CHAPTER 1

What Is Risk Management?

Can you name the ultimate project management four-letter word? You guessed it: R-I-S-K. This word is uttered either in complete confidence or under the breath as something the project manager wished he or she knew something more about.

Risk management is an integral part of project management. I'll start this chapter with a discussion of the basics of risk management, including the definition of risk, the purposes of risk management, the processes involved with risk management, and principles of risk management.

At the conclusion of this chapter, I'll introduce a case study that you can follow throughout the book. The project manager in the case study will handle issues in her project that I've discussed during the chapter. Don't be caught off guard if there are a few surprises along the way. After all, that's how most projects work.

Are you ready to dive in?

Defining Risk

Most of us tend to think of *risk* in terms of negative consequences. It's true that risks are potential events that pose threats to the project. But they're also potential opportunities. That's the side of the equation we often forget.

For instance, did you know you're taking a risk by reading this book? You're investing a few hours of your time reading about the topic of risk and risk management—and for that I thank you—but it's time that you can't regain once you expend it. You will (I hope) get to the end of this book and

realize you learned a lot more about risk than what you knew before you started. In that case, you've taken on a risk and benefited from it. The risk (the threat of a loss of time that you can't regain) will thus end in opportunity because you'll have achieved something at the conclusion of the activity that you didn't have in the beginning.

NOTE Risks are like exercise: no pain, no gain. Accomplishment is rarely possible without taking risks.

Likewise, you take other risks in your daily routine of which you probably aren't consciously aware. Perhaps you cross a busy intersection on the way from the bus stop to your office. You wait for the walk sign, look both ways before stepping out onto the curb, and proceed to the other side. But let's say you're late for a meeting with the big boss. You can stand on the corner and wait for the walk light, making you even later for the meeting, or you can cross against the light once the traffic has cleared. You weigh the consequences of both actions and decide to walk against traffic.

Chances are you probably didn't consciously perform a complete analysis of all the risks and their consequences involved in these two scenarios before reaching a decision. You likely made a snap judgment in both cases. In the first example, you picked up this book and thought you'd learn something by reading it, so you purchased a copy. In the second, you weighed the probability of getting hit by a car against the likelihood of getting yelled at by the big boss for being late. Even though the consequences of getting hit by a car have significantly more impact, you decided that being yelled at was a more likely outcome and chose to avoid this risk by taking on the other.

Organizations and individuals make decisions regarding project risks every day. They might use a formally recognized, documented process or go with the "fly-by-the-seat-of-your-pants" approach. I hope after reading this book you won't exercise snap judgment about project risks anymore but will instead develop a sound methodology for identifying, analyzing, prioritizing, and planning for risks.

Project Risk

All projects begin with goals. The point of the project is to meet and satisfy the goals the stakeholders agreed on when the project was undertaken. Risk is what prevents you from meeting those goals. (What? Your stakeholders didn't agree on the goals? We'll talk more about that in Chapter 4, "Preventing Scope and Schedule Risks.")

NOTE This may come as a surprise to all you eternal optimists out there, but all projects have risks. Unfortunately, covering your eyes and saying "you can't see me" doesn't make them go away.

As I stated earlier, most organizations, and most individuals, really, think about risks in terms of harm or danger. What's at stake, how much could we lose, and how bad will it hurt? are the initial questions that surface when we think about risk. I don't mean to be a downer—but I'll spend the majority of this book discussing risks from the perspective of the threats they pose to the project (and their consequences), because after all, unidentified and unplanned for risks are project killers. Chances are you've experienced a failed project or two as a result of unidentified or unplanned risks. As you progress through the book, I'll discuss techniques that lower or eliminate the consequences of risk and thus give your projects a head start to success.

Organizations and Project Risk

Executive managers are responsible for making decisions that benefit the corporation, the shareholders, the constituents, and the others they represent. Whether it is a for-profit company, a governmental organization, a not-for-profit organization, an education-focused business, and so on, the executives at the top have one goal in mind—maximize benefits to the organization and to their shareholders (all the while making themselves look good for future promotional purposes, but that's another book). To do

that, the company must minimize bad risks while maximizing the opportunities that good risks may present. This is where you come in.

For executives to make good decisions, they need information. Risk identification and analysis is a part of the vital information they'll use when determining a go or no-go decision regarding the project. And you are the one responsible for reporting on the risks and their potential impacts to the executives to assist them in their decision-making process.

Risk management, unfortunately, is probably one of the most often skipped project management knowledge areas on small-to-medium-sized projects. Many project managers I know take the attitude that they'll deal with the risks when and if they occur rather than take the time to identify and plan for them before beginning the work of the project.

On a small project, even just an hour or two of time spent on risk management can mean the difference between project success and project failure. The information you learn doing simple risk analysis could prove invaluable to your organization. I can't guarantee you project success, but I can guarantee you a much higher potential for project failure if you don't practice basic risk management techniques and inform your executives of the potential for bad juju before it hits.

Applying the risk management processes you'll learn about in this book will help you manage successful projects that improve your organization's performance, profits, efficiency, and market share; provide better market presence; and meet the organization's goals.

The Spotlight Series is geared toward those of you who manage small-to-medium-sized projects. You and I are the ones out there keeping the everyday business functions forging ahead with the small-to-medium-sized projects such as consolidating servers, launching websites, conducting space planning, implementing new purchasing procedures, and so on.

You may be asking, "What does *small* mean?" Well, the answer is relative. A small project with minimal impact to one organization could be huge with devastating impacts to another. For example, your $50,000 project in an organization that generates $500 million a year in revenues is relatively

harmless to the bottom line if the project should fail. Conversely, the failure of a $50,000 project to a small business owner could send her into bankruptcy. A small business owner likely couldn't afford the impact of even one risk consequence whereas the large organization could easily invest twice the original amount of the project without batting an eye. Therefore, the risk to the organization is relative as well. (Don't fool yourself, though; you'll have to report to someone about why the original $50,000 wasn't enough. The risk in this case rests with you. Did you plan the project appropriately? Did you estimate activities and budget accurately? And did you identify and plan safe, client-approved strategies for managing risks that could have caused the need for more project funds?)

Remember that your success with small projects will win you larger and larger project assignments. One way to assure you get those juicy assignments is not skipping the risk management processes.

Your company takes on risk with every project the executive team approves. They supply resources, time, money, and sometimes even stake their reputations on projects. Those same resources could be applied to other projects. But the decision makers weigh the possible outcomes of your project over another and decide to run with the project you're assigned. When projects are approved, the benefit, or perceived opportunity, outweighs the perceived threat of *not* completing the project. When the opposite is true, the project never sees the light of day.

NOTE Most organizations (and individuals) will take risks when the risk benefits outweigh the consequences of an undesirable outcome.

You may be scratching your head right now wondering why the coworker downwind from you got his project approved while yours was nixed for no apparent reason. Many things can come into play in decisions such as this, including power plays (someone somewhere doesn't like someone else who may benefit from the project), the executive in charge doesn't like the project, favoritism, and other similar office politics. More apparent reasons

might play a part as well, such as the project isn't in keeping with the company's mission, no money exists for the project, enough resources aren't available to apply to the project, the risks outweigh the benefits, and so on. I'm certain you can come up with as many reasons as I can.

As you explore risks and consequences and their impact on the organization through the course of this book, keep in mind that executives sometimes seem to defy logical reason when making decisions. They choose projects that have risks with potentially devastating consequences to the organization while brushing off other projects that to us seem like a no-brainer. So when you're wondering about why your project wasn't approved—my advice is don't. Move on to your next assignment and apply solid project management and risk management techniques to help assure its success.

Purpose of Risk Management

The good news is risk isn't the enemy. The bad news is the consequences of ignoring risk can be. What you don't know can hurt you when it comes to risk. The goal of risk management is identifying potential risks, analyzing risks to determine those that have the greatest probability of occurring, identifying the risks that have the greatest impact on the project if they should occur, and defining plans that help mitigate or lessen the risk's impact or avoid the risks while making the most of opportunity.

Project management means applying skills, knowledge, and established project management tools and techniques to your projects to produce the best results possible while meeting stakeholder expectations.

Risk management means applying skills, knowledge, and risk management tools and techniques to your projects to reduce threats to an acceptable level while maximizing opportunities.

More specifically, risk management concerns these five areas:

- Identifying and documenting risks
- Analyzing and prioritizing risks
- Performing risk planning

- Monitoring risk plans and applying controls
- Performing risk audits and reviews

I'll describe each of these processes in further detail in their own chapters, so in this section I'll stick with a high-level definition for each. These processes are highly interactive, and to understand how they all work together, you'll first look at the purpose for each.

Identifying and documenting risks This one is fairly straightforward. The first step of your risk management approach is identifying and writing down all the potential risks that exist on your project. It doesn't stop there, however. Identifying risks occurs throughout the life of the project. Every life-cycle phase brings its own challenges and opportunities, which means more opportunity for project risk.

Analyzing and prioritizing risks These processes are a little more complicated. Now that you know what the risks are, you'll apply tools and techniques to determine which ones have the greatest potential for harm (and for good) to the project. The analyzing and prioritizing process determines which risks require plans.

Performing risk planning Risk planning concerns developing strategies that document how you'll deal with the risks if they occur. Not all risks require response plans. You may choose to live with the consequences of a risk event if it occurs.

Monitoring risk plans and applying controls This process involves evaluating the risk response plans you've put into action and implementing any corrections needed to make certain the plan is effective and the risks are handled appropriately and timely.

Performing risk audits and reviews This process is different from the previous one because it's performed after the project is completed. Monitoring risks occurs throughout the life of the project. Performing a risk audit is a lot like documenting lessons learned. You'll document information as the project progresses, but the risk audit analysis is performed at the end of the project.

Iterative Process

You can see from the discussion in the previous section how the risk management processes interact. Once the project manager (or project team) identifies a risk, she analyzes it to determine its potential impact on the project. Then she develops a plan that outlines how to deal with the impacts of the risk should they occur, and monitors, tracks, and perhaps changes the plan as a result of new information. This means she may identify new risks, requiring more plans, and so on.

Risk management, just like project management, is an iterative process, and effective communication is at its core. Without communication and constructive information exchange between key stakeholders, project team members, management, the project sponsor, and so on, risk management wouldn't work well. The same is true for the project management processes.

The following illustration shows the iterative nature of risk management and the interaction between its processes.

Risk management is tightly integrated with the project management processes and, like project management itself, is not a one-time process. To illustrate this point, the next illustration shows the project life-cycle processes (in italics in the graphic) plotted with the risk management processes to demonstrate how closely linked they are. (Appendix A

contains a refresher on the project management life-cycle processes if you need a review.)

Probability and Impact

I've already touched on two topics that need a little further explanation before you proceed—probability and impact. You'll spend a great deal of time with these subjects in Chapter 5, "Analyzing and Prioritizing Risks," but for now some explanations are in order.

Probability is simply the likelihood that a risk event will occur. Let's say you're busy planning the annual St. Patrick's Day parade. The weather forecasters say today has a 20 percent chance of rain. Therefore, the probability it will rain on your parade is 20 percent.

Risk *impact* is the result of the probability of the risk event occurring plus the consequences of the risk event. Impact, in laymen's terms, tells you how bad or how good the realized risk is going to hurt.

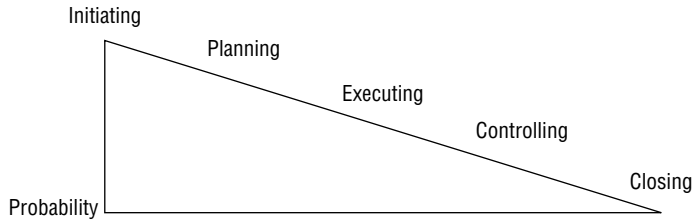
Back to the rain example. Perhaps your organization has invested $75,000 in a float scheduled to appear in the parade's third position. This is a prime spot because folks watching the parade are still energized and watching the events closely. This means the advertising panel on the side of the float with your organization's name in huge letters is going to get a

lot of visibility. This translates, you hope, into more business. However, if it rains, the impact to the organization is the $75,000 (at a minimum) invested in the float. The potential loss of business is also an impact of this risk event and could be added to the $75,000 to determine a total financial impact. So how bad will it hurt if it rains? The cost is $75,000 plus the loss of business and other time or resources expended preparing the float, assuming a total washout.

Propensity for Risk

The propensity for project risk depends on the project's life-cycle phase. Risks are most likely to occur during the Initiating phase and least likely to occur during the Closing phase. Don't let this fool you though: risks can occur at any time during the course of the project. Intuitively, it makes a lot of sense that risks have a greater chance of occurring earlier in the project. The beginning of the project has lots of uncertainty. Cost-benefit analyses are being performed, resources are being identified but may not be available, market forces may cause a shift in focus, and so on. Many events can happen early on that increase project risk (including the risk of the project getting killed for a host of reasons), so the probability for risk is greatest in the early phases. As you approach the closing phase, the majority of the project work is completed, so the probability of risk events occurring decreases. Chances are a few risks will occur along the way, but I know you have great plans in place to handle them.

You can see the relationship of risks and their probability across the project life-cycle processes in the following graphic.



The opposite can be said for risk impact. At the beginning of the project, the impact of a risk event is less than it is later in the project life cycle—with the exception of the risk of your project being killed altogether.

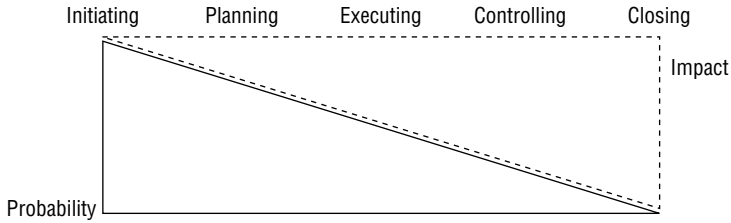
Let's say the project is proceeding as planned for this example. Not a lot of energy or resource is usually expended in the Initiating phase of a project, so if a risk event occurs, the consequences it produces aren't likely devastating. For example, perhaps you're working on a software upgrade project. During the planning phase you discover that the software you're considering purchasing requires an upgrade of the operating system that lives on the servers and an upgrade of software on every desktop in your organization. Fortunately for you, you made this discovery during the planning phase. At this point, you can plan for an increase in the budget based on this new information, or the CIO can decide to kill the project and forgo installing the new software altogether with little organizational resource spent or lost.

The consequences or impact of this risk at this phase are minimal because the only resources usually expended at this point are human resources spent on planning, gathering information, and talking with stakeholders.

Now using the same example, imagine you've purchased the software and are in the later phases of the project. You've completed all the preliminary work and are ready to load the new software. Gulp. It isn't until now, somewhere in the Executing and Controlling phase, that you discover you also need to upgrade the server and desktops. The consequences of this occurring at this stage of the project are much higher. You've already put out the money for the software purchase, you've also spent company resources performing all the tasks of the project, and now you can't proceed without the operating system upgrade. The risk is much higher at this point in the project. The software you've purchased is useless without the other upgrades, and requesting additional funds at this point in the project may not fly (or be possible, depending on budget constraints). But, hey, the big boss can always use the paycheck of the project manager who allowed this

risk event to occur to purchase the desktop and server upgrades once the project manager is gone.

The point is, the further you progress in the project life cycle, the less likely it is the risk event will occur, but the greater the impact to the project if the risk event does occur. The following graphic shows the inverse relationship of probability and impact as the project progresses through the life-cycle processes.



A Practical Risk Management Approach

In practical terms, a solid risk management methodology allows you to manage your project proactively. By that I mean you're in control and prepared for most anything that can happen on the project. On the other hand, reacting to events as they occur without any forethought regarding their probability of occurring (or what kind of trouble they could cause) is nothing more than crisis management.

A risk management approach starts first with the determination that you'll create and implement a risk management plan and not let problems run amok and get the upper hand. Identifying, analyzing, prioritizing, and then planning for the management of risks and monitoring the plans is a much better approach than allowing problems to change the outcome of your project because they weren't planned for ahead of time.

Earlier I talked about the five purposes for risk management. These are actually action items, or steps, you'll perform throughout the course of the project to actively engage in risk management. The Project Management

Institute's (PMI) *A Guide to the Project Management Body of Knowledge*—herein referred to as *A Guide to the PMBOK*—categorizes its Risk Management Knowledge Area into six processes. They are: Risk Management Planning, Risk Identification, Qualitative Risk Analysis, Quantitative Risk Analysis, Risk Response Planning, and Risk Monitoring and Control. Let's do a quick review of each of these processes next. As you've probably guessed, I'll be covering each of these areas more thoroughly as you progress through the book.

Risk Management Planning The purpose of the Risk Management Planning process is to create a *risk management plan*. Don't confuse this plan with the "what" of risk planning. The risk management plan is the "how" you'll go about dealing with risks on your project. It describes how you define, monitor, and control risks throughout the project. It also describes how each of the remaining processes in this knowledge area are implemented, monitored, and controlled throughout the life of the project. I'll discuss the risk management plan in more detail in the Risk Management Plan section later in this chapter.

Risk Identification The Risk Identification process involves identifying and documenting all the risks that could impact the project. This includes reviewing project documents, categorizing risks, reviewing checklists, using techniques such as brainstorming to identify risks, and ultimately producing a list of project risks. I'll discuss Risk Identification in detail in Chapter 2, "Identifying and Documenting Risks."

Qualitative Risk Analysis The purpose of the Qualitative Risk Analysis process is to determine the consequences the risks you identified in the Risk Identification process may have on the project objectives. It involves determining the probability that the risks will occur and ranking risks according to their effect on the project objectives. I'll discuss Qualitative Risk Analysis techniques in Chapter 5.

Quantitative Risk Analysis The Quantitative Risk Analysis process evaluates the impacts of risk and quantifies the overall risk exposure of the project by assigning numeric probabilities to each risk and their

impacts on the project objectives. The primary output of this process is a prioritized list of quantified project risks. I'll cover Quantitative Risk Analysis techniques in Chapter 5.

Risk Response Planning Risk Response Planning involves deciding what actions to take to reduce threats while maximizing opportunities discovered during the performance of the risk processes. This process includes assigning staff members as risk owners. The risk owners are responsible for carrying out the risk response plans outlined during this process when the risk event occurs (or is about to occur). To read more about Risk Response Planning, see Chapter 6, "Defining Risk Response Plans."

Risk Monitoring and Control The purpose of the Risk Monitoring and Control process is to respond to risks as they occur, track and monitor identified risks, evaluate risk response plans for effectiveness, identify new risks, and ensure proper risk management procedures are being followed as defined in the risk management plan. I'll discuss Risk Monitoring and Control further in Chapter 7, "Implementing and Monitoring Risk Response Plans."

Table 1.1 ties *A Guide to the PMBOK*'s Risk Management Knowledge Area processes to the previous risk management action steps and the frequency or timing of each. Remember that while the risk management processes are broken out individually, many times you'll combine one or more of these processes into one step.

TABLE 1.1: Risk Management Processes and Purposes

PROCESS	ACTION STEP	TIMING
Risk Management Planning	Create risk management plan detailing how risks are managed for this project.	Once during Planning phase.
Risk Identification	Identify and document risks.	Ongoing throughout all phases of the project.
Qualitative Risk Analysis	Analyze and prioritize risks.	When new risks are identified.

TABLE 1.1 CONTINUED: Risk Management Processes and Purposes

PROCESS	ACTION STEP	TIMING
Quantitative Risk Analysis	Analyze and prioritize risks.	When new risks are identified.
Risk Response Planning	Create response plans and strategies for those risks with highest probability and impact.	When new risks are identified.
Risk Monitoring and Control	Monitor the effectiveness of the response plans.	Monitor response plans at project status meetings. Identify new risks and reevaluate throughout all project phases.
Risk Monitoring and Control	Perform risk audit and reviews to determine effectiveness of overall risk management plan.	Once during the Closing phase.

Now that I've covered the bases and we're all using the same risk process terminology, let's look closer at risks.

Risks versus Problems

Risks aren't problems. The problem is that the word *problems* is present tense. That is, they're in the process of occurring. Risks are potential events that threaten the work or completion of the project (or present the project team with opportunities). Therefore, a problem isn't a risk—it's a crisis.

Firefighters are trained to, well, put out fires. If you don't identify and plan for risks, you'll likely become a firefighter by default. While your fires aren't the life-threatening situations real firefighters put themselves into daily for our benefit (thank you!), they can burn you. Which of the following sounds more appealing to you?

- Arming yourself with the ability to anticipate when a risk event may occur and preparing plans that are ready to implement the minute you see smoke, thus preventing a major forest fire.

- Hosing down problems all around you as they spring up. And while you're doing that, stomping out the hot spots with your Harley-Davidson leather boots, never knowing for sure which one is the hottest and which one might sneak out of control and burn down the project while you're not looking.

Surely you chose the first bullet.

Unfortunately, we've all seen and experienced projects that are managed in crisis mode rather than proactive mode. It's a little like walking through the fun house at the amusement park and never knowing what's going to jump out at you next. All of us face those out-of-the-blue problems occasionally, but if this is the normal course of events on your projects, you should consider getting out of crisis management and into risk management. It's much safer work.

NOTE Using proper risk management planning tools and techniques allows you to manage your project proactively instead of reactively.

Let's look at an example of risks versus problems. Remember, problems are events that are in the process of occurring with no forethought put into planning for their probability or impact.

Ned, a photojournalist friend I've just made up for purposes of this illustration, is on his way to his next assignment. He and three assistants are headed to Paris, France. Fortunately, one of Ned's assistants, Sherry, is trained in project management techniques and planned this assignment as a project (smart move). Ned, a brilliant photographer and writer, isn't a project manager—he deals with risks as they occur. Upon arriving in Paris, Ned and his co-workers are faced with one problem after the other. Table 1.2 shows a partial list of problems the group has encountered along with the reaction of Ned (the crisis manager) versus the proactive risk planning by the project manager.

TABLE 1.2: Firefighters versus Project Managers

CRISIS MANAGER (NED)	PROJECT MANAGER (SHERRY)
Lost passport	
Searches through every pocket of his carry-on bag while exclaiming, "I've lost my passport!"	Retrieves the photocopied page of the missing passport from the packet of travel documents collected before leaving on the assignment and presents it to an embassy representative for a passport replacement.
Missing luggage (the one with the camera equipment)	
After shouting expletives, asks the baggage claim attendant where the closest photography shop is located. The baggage claim attendant doesn't answer and pretends she can't speak English.	Has made arrangements with their regular photo supplier to send needed equipment overnight on a moment's notice. Also has previously separated the equipment into two or three bags so that not all the equipment is lost if a bag comes up missing.
Pouring rain the first day of the shoot	
Mopes and pouts about the bad weather while frantically searching for an alternative location to shoot so the whole day isn't lost.	Retrieves the project schedule and switches the indoor shoot (scheduled for day three) with today's activities.

As you can see, our project manager, Sherry, had a much better approach to each of these risks and was well prepared with plans in the event they occurred. Poor Ned was forced to deal with these situations as they came up. His reactions were a bit frazzled.

Risk Management Plan

You may be asking, "How do you go about implementing a practical approach to risk management without having to set up an entire department of folks to do it?" I'm glad you asked.

Your first order of business is creating a risk management plan. Remember that the risk management plan describes how you will go about defining and monitoring risks, not the specifics of how you'll deal with individual

risks. (I'll get to the how-to specifics of performing the identification and planning processes in later chapters.)

NOTE The risk management plan describes how each of the risk processes (Risk Identification, Qualitative Risk Analysis, Quantitative Risk Analysis, Risk Response Planning, and Risk Monitoring and Control) will be implemented, monitored, and controlled throughout the life of the project.

The primary elements of a risk management plan are as follows:

Methodology This section describes what methods you'll use to perform risk management. For example, you'd describe the types of techniques you'll use to identify risks, how you'll document your risk information, and perhaps how you'll tackle determining risk response plan strategies. It should also describe how newly identified risks are reported to the project manager.

Roles and responsibilities This section includes the roles of all the major stakeholders (including you as the project manager) as it pertains to risk identification and control and, most important, the roles of the risk owners, including their responsibilities in implementing and monitoring response plans.

Budget Medium-to-large-sized projects, or those with an extraordinary amount of risks with high impacts, may have a special budget for managing risk. If a risk budget exists, it's documented here.

Risk scoring Qualitative and quantitative analysis processes are used to rank and score risks. You can use several methods to do this, which you'll explore in Chapter 5. This section of the risk management plan should include a description of the scoring method you'll use, how you developed the scoring method, and the thresholds that indicate you should develop and implement a response plan.

Reporting formats This section should detail how the risk management information will be maintained, updated, and reported to project participants.

Tracking This section includes a description of the how you'll document the history of the risk activities for the current project and how the risk processes will be audited. You can refer to this information as you progress through the project and also when you work on future projects that are similar to this one.

NOTE You can find a copy of a Risk Management Plan template for your use on the Sybex website at www.sybex.com.

Risk Triggers

Imagine this: You and a group of friends (along with half the population of the city) stake out a spot to watch the annual fireworks show. You spread out a blanket, pull out the pop and snacks from your backpack, and create a nice spread. A thunderous boom sounds in the distance. Everyone looks up, anticipating the first brilliant display. What they see instead is a streak of lightning followed by another boom—a sure sign everyone ought to pack up and head for safety.

Risk triggers are signs that a risk event is about to occur. Like the thunder example, a risk trigger signals that something bigger is on the horizon. Watching for risk triggers is an important activity in your overall risk management approach. You and your team members should always be on the lookout for risk triggers. Like the thunder example, they'll signal you that a risk event is approaching.

Watch for risk triggers from the team members themselves as well. For example, a team member who previously seemed happy and upbeat about the project begins joking about finding another job or making comments that you can get along just fine without them. These statements, obviously,

could signal that the team member really is thinking of leaving. The bad news concerning this risk trigger is that schedule delays or increased costs may result. Heed what your team members are saying and evaluate it in light of project risks, even when they act like they're joking.

Continuous Process

Risk management isn't a one-person job—unless your project is extremely small and you aren't only the project manager but the project team as well. Even then, you still have a project sponsor, a boss who you report to, and stakeholders who will benefit from the project's completion. Each of these folks can help you remain on the lookout for risk triggers, identify and prioritize risks, and identify response plans to deal with the risks.

Risk management is a continuous, iterative process oftentimes called *progressive elaboration*. New risks can appear at any point in the project. They're more likely to occur early on in the project's life cycle, but don't let that lull you into a false sense of security. Remain on the lookout for new risks and for risk triggers throughout all the phases of the project. Continuously monitor response plans that have been implemented, and, last but not least, don't be a firefighter—be a risk manager!

Communication Is the Key

I can't say it enough—communicating is the most important responsibility you have as a project manager. Ninety percent of your time is spent in this activity. I can't think of any other element that has a greater impact on your project's success than good communication. And like risk management, good project communications starts with a plan.

The Communications Plan

The communications planning process says that all projects should have a communications management plan. I refer to this plan as the Big Picture plan because it tells me at a glance who the key stakeholders are, what their

information needs are, how they want the information reported, when they want the information distributed, and the format of the delivery. I can tell from this plan who should be the first one notified when a risk event takes a turn for the worse and who to call when it's time to celebrate a success. I require a communications plan (along with a scope statement, risk plan, and project schedule) for all projects our department undertakes, no matter how small or large the project is.

The communications plan works together with the risk management plan to determine who, how, and when information regarding the status of risks and the progress of the response plans gets reported.

NOTE The risk plan details how you'll carry out the risk processes, and the communications plan documents how the information regarding the status of the processes gets communicated and to what parties.

Communicating risk status is just as important to the health of the project as communicating overall project status. It's a good idea to devote a portion of every project status meeting to risk status. This is an opportunity to review the key risks that you have identified and check the pulse of those risk events that still appear dormant. You should also review any response plans in place as a result of a risk event and discuss the effectiveness of the risk plan. This is also an opportunity to identify new risks and watch for risk triggers.

Exchanging Information

Communicating is the process of exchanging information. Communication has three parts: a sender, the message, and a receiver. You and I are actively engaged in communicating now. I'm the sender. I've used the written form of communication to prepare this book that you're reading. If I were speaking about this information at a conference where you were an audience participant, all the components of the information exchange still exist, but the form of the communication changes to verbal.

As the project manager, you'll use plenty of both forms of communication. You'll also act as both sender and receiver of information. For example, your risk management plan, risk response plans, risk lists, and so on should all take the written form. When you're providing risk status to stakeholders or instructing team members on the course of action to take when a risk event occurs, you may use both written and verbal forms.

It's a Two-Way Street

Information exchange is a two-way street. Both the sender and the receiver have responsibilities to assure the message is clear and understood as it was intended.

Senders make certain the information is clear and precise and is presented to the receivers in a way that is easily understood by the receivers. For example, if I were speaking to a group of high schoolers on the topic of risk management, my approach and the content of my message would be much different than if I were speaking with project management professionals with years of hands-on experience under their belts.

Receivers, likewise, share in the responsibility of communicating clearly. Receivers have a tendency to filter the information they hear through their own perceptions. For example, if I told you that risk management planning should only be performed on large projects, you'd probably start tuning me out because you know that information isn't correct.

Table 1.3 shows the relationship between senders and receivers and the responsibility each has in the communication exchange.

TABLE 1.3: Senders and Receivers in the Information Exchange

SENDERS' RESPONSIBILITY	RECEIVERS' RESPONSIBILITY
Make the message clear and concise.	Read and listen to the message for understanding.
Target the information for the right audience.	Avoid jumping to conclusions. Interpret the information at face value.
Avoid unnecessary detail and technical jargon.	Ask clarifying questions.
Keep it honest.	Control your emotions.

Active Listening

I believe one of the most important duties you have as a receiver is to practice active listening. You may think this applies only to situations where someone is speaking to you, but you can practice active listening when reading as well. I've listed some pointers for active listening techniques in both the written and verbal forms of communication.

The following are active listening techniques for written forms of communication:

- Scan the document first for key issues.
- Paraphrase what you read in your own words.
- Read the document for understanding without filtering it through your emotions or perceptions.
- Recognize cultural differences in the presentation of the information.

The following are active listening techniques for verbal forms of communication:

- Show genuine interest in the speaker by nodding in agreement and asking questions when appropriate.
- Make eye contact with the speaker.
- Focus on the topic at hand.
- Refrain from interrupting.
- Ask clarifying questions.
- Paraphrase what you heard.

Communication is a critical component of successful risk management. While you can't know it all, even with good communication, establishing effective working relationships and open lines of communication with your project team members and stakeholders will keep the information exchange flowing. Half the battle is getting the information in the first place; the other half is what you do with it once you have it. Likewise, the amount and

method of communication also has an impact on the risk impact and consequences.

Unspoken Clues

If you knew everything there was to know about the project, there would be no risk and, hence, no reason for this book.

Back to reality—this scenario doesn't exist. It isn't possible for you to know everything. Thankfully, you do know certain things about your project and you can use certain techniques for increasing the amount of information you have. More information means an increased ability to determine risk and the predictability of the risks outcomes and impacts. One of the most important ways to increase the amount of information you have is through communication. Get out there and talk to your team members and stakeholders. Get a feel for their attitudes about how the project is progressing and whether they feel risk events are imminent. But keep an eye out for the unspoken attitudes and shifts in attention or mood. This is where you may very well realize a risk event is about to occur, or a new risk identified, that you wouldn't have found any other way.

Let's look at some of the other more subtle dynamics you should watch for when interacting with project participants.

Clues from stakeholders Especially listen for things they don't necessarily intend to tell you. For example, while discussing one of the risk events with a stakeholder, she tells you, "Don't worry about Jerry; he won't be a problem." Every project you've ever worked on that required help from Jerry or his group took every ounce of negotiation and finagling you could drum up to get him to cooperate. This statement may be hinting that Jerry is moving on to another company. However, until you know the facts, continue planning as though you'll have to work with him.

Bad attitudes and lack of motivation These are always signs that trouble is brewing with the team. Spend some one-on-one time with key

team members to determine the cause. Perhaps they're not in agreement with a recent project decision or the direction things are headed. Don't ignore their insights. Simply taking the time to hear them out may be all that's needed to get them back on track.

Body language This is another silent clue that something more is going on than what's being said. Again, don't hesitate to ask questions and give folks an opportunity to tell you what they're thinking.

Lack of participation Key team members hem and haw when they're usually forthright with their opinions. They don't participate in discussions or put forth lackluster ideas. A long list of issues could be going on here—everything from personal issues to project issues. If it's project issues, you want to know about them. If it's personal issues and this employee is a key project member, you need to know enough of the situation to assess the risks and plan accordingly.

High absenteeism The same thing applies here as the previous bullet. The reasons could be wholly uninvolved with the project, but then again, trouble could be brewing. Do yourself and the project a favor and check into it.

Stay attuned to what you're hearing and what your gut reactions are telling you and follow up on them. It's important to gather as much information as you can, and paying attention to the factors listed previously are a good place to start. I encourage you to not jump to conclusions in any of these situations. Ask questions and get the facts so you'll have concrete information to determine if threats and opportunities exist. As the project manager, your primary responsibility is to satisfactorily complete the goals of the project on time, on budget, within scope, and while meeting or exceeding stakeholder expectations. The remainder of this book will discuss the approaches and techniques you can use to identify, analyze, and plan for risks. In turn, this helps you keep your executives, stakeholders, and project team members informed and your project headed toward a successful completion.

Case Study

Emily Lewis is a well-respected team leader with Customer Centric Company. Customer Centric is an upstart company that markets credit-card-processing services to businesses. This includes the card-swipe machines that you see at every check stand and, most important, the processing of the credit transactions.

Emily was recently named the project manager for a new project the CIO has dubbed CIP (he pronounces it "sip"), which stands for Customer Information Integration Project.

Customer Centric currently has a homegrown customer relationship management software program. Their current program performs the following functions:

- Maintains customer account information
- Tracks customer queries
- Contains a basic knowledge tree with answers to common questions

Customer Centric has two call centers staffed with 30 to 50 people each. Each call center serves two functions: it addresses customer questions about their service, and it is a telemarketing center that makes and sets up appointments for salespeople in the field.

The current customer relationship management program (CRM) system doesn't interface with the company's enterprise resource planning (ERP) system. That means call center folks must access two separate systems when talking with customers. They must go to the CRM system to get the customer account information and to track the customer query and then log onto the ERP system to obtain accounting and inventory information. The ERP system performs the following functions:

- Tracks accounts receivable
- Tracks accounts payable

- Maintains manufacturing information such as inventory counts of card-swipe machines and inventory of parts
- Maintains human resource data including payroll, benefits tracking, job applications, and performance reviews

The objective of the CIP project is to purchase a new CRM package that integrates with the existing ERP system and thereby increases the efficiency of the call center, decreases average call times, and increases customer satisfaction levels of call center calls. The new system will also allow the tracking of sales calls and the recording of the result of the sales appointment.

The sales staff in the field can be notified of new appointments via e-mail, fax, or text messaging to their mobile phones. The sales staff will access the CRM system via the Internet to record the results of their sales calls.

Emily is fairly new to the project management field. She has had great success with a handful of small projects but has never worked on any project this large. This is considered a medium-sized project from the organization's perspective. From Emily's perspective, she views it as huge. She wants to assure this project is a success. She has already signed up to attend some project management training classes, but she won't get everything she needs fast enough to kick this project off; therefore, she bought some books in the Spotlight Series to help her.

Emily has documented the goals of the project, and the scope statement was agreed to and signed by the executive sponsor (her CIO, Bill Olsen) and the key stakeholders (whom you'll meet in later chapters). She has reviewed the risk processes with her project team, and her next task includes preparing the risk management plan. In the risk management plan, she'll document the following:

Methodology

The processes for identifying and documenting risks (I'll talk about these in Chapter 2)

The processes for analyzing and prioritizing risks

The methods for developing risk response plans

The methods for monitoring risk response plans

Roles and responsibilities

The roles and responsibilities of risk reporters

The roles and responsibilities of risk owners

The roles and responsibilities of the project sponsor, project manager, and project team members in risk management

Budget

The budget amount for risk response plans

The budget amount for contingencies

Reporting and tracking formats

The recording mechanism for risks and response plans

The tracking mechanism for updating risk lists and response plans

The reporting formats for updating the project stakeholders regarding risks

I'll discuss each of these sections and the ideas presented at length in the chapters to come. Remember that Emily has already read the entire book, so she knows what information to plug into each of these sections.