

Chapter 1

Initiating the Project

CHAPTER OBJECTIVES

- Defining the Project Management Life Cycle
 - Gathering Project Information
 - Defining the Project Requirements
 - Establishing the Completion Date
 - Creating the Project Charter
 - From the Field: Interview with Carl Danneels
- Q&A
- Chapter Quiz
 - Chapter Exercises

Welcome to information technology (IT) project management. IT project management is different from managing any other project you may have worked on in the past. In the world of information technology, we've got attacks on all fronts: ever-changing business needs, hardware compatibility, software glitches, security holes, and network bandwidth, not to mention careers, attitudes, and office politics.

Don't be scared off! This is also the most challenging and exciting place to be in a company. What you do here will affect the entire organization, will have an impact on profits, and can boost your career, confidence, and life to the next level.

IT project management can be as exciting as a white-water rafting excursion or as painful as a root canal; the decision is yours. What makes the difference between excitement and a sore jaw? Many things: leadership, know-how, motivation, and, among other things, a clear vision of what each project will produce, what it will cost, and when it will end.

This first chapter will help you build a strong foundation for managing successful IT projects. Like anything else in the world, project management requires adequate planning, determination, and vision for success. Ready to start this journey? Let's go!

Defining the Project Management Life Cycle

Before you hop into the launch of a project, it's paramount that you understand the life cycle of project management. A life cycle is just a pleasant way of saying things are created, they have a life, and then they go away. Projects are temporary; they do not, thankfully, last forever. Operations, however, describe the ongoing core business of an organization. Operations are the day-to-day tasks, business focus, and purpose of an organization; they're what companies do. Projects are unique endeavors that don't fit into the day-to-day model and activities of an organization. Projects are special undertakings to create unique products, services, and conditions.

A project, technically, is a temporary endeavor to create a unique product or service. Projects are an undertaking outside of the normal operations of an entity. For example, you might roll out a new application, install new monitors, create a new portion of a web site, or establish a new call center for application support. In some organizations, such as ones composed of application developers or consultants, or IT integration companies, everything they do is a project because they complete projects for other organizations. Consider a company that creates custom

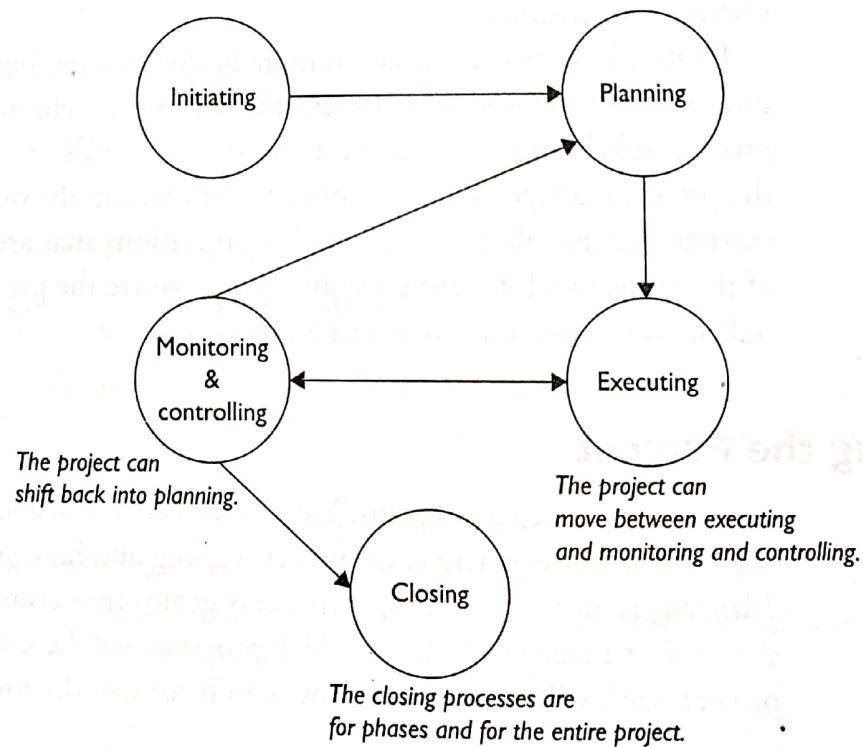
applications for other organizations. Their operation is an ongoing series of projects. The organization that completes the project work is called the performing organization.

It's not that unusual in the IT world to meet companies that perform projects for other organizations. Your company might even be one of those entities, or you might purchase goods and services from a company that completes projects for you. An organization whose main income is generated by completing projects for others might be referenced as a company that does management by projects. Even these companies, however, still have a distinction between operations and projects.

All projects move through a logical progression of activities to reach the project closing. You could examine a project in construction, health care, manufacturing, or technology, and you'd see the same set of project management processes that move the project forward. The framework that all projects share is called the project management life cycle—it's universal to all projects in the world. The project management life cycle describes the evolution of project process groups that will move a project from initiation to project closure. Figure 1-1 captures the project management life cycle and shows how all projects use different process groups to move the project toward its closing.

FIGURE 1-1

The project management life cycle uses process groups to move the project forward.



4 IT Project Management: On Track from Start to Finish

You might hear the terms project life cycle and project management life cycle used interchangeably. Technically, these are not the same thing. The project management life cycle is universal to all projects and consists of the five process groups: initiating, planning, executing, monitoring and controlling, and closing. A project life cycle describes the unique phases of a project that's specific to the discipline and nature of the project. For example, you would not have the same phases in a construction project that you'll experience in a software development project. The phases of the project compose the project's life cycle, whereas all projects use the project management life cycle that's composed of the process groups.

Initiating the Project

Project *initiation* is the official launch of the project, and it's the real focus of this chapter. Initiation is based on identified business needs that justify the expense, risk, and allotment of resources for the project to exist. It's important for IT project managers to keep the idea of the business need in mind throughout the project. Companies don't launch projects because of cool technology, fast gadgets and gizmos, or to be on the bleeding edge of technology—there must be a financial reason behind the project initiation. The business need is linked to the organization's strategies and tactics; goals and mission; and responsibility to their shareholders, owners, and customers.

I'll dive into project initiation more in this chapter, but for now know that this process group is responsible for creating the project charter and identifying the project's stakeholders. The project charter is the official document that authorizes the project manager and the project to exist within the organization. The project stakeholders are all the people and organizations that are affected by the existence of the project and the project's outcome. If you're the project manager, you're a stakeholder. More on this in just a bit—I promise.

Planning the Project

Good projects need good plans. You, the project team, and many of your stakeholders will need to know where your project is going and how you plan on getting there. *Planning* is an iterative project process group that communicates the intent of the project manager. It shows which processes will be used in the project, how the project work will be executed, how you'll control the project work, and finally,

how you'll close down phases and the project at its end. Planning requires time, resources, and often a budget for testing, experimenting, and learning.

The primary result of the planning process group is the project management plan. This document is actually a collection of smaller plans that address different areas of the project. In Chapter 2, I'll go into the details of each one of these project plans, but for now here's a quick overview of what the planning processes help the project manager create:

- Scope management plan
- Scope baseline
- Change management plan
- Configuration management plan
- Requirements management plan
- Cost management plan
- Cost performance baseline
- Schedule management plan
- Schedule baseline
- Quality management plan
- Process improvement plan
- Human resources plan
- Communications management plan
- Risk management plan
- Procurement management plan

There are also some project documents, forms, and checklists that can go into this plan too, but these are the headlines. Many of these plans don't have to be created from scratch each time—that'd be a pain. You can adapt previous, similar project plans as templates for your current projects to save time and effort, and to use the benefit of historical information during planning. Planning, I want to stress, is an iterative activity. You'll come back to planning over and over throughout the project; planning is not a one-time activity.

Executing the Project

Here's the meaty stuff of the project: getting the work done. Presented with your approved project, your project team goes about the business of getting the project work done and creating key results. Project *execution* is unique to each discipline and is led and directed by the project manager. This is also the area of the project where members of your project team will spend the bulk of their time and effort and where the project will spend the bulk of your budget. It's the heart of the project's mission: to create the product or service the stakeholders are expecting.

Project execution includes the quality assurance process, as the project team must create the project work correctly, ideally the first time. It's almost always more cost effective to do the work right the first time than to pay for it to be fixed later. In IT, simple mistakes can mushroom in costly wastes in time and materials. I'll talk all about quality and the IT projects in Chapter 11. I bet you can't wait.

It is also in the project execution process group that you'll acquire, develop, and manage the project team. It's a fine line between managing your project team and leading the project team. Management is really all about key results; you want your project team to get their work done as planned, on time, and according to budget. You want your team to be as committed to the project work as you are. Good project management balances management with leadership. Leadership is about aligning, motivating, and directing your project team.

The final process in execution is linked to the costs of your project: procurement. You'll need to understand the procurement process, how contracts work, and the rules and policies your company has surrounding the procurement process. Most IT projects need to purchase resources, that is, materials such as software and hardware, in order to satisfy the requirements of the stakeholders. Conducting the procurements according to the procurement management plan can be a time-consuming process, and when time's of the essence, that can cost your project.

Monitoring and Controlling the Project

In tandem with project execution, you have the *monitoring and controlling* process group. This set of processes ensures that the project work your team is doing is being completed accurately and according to plan. If there are problems, issues, or risks, then the project shifts back to project planning to figure the stuff out before moving back into execution. Monitoring and controlling the project is based on your project plans, the work of the project team, and shifting conditions within the project.

You'll manage scope, time, and cost changes with the monitoring and controlling processes. It's also in this process group that you'll work with the project stakeholders to verify that the project scope has met their requirements so that they'll accept the project deliverables the project team has created for them. Scope verification is an inspection-driven process that leads to acceptance decisions for the project.

Another inspection-driven process that's done without the stakeholders is quality control. *Quality control* is you and the project team inspecting the project work to confirm that it's done correctly before the stakeholders look at what you've created. Quality control is all about you keeping mistakes out of the customers' hands. This is actually a great example of how project execution and monitoring and controlling work together. Recall that quality assurance is about doing the project work correctly the first time. Quality control is about proving that the work was done correctly—and if it is not, then the team does corrective actions to fix the errors.

Monitoring and controlling also provides communication for reporting the overall performance of the project, the performance of key project deliverables, and information on project specifics, such as the time, cost, and risk portions of the project. Monitoring and controlling also requires that the project manager oversees and administers the procurement agreements with the project vendors.

Closing the Project

I'll address the project closure in detail in Chapter 12, but it's important to address project closing at the beginning of the project. Because projects are temporary, the project manager, project team, and other key stakeholders all need to be in agreement as to where the project is going. You'll need to define indicators that signal the project is complete. Because technology can change so quickly and frequently, it is vital to define what constitutes the project closure. You don't want a project that drones on and on because of loosely defined requirements.

The closing process group allows project phases and the project as a whole to be closed. Some documentation, final reports, and communications happen in the final activities of the project. All of the project information should be archived for future usage—sometimes called organizational process assets. Basically, the work you've done in your project can be used for supporting the solution you've created, or other project managers can use your project files to help their projects.

The closing process group also includes the close procurement process. Contracts will define how the relationship between the buyer and the seller should end. This includes post-delivery support, warranties, inspections, and payments. When it

comes to closing out the procurement, your company may require a procurement audit to determine how and where the project monies were spent, what was purchased, and that all the invoices and contracts are complete.

Gathering Project Information

Everybody talks about project management, but what is it exactly? In some organizations, any task or duty is considered a project that requires someone to manage it. Puh-leeze! *Project management* is the ability to administer a series of chronological tasks resulting in a desired goal. Some tasks can't be completed until others are finished, while other tasks can be done in parallel. Some tasks require the skill of a single individual; other jobs in the project require that everyone chip in and lighten the load.

IT project management is the ability to balance the love and implementation of technology while leading and inspiring your team members. Of course, the goal of project management is not technology for technology's sake, but rather a movement toward things like improved customer service, enhanced product quality, and increased profitability. Add to that mix external factors such as market conditions, competition, demands for new technology, and even the changing pace of technology—it's no wonder IT projects can become so frustrating. As you can see in Figure 1-2, project management is a high-wire balancing act.

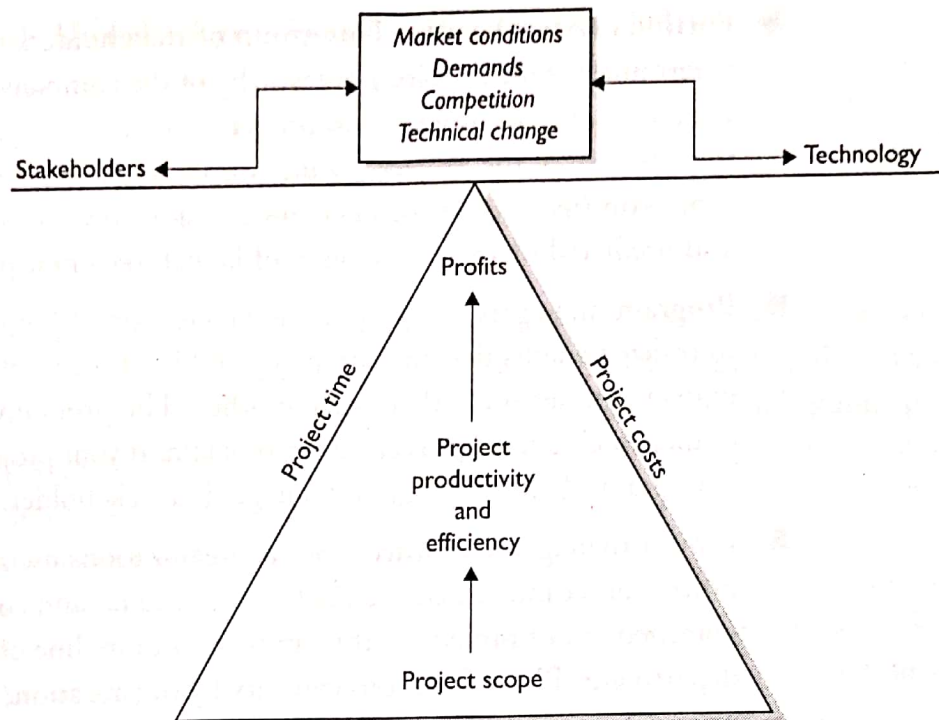
The business need of why a project has been created really drives the implementation of a project. Business needs can be to increase efficiency, to increase productivity, to respond to a customer request or a new regulation, or for countless other reasons a project is initiated. The project manager must understand what's driving the project and how the project supports the business need, the mission of the organization, and how the deliverable of the project will be used by the stakeholders.

Establishing the Project Requirements

Before the actual project work can begin, the project manager must establish the project requirements with the project stakeholders. Stakeholders are any individuals, groups, or communities that have a vested interest in the outcome of the project. On some projects, the stakeholders may be just one department. On others, when projects may affect every department, the stakeholders may be throughout the

FIGURE 1-2

A project manager must balance stakeholders, technology, and the project.



entire organization. Identifying stakeholders is important because their input to the project requirements early in the project initiation can ensure the project's success.

Of course, on most projects there will be key stakeholders who influence the project's outcome: department managers, customers, directors, end users, and other folks who have direct power over the project work or results. With the input of these key stakeholders, specifically their requirements for the project, constraints on the project, and time and cost objectives for the project, the project manager will be able to gather the project requirements to begin building a project plan to create the project deliverables. Stakeholders include

- **Customers and users** These are often called the end users, clients, or recipients of the project deliverables. These stakeholders could be internal to your organization or quite literally customers that purchase the deliverable your project creates.
- **Project sponsor** This is a person in the organization that has the authority to grant the project manager power over the project resources, assign a project budget, and support the existence of the project. This person also signs the project charter to officially launch the project and assigns the project manager to the project.

- **Portfolio review board** This group of stakeholders is responsible for determining which projects are worthy of the company's capital. They define the governance of projects and programs within an organization and oversee the selection of the projects, while considering a number of factors such as return on investment, project value, risk to reward of proposed projects, and predicted financial outcomes of launching a new project.
- **Program managers** A program is a collection of projects working together to realize benefits that the company could not realize if the projects were managed independently of one another. The program manager oversees all of these orchestrated projects in her program. If your project is operating within a program, then the program manager is a stakeholder.
- **Project management office** Some organizations use a project management office (sometimes called the PMO) to centralize and coordinate the management of projects within an organization, line of business, or department. PMO functions can vary by organization, though most offer project management support, guidance, and direction for projects within their business domain. It's not unusual for a PMO to direct the actual project management of a project.
- **Project team** These are the people that work on planning and executing the project plan. Depending on the organization, the project team may work full-time or part-time on the project, and they can come and go as the project work warrants or stick around for the duration of the project.
- **Functional management** Functional management consists of managers of the administrative functions of a company; consider finance, human resources, and accounting. Functional management has their own staff and their own day-to-day duties to keep the operations stable.
- **Operations management** These are managers of the core business area such as design, manufacturing, and product development. Operations managers oversee and direct the salable goods and services of the organization.
- **Business partners** These are the sellers, vendors, and contractors that may be involved in a project through a contractual relationship. Business partners can provide goods and services such as hardware, software, and subject matter experts like developers, technical writers, and software testers that you might need on your project.

- **Project manager** You are a stakeholder for your project. You're responsible for developing the project plans, keeping the project on track, monitoring and controlling the project, and communicating the project status and performance. As it goes in project management, if the project succeeds, it's because of everyone's efforts. If the project fails, then blame the project manager.

Clarity is paramount. When the decision has been handed down that your company will be implementing some new technology, and you'll be leading the way, you need a clear, thorough understanding of the project's purpose. Ambiguous projects are a waste of time, talent, and money. Before the project begins, you need to know what exact results signal the project's end. A project truly begins when you know exactly what the project will produce.

Once the project is defined, you need clearly stated objectives, requirements, and boundaries for the project. While management may have an ideal timeline for project completion, it'll take some planning and research to determine the exact duration of the project. The role of a project manager is not permanent but temporary. You, the project manager, are responsible for setting the goal, developing the steps to get there, and then leading the way for your team to follow.

How will you know what the end result of the project is to be? Ask! Who do you ask? People like the project sponsor can answer these kinds of questions. More about that later! You must have a clear vision of the end result, or the project will drone on and on forever and you'll never finish. Too often IT projects can roll into project after project stemming from an original, indecisive, half-baked wish list. Whether you are a full-time employee within an organization or a contract-based project manager, you must have a clear understanding of what the end results of the project will be.

Imagine your favorite archeologist maneuvering through a labyrinth of pitfalls, poison darts, and teetering bridges to retrieve a golden statue. In the movies, there's always some fool who charges past the hero straight for the booty and gets promptly beheaded. Don't be that guy. Before you can rush off toward the goal of any given project, you've got to create a clear, concise path to get there.

To create this path, you'll have to interview the decision makers, the users the change will affect, and any principals involved in the development of the technology. These are the stakeholders—the people who will use the project deliverables on a daily basis or will manage the people who will use the project deliverables. You must have a clear vision of what the project takes to create it or you're doomed. Often projects start from a wish list and evolve into a catalog of complaints about the

current technology. One of your jobs in the early stages of the project will be to discern valid input from useless gripes.

As you begin your project, consider the following questions.

Does the Project Have an Exact Result?

Projects that are as indecisive as a six-year-old at an ice cream stand rarely are successful. As a project manager, you must ensure the project has a definable, obtainable end result. At the creation of the project, every project manager, project sponsor (the initiator of the project), and team member should know and recognize the end result of the project. Beware of projects that begin without a clearly defined objective.

While you should be looking for exact requirements that a project is to include, you must also look for requirements that are excluded from a project (for example, a project that requires all mail servers to be upgraded in the operating system, but not the physical hardware). As the project takes form, the requirements to be excluded will become obvious given management, the time allotted for the project's completion, and the given budget.

Are There Industry or Government Sanctions to Consider?

Within your industry there may be governmental or self-regulating sanctions you will have to take into account for your project. For example, a banking environment will involve regulations dealing with the security of the technology, the backup and recovery procedures, and the fault tolerance for the hardware implemented. Government regulations vary by industry, and if your company is a government contractor, there are additional considerations for the project deliverables.

Within your industry there may be standards and regulations. Regulations are "must-haves" that are required by law. Of course, pharmaceuticals, utility companies, and food packaging companies have regulations that dictate their practices. If companies break regulations, fines and lawsuits may follow. Standards, however, are generally accepted guidelines and practices within an industry. Standards are heuristics, sometimes called guidelines, which are not laws but are usually followed. The project manager must be aware of regulations and standards that affect the project's work and deliverables.

Does the Project Have a Reasonable Deadline?

Massive upgrades, software rollouts, application development, and system conversions take teamwork, dedication, and time. Projects that don't have a clearly stated, reasonable deadline need one. Projects should not last forever—they are temporary. Acknowledge the work. Do the work. Satisfy the user with deliverables of the project. Once you've accomplished this, the project is done.

We'll talk more about project scheduling in Chapter 7, but the project manager must be aware of the project calendar and the resource calendar. The project calendar defines the hours in which the project work can take place. For example, if your project is to rewire an entire building with new network cable, the project calendar may specify access to the building between the hours of 8:00 P.M. and 6:00 A.M. Resource calendars are specific to the project team members. They take into consideration the hours employees are available, their vacations, and company holidays.

In addition, the project manager must consider how many working hours project team members will be able to devote to the project in a given day. Six hours of productivity is typical of an eight-hour day because of impromptu meetings, phone calls, and other interruptions. These factors directly influence the project schedule and if the project can meet the project deadline with the given resources.

Is the Project Sponsor Someone Who Has the Authority to Christen the Project?

Most IT folks hate politics, but we all know politics, personal interests, and department leverage are a part of every company. Make certain the project sponsor is the person who should be initiating the project—without stepping out of bounds. Make certain this individual has the resources to commit to the implementation and has the support of the people up the organization chart. And do it with the full knowledge and support of management.

The project sponsor should be an individual within the organization who has the power to assign team members, allocate funds, and approve decisions on the project work. The project sponsor is typically above the functional managers of the project team members assigned to the project work.

Does the Project Have a Financial Commitment?

If you do not have a clear sense of a financial commitment to the completion of the project, put on your hard hat and don't stand under any fans. Technology costs

money because it makes money. The goal of a project, in the corporate world, is the same goal of any company: to make or save money. A tech-centric project requires a financial investment for quality hardware, software, and talent. If the project you are managing has a budget to be determined somewhere down the road, you've got a wish list, not a project at all.

Is Someone Else Doing This Already?

In large companies, it's easy for two projects to be competing against each other for the same end result. This comes back to communication among departments, teams, and the chief information officer. In a perfect world, IT projects fall under one umbrella, information is openly shared among departments, and everyone works together for the common goal of a company (to make money). This process can be administered through a Project or Program Management Office where projects are tracked across the enterprise. Of course, that doesn't always happen. You should do some initial research to ensure your project isn't being accomplished elsewhere in the company before you invest time, finances, and your career in it.

Possessing Multiple Personas

Are you an optimist? A pessimist? A realist? A project manager has to be all of these. You have to be an optimist so that you may lead your people, manage the resources, and implement the technology according to plan. You have to be a pessimist, secretly of course, because you need to look at the worst-case scenario for each piece of the technology implementation. You have to be a realist because you need to look at the facts of the projects completely, unattached, unemotional, and unencumbered.

When your project is developing, you should play devil's advocate to each cornerstone of the project. You need to question the concepts, the technology, and the time it may take for each step of the implementation. As you can see in Figure 1-3, you should question everything before you begin.

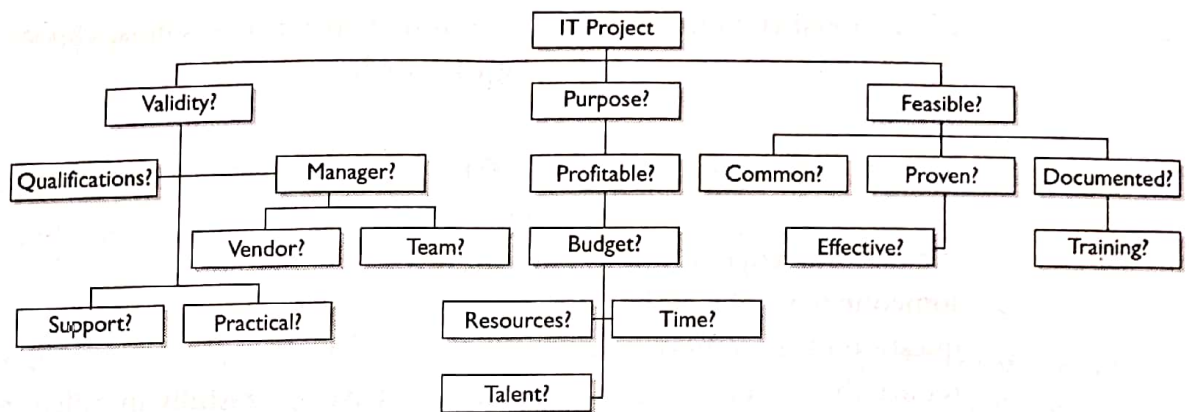
Questions to consider:

How Will This New Technology Affect Your Users?

Not all technology you implement has a direct effect on your users, but most of it does. Your life may be IT, but the accountant in the finance department doesn't like change. She likes everything the way it is now; that's everything from having to click

FIGURE 1-3

Project managers must question all aspects of a project.



OK on a redundant error message to installing her favorite screen saver. If your technology changes her world, you should let her know ahead of time; otherwise, she'll be certain to let you know afterward. Your primary objective must be to make her job easier.

As technology has become integrated in practically all areas of an organization, users have become more tech-sophisticated. They want to know why the change is happening, why the change is needed, and how it will help them. This brings us back to requirements gathering and communication. Ninety percent of a project manager's job is communication. If the project manager wants buy-in from the stakeholders, particularly the users, he must communicate the benefits and rationale behind the technology project.

Will This Technology Affect Other Solutions?

How many times have you installed software without testing it, only to discover it disrupts something as unrelated as printing? I hope never, but it happens. You must question and test the ability of the new technology to work with your current systems. Of course, if you're considering a 100 percent change in technology, then there really isn't a software compatibility issue.

Will This Technology Work with Any Operating System?

How many operating systems are in your organization? While the goal may be just one, I'd wager you've got two or three different OSs floating around. Think about those graphic designers and their Macintoshes. Remember those salespeople and their Windows Vista laptops? And what about those mainframe and server-based

Linux users? If your company has multiple operating systems, you've got to question the compatibility of the technology for each.

What Other Companies Are Using This Technology?

The assumption is you are buying this solution rather than building it. Therefore, is it a bleeding edge solution? Are you first in line? No one likes to be first, but someone has to be. When embracing and implementing a new technology, ask that question of the vendor's salesperson. Hopefully the salesperson will be happy to report about all the large companies that have successfully installed, tested, and implemented the vendor's product. That's a good sign. If someone else has done it, you can, too.

Does the Vendor of This Technology Have a Good Track Record in the Industry?

From whom are you buying this technology? Has the vendor been around for a while and implemented its product many times over? Does the vendor have a history of taking care of problems when they arise? This is not to say you should not buy from a startup—every major IT player was a startup at some time in its history. You should feel fairly confident that the vendor selling the product today will be around to support it tomorrow.

What Is the Status of Your Network Now?

You may not always have to ask this question, but with so many network-intensive applications and new technologies today, it doesn't hurt. You don't want to install the latest bandwidth hog on a network that's already riding the crest of 90 percent utilization. You and your company won't be happy. By asking this question, you may uncover a snake pit that needs to be dealt with before your project can begin.

What If . . . ?

Finally, you need to dream up worst-case scenarios and see if there are ways to address each. You need to find out how the technology will react when your servers are bounced, lines go down, and processor utilization peaks. You want to ask these questions and have answers for them now rather than when the crisis hits during your four-week vacation to Alaska.

No Other Choices?

At the start of a project, in its very genesis, ensure that the proposed technology is the correct technology. Of course, sometimes you have no control over the technology that is to be implemented because some vice president and decision-maker heard about the product from his golf buddy who is CIO at another large firm and is now having you install it everywhere. It happens.

Other times, hopefully most of the time, you have some input to the technology implemented to solve a problem. You are the professional, the IT guru, so you should have a definite say regarding the technology that you'll be in charge of delivering. You'll need to create a list of questions and then find the appropriate technology that offers the needed solution, works with your current systems, and fits within your budget. Having the right technology to begin with ensures success at project's end.

Interviewing Management

To have a successful project, you need a clear vision of the delivered result. You need to know why the project is being implemented. You need a strong commitment of management to the project. You need to share management's vision of how the end results will benefit the company. How will you discover these facts? Ask!

When your boss comes to you, for instance, and reports that you are to manage a project to upgrade the mail servers, you need to find out why. It may not be that the manager really wants the mail servers upgraded; he could just be having trouble opening a cartoon his frat brother from Utah sent him and be blaming it all on the company's e-mail system.

When you approach management to find out why the project needs to happen, you aren't questioning their decision-making ability. You are, however, questioning what their vision is for the project. In your company, your immediate manager may be the most technically savvy genius in the world, and her decisions are always right on target. In others, if not most, managers know that a technology exists and can be implemented. However, they don't know exactly which technology they're after. Figures 1-4 and 1-5 show the difference between effective decision-making abilities and poor decision-making abilities.

FIGURE 1-4

Well-informed decisions result in success for everyone, not just the project.

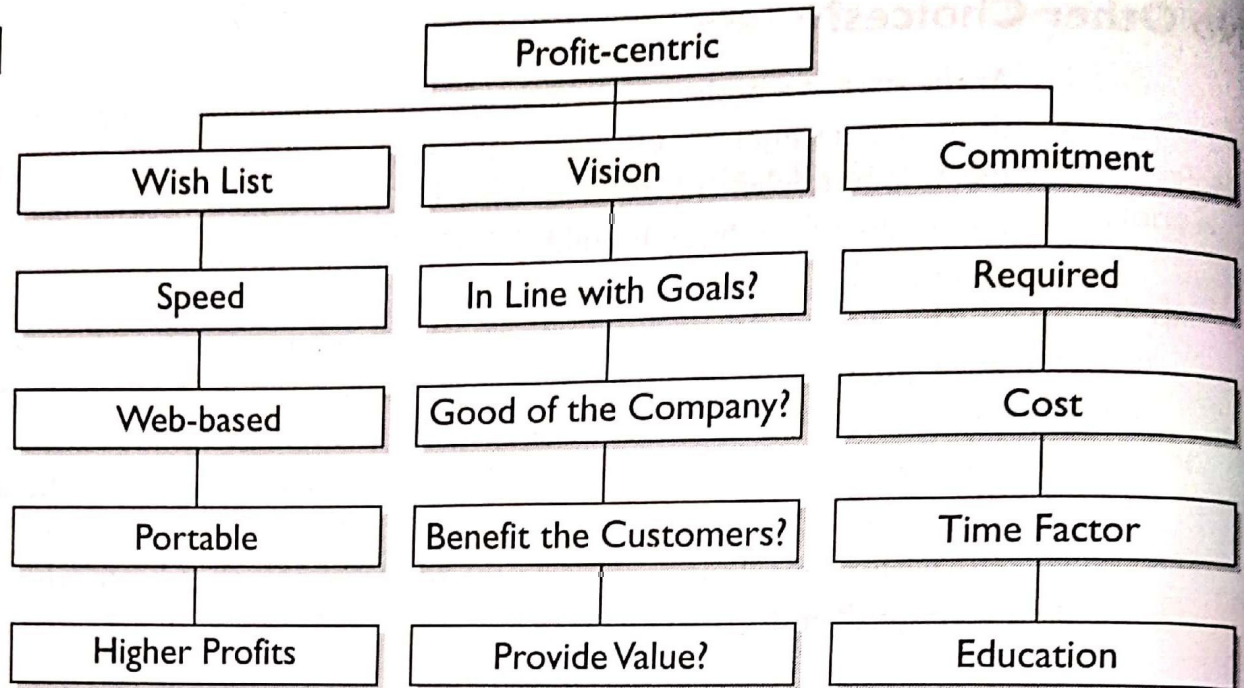
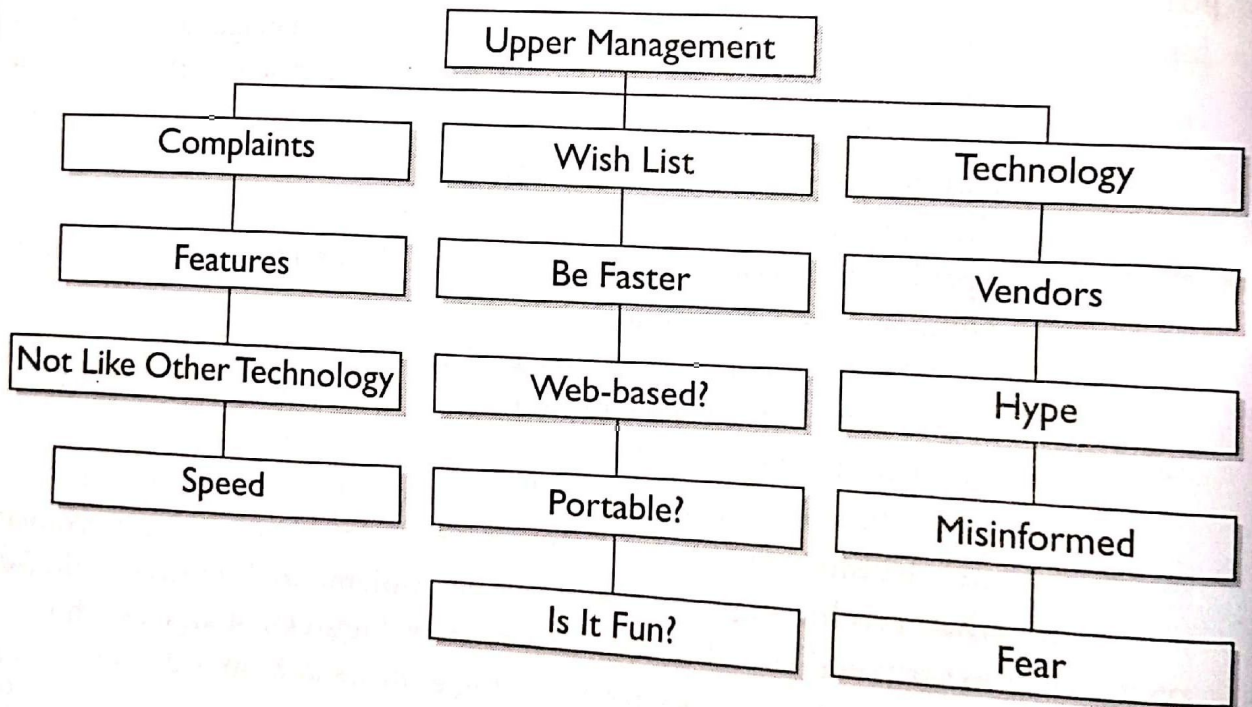


FIGURE 1-5

Decisions based on complaints, wishes, and sales spiels miss the mark.



As the project manager, your job is to ensure the success of your project and your career, and to ensure a successful impact on the bottom line. When you speak with management about the proposed project, you are on a fact-finding mission. Ask questions that can result in specific answers. For example,

- What do you want technology so-and-so to do?
- Why is this technology needed?
- How did you discover this technology?
- What led you to the decision this was the way for your company to go?

Sometimes a manager may come to you with a specific problem for you to solve. In these instances, the project is wider and more open-ended, and you'll have to drill deeper into the problem presented. Let's say for example that a vice president is complaining about the length of time it takes her to retrieve information on customers through your database. She just wants it faster.

Your questions may be something like this:

- Can you show me how the process is slow?
- Is it slow all the time or just some of the time?
- How long have you experienced this lag?
- Have others reported this problem?
- There are several things we can do to increase the speed of the process. Each may require a financial commitment initially but would result in faster responses for all of the database users. Do you want to investigate this route?

Notice how you're thinking like an executive. It's not technology for technology's sake. A new multiprocessor database server, gigabytes of memory, and faster switches are all cool stuff, but if they don't earn their keep, they are just toys. When you are inventing a project, think like an executive of a company and show how the investment in software, hardware, and talent can create more dollars by increasing productivity, safeguarding data, or streamlining business processes and ultimately making customers happy.

Your company may shift much of these requirement-gathering duties to a business analyst. That's fine, but you and the business analyst should still work together to examine the goals, requirements, and objectives of the project that will eventually

feed into your project scope. One approach that I've always liked is called SMART. For each project goal, you can determine if it meets all of the following to spell smart:

- **Specific** You to know what the specific requirements and deliverables are for your project.
- **Measurable** It's a good idea to avoid vague terms like fast, good, and happy. You need measurable metrics for the project requirements.
- **Achievable** The goals of the project should be achievable considering the resources, cost, and time required versus what's available in the organization. Management and customers that ask for a long list of requirements without providing a balance of time and monies are setting themselves up for disappointment.
- **Relevant** The goal of the project shouldn't be for someone's private agenda. The goals of the project should support the primary business need of the organization, provide an opportunity for the company, or solve a problem. Basically, all projects should either increase revenue or cut costs.
- **Time-bound** Requirements that are dreamy, are open-ended, and don't provide an easy link to conclusion aren't good requirements to accurately plan and create.

Interviewing the Stakeholders

As you know, stakeholders are individuals, groups, or organizations that have a direct interest in the outcome of the project. Your project's success or failure will directly affect the way they complete their work, use their existing technology, or continue to buy from your company. Stakeholders can include

- Management
- The project manager
- The project team
- Project sponsors
- Customers
- End users
- The community

In a technical project, the largest group of stakeholders is typically the users. Any project that has an impact on users needs to be discussed with them. This can be done in several different ways. The most popular, and sometimes most disruptive, is a focus group. Focus groups are often led by a professional, impartial moderator and are conversational in tone. Fair warning: if you don't have a good moderator that will direct the conversation to productive input, you might find that focus groups have a tendency to engage in gripe sessions about the problem rather than the solution. If you choose this route, take control of the discussion and keep the participants focused on the solution.

A focus group allows you to take a sampling from users from each affected department, present the project to them, and then listen to their input. You need to explain how the proposed technology will be better than the current, how it will solve problems, and, if necessary, why the decision is being made to change. Input from focus groups can alter your entire project for the good or the bad.

Another way to interview users is through an intranet site. This method can be an effective form of communication because users have the opportunity to share their opinions and have some say on your project. Of course, with this route, it's best to have your intranet site request responses to a survey so that the results can be tallied quickly. See Figure 1-6 for an example of an online survey.

Some project managers rely on the Delphi Technique. This approach is often used in risk management, but it can be applied to any consensus-gathering activity. The participants and their comments are anonymous. The participants are allowed to freely comment on the technology, their concerns, and their desires for the requirements. All of the comments are then shared with all of the participants, and they can agree with or discount them according to their opinions and experience. Because the process is anonymous, there is no fear of retribution or backlash, or of offending other participants. After several rounds of discussion, a consensus is formed on what is needed. An intranet site can automate the method and keep users anonymous.

Finally, learn how the users do their work now. This is especially important for situations like new software development, application upgrades, and new hardware technologies. This can be accomplished in a usability laboratory where mock screens, resembling the technology being implemented, are made available. Feedback from users helps design the solution to be implemented. By working with a user one-on-one, you can experience how the user is using the current technology, how the new technology will affect the user, and what the ultimate goal of a technical

FIGURE 1-6

An online survey can quickly tally users' input to a new technology.

Workflow Creation Survey

Your Name:

Your shift hours: Day Night

Check all the activities that you use on a daily basis:

Time reporting HR Reporting Fax submission
 Expense Request Expense Approval
 Room reservations Meeting Request
 Available time queries

Which form do you use the most?

Would you like to participate in the pilot testing group?
 No Yes

change should be: increased productivity and increased profits. Don't lose sight of that fact. This is really stakeholder observation, and it comes in two flavors:

- **Passive observation** Where the observer simply observes and documents the work and does not interact with stakeholders at all. It's sometimes called invisible observation.
- **Active observation** Where the observer interacts with the users, stops their work to ask questions, and can even get involved in the actual work to experience the users' processes. This approach is sometimes called visible observation.

As stakeholders are identified, they should be added to a stakeholder register. The stakeholder register helps with requirements gathering and also with project communication. The stakeholder register defines

- **Stakeholder identification information** Includes each stakeholder's contact information, role in the project, and organizational position.
- **Assessment information** Includes each stakeholder's specific requirements, project expectations, and project influence, along with the specific phases and deliverables each stakeholder is most interested in.

- **Stakeholder classification** Stakeholders that are for your project are considered positive stakeholders. Stakeholders that oppose your project are considered negative stakeholders or project resisters. Neutral stakeholders are indifferent to your project. This part of the stakeholder information may also include information on the stakeholder role in the company, such as internal employee, customer, or vendor.
- **Stakeholder management strategy** This may be included in the stakeholder register, though it's often a separate document. The stakeholder management strategy defines how the project manager will increase support for the project among the stakeholders and how interruptions and objections to the project can be minimized. The strategy considers which stakeholders wield power and influence over the project, interest level for the project, and strategies to overcome stakeholder objections.

Understanding how stakeholders complete their work can help the project manager and the project team understand how the project deliverables will be used. Understanding the end result of the project at project initiation will enable accurate identification of project goals.

Identifying the Project Needs

Thanks to Intel's Gordon Moore, it is a common belief that the processor chip speed of technology doubles every 18 months. This law has spread to practically all areas of technology, which, in turn, means the role of an IT project manager can be expected to change just as rapidly. IT project managers everywhere struggle with keeping teams, budgets, and goals focused. IT project management becomes even more tedious when you consider the economy, the instantaneous expectations of stockholders and management, the constant turmoil in the IT industry, and the flux of each team member's commitment to their own career.

Why do so many projects fail from the start? Projects fail for many different reasons: other projects take precedence, team members lose sight of the purpose of the project, and project managers try to do the work rather than lead the team, among others. At the root is a fundamental problem: vision. Vision, in project management terms, is the ability to clearly see the intangible and recognize the actions required to get there. One of your jobs is to develop, nurse, and transfer the vision to everyone on your team. The project manager, however, cannot have a clear vision of the project if the project needs are never clearly established.

Creating Reasonable Expectations

Once you've discovered your vision, create a goal. A *goal* should be a clearly stated fact, for example, "The new database will be installed and functional by December 6 of next year." A goal sums up the project plan in a positive, direct style. Every member of your team should know and pursue the goal. It's not all up to you. The goal establishes the direct need and purpose for undertaking the project.

When creating a goal for your project, be reasonable. Just as it would be foolish for a fat man to say, "I'm going to lose sixty pounds this month," it would be as unreasonable for you to create an impossible goal.

A logical goal is not just an idea, a guesstimate, or some dreamy date to be determined. A goal is actually the end result of a lot of hard work. Each IT project will, of course, have different attributes that determine each goal. Let's say for example that your company is going to be migrating your servers and desktops to the latest and greatest operating system.

With this scenario certain questions would have to be answered to determine the ultimate goal: Is the hardware adequate for the new OS? Will the applications work with the new OS? Will the team have adequate time to be trained and experiment with the new OS? These questions will help you create the end date for the goal.

Creating the Project Charter

Once you've determined the business needs for the project, it's time to create a project charter. A *project charter* is similar to the goal, but more official, more detailed, and in line with your company's vision and goals. Obviously a project can stem from a broad, general description of an IT implementation. A goal narrows the description and sets a deadline. A project charter formalizes the goal and serves as a map to the destination. Above all, however, a project charter formally authorizes the project.

Not only does a charter clearly define the project, its attributes, and its end results, it also identifies the project authorities. The project authorities are usually the project sponsor, the project manager, and the team leaders (if necessary), and the charter specifies the role and contact information for each.

Why do you need a project charter? Why not just hop right in and get to work? In a small company, plowing right into the project may turn out just fine. However,

in most companies, including smaller ones, a project charter is the foundation for success. Consider what the charter accomplishes:

- It authorizes the project.
- It defines the business need in full.
- It identifies the sponsor of the project.
- It identifies the project manager.
- It makes the project manager accountable for the project.
- It assigns authority to the project manager on behalf of the project sponsor.

Project Charter Elements

When you create the project charter, you can include just about any information on the project that you'd like. Generally though, consider these elements:

- **Official project name** Every project needs a name.
- **Project sponsor and contact information** The project sponsor should be someone in the organization who has the authority to assign the project manager power over the project resources.
- **Project manager and contact information** The project manager is officially named in the project charter.
- **Purpose of the project** The purpose defines the problem statement or opportunity the project will address.
- **Business case for the project** The business case defines why the project needs to happen and synchronizes the project to the company's strategic plan. The business case does not necessarily need to be included in the project charter, just referenced.
- **Key deliverables of the project** These are the primary products, services, or results the project should create.
- **General statement about how the team will approach the work** You might reference a software model you'll use or an approach you've used on similar projects in the past.

- **Basic timeline of when the project milestones will be reached** A milestone is an event in the project that shows progress. Milestones typically come at the end of a project phase.
- **Project resources, budget, staff, and vendors** Some of this information will be known at the launch of the project, given the nature of the work or the structure of the organization. Often, however, only the roles and responsibilities are known and the project is organized after the project charter is created.
- **Summary budget** Depending on the organization's rules and project approaches, this budget is usually based on a rough order of magnitude cost estimate with a defined range of variance or a maximum dollar amount for the project.
- **High level assumptions and constraints** An assumption is something that's believed to be true but hasn't necessarily been proven to be true, such as operating system and hardware compatibility. A constraint is anything that limits the project manager's options, such as that you're required to use the cinnamon roll software development model.
- **High-level risks** A risk is an uncertain event or condition that may have a positive or negative effect on the project. For example, data loss, network downtime, or the loss of key resources are all typical IT risks.

Every project needs a charter. It authorizes the project, creating a sense of responsibility for the project manager, a sense of ownership for the sponsor, and a sense of teamwork for the project team. The project charter will save you headaches, establish who's in charge, and move you to your goal more quickly and with more confidence.

Following is an example charter, based on a fictional company called Best Enterprises. The company's network currently consists of 380 computers running Windows NT, 11 Windows NT 4.0 servers, and 5 Novell NetWare servers. It has made a decision to move all the workstations to Windows Vista and all the servers, including the NetWare servers, to Windows 2008 Server.

Sample Project Charter

Project: Systems Upgrade: Workstations and Servers

Project Sponsor: Sharon Brenley, Chief Information Officer (x. 233)

Project Manager: Michael Sheron, Network Administrator (x. 234)

Project Team: Edward Bass, Ann Beringer, Mike Tallent, Carol Fox, Charlotte Harving, Kyle Hardie, Casey Murray, Dustin Bossmeyer, Mark Turner, Frank Simmons

Project Purpose All desktops will be upgraded to Windows Vista by December 30. All servers will be upgraded and moved to five Windows 2008 Servers by January 15 of the following year.

Business Case Windows NT has served our company for the past five years. We've learned to love it, embrace it, and grow with it. However, it's time to let it go. We'll be embracing a new technology from Microsoft, similar to Windows NT, but far superior: Windows Vista. Vista will allow us all to be more productive, more mobile, more secure, and more at ease.

In addition, there are new technologies that work excellently with Vista such as infrared networking for our manufacturing shop floors and new accounting software that will be implemented later this year.

Of course, our company will continue to embrace our web presence and the business we've earned there. Vista will allow us to follow that mindset and create greater opportunities for us all.

As our company has experienced over the past year, our servers are growing old, slow, and outdated. We'll be replacing the servers with six new multiprocessor servers loaded with RAM, redundant drives, and faster, reliable tape arrays—which means faster, more reliable, more productive work for us all. The operating system we'll be implementing for all of our servers will be Windows 2008.

Windows 2008 will allow our users to find resources faster, keep our network up longer, and provide ever-increasing security.

Project Results

- Windows Vista on every desktop and portable computer
- Windows 2008 Server installed on six new servers
- All implementation complete by January 15