Chapter 1

Establishing Project Management Fundamentals

This chapter will start us off with the fundamentals of project management. We want to make sure that your understanding of project management is in line with ours, because after all, there is more than one way to manage a project. If your experience is like ours, you probably tried several approaches until you found one that worked for you. For some, the process of managing a project, organizing data, and communicating with stakeholders and team members comes naturally. For others, let's just say there were a few knocks along the way and finding a system that works is still somewhat of a struggle. No matter how you manage a project or what your understanding of project management processes is, we're going to set the foundation here and walk you through a process that incorporates sound project management principles with the benefits of Excel 2007 (and other Office 2007 products) to manage your projects and project data more efficiently.

Project Management Institute

Project management brings together a set of tools and techniques that describe, organize, and monitor the activities and work of the project. Project management is performed by people, and you probably have experience doing just that whether you call it project management or not.

As we mentioned, there are several established project management processes you could use to manage a project. We will be using the principles outlined by the Project Management Institute (PMI) in *A Guide to the Project Management Body of Knowledge (PMBOK Guide), Third Edition.* PMI sets the standard in project management today. It is the most widely recognized organization regarding project management and it has successfully promoted project management best practices around the globe. PMI offers two certifications, the Project Management Professional (PMP) and the Certified Associate in Project Management (CAPM). If you're interested in learning more about these certifications, please visit `www.pmi.org`. If you have not yet obtained the PMP certification, we encourage you to do so. You'll find that this certification is now a requirement for many project management job postings and other positions, particularly in the information technology field, where project management is a significant function and responsibility of the role.

If you're thinking about taking the PMP exam offered through PMI, be sure to get a copy of Kim Heldman's *PMP Project Management Professional Study Guide, Third Edition* (Sybex, 2005). Thousands of people world-wide have used Kim's book to study for and pass the PMP exam.

As you progress through this book, you may find that you've used the processes and procedures outlined but perhaps called them by another name. Others may be new to you. That's okay—follow along and you'll learn some of the terms and processes found in *A Guide to the PMBOK* and how to make the best use of Excel 2007 functions and features to make your project a success.

First we'll look at what a project is and some of the ways they come about.

What Is a Project?

We can't think of a better place to lay our foundation than by defining the term *project*. It may seem odd to have to explain what a project is, but people frequently confuse projects with ongoing operations. Projects have definite beginning and ending dates and produce a unique product or service. Ongoing operations don't typically have start or end dates and usually the same process is used to produce the same result. (We'll look more closely at these definitions in the next section).

The focus of this book is on projects. Projects follow a specific process from start to finish, and that process is repeatable for any project you undertake. For example, all projects start with a request (produced in the Initiating process). Each project requires proper planning and monitoring techniques to ensure that the goals of the project are met and that they satisfy stakeholder expectations. We'll examine these processes as we proceed through the remaining chapters of this book.

Projects versus Ongoing Operations

Asking your spouse to install new shelving and clean and organize the garage may evoke a statement like, "I don't have time for a project like that right now." Cleaning and organizing the garage may be a project. But how do you know for sure? As we said in the previous section, projects have a definite beginning and ending date, they're limited in duration, and at their conclusion a unique product or service is produced. In this case, cleaning out the garage meets the definition of a project. There's a clear start and end date, and when you're finished, a new result is produced because the shelves are installed and scattered items are now neatly organized and categorized.

The purpose of a project is to meet its goal and conclude. The purpose of ongoing operations is to keep the organization functioning.

Now suppose you have company coming for dinner. If you're like us, there's a mad rush 20 minutes before the guests arrive to tidy up and run the vacuum to get all those dark fuzzies off the carpet. Is this a project? No. It doesn't fit the definition. Vacuuming is an ongoing operation. Sure, you start and stop at a specified time (hopefully before the doorbell rings), but there isn't a unique product or service produced at the end. Every time you vacuum, you use the same process and get the same result. And it's seemingly a never-ending chore. Vacuuming must occur every few days or so and it's almost always performed in the same way. That describes an ongoing operation. There is no clear start and end date, the tasks are repetitive in nature, and generally the same result is produced over and over.

Ongoing operations may or may not follow a specific process, and they can take on a million different forms. The process for one operation isn't necessarily the same as it is for another. This doesn't mean that you can't use the templates and spreadsheets presented in this book for tracking ongoing operations or organizing other data or tasks. In fact, you may find several of the forms and spreadsheets in this book useful for other applications, so feel free to modify them and incorporate them into your routine.

Perhaps your boss approaches you with the following scenario: She'd like to consolidate the four disparate networks in your organization into one network and clearly define the roles and responsibilities for each of the team members under the new scenario. Is it a project? Yes. It has a definite start and end date and it produces a unique product or service at its conclusion. However, when this project is over and the networks are successfully consolidated, the process of monitoring and fine-tuning the network becomes an ongoing operation. This scenario tends to occur quite often in the information technology field. A project is completed and then assimilated into the ongoing, everyday work of the organization. For example, a new software program is written to monitor customers' buying patterns. When the software is tested and implemented, another team of specialists takes over the day-to-day tasks of monitoring the software and helping users work through problems.

In other industries, projects may come to a conclusion without being assimilated into ongoing operations. The construction and manufacturing industries are some examples that come to mind. Once you've constructed a building or produced a new product, it's turned over to the consumer. Table 1.1 recaps the characteristics of projects and ongoing operations.

TABLE 1.1 Projects versus Ongoing Operations

Projects	Ongoing Operations
Definite beginning and ending.	No definitive beginning and ending.
Temporary.	Ongoing.
Produces a unique product or service.	Produces the same product or service over and over.
Resources are dedicated to the project.	Resources are dedicated to operations.
Ending is determined by specific criteria.	Processes are repeated over and over.

How Projects Come About

The authors have over 40 years combined experience working on or managing projects. It never ceases to amaze us how new projects come about. We've seen them announced at team meetings, mentioned in the hallway, scribbled down on a lunch napkin, and turned over to us in the restroom. The topper is the one that came about when one of our coworker's bosses told a newspaper reporter about a project his organization was undertaking. The trouble was our coworker hadn't heard a word about the project until he read the article in the Sunday paper. You probably have a few stories of your own like these.

On a serious note, there are several reasons a project comes about. Understanding the reason will help you clarify the goals and scope of the project. For example, if you know the project came about due to a new law or mandatory regulation, you'll know there are specific requirements that must be met and certain aspects of the project that cannot be compromised. The new law may have strict specifications and those specifications must be incorporated as part of the requirements for your project.

Organizations are always examining ways of creating business, staying competitive, gaining efficiencies, and serving their customers in new and creative ways. Projects may result from all of these needs. Business requirements, opportunities, or problems may also bring about a new project. According to *A Guide to the PMBOK,* most projects come about as a result of one of the following six needs or demands. We'll briefly examine each next.

Market demands Market demands often drive new project requests. Changes in the economy, changes in consumer habits, and changes in supply and demand are all examples of market demands that can bring about a new project. For example, spikes in utility prices or interruptions in oil supplies and reserves may bring about projects to create alternative energy sources.

Business needs Business needs such as improving efficiency, reducing costs, and increasing inventory churn are often reasons for project creation. An example business need might involve implementing an enterprise resource planning system that improves the customer ordering and fulfillment process while providing the organization with up-to-the-minute revenue information.

Customer requests Customer requests are an endless source of project creation. We usually think of customers as external to the organization. Keep in mind that there are also internal customers. Typically the information technology, human resources, and accounting divisions have internal customers within the organization that they serve. Customer requests, both internal and external, may drive many projects. For example, the folks in the human resources department might decide to implement an automated system for tracking all human resource transactions. They want to track job applications, promotions, terminations, and so on online rather than in file drawers.

Legal requirements Legal requirements primarily come about as a result of government action. For example, the Food and Drug Administration requires an extensive testing process for new medical devices before they can be introduced to the marketplace and used on us mere humans. Those processes may drive a project or drive the need for additional requirements for an existing project. The legal requirements category may also include industry regulations imposed to ensure safety, accountability, environmental protection, and so on.

Technological advances This one happens to be the authors' favorite category. Without technological advances, we wouldn't have the iPod, cell phones, personal digital assistants, digital cameras, or myriad other devices we could not live without. Today it seems that technological advances come about almost overnight. It especially seems that way after you've just purchased what you thought was the latest and greatest only to find the next latest and greatest introduced the week after you purchased your model.

Social needs Projects driven by social needs may include things like preventing infectious disease, purifying drinking water, and creating educational programs for underprivileged children. Social needs may come about due to customers or concerned citizens.

Each category represents opportunities, business requirements, or problems that need solved. Management generally decides how to respond to needs and demands, and those decisions will likely bring about a new project.

Overview of the Project Process Groups

Most project management methodologies have a series of processes through which projects progress. Most methodologies start with an initiating process and continue through to closing. Since we're basing our methodologies on *A Guide to the PMBOK* standards, we'll look at the five project management process groups they promote:

- Initiating
- Planning

- Executing
- Monitoring and Controlling
- Closing

A number of individual processes collectively make up each group. For example, the Initiating process group includes two individual processes, Develop Project Charter and Develop Preliminary Project Scope Statement.

These groups, along with their individual processes, make up the project management process. A project starts off in the Initiating group and proceeds through each of the groups until it is either completed successfully and closed out or cancelled.

Often during the course of a project, you'll find that you need to revisit a process group (most likely the Planning group) to update or add information that changes assumptions made previously. Project management is an iterative process in that you discover information as you get further along in a project. This may require changes and tweaking to previous work to keep documents, plans, and the work of the project on track with the goals.

Next let's take a look at a high-level definition of each of the process groups.

Initiating The Initiating process is where the project comes to life. Initiating officially acknowledges that a project should begin. It also indicates that resources (both human and financial) should be encumbered for the project. The project manager is usually named here and is authorized to begin work on the project. The first project documentation gets created in this group in the form of the project charter. This document describes the goals of the project, the business reason or justification for the project, a high-level description of the project's product or service, and more. The following are some of the accomplishments for this process group:

- Determining the major goals of the project
- Assigning the project manager
- Documenting and publishing the project charter

Planning The Planning process group is where a great deal of the project management work of the project occurs. Here you'll further define the goals of the project, discover and document deliverables and requirements, formulate communication plans, highlight risks that may occur on the project, determine quality metrics, and more. The Planning processes are critical to the functions of the remaining process groups. In project management terms, Planning is more than likely the most important process group of all. The accomplishments for this process group include the following:

- Documenting and publishing the project scope statement
- Establishing a project budget

- Defining project activities
- Developing a project schedule
- Determining resource needs, skills, and talents

Executing The Executing process is where the work of the project happens. The project manager coordinates and directs project resources and oversees the completion of the project plan. This process also ensures that future project work stays in alignment with the project goals. Approved changes to the project plan are typically implemented here. Sometimes the changes require a trip back through the Planning processes to adjust plans or schedules to keep the project on track. The following list includes some of the accomplishments for this process group:

- Forming and motivating the project team
- Directing and leading the project team
- Obtaining other project resources
- Communicating project information
- Conducting project status meetings

Monitoring and Controlling Monitoring and Controlling, as the name implies, is where the work of the project is measured, verified, and accepted or where action is taken to correct work that is not in line with the project plan. Performance measurements are taken and evaluated during these processes to determine if variances exist between the work results and the project plan. If variances are discovered, corrective action is taken to once again get the work of the project in line with the plan. This might mean another pass through the Planning process group to adjust project activities, resources, schedules, budgets, and so on. Here are some of the accomplishments for this process group:

- Measuring project performance against the plan
- Taking corrective actions when needed to bring performance measures within limits
- Evaluating the effectiveness of corrective action measures
- Ensuring that the project progresses according to the plan
- Reviewing and implementing change requests

In practice, the Executing and Monitoring and Controlling processes are often combined and performed together—or very close together. As work results are produced (Executing), they're verified and accepted or adjustments are made to correct the work and produce results in line with the plan (Monitoring and Controlling). If you find it easier to combine these processes (as these authors do), stay alert to changes and make certain not to skip the important steps within either process group.

Closing The Closing process group brings a formal, orderly end to the project. In this group, final acceptance of the project occurs, project documents are gathered and archived, contracts are closed out, lessons learned are documented, and more. Closing is the most often skipped process. Once the work of the project is complete, project teams have a tendency to jump right into the next project. Taking the time to collect and archive documents will really pay off when you undertake a new project that's similar in size and scope to the project you've completed. You can review the documents, reuse templates, and save time by reviewing risks, plans, and so on to speed up the Planning processes in particular. Here are some of the accomplishments for this process group:

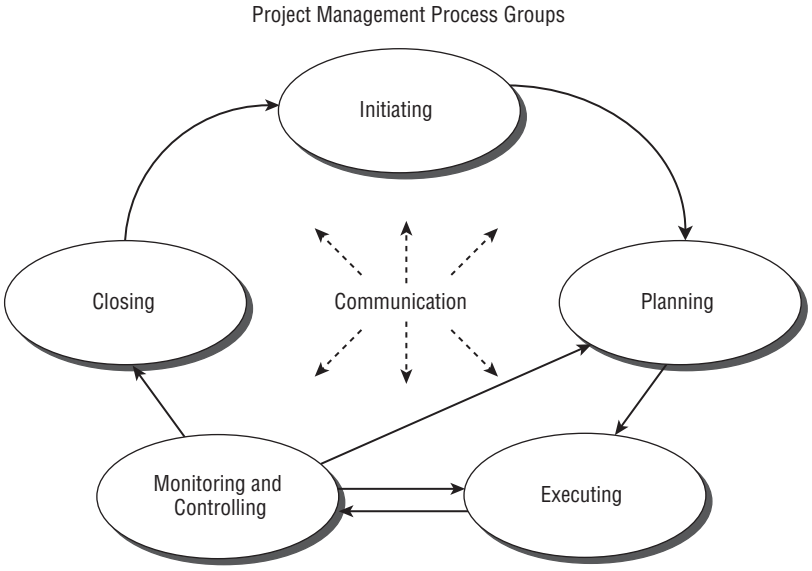
- Obtaining acceptance of the deliverables
- Documenting lessons learned
- Archiving project records
- Formalizing project closure
- Releasing project resources

If you're working on a large project or a project that contains multiple subprojects, the Closing process group will become an input to the Initiating process group. For example, imagine you're working on a construction project that is extending a university campus and adding several new buildings. New buildings, roads, and other infrastructure components make up the overall project. At the completion of each phase of the project (building A, building, B, building C, and so on), the closing process becomes an input into the next phase. Therefore, Initiating can signal not only the beginning of a project but also the beginning of the next phase of a project.

As we stated earlier, these processes are iterative. Planning, Executing, and Monitoring and Controlling are the most often repeated processes. Also, the outputs of one process group (Initiating, for example) become the inputs to another process group (Planning, for example). It's important to be as detailed and accurate as you can as you progress through the processes because you'll be building on the documentation and work you've done previously. Figure 1.1 shows the inputs and outputs and the iterative nature of these processes.

We'll cover each of the process groups as we progress through the remaining chapters of this book, with the most emphasis on the Planning processes. Planning is probably the most important process group of all and is likely the place where Excel 2007 and the other Office products will get the heaviest use. You'll continue to use Excel throughout the remainder of the project, but the largest effort will be spent up front establishing templates, forms, and processes that you'll fill in and update as the work of the project progresses. Next we'll take a look at the key skills every good project manager should possess.

FIGURE 1.1 Project management process groups



Key Project Management Skills

When this author (Kim) started her career in project management, the field wasn't even called project management. We were known by a host of names: analysts, implementation specialists, engineers, integrators, hey you, and so on. Several times before the term *project manager* became commonplace, my coworkers and managers would describe us as "those organized people with a mix of technical, business, and people skills—you know, the 'do everything' kind." In reality, this description wasn't, and still isn't, far from the truth. Project managers must have a wide variety of skills and they must have high competency levels in those skill sets. Four cornerstones frame the skill set of every good project manager:

- Leading
- Communicating
- Team building and motivating
- Negotiating and problem solving

From these skills, the project management house is constructed. Project management skills form the next floor. General management skills, technical skills, organizational skills, business skills, industry-specific skills, and so on all build upon this foundation. We will look at each of the foundational skills later in this section with the exception of team building. We'll cover that topic in Chapter 5, "Planning and Acquiring Resources."

The four cornerstone skills, known as "soft" skills, are the most important set of skills you have as a project manager. And of the four, leadership is the foundation stone you'll lay first. If you aren't good at leading, your project and your project team will likely suffer for it. Technical skills are important, but without a mastery of the soft skills, the technical skills aren't a lot of help. Think of it as having a set of stairs in a 20-story building. The trip to the top floor is possible, but it's a lot of hard work and you'll likely lose team members along the way. An elevator would make the journey a lot more pleasant.

Whether you believe soft skills are intertwined with our personalities and styles or you believe they can be learned, it's safe to say none of us knows everything and there's always opportunity to learn new information and add a few new tips and tricks to your tool bag.

Mastering the four foundation skills is even more important today than it was in the past because the field of project management has grown up within the organization. We'll look at how that's happened next.

Project Management Maturity

As the project management profession has grown and matured, so has its place in the typical organization. For example, in the early days of our careers, we wielded notebooks full of spreadsheets, checklists, and documentation for each project we were assigned. The positions we held were buried several layers deep in the organization—usually somewhere in the customer service or information technology departments.

Today, many organizations take a much more holistic approach to project management. Sure, we still have the spreadsheets and checklists, but project management has moved from the tactical, buried eight levels deep in an obscure department to the strategic. Project management offices (PMOs) have cropped up everywhere. The PMO is responsible for the management of all the major projects within an organization (also known as portfolio or program management), and its director often holds a high-level management position. We're even beginning to see "C" level job postings—Chief Project Management Officer—to head up those PMOs.

Project management is no longer a matter of how to take a project from step 1 to step 10—although the tactical aspects will never go away. Project management has now taken a seat at the executive table. Today project management is strategic as well as tactical. Where once an organization may have decided to implement a technology product to improve workforce efficiency, for example, that same project is now examined from the perspective of the overall value it adds to the organization. It's weighed against the strategic direction of the organization and other projects of similar importance. Return on investment is investigated, as is the value to the customer or end user. Global business implications are determined. And the list goes on. The factors today are considered from an organizational perspective rather than a departmental perspective.

Project management has matured from the tactical to the strategic. It still requires tactical skills to manage the day-to-day activities of project work, but increasingly, projects are viewed from the perspective of the organization as a whole and the value they add to the organization or its customers.

Because of this maturity from the tactical to the strategic, it's more imperative than ever that project managers have a well-rounded set of skills. As we said, a project manager's skills are first and foremost built upon leadership abilities. Without solid leadership skills, it's difficult to impart vision, gain support for that vision, and inspire project teams to perform at their best. We'll look at leadership skills in the next section.

Leadership Skills

What's your definition of a leader? Is a leader a leader because they hold a position of authority? Do you know leaders who don't hold a managerial title? Our guess is your answer to this last question is yes. Leaders don't necessarily have a position of authority in the organization. Nonetheless they are leaders in their own right. These are the go-to folks in the organization. They're the ones likely to inspire project team members to say, "I wonder what [fill in the blank] thinks of that idea," and to follow their opinion on the topic.

Leadership is more than getting people to do what you want them to do. Dictators don't have any trouble performing this feat, but their followers aren't usually happy about it. Successful project managers know that certain key aspects of leadership are important.

- Imparting a vision of the project's value to the organization
- Imparting a vision of the product or service of the project (the project's end result)
- Gaining consensus on the goals and deliverables of the project and other issues that arise as the project progresses
- Establishing direction and a clear plan for meeting the goals of the project
- Managing the expectations of stakeholders, management, and team members
- Inspiring others to perform at their best
- Backing the team and their actions when it's appropriate
- Removing obstacles from the project team's path
- Managing conflict
- Building trustworthy relationships

Most of these factors probably seem obvious. At a minimum, they make sense. However, don't fall into the trap of thinking that you've accomplished these things, as we've seen many project managers do. They lull themselves into believing "everyone" knows the plan or that everyone knows you're there to help with issues and conflicts as they arise. Make it a habit

to ask. Ask your team members. Ask your stakeholders. Ask questions such as these: Do you know the goal of this project? Are there any problems I should be aware of? Don't assume anything. Institute an open-door policy and stand behind it (the policy, that is). You'll be surprised what people will tell you when they see your leadership qualities and you have gained your trust and respect.

Project management processes are important, but people are even more important. Members of high-performing teams have a high level of respect and trust for their leader and for each other. Strong leadership skills along with clear communication will go a long way toward building that trust.

Leadership involves many aspects and it's beyond the scope of this book to go into everything leadership entails. Mastering the skills listed previously and remembering to actively engage your team members and stakeholders will help your project progress along the successful path.

Communicating Successfully

A very close second to leadership skills is communication skills. Actually, we don't know how you can be a leader without being a good communicator. It's possible to communicate without being a leader—we've all got our war stories about bosses like that—but being a leader without being an effective communicator isn't really possible. So let's examine some of the key skills needed for effective communication in the project management arena.

Senders

Communication at its basic level is an exchange of information. Notice the word *exchange* in that definition. Communication requires a sender, a transmission of the message, and a receiver. Yes, the project manager can speak and no one may listen, but according to our definition, that isn't communication. We won't go into the mechanics of the communication model, but keep in mind that information that is distributed but isn't read or acknowledged by the receiver hasn't accomplished anything. If, for example, you know before opening an email that you're likely to get sucked into a 20-minute reading marathon to try to find the point, you may not read it. At best, you'll skim through it and may miss the point. So how can project managers avoid some common communication blunders? We're glad you asked. Here are a few tips on making your communication as effective as possible when you are the sender:

- Write clear and concise documents and stay on topic.
- Create communication that's appropriate for the audience. Executives like bullet points—use them.
- Rehearse important topics or meetings beforehand. Ask someone to critique your rehearsal if needed.

- Make certain you define terms that are not familiar to the receiver.
- Leave negative emotions at your desk but take passion with you.
- Communicate the right information and the right amount of information to avoid receivers tuning you out.

Receivers

On the receiving end of communication is listening. We're certified marriage counselors in our spare time (no, we never sleep). Based on several years of helping couples with their martial woes, we can safely say that a large percentage of issues are communication issues. And of those, listening tends to be the problem. When you ask one of the spouses to repeat what they just heard the other say, what's repeated is often different than what was stated. That's because the listener puts their own perspective and interpretation on what was stated without having *really* listened to what was said. Sure enough, we've experienced this same phenomenon in the workplace. One team member "hears" what a stakeholder or another team member has to say. When you get them both in the same room and have each of them restate the issue, you usually discover there was some misinterpretation or misunderstanding on one or both of their parts. Guard against adding your own seasoning to what you hear and practice active listening with the following techniques:

- Ask clarifying questions.
- Paraphrase what you heard in your own words and ask the speaker if you've understood the issue correctly.
- Show genuine interest by nodding in agreement or asking questions about the topic.
- Maintain eye contact.
- Do not interrupt; wait for the speaker to finish.

Making Connections

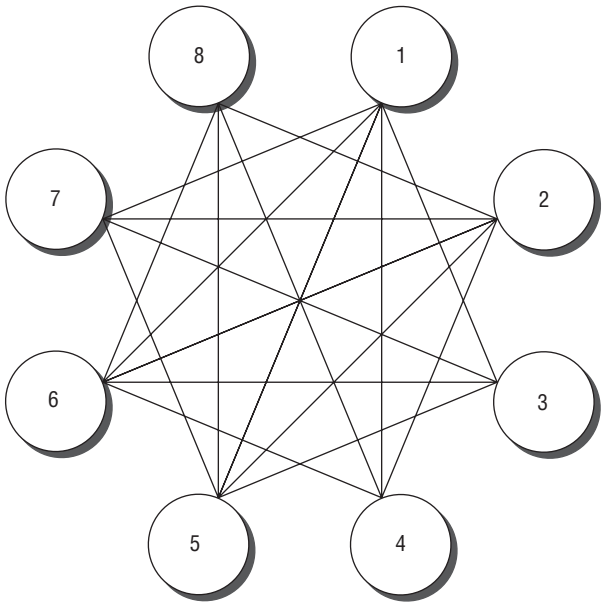
If you've recently attended a child's birthday party, you may have played the gossip game. All the kids stand in a circle and someone whispers a secret into the ear of the first child. They repeat the secret to the child next to them and so on until it goes around the circle. The last child tells everyone the secret. As you know, it's usually nothing at all like the original version. This illustrates not only the importance of active listening, but also the importance of limiting the number of participants in the circle, or meeting as may be the case. The more people in the communication chain, the more likely misinterpretations will occur.

Figure 1.2 illustrates the lines of communications among 8 participants.

If you counted all the lines in the figure, you'd come up with 28 lines of communication among the 8 participants. That amounts to 28 places for misunderstanding and misinterpretation. If you prefer to do this mathematically, you can calculate the lines of communication as follows:

$n\ (n - 1) / 2$ = total lines of communication

FIGURE 1.2 Lines of communication



As you can see, the more participants you have, the harder you'll have to work to make certain everyone hears and understands the message. This doesn't mean the project meetings become an exclusive club with only a handful of members. It's most important to consider the number of people in meetings where decisions need to be made. Once you go over 10 or 11 participants, the lines of communication become unwieldy. Again, it doesn't mean you can't be successful, but decision-making meetings are much more effective with fewer participants. In fact, some of the research going on regarding successful projects shows that small teams are much more successful than large teams, so whenever you can, limit the participants to those who are critical to the task at hand.

The Project Management Institute states that project managers spend 90 percent of their time communicating. Based on our experience, that's a correct statement. If you aren't spending the majority of your day talking (or otherwise communicating) with team members, stakeholders, and others about the project, get started now. Hang out at the water cooler if you have to. Practice both good sending and receiving skills.

Communications, like leadership, is a topic that could fill several books all on its own. It's beyond the scope of this book for us to go into all the details, but we're hoping you'll put the pointers we've given you to good use on your next project. Next we'll stir up a little conflict and reveal some helpful negotiating and problem-solving techniques.

Negotiating and Problem-Solving Skills

Negotiating and problem-solving skills make up another foundation stone of successful project management. Along with leadership and communication, you will use negotiating and problem-solving skills almost daily. We'll look at the typical project management situations where negotiation skills are needed next and follow up with an overview of five conflict resolution techniques.

Negotiating Skills

Usually when we think of negotiation, we think of contracts or complex disputes that need resolved. While that's true, negotiation occurs on a much smaller scale as well. You will often have to negotiate for team members with other managers in the organization, you'll negotiate for additional time or money, you'll negotiate costs and delivery times with vendors, and there's usually a never-ending stream of project issues that require negotiation to resolve. These issues can range from the very minor up to and including a decision to kill the project.

As a project manager, you may find yourself in a situation where you do not necessarily have ultimate authority over the project decisions. For example, you may have several divisions within your organization that have pooled their resources, both budget and people, to execute a project. That means the stakeholders from each of the participating divisions have an equal say in decisions or where and how money will be spent. Like the Survivors who use extreme measures to fight their way into the last-person-standing position, this calls for extreme negotiating skills. Only in this example, you don't want to be the last person standing; you want all the others to come along with you. This means you'll have to go beyond simple compromise. You'll need to establish effective relationships with the stakeholders and understand their needs and issues. You'll have to do a little personality sleuthing and determine how best to communicate and work with each individual. And you'll have to have genuine concern for their stake in the project and the competing needs they face within their own divisions. As the project manager, it's your job to bring these issues to light and help the entire group understand them. You should also present and discuss alternative solutions and bring the group to consensus on a resolution.

Conflict Resolution

But what happens when you can't reach consensus on a resolution and end up with a conflict on your hands? Conflict is when the desires, needs, or goals of one person or group are not in agreement with another. You could throw in the towel and go home, but that's not recommended. In all seriousness, withdrawal is a conflict resolution technique—just not a very effective one. There are five conflict resolution techniques that use different approaches to solving the issue at hand: forcing, smoothing, compromise, problem solving, and withdrawal. Of them, problem solving is the best approach and should be used whenever possible. However, there are times when this technique may not work or may not be appropriate. It's also handy to understand these techniques because you'll be able to easily spot which one other participants are using and try to steer them into the problem-solving technique. Let's look briefly at each of them next.

Forcing Forcing is just as it sounds. One person forces a solution on the other parties. This typically occurs when one of the stakeholders has more authority than the others or more power to exert their influence. While this is a permanent solution, it isn't necessarily the best one. People will go along with it because, well, they're forced to go along with it, but it doesn't mean they agree with the solution.

Smoothing Smoothing is where one of the parties attempts to make the conflict appear less important than it is. Everyone looks at each other and scratches their head and wonders why they thought the conflict was such a big deal anyway. As a result, a compromise is reached and everyone feels good about the solution until they get back to their desk and start thinking about the issue again. When they realize that the conflict was smoothed over and really is more important than they were led to believe, they'll be back at it and the conflict will resurface.

Compromise Compromise is achieved when each of the parties involved in the conflict gives up something to reach a solution. Everyone involved decides what they will give on and what they won't give on, and eventually through all the give and take, a solution is reached. Neither side wins or loses in this situation, and it could result in apathy from all the participants. If compromise must be used, make certain firm commitments to the resolution are made by all parties to help assure that the solution is permanent.

Confrontation This technique is also called problem solving and is the best way to resolve conflict. A fact-finding mission results in this scenario. The thinking here is that one right solution to a problem exists and the facts will bear out the solution. Once the facts are uncovered, they're presented to the parties and the decision will be clear. Thus the solution becomes a permanent one and the conflict expires. This is the conflict resolution approach project mangers use most often and is an example of a win-win conflict resolution technique.

Withdrawal Withdrawal occurs when one of the parties gets up and leaves and refuses to discuss the conflict. This never results in resolution. It's probably the worst of all the techniques because nothing gets resolved. Withdrawal is a lose-lose technique.

General Management Skills

General management skills, as mentioned earlier, involve accounting, marketing, procurement, human resources, international business, and so on. From a project management perspective, they involve what *A Guide to the PMBOK* calls the nine knowledge areas. These are specific areas of knowledge that bring together information and processes by commonalities. For example, the Cost Management knowledge area involves budgeting, estimating, and cost control. The nine knowledge areas are as follows:

Project Integration Management This knowledge area involves identifying and defining the work of the project and combining, unifying, and integrating the appropriate processes to complete that work. The information developed and documented in this knowledge area includes the project charter, the project scope statement, and change control processes.

Project Scope Management Project Scope Management is concerned with defining the work of the project and is highly interactive. It also concerns defining both project scope and product scope. Project scope involves managing the work of the project, whereas product scope concerns defining the characteristics of the product. Some of the activities in this knowledge area are creating the scope statement, creating the work breakdown structure, and controlling project scope throughout the project.

Project Time Management This knowledge area is concerned with estimating the duration of the project plan activities, devising a project schedule, and monitoring and controlling deviations from the schedule. Collectively, this knowledge area deals with completing the project in a timely manner. Time management concerns keeping the project activities on track and monitoring those activities against the project plan to ensure that the project is completed on time. Some of the accomplishments achieved in this knowledge area are defining activities, estimating activity durations, creating the project schedule, and controlling the project schedule.

Project Cost Management The activities in the Project Cost Management knowledge area establish cost estimates for resources and keep watch over those costs to ensure that the project stays within the approved budget. This knowledge area is primarily concerned with the costs of human resources, but other costs should be considered as well. The activities in this knowledge area include estimating costs, developing the project budget, and controlling costs.

Project Quality Management The Project Quality Management knowledge area assures that the project meets the requirements it was undertaken to produce. Some of the activities in this knowledge area are creating the quality management plan, measuring performance, monitoring project results, and comparing them to the quality standards to ensure that the customer will receive the product or service they thought they purchased.

Project Human Resource Management Project Human Resource Management involves all aspects of people management, including leading, coaching, dealing with conflict, performance appraisals, and more. This knowledge area ensures that the human resources assigned to the project are used in the most effective way possible. Some of the activities you'll perform in this knowledge area are acquiring project teams, team building, and managing and motivating teams.

Project Communications Management Project Communications Management makes certain that all project information, including project plans, risk assessments, meeting notes, and more, is collected, documented, archived, and disposed of at the proper time. This knowledge area also ensures that information is distributed and shared with stakeholders, management, and project members at appropriate times. When the project is closed, the information is archived and used as a reference for future projects. This is referred to as historical information in several project processes. The information you'll gather, document, and report in this knowledge area includes communication plans, performance measurements, status reports, and more.

Project Risk Management Risks include both threats and opportunities to the project. This knowledge area is concerned with identifying, analyzing, and planning for potential risks,

both positive and negative, that may impact the project. This means minimizing the probability and impact of negative risks while maximizing the probability and impact of positive risks. Some of the documents you'll create in this knowledge area are a risk management plan, a risk identification list, a risk register, risk responses, and more.

Project Procurement Management This knowledge area is concerned with purchasing goods or services from vendors, contractors, suppliers, and others outside the project team. The activities and documents you'll perform in this knowledge area include planning for purchases, preparing bids and requests, selecting vendors, and writing contracts.

There is a lot of information covered in each of these knowledge areas and we'll discuss each throughout the remainder of this book. For example, the Project Integration Knowledge area covers the project charter and project scope statement. We'll talk about the project charter later in this chapter and jump into the scope statement in Chapter 4, "Determining Project Requirements."

Organizing Time and Information

Another skill that project managers should have in their tool bag is solid time management and organization skills. Each of us has eight hours or so every workday to accomplish our tasks. It seems some people accomplish twice the amount of work in that period of time than others. Time management is a process that you use to control the priorities in your day so that you can work on the most important items. Organizational skills are particularly useful in project management terms when it comes to organizing project documentation, organizing meetings, and organizing teams.

Microsoft Outlook is an effective time management tool. It contains a calendar, a task list, and a contact list all in one place. Most of you are probably familiar with its capabilities or have used a product similar to it. You can set recurring project meetings, for example, create tasks and give them specific due dates, and so on. One of the new features of Outlook 2007 allows you and each of your team members to publish your calendars to the Office Server, making it available to others. This is helpful when setting up meetings or when checking on someone's availability. We'll talk more about scheduling team members' activities and setting up resource calendars in Chapter 8, "Constructing the Project Schedule and Budget."

Task lists are another feature of Outlook. You can set up customized views to see the status of tasks by owners and due date and percent complete and so on. However, we find tasks lists easier to create and manage in Excel. For example, in your role as a project manager, you will have multiple team members and tasks to track. These tasks will roll up into project deliverables. Again, we'll look more closely at task lists in Chapter 8.

Tips for Managing Time

Remember that project managers spend up to 90 percent of their time communicating. This means talking to people and writing project documentation and status updates and so on. If you don't

schedule time to perform these functions, they may not happen. And talking to your team members should rank high on your priority list. Keep these tips in mind when managing your time:

- Schedule time on your calendar every day to talk to team members so your calendar shows that time as "busy."
- Schedule time to update project documentation. Again, block out 30 minutes or whatever time it will take so that no one else schedules you for a meeting during that time.
- Don't forget to add travel time before and after offsite appointments.
- Set project status meetings, change control meetings, stakeholder updates, and so on as recurring appointments.
- Review your calendar and task list first thing every morning and again before you leave the office. At the end of the day, determine what tasks need carried over to the next day and review upcoming appointments. You'll wish you had remembered this one the first time you show up to work and realize you have an important stakeholder meeting on the schedule but you wore your grubby clothes that day.
- Handle every piece of information you see (email, regular mail, voicemail, memos, and so on) preferably only once but as few times as possible. Read it, answer it, file it, or delete it as soon as you're finished.

If you find yourself always feeling rushed or find that your day manages you rather than you managing your day, you should invest in a time management course that can offer more information than we have the space for here.

Tips for Managing Information

Managing time and managing information have a lot in common. In fact, if you're effective at managing information, you'll save time. How many times have you found yourself wondering where you put an email or stashed a file on your hard drive? Thank goodness for search engines—but there is a better way. Developing an effective filing system and sticking with it will cut down on the number of times you'll need to call upon a search engine. Keep in mind there's no right way to do this. We'll offer you a few suggestions, but you should use what works best for you. Feel free to modify these ideas to fit your style.

Often project managers manage more than one project at a time. Therefore, it makes sense to create folders for each project. For example, suppose you have a project titled Web Redesign and one titled Retail Feasibility Study. Create an electronic folder for each project. Then within each folder, you might consider subfolders with names that describe the types of information they hold, such as, for example, project status reports, budget, vendor list, project schedule, stakeholder communication, and so on. If your project will extend over several months, consider creating another set of subfolders within each of these that are date based. For example, the project status folder would have subfolders called Jan 2008, Feb 2008, and so on.

As you will discover later, using portal software such as Windows SharePoint Services (WSS) or SharePoint Portal Server (SPS) allows you to enhance the abilities you have to store documents. For example, using SPS (now called Microsoft Office SharePoint Server – MOSS), you can add metadata ("data about the data") to a spreadsheet file as well as create different views of the data for various users.

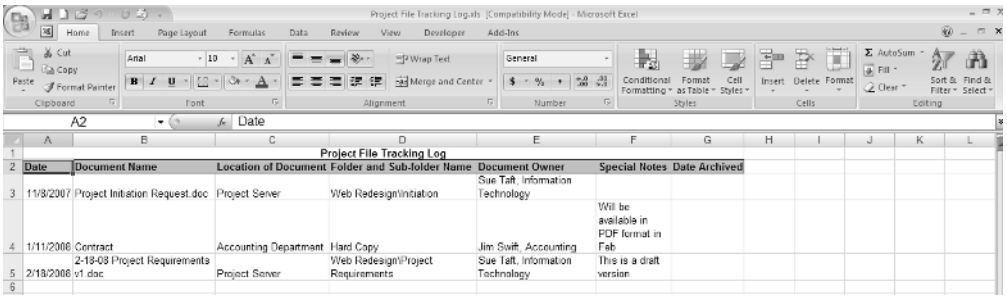
It's also helpful to follow a consistent naming convention for your files so that if you do have to search for them, you at least know what they're called. Staying with the project status reports example, you may consider naming the files with the date followed by the name. For example if you have weekly status reports, name them something like 01-11-08 Status Report. Or if you have monthly status reports, Jan-08 Status Report will work.

If you require individual team members to provide you with status reports (this is a good idea), you could name them similarly and file them in a subfolder under Project Status called Team Status Reports. In this case, use the date and the team member's name.

You might want to consider creating an Excel spreadsheet to track where and when information was filed, especially if you are managing a very large project that will likely collect mounds of documentation or you're managing multiple projects. This is especially helpful if you have a collection of documents, some electronic and some hard copy, that are filed in two different places. Figure 1.3 shows a sample portion of a project file tracking spreadsheet.

We often hear the term *information overload* today. You can manage project information overload by following some of the tips we outlined in these last two sections. Keeping yourself and your team organized will save you time. Writing things down helps prevent loss and also protects the project from delays when a key team member leaves with all the information "in their head."

FIGURE 1.3 Sample file tracking log



Project File Tracking Log.xls [Compatibility Mode] - Microsoft Excel

Home | Insert | Page Layout | Formulas | Data | Review | View | Developer | Add-Ins

A2: Date

	A	B	C	D	E	F	G	H	I	J	K	L
1				Project File Tracking Log								
2	Date	Document Name	Location of Document	Folder and Sub-folder Name	Document Owner	Special Notes	Date Archived					
3	11/8/2007	Project Initiation Request.doc	Project Server	Web Redesign\Initiation	Sue Taft, Information Technology							
4	1/11/2008	Contract	Accounting Department	Hard Copy	Jim Swift, Accounting	Will be available in PDF format in Fab						
5	2/18/2008	2-18-08 Project Requirements v1.doc	Project Server	Web Redesign\Project Requirements	Sue Taft, Information Technology	This is a draft version						
6												

Professional Responsibility

Certified project managers are required to adhere to a code of professional conduct. Certified or not, it's still a great idea. As in most professions, honesty and integrity should be your number one priority. Honesty builds credibility with your team members and stakeholders. When you hit those bumps in the project road, stakeholders may not like the news you have to deliver but they'll know you're telling the truth if you've practiced honesty and integrity all along.

Project managers are often in positions in which they have a lot of interaction and contact with vendors, stakeholders, and outside boards or commissions. These people may have influence over your career or have the ability to reward you in other ways. Your personal gain, whether a promotion or a golf trip to Arizona, should never be taken into account when making project decisions. Don't allow vendors or stakeholders to pressure you into making decisions that sound right for you personally but might be a disaster for the project.

You'll also want to avoid conflict-of-interest situations. A conflict of interest is where it appears that your own interests are benefiting as a result of project decisions. For example, suppose you are part owner with your brother-in-law in a real estate firm. One of the requirements of your project is to locate and lease a building. You should not choose this real estate company as the firm to find the building needed for the project because there's not only a conflict of interest but a potential for personal gain as well.

When in doubt, avoid even the appearance of impropriety.

Project managers should strive to maintain a level of professionalism that depicts honesty and integrity. Continuing education in your industry and project management techniques should also always be high on your personal to-do list. Respect your company's data and property, lead by example, and always report truthfully and honestly.

Chapter 2 includes an overview of Excel and other Office 2007 products. We'll incorporate their features into the following chapters and walk you through constructing processes and templates using these products.