This part of the book is dedicated to presenting the primary project management skill sets you need in order to lead the several levels of projects that exist. It is assumed you already have the technical skills to either perform the technical task or appreciate and understand all the disciplines necessary to accomplish the technical task.

As stated in the preface, the first element of the success formula is knowledge. Knowledge is achieved in a three-step process: awareness, training, and education. Awareness is: What you need to do. Training is: How to do it. Education is: Why you need to do it.

This part of the book will create the awareness of the subject areas you need in order to perform at the various levels of project and program management. Once awareness is achieved, I direct you to the training that will support the early levels of the skill set needs. Chapter 7 in Part III will introduce expanded training and education in all these areas.

Part II is presented in two chapters. Chapter 5 addresses acquiring preparatory skills—that is, those skills every project manager needs at every level of performance. Preparatory skills are divided into two groups: Personal Skills and Company/Customer/Industry Skills.
Chapter 6 addresses the subject area needs of the five skill groups that comprise the project and program management fields. Reading through this part of the book, you may ask: Who has time to read all these books or to attend all these seminars? My answer is that you need to make time. On long coast-to-coast flights or while waiting for your plane to load are good opportunities for reading. A boring evening in the hotel room is another good opportunity. Reading at lunch has a double return—you can gain some knowledge and lose some weight at the same time.

Personally, I have two stacks of books that I call the “Takers” and the “Leavers.” Size dictates which pile a book ends up in. The “Takers” I take on trips. Reading time is pretty much up to you, so you need to work it into your schedule. Seminars are pretty much up to the company. You need to take the seminars offered as standard fare by the company and then expand your horizons by requesting to attend the applicable ones recommended by this book or others you come across in your own research.
Acquiring Preparatory Skills

Before we jump into the specific subjects necessary to prepare you for each type of project or program, we need to discuss some preparatory skills you must have. These skills fall into two groups: the Personal Skill Set and the Company/Industry Skill Set.

**Personal Skill Set**

The Personal Skill Set are those skills every project and program manager needs in order to lead their tasks and teams effectively. These include problem solving, leadership, ethics, and presentation skills. Each of these skills has an infinite number of competence levels that can be achieved. To one degree or another, you already possess some of these skills, and you will continue to refine them throughout your career.

**Problem Solving**

Problem solving is fundamental to project management. It is the most important of the personal skills. The mechanics of problem solving are essentially the same, no matter what. They involve defining the problem, searching for alternative solutions, evaluating them, selecting the best alternative solution, and then applying it. There are some sophisticated software applications that present these mechanics, but they all use about the same process.

Applying the achieved solutions will contribute to your knowledge base. Should you confront the same kinds of issues over time, you will gain a knowledge base of solutions applicable to these issues. At that point, of course, you will only need to apply the solution rather than start from the beginning every time. Most importantly, though, you will be able to anticipate these problems and build solutions into the project plan before the problem actually exhibits itself. Nevertheless,
other problems will crop up, and you will need to apply the process again and again.

**Leadership**

In my opinion, John Maxwell defined leadership precisely when he wrote: “Leadership is influence, nothing more, nothing less.” When prosecuting a project, you will find the need for leadership everywhere, every day. But leadership is not something you can pour out of a bottle, nor is it a mathematical formula. It is an elusive trait that some people are born with, some people develop, some people don’t have, and some never will. Whatever it is, Ken Blanchard is right: A “pill” just won’t work. Remember the “persona” factor I talked about earlier? Your abilities as a leader will be greatly influenced by your persona.

You can get a leg up on the development of your leadership skills and style through courses (seminars), such as *Preparing for Leadership: What It Takes to Take the Lead* offered by the American Management Association (AMA). They say, “This course is uniquely designed to help leaders-to-be get ready for their new challenges and responsibilities.”

**Ethics**

Webster defines ethics as: “The principles of conduct governing an individual or group.” As a project manager, your ethics will be tested with every decision you make, so it is important to have an understanding not only of ethics in a general sense but of the ethics that are the governing principles for your industry, your company, and your discipline. These can sometimes clash, and that is where your individual ethics are tested. How you pass this test is a reflection of your integrity.

Samuel Southard’s *Ethics for Executives* offers the traditional view of business ethics, while John Maxwell’s *There’s No Such Thing As “Business” Ethics: There’s Only One Rule for Making Decisions* offers a different and interesting view. Many times ethics will be severely tested when dealing with international programs. Here is where culture plays an important role.

Most universities have an ethics department that handles ethical issues for the business-associated curricula as well as for the entire college or university. These offices are good sources for information on ethics. If you happen to be involved with government contracts in the defense sector, the Defense Industry Initiative (DII) is a good source for information.
Most of the principal organizations have an ethics requirement; meaning you must accept their ethics standards (frequently called a Code of Conduct), in order to be certified by them. You can find the standards in Figure 5-1.

**Meeting and Presentation Skill Set**

Refined meeting and presentation skills are essential for all project managers. For discussion purposes I consider public speaking and visual aids as inherent parts of presentation skills.

Your meeting skills will be tested every time you call a meeting, formal or informal. All meetings need to be called for a purpose and managed to that purpose. The purpose of the meeting should be stated on the agenda if it is a formal meeting.

A trick that has always worked for me is to open the meeting with a salutation (good morning) and then say: “The purpose of this meeting, is . . .” and then, of course, state the purpose of the meeting. This lets the attendees know there is a purpose and a structure to the meeting, and it’s not just to get together for coffee and donuts. Nor is it for airing all the grievances in the world.

Your presentation skills will be tested every time you stand up for a meeting, for a monthly review or a customer review, or at any other time you are the center of attention—and as a project manager, you will almost always be the center of attention. Although there are a lot of books that address the subject of public speaking and presentations, most are mechanical in their presentation. However, I have found a

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**Figure 5-1. Organizational ethics references.**

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little book by Steve Mandel titled *Effective Presentation Skills* that is good for individual study. This book has a lot of checklists and self-assessments to help you with the basic skills. This is most certainly a skill, though, that can only be mastered with practice. Practice worked for Demosthenes, and it will work for you. Once again, your persona will have a great deal to do with how you project your speaking abilities.

If your company doesn’t offer a course in public speaking or presentation skills, you can check with your local community college or simply join Toastmasters International. I firmly believe that presentation skills must be refined and reinforced in a group environment.

In the workaday world, presentation skills are closely allied to the visual aids you will use in your presentations. The visual aids can vary from handouts to flip charts to overhead viewgraphs to 35-millimeter slides to television presentations. The tools can vary from a typewriter to a computer using the ubiquitous Microsoft Power Point to sophisticated video software. The key to presentation skills lies in maintaining an audience’s interest and conveying the necessary information to them. Make certain your media supports and enhances your presentation data and is not just a crutch for a bad presentation, as in the cartoon where the salesman stands up and says: “I don’t have anything to say but I do have some neat slides.”

It is possible that your company prefers to use one particular presentation technique. Needless to say, that’s the technique you should concentrate on. The training department should select the presentation skills seminar for your company; this way, the consistency of presentations will be ensured throughout the company. If you don’t have a training department and there are no standards in your company, my opinion is that Microsoft Power Point is the most universal tool you can use to create your presentation media. The resulting presentation can be printed for handouts, converted into overhead slides (view graphs) or 35-millimeter slides, be presented as direct video, or used to drive video projection equipment. The Help menu that is a part of the application will even establish formats for you.

If you are a veteran project manager, the above paragraphs will likely be the things you do as a matter of course. But, if you’re just starting out, I suggest you pay close attention to those paragraphs. Develop these skills before you need them. It’s a demeaning experience to stand in front of an audience and get chewed out for presenting a “bunch of unintelligible gobbledygook,” or to be taken to task by your boss for having poor decision-making skills, or to be chastised by your
Acquiring Preparatory Skills

Team members for not providing adequate leadership, but to me, the worst thing of all is to be accused of not having ethics! These skills are fundamental to your growth and position as a project manager. Learn them and use them well.

**Company/Customer/Industry Skill Set**

The Company/Customer/Industry Skill Set consists of three groups of documentation. The first group is that used by your company to convey the policies, plans, processes, and procedures established by management to control the business of the company. The second group is the documentation used by the customers with whom the company does business. This documentation sets standards and requirements for both the customer and the customer’s suppliers. Federal Acquisition Regulations (FARs) and NASA Procurement Regulations (NASA PRs) are typical of documentation in this group. The third group is the documentation of organizations created to establish standards, processes, and procedures for specific equipment or industries. The Software Engineering Institute (SEI), the Underwriter’s Laboratory (UL), and the International Standards Organization (ISO) are typical of organizations in this group.

**Enterprise Policies, Plans, and Procedures**

This is the simplest of all the skills. All you need to do is to read, understand, and remember the policies, plans, processes, and procedures established by your company. If you are working for a company, you must understand how that company does business. Now that may seem like an obvious recommendation, but it is amazing the number of people, especially those who “know it all,” who don’t take the time to read the policy manuals of their company. This can really get you into trouble, especially when you are composing your project plan. Usually, company policies are referred to as the “Red Book,” or the “Blue Book,” or the “Granite Book” or some similar term to bring attention to the importance of the book. Whatever its name, it usually has a venerated place in the minds of management and should be treated accordingly.

The best way to start this process is to list all the documents and then find them. Usually, these documents are divided into sections for Administration, Human Resources, Engineering, Program Management, and so on. Make a list of the documents that are applicable to you and to projects and get on with reading them.
Figure 5-2 shows the typical categories of documentation you will find in company policies, plans, processes, and procedures.

Company policies, plans, and procedures can usually be grouped into two classes: too few or too many. The numbers of policies in a company are usually directly proportional to the number of employees in a company. Small companies have few policies; very large companies have many, many policies. This is understandable, but unfortunately, there is a “critical mass” of categories of policies and procedures that every company should have, and the small companies usually do not cover all these categories. It is important to understand this principle if you are a part of a small company. The lack of policies and procedures can allow for a lot of latitude, but this can also get you into trouble. If

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<td>Manufacturing &amp; Production</td>
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<td>Operations &amp; Maintenance</td>
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you are part of a small company with very few policies and procedures, cultivate an understanding with management about their expectations. Your job is to figure out what policies your company has, where they are, and which apply to you and to which projects. Read these policies (when available) and understand them. Why? Because this step is fundamental to the creation of a project plan within the context of how your company operates.

**Customer Standards**

If you are leading a project that performs tasks within your own organization, it is likely that group will use the same policies and procedures as your group does. If you are leading a project that performs tasks within your own corporation or consortium but with another company, it is likely that company will have policies and procedures different from your own. If you are leading a program that performs a task under contract, customer standards are the documents of the customers that apply to you as a contractor or vendor. These standards and regulations may have to do with procurement or with task performance. Required customer standards should be listed in the statement of work, but may not be. Take some time to review prior statements of work and talk with the customer to ferret out any customer standards that may be required but were not listed. Why? Because when handover time comes, the customer may say: “We expected you to know these standards were required. That’s partly why we hired you.” There’s little you can say to win this argument.

**Industry Standards and Regulations**

Standards and regulations refer to the documents that govern the products and processes your project will create. Bodies such as the American Society for Quality Control (ASQC), the International Standards Organization (ISO), the Institute of Electrical and Electronic Engineers (IEEE), and so on have been created specifically for the purpose of establishing and maintaining specific standards and regulations.

How does this affect you? If your product is software, it’s a pretty sure bet you will use the standards of the Software Engineering Institute (SEI). If your project is involved with electrical products, most certainly the standards and requirements of the Underwriter’s Laboratory (UL) will be involved. If your project is involved with mechanical products, the requirements of the American National Standards Insti-
tute (ANSI) will be involved, and so on. The required standards and regulations should be included in your statement of work or your specification but may be glossed over there. If you are new to the product, take some time to review past specifications and talk with the technical people who have been involved with these products in the past. It will be worth your time.

There are over 150 bodies setting standards for everything from airports to pharmaceuticals to toilets. As project manager, you may or may not need to know each of these standards and regulations by chapter and verse, but you must know which are required and how to ensure that copies are available to the technical people on the project. Failure to adhere to these standards and regulations can cause the product to be unresponsive and can cause the project to fail.

Because each company and each project is different, knowledge of the foregoing skills will be an individualized affair. Nevertheless, at least now you have an idea of what they are and where to look for them.

Suggested Reading (Books)

Seminar Contacts
Preparation for Leadership: What It Takes to Take the Lead
See: http://www.amanet.org/seminars/cmd2/2536.htm

Notes
4. For further information about the Defense Industry Initiative, contact: Richard J. Bednar, Senior Counsel, Crowell & Moring LLP, 1001 Pennsylvania Avenue, N.W., Suite 1000, Washington, D.C. 20004-2595, Telephone: 202-624-2619; e-mail: rbednar@crowell.com.