you and who's likely to work against you by arranging informal chats with key individuals within your organization. Initiate a casual discussion about the discipline of project management. In many cases, it won't take very much time to figure out whether you can expect your relationship with that individual to be relatively smooth or to be rocky.

process compliance and individual judgment, of gut feelings and data, of people and things. The challenge is enormous.

So if you feel *mentally* prepared to accept this challenge, you're well on your way to becoming a successful project manager. The only thing left is to learn how to do it the right way.

Throughout this book, we'll tell you and show you how to do project management the right way. And although we'll focus primarily upon the process, we'll never lose sight of the importance of the interpersonal aspects as well as the environmental aspects—the people and things that surround your project. Together, the process and the people form the art and science of project management.

About the Art and Science of Project Management

Project management has two major aspects:

- the art—leading the people on the project
- the science—defining and coordinating the work to be done

The art of project management relates to the fact that projects are really about people getting things done. Project management requires a keen knowledge of human behavior and the ability to skillfully apply appropriate interpersonal skills.

The second aspect—and the focus of this book—involves the knowledge, understanding, and skillful application of a prescribed *project management process*. This process is intended to guide project managers and project teams in effectively performing key process steps, such as identifying the true need,

defining the project objective, creating an execution schedule, and maintaining control throughout the entire project. The basic premise of the process is the development of a set of graphic tools, documents, and techniques, all aimed at facilitating project success. Among the graphic tools and documents are the Requirements Document, the Work Breakdown Structure, and the Network Diagram (all covered in chapters to come). Among the many techniques we'll cover will be calculating Net Present Value, preparing a comprehensive proposal, and conducting a Make vs. Buy Analysis.

About This Book

As we focus on the tools and techniques of project management throughout this book, we'll be making a few key assumptions intended to represent the most common conditions for practicing project managers today. First, we'll assume that you are the person leading the project—irrespective of your position within the organizational hierarchy. Second, we'll assume that you are managing projects within a *matrix environment*. This means that the project requires the efforts of individuals from a number of functional departments, such as Marketing, Engineering, Human Resources, Operations, etc. Finally, we'll assume that you do not have direct control over these people; in other words, you are *not* their immediate supervisor.

However, even if you're not a practicing project manager, if you're a manager of project managers or an executive, this book will be of great value to you. It will provide you with a wealth of knowledge and insight relative to the life of a project manager. This knowledge and insight will greatly help you develop a meaningful support structure for the project managers *and* project teams within your organization. Few would deny that project managers stand a much better chance of effectively applying the tools and techniques covered in this book and therefore succeeding with their projects when they operate within a supportive organizational environment. And if you're a supervisory manager or organizational executive, you

play a primary role in ensuring that a supportive environment is provided for project managers—like Brad.

Project Manager's Checklist for Chapter 1

- ❑ Project management is both an art and a science. The art is strongly tied to the interpersonal aspects—the business of leading people. The science (which this book will focus on) includes understanding of processes, tools and techniques.
- ❑ All project managers are expected to be very well versed in the science of project management. You cannot survive without being knowledgeable in this area.
- ❑ If you're an accidental project manager (put into the role rather than choosing it voluntarily), you'd better pause to think about whether you're cut out to be a project manager before getting too involved. Although it can be personally satisfying, it's a tough job that requires a thick skin. If you do a good job, you'll probably be asked to lead many more projects, so you'd better be OK with the role, or your life will not be much fun
- ❑ Generally speaking, the project manager's job is not intellectually challenging, but it is complex and broad. It requires a large variety of different skills—many of which will be new to you.



About Projects and Project Management

Upon returning to his desk, Brad contemplates what lies ahead. Although a bit frightened, he likes the idea of taking on a new challenge.

“The visibility should help my career along,” he says to himself with a wry smile, “... as long as Project Apex turns out OK, that is,” the smile turning gradually into a slight grimace. As he polishes off the turkey sandwich he was too nervous to finish before meeting with Susan, he decides to accept the assignment—though he’s not sure he *really* has a choice!

Before tackling Project Apex, Brad realizes that he’d better do a quick study on project management—starting with the basics of what a project is and how project management is supposed to be done. He wants to be in the best possible position to make Project Apex a resounding success. Let’s give him some help by examining project management from three perspectives:

1. the process context
2. the interpersonal and behavioral context
3. the organizational context.

Project Management: The Process Context

Problems, needs, and opportunities continually arise in every organization. Problems like low operational efficiency, needs like additional office space, and opportunities like penetrating a new product market are just a few of a nearly endless number of situations that management must address in the process of operating an organization or company. These problems, needs, and opportunities give rise to the identification of solutions.

Executing those solutions entails a change for the organization. Projects are generally established to carry out this change and there's always someone responsible for the successful completion of each project. As the project manager, you are the primary change agent, and your guide for carrying out the change is the *project management process*.

What Is a Project?

Several definitions exist for “project.” We used a simple one in Chapter 1: “A temporary endeavor undertaken to achieve a particular aim.” Whichever specific definition you choose, nearly every project you manage will have many of the same characteristics. Let's examine some of the most important ones.

At the most basic level, a project is actually *the response to a need, the solution to a problem*. Further, it's a solution that promises a benefit—typically a financial benefit. The fundamental purpose for most projects is to either *make money* or *save money*. That's why projects should be financially justifiable, as we'll see in Chapter 4.

By definition, a project is *temporary in nature*; that means that it has a specific start and finish. A project consists of a *well-defined collection of small jobs* (tasks) and ordinarily *culminates in the creation of an end product or products* (deliverables). There will be a *preferred sequence of execution* for the project's tasks (the schedule).

A project is a *unique, one-time undertaking*; it will never again be done exactly the same way, by the same people, and within the same environment. This is a noteworthy point, as it

suggests that you will rarely have the benefit of a wealth of historical information when you start your project. You'll have to launch your project with limited information or, worse yet, misinformation.

There will always be some *uncertainty* associated with your project. This uncertainty represents *risk*—an ever-present threat to your ability to make definitive plans and predict outcomes with high levels of confidence. All of your projects *consume resources*—resources in the form of time, money, materials, and labor. One of your primary missions is to serve as the overall steward of these resources—to apply them as sparingly and as effectively as possible.

So, there's a general definition or explanation. Here are some examples of projects: introducing a new product to the marketplace, building and installing a piece of equipment, and running a political campaign. In contrast, the following activities are not projects: operating a manufacturing facility, supervising a work group, and running a retail business. These activities are ongoing.

What Is Project Management?

The Project Management Institute defines project management as "... the application of knowledge, skills, tools and techniques to project activities to meet project requirements" (*A Guide to the Project Management Body of Knowledge*, 2000 Edition, Newtown Square, PA: Project Management Institute, 2000, p. 6). Although this definition may sound pretty straightforward, you will find that the skillful application of those skills, tools, and techniques will come only after you've had a significant amount of education and on-the-job experience.

The project management process calls for the creation of a small organizational structure (the project team), which is often a microcosm of the larger organization. Once the team has produced the desired outcome, the process then calls for the decommissioning of that small organizational structure.

The Project Life Cycle: The View from 50,000 Feet

Projects typically have identifiable phases and each phase has a

12 Project Management

unique set of challenges for the project manager. If we view the project process from the highest level, four basic project phases can be identified.

During the first of these four phases, the *Initiation Phase*, the need is identified. An appropriate response to the need is determined and described. (This is actually where the project begins.) The major deliverables and the participating work groups are identified. The team begins to take shape. Issues of feasibility (*can we do the project?*) and justification (*should we do the project?*) are addressed.

Next is the *Planning Phase*, where the project solution is further developed in as much detail as possible. Intermediate work products (interim deliverables) are identified, along with the strategy for producing them. Formulating this strategy begins with the definition of the required elements of work (tasks) and the optimum sequence for executing them (the schedule). Estimates are made regarding the amount of time and money needed to perform the work and when the work is to be done. The question of feasibility and justification surfaces again, as formal approval to proceed with the project is ordinarily sought before continuing.

During the third phase, the *Execution Phase*, the prescribed work is performed under the watchful eye of the project manager. Progress is continuously monitored and appropriate adjustments are made and recorded as variances from the original plan. Throughout this phase, the project team remains focused on meeting the objectives developed and agreed upon at the outset of the project.

During the final phase, or the *Close-Out Phase*, the emphasis is on verifying that the project has satisfied or will satisfy the original need. Ideally, the project culminates with a smooth transition from *deliverable creation* (the project) to *deliverable utilization* (the post-project life cycle). The project customer accepts and uses the deliverables. Throughout this phase, project resources (the members of the project team) are gradually re-deployed and the project finally shuts down. However,


although the project team and the project manager typically stop participating at this point, they can benefit greatly from understanding and appreciating what goes on *after* the project, as we will soon see.

The Project Management Process: Step by Step

Now that we've overviewed the process, let's circle back and break it down into steps. I recommend an approach that follows the four-phase model described above, but provides for additional detail in the areas of *requirements gathering*, *project definition*, *risk management*, and *stakeholder management*. The result is the eight-step process, which we'll use as the basis of study in this book. The eight steps are briefly summarized below:

Step 1. Identify and frame the problem or opportunity. In this phase, the fundamental need is identified. The need is then quantified with respect to factors such as its size, shape, and extent. This leads to the creation of a *Requirements Document*, which articulates the need in as much detail as possible.

The true need must be completely understood before attempting to define the best solution. A significant number of project failures can be attributed to the phenomenon of *solution-jumping*. In simple terms, this occurs when you try to provide an answer without understanding the question. This is a real possibility whenever the requirements are not fully defined, and impulse—rather than a rational process—is used to determine the project solution.



Solution-jumping The tendency of people to talk about what to do before analyzing the situation adequately, trying to develop a solution before thoroughly understanding the problem.

Step 2. Identify and define the best project solution. In Step 2, early determinations should be made regarding which work groups should be involved. A team should be formed to assist in this and all subsequent process steps. This step begins by identifying all reasonable alternatives. The team may use brainstorming or similar creativity techniques to help identify alterna-



Amy's Need

Dave walked briskly over to Bill's cubicle. "Bill, I just got a call from Amy. She's got a problem and needs our help. I'd like you to go over there right away and get the details. Figure out what she needs and take care of her."

Bill was pleased to be assigned to one of his organization's most valued clients. By the next afternoon, he was sitting in Amy's office, carefully reviewing the documents she'd prepared.

"Bill, we need the capability of screening all of our incoming components *before* they come into the assembly line," said Amy. "You're free to do this any way you'd like; just make sure that they fall within these guidelines." She handed Bill some design documents and a list entitled *Incoming Material Screening Requirements*.

Bill was happy that Amy had given him free rein in determining the solution to her problem. He studied the project requirements and formed a project team. Then, he and his team developed and installed the hardware and software necessary to check all incoming components for compliance with the screening requirements. It was truly a thing of beauty. Bill was proud of the job he and his team had done.

Less than a week later, Dave called Bill into his office. "Bill, Amy just called me," he said. "They're still having the same problem as before—*too many rejects coming off the end of their assembly line*. What happened?"

Suddenly Bill realized what had happened. He had just discovered Amy's true need—the hard way.

tive solutions. Using criteria previously agreed upon, the team then singles out the "best" solution. *This is the actual project.* The team prepares project definition documents, which consist of a comprehensive narrative description of the preferred execution approach, the criteria for project completion, and the definition of project success. In many organizations, this step concludes with a formal proposal to management and formal approval or authorization to proceed is granted. If the project is not approved, it may be terminated.

Step 3. Identify task and resource requirements.

Once the project solution is identified, we're ready to move to the next phase, which is to identify the task and the resource requirements. This is also referred to as *scope management*. In

this step, the team identifies all of the work to be done (the tasks). Consideration should be given to the preferred methods for doing the work and how much of the work will be done using internal resources. Preliminary resource commitments should be secured for all work.

Early Termination: A Success or Failure?



Unfortunately, some equate the early death of a project with failure. This couldn't be further from the truth. If the process is working properly, projects that will not benefit the organization will be weeded out early—before a significant amount of time and money has been invested.

Step 4. Prepare the control schedule and resource allocation plan. Creating the project schedule consists of several steps. First, a network or logic diagram is prepared to display the *optimum sequencing* of the tasks. Next, the length of time required to complete each task (its *duration*) is estimated.

By combining information on the preferred sequence of tasks, the estimated task durations, and an assumed project start date, the team can place tasks in “real time,” much like scheduling appointments on a calendar. This reveals the total project duration and the expected project completion date. The final part of this step consists of creating a logic-based, time-scaled bar chart that will be used during the project execution to track progress.

The Schedule Has Many Uses



Project schedules are created to serve three purposes:

- to calculate an estimate of the total duration of the project
- to inform task performers about who should be doing what and when
- to provide documentation that can be used to track and control progress of the project.

Step 5. Estimate project costs and prepare a project budget. In this step, the project manager coordinates the preparation of a cost estimate for the project. A variety of methods may be used to estimate cost, depending upon the level of detail that


exists at that time. The overall project cost is allocated to individual elements of the project, thus creating a budget for each major work element. This budget is used to monitor and control cost expenditures during project execution.

Step 6. Analyze risk and establish stakeholder relationships.

Once the project team has identified the work, prepared the schedule, and estimated the costs, the three fundamental components of the planning process are complete. This is an excellent time to identify and try to deal with anything that might pose a threat to the successful completion of the project. This is called *risk management*. In risk management, “high-threat” potential problems are identified. Action is taken on each high-threat potential problem, either to reduce the probability that the problem will occur or to reduce the impact on the project if it does occur. Though treated as a discrete step, risk

analysis should be a continuous process: you should be ever vigilant for threats to your project’s success.

This is also a good time to identify all the project stakeholders and establish or solidify relationships that will be maintained throughout the life of the project.



Project stakeholder Anyone who has a vested interest in your project. This group ordinarily includes those who stand to gain or lose through the success or failure of your project, those who participate in the execution of your project, those who supply resources to your project, and those who are affected by the outcome or outputs of your project.

Step 7. Maintain control and communicate as needed during execution.

You’ll spend most of your time in this step. During project execution, people are carrying out the tasks and progress information is being reported through regular team meetings. The team uses this information to maintain control over the direction of the project and takes corrective action as needed.


The first course of action should always be to bring the project back “on course,” to return to the original plan. If that can-

not happen, the team should record variations from the original plan and record and publish modifications to the plan. Throughout this step, organizational managers and other key stakeholders should be kept informed of project status according to an agreed-upon frequency and format. The plan should be updated and published on a regular basis. Status reports should always emphasize the anticipated end point in terms of cost, schedule, and quality of deliverables.

Step 8. Manage to an orderly close-out. This step is often characterized by the development of a *punch list*. A punch list is a relatively small list of tasks that the project team needs to complete in order to close out the project. The project manager must keep team members focused at this critical time. Unfortunately, far too often the attention of the team begins to drift because the project is shutting down. If this step of the process is not managed in an orderly fashion, the end can have a tendency to drag on. This can have a devastating effect on customer satisfaction.

Finally, the team should conduct *lessons learned studies*, to examine what went well and what didn't. Through this type of analysis, the wisdom of experience is transferred back to the project organization, which will help future project teams.

Punch list A relatively small list of tasks that the project team needs to complete in order to close out the project.



What Happens What “After the Project” Is More Important than the Project

Are you shocked? Insulted? Don't be. This doesn't mean that what you do during the project has little value. It simply points out that your approach to nearly everything throughout the eight steps of the project management process should be heavily influenced by your knowledge of what will happen *after* you've produced the project deliverables.

As mentioned above, the deliverables that your project produces will be accepted and used by a customer, client, or user.

Accordingly, your knowledge of how, why, when, and where your project's deliverables will be used should form the basis for making decisions throughout the entire life of the project. This is called *managing the project with a full life cycle perspective*. This perspective recognizes the fact that many of the decisions you make *during* the project will have far-reaching and profound effects on the efficiency, productivity, utilization, and profitability of the project deliverables *after* the project has been completed.

Project Management: The Interpersonal and Behavioral Context

Although this book focuses primarily on process, a full and fair treatment of project management would not be complete without some discussion of interpersonal and behavioral aspects of project management. You will find that the interpersonal and behavioral aspects of project life are crucial to the success of a project. In fact, studies often point to interpersonal and behavioral problems as a root causes for project failure. As mentioned previously, the art of project management is about dealing with people and about getting work done through other people. So let's take a closer look at the phenomenon of project leadership.

The Phenomenon of Project Leadership

In his book entitled *Project Management as if People Mattered* (Bala Cynwyd, PA: Primavera Press, 1989), Dr. Robert J. Graham makes several critical distinctions about the phenomenon of project leadership, which I'd like to pass along. Together, these statements do an excellent job of characterizing the interpersonal and behavioral side of project management.

Leading a project is not the same as leading a department. A project by definition is unique; it has never been done before. As a result, the end product and the process for producing it are never fully specified in advance. Therefore, *the project leader lives in an environment of constant uncertainty*.

The project leader coordinates the efforts of a team of people who may not be accustomed to working with one another.

They will normally have a wide variety of skills, backgrounds, biases, work habits, values, and ethics. *The project leader must work with this diverse group of people so that they coalesce into an effective working team.*

Project teams normally cut across organizational boundaries and include people from several departments or groups. Project success will require the cooperation of all of these people. To gain this cooperation is often a challenge. *The project leader must be skilled in obtaining cooperation from other people over whom he or she does not have direct control.*

In today's organizational environment, good human relations skills are vital to success in project work. The task is difficult for project leaders who are leading a team formed of diverse personalities, operating in a temporary and uncertain environment, and trying to obtain cooperation from people over which they have no direct control.

This issue of direct control is worth repeating, because it's so important. One of the most difficult aspects of your position as a project manager relates to the simple reality that in most organizations it's unlikely that project managers will have direct control or formal authority over the people on the project team. This is fundamentally different from leading a department, where the manager ordinarily exercises formal control and a hierarchical relationship between supervisor and subordinate is recognized as the norm. Project leaders, lacking formal authority, must rely on influence and persuasion to gain cooperation. Their skills in this area are integral to their role as project managers.

Motivating Your Team: Giving 'Em What They Need

Beyond possessing the ability to influence the people on your team to get the desired performance, you must also learn how to motivate them, to keep them energized toward meeting goals. This is a somewhat controversial topic.

Can you truly motivate the individuals on your team? Most experts think not, primarily because motivation is viewed as an internal function. You should recognize, however, that you can



Practical Tips for Creating a Motivational Climate

Tip # 1: Convey the attitude that people and their work are valued

- Take time to explain how each member's function contributes to project goals.
- Take time at team meetings to highlight how various members contribute to positive results.
- Heighten the exposure of low visibility or less appreciated responsibilities.

Tip #2: Convey Confidence in People's Knowledge, Ability, and Work Ethic

- Avoid double-checking and micromanagement as much as possible.
- Assign goals that represent a stretch for the individual, then let him or her determine how best to achieve those goals.
- Provide freedom, decision-making power, and authority in a way that conveys trust.

Tip #3: Recognize Good Performance

- Clarify in advance what represents a high standard of performance.
- Communicate achievements of your team to management in a visible and positive way.
- Openly recognize *attempts* to go beyond what's expected.

Tip #4: Lead by Example

- Don't ask others to do things that you would not be willing to do yourself.
- Intercede on behalf of members of your team when warranted.
- Continuously maintain the highest levels of honesty and integrity at all times.

create a climate, environment, or situation where motivation can occur within an individual. Motivation is all about recognizing a need that exists within an individual and finding a way to satisfy that need. This is a key point in understanding how to develop a high-performing team.

Managing Diverse Objectives and Perspectives

Most project teams are made up of people from several departments. As a project manager, one of your jobs is to form the team into a unified, single-minded unit with a focused project objective.

Occasionally, however, individual team members may have their own objectives (some call it a hidden agenda), based upon their personal situation, technical discipline, or feelings of allegiance toward their work group. When team members have multiple personal objectives, it can undercut team cohesion and weaken the team's dedication to the project. If you allow individuals too much freedom to pursue their own objectives, it can be counterproductive to the objectives of the project. As your team comes together, you should be attentive to any personal objectives. For example, someone from the marketing department may focus solely upon optimization of product reliability, usefulness to the end user, or customer appeal. A representative of the human resources department may be driven solely by quality of work life issues or workforce morale. These are noble causes, but they must be considered in the context of the larger picture, together with all other factors. Even deeper personal agendas—such as ambition with intent for personal gain at all costs—could create challenging situations for you as the project manager. You must learn to recognize and discourage all kinds of *personal* objectives and be able to focus the entire team on the overall *project* objectives.

Project managers may also have to manage diverse objectives from outside their project teams. Many project managers must work effectively with groups *outside* their organization, such as suppliers, subcontractors, and partners. Members of these groups will often have very parochial perspectives. Getting them to rally behind your project's objectives instead of their own can be quite challenging at times.

Finally, in today's global environment, managing diverse objectives may apply to issues of culture, politics, and customs. People often consider working on teams to be an opportunity to promote their own interests, beliefs, opinions, causes, and so forth. Again, you should value diversity among your team members, but not allow it to distract from your project.

Project Management: The Organizational Context

Most project managers work in organizations. And organizations—large or small—are often complex. Life as a project manager in a complex organization offers many challenges. The people on your project team will come from different functional work groups, which creates various leadership challenges for you. Your organization’s management is likely to have an opinion on the value of project management methods. You need to clearly understand that perspective and what it means to you. And overall, your entire organization is currently operating at some level of project management excellence—or maturity.

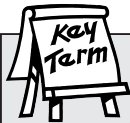
These and other aspects of organizational life serve as the backdrop as you seek to discharge your responsibilities as project manager. How well you understand and adapt to these aspects is what determines your *political savvy*—a key component of your functional competency. Let’s explore these organizational issues in a bit more detail.

Overcoming the “Silo Mentality”

Most organizations consist of many functional departments. Normally there’s a representative from each affected department on the project team. Each individual team member’s perspective—or frame of reference—will tend to align with his or her discipline or work group. This is the *silo mentality*.

The challenge for you is to redirect team members’ frame of reference from a *functional* orientation to a *project* orientation.

Encourage them to think in terms of what’s best for the



Silo mentality When people in an organization tend to think first of the needs, interests, and goals of their individual departments, before the needs, interests, and goals of the organization as a whole. Also known as *silo thinking*, the term derives from diagrams of multi-disciplined organizations, which ordinarily display functional departments in a vertical orientation. Team members who think exclusively in terms of their own work group are said to be thinking in “functional silos” (vertically), rather than in terms of what’s best across the entire project (horizontal thinking).

project. Coach them, for example, to refrain from making decisions that optimize their part of the project until they've verified that someone else's part will not be adversely affected.

(Obviously, this is easier said than done!)

One of the best ways to get team members to work across function lines is by using project management discipline and applying project management techniques. Project management is the glue that binds your "temporary organization" together. You must tirelessly promote the idea that every team member must focus on what's best for the project.

How Does Your Management View Projects?

Projects are often viewed as being fundamentally rooted in technology. This is because most projects are technical. Unfortunately, this orientation toward technology has obscured the true purpose of projects. The truth is that projects are all about business—not technology. The fundamental objective for a project is to achieve a business result, such as improving effectiveness, increasing sales, or making operations more efficient. No matter what that underlying cause, the ultimate purpose of a project is very simple: to make money or to save money. That's management's expectation as well—or at least it should be. Most organizations are paying closer attention to the return on their project dollar.

This has process implications, such as ensuring that you place a strong emphasis on preparing the *business case* for your project during the early stage—a business case that clearly shows anticipated expenditures vs. savings, cost-benefit ratios, and the anticipated business impact on the organization. These business-related project expectations have implications for you as a project manager. In addition to being technically knowledgeable, you should know about business methods, business strategy, and business skills. You should adopt an entrepreneurial spirit in the way you execute your projects. In short, the expectation is that you should manage your project as if you were a businessperson starting up a small enterprise.

What Is Your Organization's "Level of Maturity"?

Project management maturity is a concept that has received greater attention over the past few years. The project management maturity of your organization has a tremendous effect upon the way that project management discipline is carried out within the organization and tends to define what your life as a project manager will be like. There are several views on how best to measure and characterize an organization's project management maturity, but most identify anywhere from three to five levels of maturity. Whatever process is used to describe maturity, the metrics usually attempt to gauge these parameters (in no particular order):

- The extent to which project process documentation has been developed and distributed and is understood throughout the organization
- The ability of project teams to predict outcomes with reasonable accuracy
- The efficiency with which projects are executed
- The perceived success rate of projects
- The organization's ability to learn from its experiences
- The extent of continuous improvement in project execution over time

The combination of your organization's project management maturity and your management's opinion of the value, purpose, and function of project management will often dictate the boundaries of your authority and responsibility as a project manager.

More Dynamics of Managing Projects in Organizations

Those who manage projects in organizations typically must deal with two fundamental problems—cross-functional departments overlaid on a hierarchical authority structure. Functional hierarchies have all sorts of rules that specify, for example, who should make a decision, who should direct the efforts of others, and how people should communicate. Project managers who

chronically violate these rules may be subject to organizational sanctions.

There's typically a formal communication process that prescribes how "official" information is to be transferred between departments only through their heads. Thus coordination between departments requires that information and data move up and down the organization. Savvy project managers appreciate that this mode of operating may slow down the process considerably, so they may use informal communication channels whenever possible.

Similarly, there exists within many organizations an informal organization, an informal network of personal contacts and relationships among people in the organization that lies outside the formal structure. It includes friendships and the grapevine, among others. This informal structure does considerable coordination work. For example, the marketing people may contact their friends in design engineering to sort out some low-level technical problems that their customers are experiencing.

When people fail to resolve problems by working within the formal structure, they tend to use the informal structure. For example, a project manager might go beyond his or her authority to approve an expenditure, hoping that the necessary paperwork will be sorted out later. If projects in a functional hierarchy are managed almost entirely through the informal organization, it suggests a need to modify the formal structure so that it's more in line with project management methodology.

The nature of your organization's structure will greatly determine how you work as a project leader. In a *purely functional organization*, decision making and authority will be very strongly oriented toward individual departments or individual functions within the organization. This can make your life tough. At the other end of this continuum exists the *purely projectized organization*, where project managers have tremendous influence, authority, and decision-making power. These are typically organizations whose core business is executing projects, such as large consulting firms. Most organizations are somewhere

between these extremes. In these *matrix organizations*, the decision making and the authority are shared between project managers and functional management. As a project manager, you need to understand where your organization resides along this continuum and use this as a basis for determining your limits of authority and participation in the decision-making processes.

Defining Project Success

The definition of project success is obviously critical. After all, that's how you'll be judged as a project manager. Unfortunately, there are almost as many definitions of project success as there are project management professionals. To add to the confusion, every organization has its own view of what matters in project outcomes.

So, instead of trying to focus on one definition, I'd like to offer a *framework of thought* on success. I've found it valuable in the many discussions I've had over the years.

If you consider the various ways that projects could be deemed successful, you come to realize that project success exists on four levels, each with a unique perspective and set of metrics. And despite the specific values used to quantify success or failure, the principle remains constant. Following are the four levels of success that I use:

Level I—Meeting Project Targets

Did the project meet the original targets of cost, schedule, quality, and functionality? Although it's certainly admirable to beat these targets, my concept of success is tied to whether the project manager did what was expected. In other words, maximum success is zero variance between project targets and results. There are at least two reasons why I embrace this interpretation. First, it supports the organization's need for certainty. Second, I believe that project managers who chronically beat targets are suspect, at best.

Level II—Project Efficiency

How well was the project managed? This is a metric for the *process*. If the project meets its targets, but the customer groups, project team, or others were adversely affected by the project experience, the project will probably not be perceived as successful. Project efficiency can be evaluated through the use of criteria such as the following:

- The degree of disruption to the client’s operation
- How effectively resources were applied
- The amount of growth and development of project team members
- How effectively conflict was managed
- The cost of the project management function

Level III—Customer or User Utility

To what extent did the project fulfill its mission of solving a problem, exploiting an opportunity, or otherwise satisfying a need? Earlier in this chapter, Bill was caught in the situation where he managed a project effort that did not solve the client’s problem. If, like Bill, you do not satisfy the true need, the project may be perceived as a failure.

Here are some questions to help assess Level III success:

- Was the original problem actually solved?
- Was there a verifiable increase in sales, income, or profit?
- Did we save as much money as expected?
- Is the customer actually using the product as intended?

Back Up if You Have to

When you’re assigned to manage a project, one of your first steps should be to uncover the true need. If you don’t, you can’t be certain that your project will satisfy that need. Unfortunately, taking time to determine the true need may be viewed by some as “backtracking.” But the alternative is to risk being perceived as unsuccessful. So back up if you aren’t absolutely sure you understand the true need.



Level IV—Organizational Improvement

Did the organization learn from the project? Is that knowledge going to improve the chances that future projects will succeed at each of the three levels described above? High-performing organizations will learn from their failures—and their successes—and use that knowledge to improve their success rate in over time. This level assumes a long-term perspective and measures organizational learning and a resultant increase in project successes. The primary tools for organizational improvement are the maintenance of accurate historical records and the widespread use of lessons learned.

Project Manager's Checklist for Chapter 2

- Projects possess several key characteristics. They are temporary and unique. They consist of several tasks that have a preferred sequence. They consume resources and result in end products called deliverables. They ordinarily involve high levels of risk and uncertainty.
- These and other characteristics make projects different from day-to-day work; projects therefore call for the application of special management techniques.
- Projects are carried out in four major stages: *initiation*, where the project is defined and launched, *planning*, where the solution is detailed and the work required to carry it out is identified and scheduled, *execution*, where the work is done and monitored, and *close-out*, where the project is brought to successful closure.
- You should manage your project with a full life cycle perspective. This means understanding how the deliverables of your project will be used after the project is handed over to the customer, and using that knowledge to influence the decisions you make during the project.
- Most project managers work in complex organizations, where people who work on the team may come from sev-

eral different work groups. This can create unique management challenges for you, as you strive to get everyone focused on doing what's best for the project.

- ❑ Project success can be evaluated on four different “levels”:
(1) Were the cost, schedule, and deliverable performance targets met? (2) Was the project managed in an efficient manner (3) Is the customer happy and have the desired business results been achieved? and (4) Did organizational learning take place that will lead to better projects in the future?