Chapter 10. Project Communications Management Learning Objectives

After reading this chapter, you will be able to:

- Discuss the role of soft skills in IT project management, and highlight the importance of good communications as one means of achieving project success
- Review key concepts related to communications
- Explain the elements of planning project communications and how to create a communications management plan
- Describe how to manage communications, including communication technologies, media, and performance reporting
- Discuss methods for controlling communications to ensure that information needs are met throughout the life of the project
- List various methods for improving project communications, such as running effective meetings, using various technologies effectively, and using templates
- Describe how software can enhance project communications management
- Discuss considerations for agile/adaptive environments

Opening Case

Peter Gumpert worked his way up the corporate ladder in a large telecommunications company. He was intelligent, competent, and a strong leader, but the company's new fiber-optic undersea telecommunications program was much larger and more complicated than anything he had previously worked on, let alone managed. This program consisted of several distinct projects, and Peter was in charge of overseeing them all. The changing marketplace for undersea telecommunications systems and the large number of projects involved made communications and flexibility critical concerns for Peter. For missing milestone and completion dates, his company would suffer financial penalties ranging from thousands of dollars per day for smaller projects to more than $250,000 per day for larger projects. Many projects depended on the success of other projects, so Peter had to understand and actively manage those critical interfaces.

Peter held several informal and formal discussions with the project managers who reported to him on the program. He worked with them and his project executive assistant, Christine Braun, to develop a communications plan for the program. He was still unsure, however, about the best way to distribute information and manage all of the

inevitable changes that would occur. He also wanted to develop consistent ways for project managers to develop their plans and track performance without stifling their creativity and autonomy. Christine suggested that they consider using some new communications technologies to keep important project information up to date and synchronized. Although Peter knew a lot about telecommunications and laying fiber-optic lines, he was not an expert in using information technology (IT) to improve the communication process. In fact, that was part of the reason he had asked Christine to be his assistant. Could they really develop a process for communicating that would be flexible and easy to use? Time was of the essence, as more projects were being added to the fiber-optic undersea telecommunications program every week.

The Importance of Project Communications Management

Many experts agree that the greatest threat to the success of any project, especially IT projects, is a failure to communicate. Many problems in other knowledge areas, such as an unclear scope or unrealistic schedules, indicate problems with communication. It is crucial for project managers and their teams to make good communication a priority, especially with top management and other key stakeholders.

The IT field is constantly changing, and these changes come with a great deal of technical jargon. When computer professionals communicate with people who aren't as proficient with or knowledgeable about computers—a group that includes many business professionals and senior managers—technical jargon can often complicate matters and create confusion. Even though most people use computers today, the gap between users and developers increases as technology advances. This gap in knowledge and experience causes some of the communication problems between technical professionals and their business colleagues. Of course, not every computer professional is a poor communicator, but most people in any field can improve their communication skills.

In addition, many educational systems for IT graduates promote strong technical skills over strong communication and social skills. Most IT-related degree programs have many technical requirements, but few require courses in communications (speaking, writing, listening), psychology, sociology, and the humanities. People often assume that learning these soft skills is easy, but they *are* important skills, so people must learn and develop them.

Many studies have shown that IT professionals need these soft skills just as much or even more than other skills. You cannot totally separate technical skills and soft skills when working on IT projects. For projects to succeed, every project team member needs both types of skills, and needs to develop them continuously through formal education and on-the-job

training.

Studies continue to show a high demand for IT professionals and the importance of good communication and business skills. According to an article in the *International Journal of Business and Social Science*:

- Organizations are looking for workers with the correct mix of technical, soft, and business skills.
- The most important non-technical skills are problem solving, team work, listening, the ability to adapt to new technologies and languages, time management, the ability to transfer knowledge to application, multitasking, verbal communication, the ability to visualize and conceptualize, "be the customer" mentality, interpersonal skills, understanding business culture, inter-team communication, and give and receive constructive criticism.
- "The need for these non-technical skills is so great that some IT companies indicate that they will hire individuals with minimum technical skills so long as they demonstrate solid soft and business skills."*

This chapter highlights keys to good communications, describes the processes of project communications management, provides suggestions for improving communications, and describes how software can assist in project communications management.

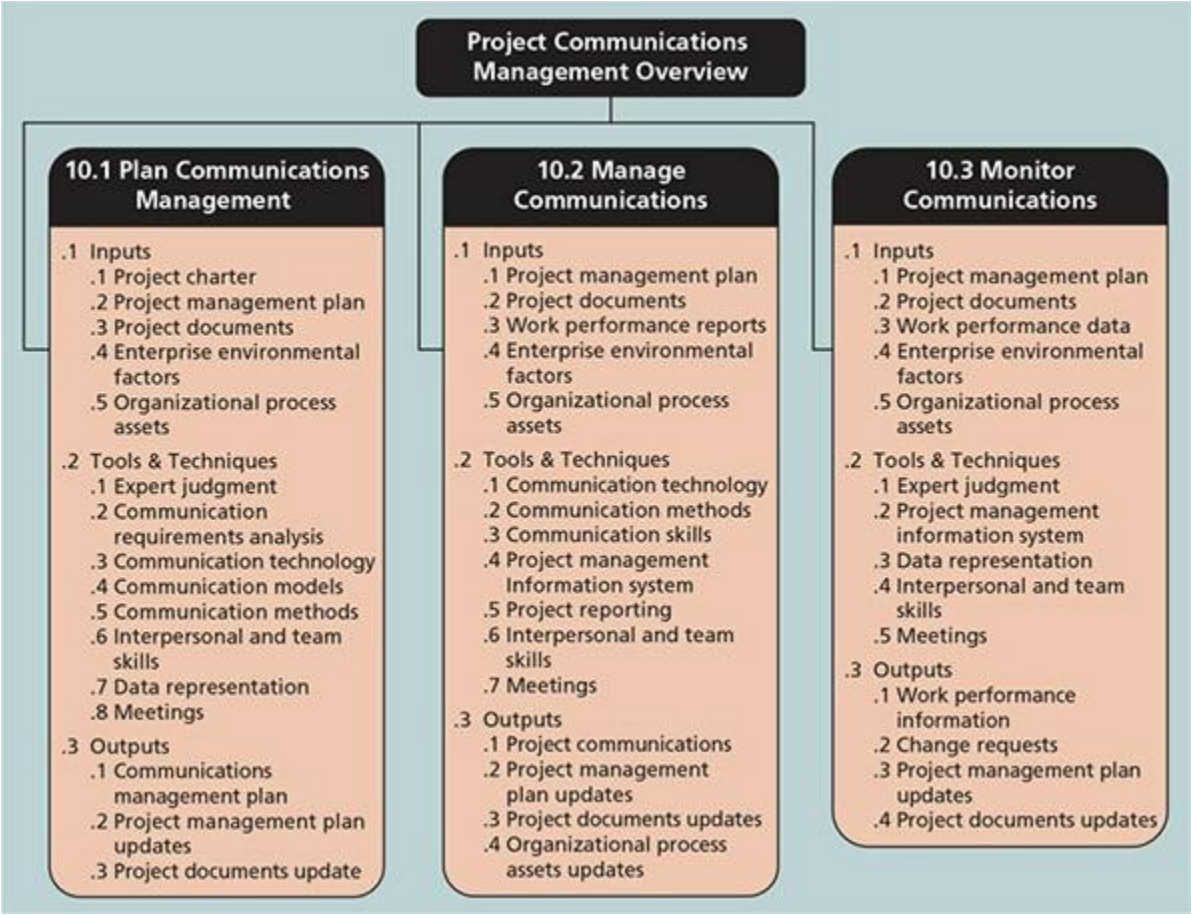
The goal of project communications management is to ensure timely and appropriate generation, collection, dissemination, storage, and disposition of project information. There are three main processes in project communications management:

1. *Planning communications management* involves determining the information and communications needs of the stakeholders. Who needs what information? When will they need it? How will the information be given to them? The outputs of this process include a communications management plan, project management plan updates, and project documents updates.
2. *Managing communications* involves creating, distributing, storing, retrieving, and disposing of project communications based on the communications management plan. The main outputs of this process are project communications, project management plan updates, project documents updates, and organizational process assets updates. Recall from Chapter 4 that organizational process assets include formal and informal plans, policies, procedures, guidelines, information systems, financial systems, management systems, lessons learned, and historical information. These assets help people understand, follow, and improve business processes in an organization.

3. *Monitoring communications* involves ensuring that stakeholder communication needs are met.

Figure 10-1 summarizes the inputs, tools and techniques, and outputs of project communications management.

Figure 10-1. Project communications management overview



Keys to Good Communications

Project managers say they spend as much as 90 percent of their time communicating. Just as it is difficult to understand people and their motivations, it is also difficult to communicate with people effectively. Several important concepts can help, such as focusing on individual and group communication needs, using formal and informal methods for communicating, providing important information in an effective and timely manner, setting the stage for communicating bad news, and understanding communication channels.

Focusing on Group and Individual Communication Needs

Many top managers think they can just add more people to a project that is falling behind schedule. Unfortunately, this approach often causes more setbacks because of the increased complexity of communications. In his popular book *The Mythical Man-Month*, Frederick Brooks illustrates this concept very clearly.* People are not interchangeable parts. You cannot assume that a task scheduled to take two months of one person's time can be done in one month by two people. A popular analogy is that you cannot take nine women and produce a baby in one month!

It is important to understand individual and group preferences for communications. As you learned in **Chapter 9**, people have different personality traits that often affect their communication preferences. For example, if you want to praise a project team member for doing a good job, most introverts would be more comfortable receiving that praise in private, while most extroverts would like everyone to hear about their good work. An intuitive person would want to understand how something fits into the big picture, while a sensing person would prefer to have more focused, step-by-step details. Strong thinkers would want to know the logic behind information, while feeling people would want to know how the information affects them personally as well as other people. A judging person would be very driven to meet deadlines with few reminders, while a perceiving person would need more assistance in developing and following plans.

However, every person is unique, so you cannot simply generalize based on a personality profile or other traits. You need to seek first to understand, as author Stephen Covey suggests in *The 7 Habits of Highly Effective People*, and put yourself in someone else's shoes before you can truly communicate.

It is important for project managers and their team members to be aware of their own communication styles. As you learned in **Chapter 9**, many IT professionals have different personality traits than the general population, such as being more introverted, intuitive, and oriented to thinking (as opposed to feeling). These personality differences can lead to miscommunication with people who are extroverted, sensation-oriented, and feeling-oriented. For example, a user guide written by an IT professional might not provide the detailed steps most users need. Many users also prefer face-to-face meetings or short videos to learn how to use a new system instead of trying to follow a written guide. They might prefer to have a two-way conversation in which they can get hands-on experience and ask questions on the spot.

Also, the receiver of information rarely interprets it exactly as the sender intended. Therefore, it is important to provide several methods of communication, such as written words, visuals, videos, and meetings, and an environment that promotes open dialogue. Instead of assuming that the receiver understands, you can build in a feedback loop to make sure. For example, several teachers use tools to quickly gauge how well their students understand a concept.

Many are surprised at the difference in what they think people understand and what they really do. It is also difficult for many people to admit that they do not understand something. Project managers and their teams must be patient and flexible when communicating information and focus on making sure their messages are understood. You cannot overcommunicate!

Geographic location and cultural background also affect the complexity of project communications. If project stakeholders are in different countries, it is often difficult or impossible to schedule times for two-way communication during normal working hours. Language barriers can also cause communication problems; the same word may have very different meanings in different languages. Times, dates, and other units of measure are also interpreted differently. People from some cultures also communicate in ways that might make others uncomfortable. For example, managers in some countries still do not allow women or workers of lower ranks to give formal presentations. Some cultures also reserve written documents for binding commitments. Taking the time to research and understand these nuances of communications early in a project can help tremendously.

What Went Wrong?

Amusing examples of miscommunications are common, especially when they involve the use of new technologies. For example, I was teaching an introductory course in information systems several years ago. Other instructors would often sit in on the course to learn how to use the latest software applications. One day, students were learning how to adjust settings and use shortcuts on their computers. I would tell the students to "right-click" and then select Properties, or "right-click" and then select Copy. At the end of the class, an instructor quietly approached, waited until the other students were gone, and then said, "I don't know what I'm doing wrong." She held up a piece of paper on which she had written the word "click" about a dozen times. In other words, she literally did write "click" when told to do so instead of right-clicking. I asked, "Are you a Mac user?" Macintosh computers do not normally have a mouse with two buttons, so users never have to right-click. I showed the instructor how to right-click with a mouse, and in future classes made sure to point out operations that were different on PCs than Macs. As technology continues to change, it's important to be patient and take the time to make sure stakeholders understand how to use tools relevant to their project.

Formal and Informal Methods for Communicating

It is not enough for project team members to submit reports to their project managers and other stakeholders and then assume that everyone who needs to know the information will

read the reports. Occasionally, that approach might work, but many people prefer informal communications. About half the general population are extroverts, so they enjoy talking to other people. Often, many nontechnical professionals—from colleagues to managers—prefer to have a two-way conversation about a project rather than reading detailed reports, e-mails, or Web pages to try to find pertinent information.

Many colleagues and managers want to know the people working on their projects and develop a trusting relationship with them. They use informal discussions about the project to develop these relationships. Therefore, project managers must be good at nurturing relationships through good communication. Many experts believe that the difference between good project managers and excellent project managers is their ability to nurture relationships and use empathic listening skills, as described in **Chapter 9**, Project Resource Management.

Oral communication also helps build stronger relationships among project personnel and project stakeholders. People like to interact with each other to get a true feeling for how a project is going. Research conducted by Albert Mehrabian and discussed in his book *Silent Messages* indicated that in face-to-face interactions information is communicated through body language, tone of voice, and the spoken content.* The lesson for project communications today is that it is important to pay attention to more than someone's actual words. A person's tone of voice and body language say a lot about how they feel.

Effective creation and distribution of information depends on project managers and project team members having good communication skills. Communicating includes many different dimensions such as writing, speaking, and listening, and project personnel need to use all of these dimensions in their daily routines. In addition, different people respond positively to different levels or types of communication. For example, a project sponsor may prefer to stay informed through informal discussions held once a week over coffee. The project manager needs to be aware of this preference and take advantage of it. The project sponsor will give better feedback about the project during these informal talks than through some other form of communication. Informal conversations allow the project sponsor to exercise a leadership role and provide insights and information that are critical to the success of the project and the organization as a whole. Short face-to-face meetings are often more effective than electronic communications, particularly for sensitive information.

Distributing Important Information in an Effective and Timely Manner

It is important to include detailed technical information that affects critical performance features of products or services developed in a project. It is even more important to

document any changes in technical specifications that might affect product performance. For example, if the fiber-optic undersea telecommunications program described in the chapter's opening case included a project to purchase and provide special diving gear, and the supplier of the oxygen tanks enhanced the tanks so divers could stay under water longer, other people would need to know about this important new capability. The information should not be buried in an attachment with the supplier's new product brochure.

People have a tendency to avoid reporting bad news. If the oxygen tank vendor was behind on production, the person in charge of the project to purchase the tanks might wait until the last minute to report this critical information. This news could be delivered quickly via text through a website, e-mail, text message, or similar means. However, people tend to become overwhelmed by too much information, and they might not understand what it means to them on their particular project.

Oral communication via meetings and informal talks helps bring important information—positive or negative—into the open. Because IT projects often require a lot of coordination, it is a good idea to have short, frequent meetings. For example, some IT project managers require all project personnel to attend a "stand-up" meeting every week or even every morning, depending on project needs. Stand-up meetings have no chairs, which forces people to focus on what they need to communicate. Recall that projects using an agile approach have daily meetings to make sure everyone is on the same page. If people can't meet face to face, they can have virtual meetings instead.

Setting the Stage for Communicating Bad News

It is important to put information in context, especially if it's bad news. If there is a problem, know how it will affect the whole project and the organization. Bad news might seem like a major setback, but you can recommend steps to take to mitigate a problem. Project sponsors and other senior managers want to know that you have evaluated the impact of the situation, considered alternatives, and made a recommendation based on your expertise. Project managers should know how a major problem might affect the bottom line of the organization and be able to use their leadership skills to handle the challenge.

An amusing example of how to mitigate bad news is provided in the following letter from a college student to her parents. Variations of this letter can be found on many websites.

> Dear Mom and Dad, or should I say Grandma & Grandpa,
>
> Yes, I am pregnant. No, I'm not married yet since Larry, my boyfriend, is out of a job. Larry's employers just don't seem to appreciate the skills he has learned since he quit high school. Larry looks much younger than you, Dad, even though he is three years older.

I'm quitting college and getting a job so we can get an apartment before the baby is born. I found a beautiful apartment above a 24-hour auto repair garage with good insulation so the exhaust fumes and noise won't bother us.

I'm very happy. I thought you would be too.

Love, Ashley

P.S. There is no Larry. I'm not pregnant. I'm not getting married. I'm not quitting school, but I am getting a "D" in Chemistry. I just wanted you to have some perspective.

Determining the Number of Communication Channels

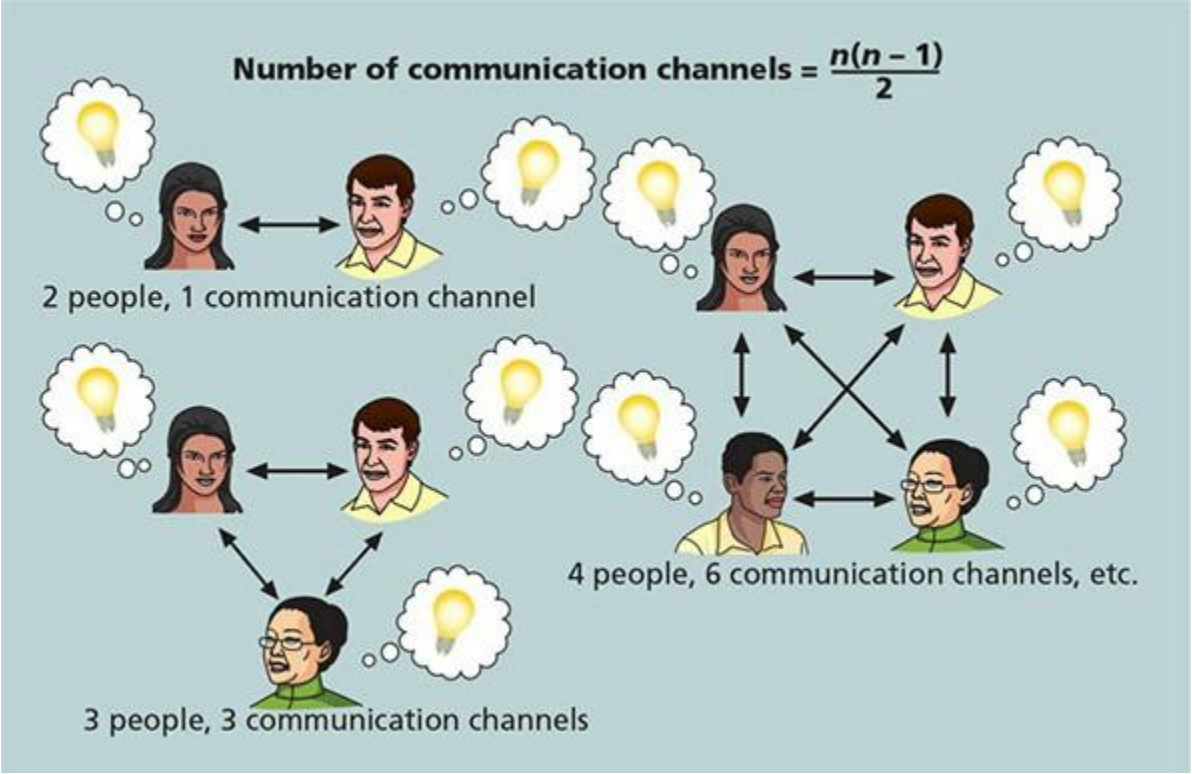
Another important aspect of communications is the number of people involved in a project. As the number increases, the complexity of communication increases because there are more channels or pathways through which people can communicate. You can use the following simple formula to determine the number of communication channels as the number of people involved in a project increases:

$$\text{Number of communication channels} = \frac{n(n-1)}{2}$$

where *n* is the number of people involved.

For example, two people have one communication channel: $(2(2-1))/2 = 1$. Three people have three channels: $(3(3-1))/2 = 3$. Four people have six channels, five people have 10, and so on. Figure 10-2 illustrates this concept. You can see that as the number of people increases above three, the number of communication channels increases rapidly. Project managers should try to limit the size of teams or subteams to avoid making communications too complex. For example, if three people are working together on a particular project task, they have three communication channels. If you added two more people to their team, you would have 10 communication channels, an increase of seven. If you added three more people instead of two, you'd have 12 communication channels. You can see how quickly communication becomes more complex as you increase team size.

Figure 10-2. The impact of the number of people on communication channels



Good communicators consider many factors before deciding how to distribute information, including the size of the group, the type of information, and the appropriate communication medium. People often send e-mail messages that are quickly written and therefore not as carefully planned as they should be. While this can be a problem even with a small group of five recipients, the negative effects multiply many times when sending such a message to a group of 500 people or more. When asked why you cannot always send an e-mail to a very large team of people just as you could to a small one, one CIO answered, "As a group increases in size, you have a whole slew of management challenges. Communicating badly exponentially increases the possibility of making fatal mistakes. A large-scale project has a lot of moving parts, which makes it that much easier to break down. Communication is the oil that keeps everything working properly. It's much easier to address an atmosphere of distrust among a group of five team members than it is with a team of 500 members."*

However, in some situations you cannot have face-to-face meetings and must e-mail a large group of people. Many IT professionals work on virtual projects in which they never meet their project sponsors, other team members, or other project stakeholders. In a virtual project environment, it is crucial for project managers to develop clear communication procedures. They must use e-mail, Web conferencing, instant messaging, discussion threads, project websites, and other technologies to communicate most information. They might be able to use phone calls or other media occasionally, but in general, they must rely on good written communications.

As you can see, project communication involves more than creating and sending status reports or holding periodic meetings. Many good project managers know their personal strengths and weaknesses in this area and surround themselves with people who complement their skills, just as Peter Gumpert did in the opening case by asking Christine to be his assistant. It is good practice to share the responsibility for project communications management with the entire project team.

Planning Communications Management

Because communication is so important on projects, every project should include a **communications management plan** —a document that guides project communications. This plan should be part of the overall project management plan, as you learned in Chapter 4, Project Integration Management. The communications management plan varies with the needs of the project, but some type of written plan should always be prepared. For small projects, such as the project management intranet site project described in Chapter 3, the communications management plan can be part of the team charter. For large projects, it should be a separate document. The communications management plan should address the following items:

1. Stakeholder communications requirements
2. Information to be communicated, including format, content, and level of detail
3. Who will receive the information and who will produce it
4. Suggested methods or technologies for conveying the information
5. Frequency of communication
6. Escalation procedures for resolving issues
7. Revision procedures for updating the communications management plan
8. A glossary of common terminology

It is important to know what kinds of information will be distributed to particular stakeholders. By analyzing stakeholder communication needs, you can avoid wasting time or money on creating or disseminating unnecessary information.

Table 10-1 provides part of a sample stakeholder communications analysis that shows which stakeholders should get particular written communications. Note that the stakeholder communications analysis includes columns that list the contact person for the information,

when the information is due, and the preferred format for the information. Notice that the first stakeholder, customer management, wants a hard copy of the monthly status reports plus a meeting to talk about them. You can create a similar table to show which stakeholders should attend particular formal project meetings. It is always a good idea to include comment sections with these types of tables to record special considerations or details related to each stakeholder, document, meeting, or other component. Have stakeholders review and approve the stakeholder communications analysis to ensure that the information is correct and useful.

Table 10-1. Sample stakeholder communications analysis

Stakeholders	Document Name	Document Format	Contact Person	Due
Customer management	Monthly status report	Hard copy and meeting	Tina Erndt, Tom Silva	First of month
Customer business staff	Monthly status report	Hard copy	Julie Grant, Sergey Cristobal	First of month
Customer technical staff	Monthly status report	E-mail	Li Chau, Nancy Michaels	First of month
Internal management	Monthly status report	Hard copy and meeting	Bob Thomson	First of month
Internal business and technical staff	Monthly status report	Intranet	Angie Liu	First of month
Training subcontractor	Training plan	Hard copy	Jonathan Kraus	November 1
Software subcontractor	Software implementation plan	E-mail	Najwa Gates	June 1

Comments: Put the titles and dates of documents in e-mail headings and have recipients acknowledge receipt.

Many projects do not include enough initial information on communications. Project managers, top management, and project team members often assume that using existing communication channels to relay project information is sufficient. The problem with using existing channels is that each group (as well as other stakeholders) has different communication needs. Creating some sort of communications management plan and reviewing it with project stakeholders early in a project helps prevent or reduce later communication problems. If an organization works on many projects, developing some consistency in handling project communications helps the organization run smoothly.

Consistent communication helps organizations improve project communications, especially for programs composed of multiple projects. For example, Peter Gumpert, the program manager in the opening case, would benefit greatly from having a communications management plan that all of his project managers help develop and follow. Because several of the projects have some of the same stakeholders, it is even more important to develop a coordinated communications management plan. For example, if customers receive status reports from Peter's company that have totally different formats and do not coordinate information from related projects within the same company, they will question the ability of Peter's company to manage large programs.

Information about the content of essential project communications comes from the work breakdown structure (WBS). In fact, many WBSs include a section for project communications to ensure that reporting key information is a project deliverable. If reporting essential information is an activity defined in the WBS, it becomes even more important to know what project information to report, when to report it, how to report it, and who is responsible for generating the report.

Managing Communications

Managing communications is a large part of a project manager's job. Getting project information to the right people at the right time and in a useful format is just as important as developing the information in the first place. The stakeholder communications analysis serves as a good starting point for managing communications. Project managers and their teams must decide who receives particular information, but they must also determine the best way to create and distribute the information. Is it sufficient to send written reports for project information? Is text appropriate, or would visuals or even videos communicate the information better? Are meetings alone effective in distributing some project information? Are meetings and written communications both required for project information? What is the best way to provide information to virtual team members?

During project execution, project teams must address important considerations for managing information, and they often end up updating business processes through improved communications. For example, they might modify policies and procedures, modify information systems, or incorporate new technologies to improve information distribution. For example, Peter Gumpert, the program manager in the opening case, might decide that providing key project members with special apps on smartphones would enhance communications. He would need to request additional funds to provide these devices and apps, and training on how to use them.

After answering key questions related to project communications, project managers and their teams must decide on the best way to create and distribute the information. Important

considerations include the use of technology, the appropriate methods and media to use, and performance reporting.

Using Technology to Enhance Information Creation and Distribution

Technology can facilitate the process of creating and distributing information, when used effectively. Most people and businesses rely on e-mail, instant messaging, websites, telephones, cell phones, texting, and other technologies to communicate. Using a project management information system, you can create and organize project documents, schedules, meeting minutes, and customer requests, and make them available in an electronic format. You can store this information locally or in the cloud. Storing templates and samples of project documents electronically can make accessing standard forms easier, thus making information distribution easier. It is also important to have backup procedures in place in case something goes wrong with normal communications technologies, as described in the "**Global Issues**" feature later in this chapter. Two important considerations in deciding which technologies to use include the communication method and media, as described in the next sections. You will learn more about using software to assist in project communications management later in this chapter.

Global Issues

Natural disasters often disrupt communications around the world. For example, the scale of the damage to Japan's communications infrastructure after a 9.0 magnitude earthquake in March 2011 was unprecedented. Fortunately, thousands of employees from Nippon Telegraph and Telephone (NTT) East worked around the clock to restore communications. As a result of their efforts, 4.75 million public phone calls were made *on the day after the disaster*. The following list summarizes some facts and figures about the damage and the recovery efforts:

- Approximately 90 trunk lines were severed as a result of damage to bridges and railways.
- 990 exchange buildings were left without power.
- 1.5 million lines were damaged.
- 16 exchange buildings were destroyed.
- 2,700 km of aerial cables were damaged.

- 3,930 emergency-use public phone lines were set up.
- NTT East donated 30,000 telephones to local authorities.
- 450 emergency Internet access points were created.*

It's great that communications can be restored a day after a disaster, but often that's too late. The April 2015 Nepal earthquake killed over 8,800 people and injured more than 23,000. After cell phone and Internet connections disappeared, several people turned to older technology, like ham radios, to communicate information about missing victims quickly.

To improve communications when the next disaster hits, researchers have been working on a better solution. Danish designers Pernille Skjødt and Ida Stougaard created a device called Reachi, which was a finalist in the 2015 Global Social Venture Competition. It uses a technology called mesh-networking that sends a signal from person to person—the same technology used in the smartphone app called FireChat. The Reachi is a single-function device that is sturdier than a phone, can survive immersion in water, and runs on solar power. "The designers are currently finishing their final proof of concept and coordinating with the Philippines Red Cross to plan a rollout across the country. Eventually, they hope to bring it to other countries as well. It's something that could be useful anywhere; even the most-connected places on Earth can't easily communicate when standard infrastructure breaks."*

Selecting the Appropriate Communication Methods and Media

There are three broad classifications for communication methods:

1. *Interactive communication*: As the name implies, two or more people interact to exchange information via meetings, phone calls, or video conferencing. This method is usually the most effective way to ensure common understanding.
2. *Push communication*: Information is sent or pushed to recipients without their request via reports, e-mails, faxes, voice mails, and other means. This method ensures that the information is distributed, but does not ensure that it was received or understood.
3. *Pull communication*: Information is sent to recipients at their request via websites, bulletin boards, e-learning, knowledge repositories like blogs and wikis, and other means.

In addition to determining the appropriate method or methods for communicating specific project information, it is important to consider which media to use. For example, if you know that you must use interactive communication to review an important topic with the project sponsor, you still need to determine which media to use. **Table 10-2** provides guidelines from Practical Communications, Inc., a communications consulting firm, about how well different types of media are suited to different communication needs. These media include hard copy, phone calls, voice mail, e-mail, meetings, and websites. For example, if you were trying to assess commitment of project stakeholders, a meeting would be the most appropriate medium to use. (A face-to-face meeting would be preferable, but a Web conference, in which participants could see and hear each other, would also qualify as a meeting.) A phone call would be adequate, but the other media would not be appropriate. Project managers must assess the needs of the organization, the project, and individuals in determining which communication medium to use and when. They must also be aware of new technologies that can enhance communications and collaboration, as described in the following What Went Wrong? feature.

Table 10-2. Media choice table

Key: 1 = Excellent , 2 = Adequate , 3 = Inappropriate

How Well Medium Is Suited to:	Hard Copy	Phone Call	Voice Mail	E-mail	Meeting	Website
Assessing commitment	3	2	3	3	1	3
Building consensus	3	2	3	3	1	3
Mediating a conflict	3	2	3	3	1	3
Resolving a misunderstanding	3	1	3	3	2	3
Addressing negative behavior	3	2	3	2	1	3
Expressing support or appreciation	1	2	2	1	2	3
Encouraging creative thinking	2	3	3	1	3	3
Making an ironic statement	3	2	2	3	1	3
Conveying a reference document	1	3	3	3	3	2
Reinforcing one's authority	1	2	3	3	1	1
Providing a permanent record	1	3	3	1	3	3
Maintaining confidentiality	2	1	2	3	1	3
Conveying simple information	3	1	1	1	2	3
Asking an informational question	3	1	1	1	3	3
Making a simple request	3	1	1	1	3	3
Giving complex instructions	3	3	2	2	1	2
Addressing many people	2	3 or 1*	2	2	3	1

Source: Tess Galati, *Email Composition and Communication (EmC2)*, Practical Communications, (2001)

What Went Wrong?

A Frost & Sullivan study sponsored by Verizon Business and Microsoft Corp., called "Meetings Around the World: The Impact of Collaboration on Business Performance," found that collaboration is a key driver of overall performance of companies around the world. The impact of collaboration is twice as significant as a company's aggressiveness in pursuing new market opportunities and five times as significant as the external market environment. The study defines collaboration as an interaction between culture and technology, such as audio and Web conferencing, e-mail, and instant messaging. The researchers also created a method to measure how collaboration affects business performance.

Of all the collaboration technologies that were studied, three were more commonly present in high-performing companies than in low-performing ones: Web conferencing, audio conferencing, and meeting-scheduler technologies. "This study reveals a powerful new metric business leaders can use to more successfully manage their companies and achieve competitive advantage," said Brian Cotton, a vice president at Frost & Sullivan. "Measuring the quality and capability of collaboration in a given organization presents an opportunity for management to prioritize technology investments, encourage adoption of new tools and open up communications lines for improved collaboration."*

The study also revealed regional differences in how people in various countries prefer to communicate with one another. These differences highlight an opportunity for greater cultural understanding to improve collaborative efforts around the world. For example:

- American professionals are more likely to enjoy working alone, and they prefer to send e-mail rather than call a person or leave a voice mail message. They are also more comfortable with audio, video, and Web conferencing technologies than people from other regions. In addition, they tend to multitask the most when on conference calls.

- Europeans thrive on teamwork more than their counterparts elsewhere and prefer to interact in real time with other people. They are more likely to feel that it is irresponsible not to answer the phone, and they want people to call them back rather than leave a voice mail message.

- Professionals in the Asia-Pacific region, more than anywhere else, want to be in

touch constantly during the workday. As a result, they find the phone to be an indispensable tool and prefer instant messaging to e-mail.

In a follow-up study sponsored by Verizon and Cisco, Frost & Sullivan examined the role that collaboration solutions play in enabling high levels of organizational performance and developed a model for measuring return on collaboration (ROC). Surveys from 3,662 managers across the globe were analyzed to estimate the return generated from deploying collaboration technology in critical business activities from six functional areas: innovations and new product development (Research & Development), employee retention and churn/attrition (Human Resources), sales performance (Sales), customer acquisition (Marketing), shareholder value (Investor Relations), and corporate reputation (Public Relations). The study results show the highest returns in the areas of sales performance and innovations and new product development. "Our main finding was striking: As organizations deploy and use IP-enabled, advanced collaboration tools in their operations, they are able to perform better on business critical activities, and realize a higher return on their collaboration.*

Reporting Performance

Another important tool for managing project communications is performance reporting. Performance reporting keeps stakeholders informed about how resources are being used to achieve project objectives. It also motivates workers to have some progress to report. Recall from **Chapter 1** that progress reports are considered to be a super tool—a tool that is extensively used and has been found to improve project performance. Performance reports are normally provided as progress reports or status reports. Many people use the two terms interchangeably, but some people distinguish between them as follows:

- **Progress reports** describe what the project team has accomplished during a certain period. Many projects have each team member prepare a monthly report or sometimes a weekly progress report. Team leaders often create consolidated progress reports based on the information received from team members. A sample template for a monthly progress report is provided later in this chapter.

- **Status reports** describe where the project stands at a specific point in time. Status reports address where the project stands in terms of the triple constraint, meeting scope, time, and cost goals. How much money has been spent to date? How long did it take to do certain tasks? Is work being accomplished as planned? Status reports can take various formats depending on the stakeholders' needs. As described in Chapter 2, when using agile project management, progress is communicated via daily Scrum meetings and

burndown charts.

Forecasts predict future project status and progress based on past information and trends. How long will it take to finish the project based on how things are going? How much more money will be needed to complete the project? Project managers can use earned value management (see Chapter 7, Project Cost Management) to answer these questions by estimating the budget at completion and projected completion date based on how the project is progressing.

An important technique for performance reporting is the status review meeting. Status review meetings, as described in **Chapter 4**, Project Integration Management, are a good way to highlight information provided in important project documents, empower people to be accountable for their work, and have face-to-face discussions about important project issues. Many program and project managers hold periodic status review meetings to exchange important project information and motivate people to make progress on their parts of the project. Likewise, many top managers hold monthly or quarterly status review meetings in which program and project managers must report overall status information.

Status review meetings sometimes become battlegrounds where conflicts between different parties come to a head. Project managers or higher-level top managers should set ground rules for status review meetings to control the amount of conflict and should work to resolve any potential problems. It is important to remember that project stakeholders should work together to address performance problems.

Advice for Young Professionals

If you are working on a protect team but never attended a status review meeting, ask your project manager if you can attend one. You can learn a lot about your own project and other projects going on in the organization. You will also see firsthand how senior management reacts to different information and what their key concerns are. Hopefully there is good discussion about important issues. If you go on to attend or present at future status review meetings, don't be afraid to ask questions and provide your own suggestions during discussions.

Monitoring Communications

The main goal of monitoring communications is to ensure the optimal flow of information throughout the entire project life cycle. The project manager and project team should use expert judgment, project management information systems, data representation,

interpersonal and team skills, and meetings to assess how well communications are working. If communication problems exist, the project manager and team need to take action, which often requires changes to the earlier processes of planning and managing project communications. The main outputs of monitoring communications are work performance information, change requests, project management plan updates, and project documents updates.

It is often beneficial to have a facilitator from outside the project team assess how well communications are working. A facilitator can also help the team solve any communication problems. Many project teams need help in improving communications, and many internal and external experts are available to help. The following section also provides suggestions for improving project communications.

Suggestions for Improving Project Communications

Good communication is vital to the management and success of IT projects. So far in this chapter, you have learned that project communications management can ensure that essential information reaches the right people at the right time, that feedback and reports are appropriate and useful, and that there are formalized processes for planning, managing, and controlling communications. This section highlights a few areas that all project managers and project team members should consider in their quests to improve project communications. This section provides guidelines for developing better communication skills, running effective meetings, using e-mail, instant messaging, texting, kanban boards, and collaborative tools effectively, and using templates for project communications.

Developing Better Communication Skills

Some people seem to be born with great communication skills. Others seem to have a knack for picking up technical skills. It is rare to find someone with a natural ability for both. Both types of skills, however, can be developed. Most IT professionals enter the field because of their technical skills. Most find, however, that communication skills are the key to advancing in their careers, especially if they want to become good project managers.

Most companies spend a lot of money on technical training for their employees, even when employees might benefit more from communications training. Individuals are also more likely to enroll voluntarily in classes to learn the latest technology than in classes that develop soft skills.

Communication skills training usually includes role-playing activities in which participants learn concepts such as building rapport, as described in **Chapter 9**, Project Resource Management. Training sessions also give participants a chance to develop specific skills in

small groups. Sessions that focus on presentation skills typically use video to record the participants' presentations. Most people are surprised to see some of their mannerisms and enjoy the challenge of improving their skills. A minimal investment in communication and presentation training can have a tremendous payback to individuals, their projects, and their organizations.

As organizations become more global, they realize that they must also invest in ways to improve communication with people from different countries and cultures. For example, Apple released their new 2015 operating system, which included hundreds of diverse emojis to appeal to users all over the world.

Many Americans are raised to speak their minds, while in some other cultures people are offended by outspokenness. Decision makers from several countries, such as China, focus on building personal relationships and trust rather than on facts and quick responses, like Americans. Not understanding how to communicate effectively with people of other cultures and diverse backgrounds hurts projects and businesses. Many training courses are available to educate people in cultural awareness, international business, and international team building. Workers also need to learn how to participate in virtual meetings and conference calls. Some people take these skills for granted, but many people need assistance in becoming comfortable and productive in new work environments.

It takes leadership to help improve communication. If top management lets employees give poor presentations, write sloppy reports, offend people from different cultures, or behave poorly at meetings, the employees will not want to improve their communication skills. Top management must set high expectations and lead by example. Some organizations send all IT professionals to training that includes development of technical *and* communication skills. Successful organizations allocate time in project schedules for preparing drafts of important reports and presentations and incorporating feedback on the drafts. It is good practice to include time for informal meetings with customers to help develop relationships and provide staff to assist in relationship management. As with any other goal, communication can be improved with proper planning, support, and leadership from top management.

Media Snapshot

Many readers of this book grew up using social media sites like Facebook and Twitter. You may be surprised to learn that 93 percent of recruiters check out social media profiles of prospective hires. A 2014 article in *Money* magazine provides a list of "10 Social Media Blunders That Cost a Millennial a Job—or Worse," as follows:

1. Posting something embarrassing on the corporate Twitter feed.

2. Sexual oversharing.
3. Revealing company secrets.
4. Blowing your own cover.
5. Talking smack about a job before you've even accepted it.
6. Making fun of clients or donors.
7. Making fun of your boss/team.
8. Posting while you're supposed to be working.
9. Complaining about your job.
10. Drinking in a photo—even if you're over 21.*

Running Effective Meetings

A well-run meeting can be a vehicle for fostering team building and reinforcing expectations, roles, relationships, and commitment to the project. However, a poorly run meeting can have a detrimental effect on a project. For example, a terrible kick-off meeting may cause important stakeholders to decide not to support the project further.

Many people complain about the time they waste in unnecessary or poorly planned and poorly executed meetings. The following guidelines can help improve time spent at meetings:

- *Determine if a meeting can be avoided*. Do not have a meeting if there is a better way to achieve the objective at hand. For example, a project manager might need approval from a top manager to hire another person for the project team. It could take a week or longer to schedule even a 10-minute meeting on the top manager's calendar. Instead, an e-mail or phone call describing the situation and justifying the request is a faster, more effective approach than having a meeting. However, you often do need a face-to-face meeting in certain situations because using e-mail or a phone call would be inappropriate. Consider which medium would be most effective.

- *Define the purpose and intended outcome of the meeting*. Be specific about what should happen as a result of the meeting. Is the purpose to brainstorm ideas, provide status information, or solve a problem? Make the purpose of a meeting very clear to all meeting planners and participants. For example, if a project manager calls a meeting of all project

team members without knowing the true purpose of the meeting, everyone will focus on their own agendas and very little will be accomplished. All meetings should have a purpose and intended outcome.

- *Determine who should attend the meeting*. Do certain stakeholders have to be at a meeting to make it effective? Should only the project team leaders attend a meeting, or should the entire project team be involved? Many meetings are most effective with the minimum number of participants possible, especially if decisions must be made. Other meetings require many attendees. It is important to determine who should attend a meeting based on its purpose and intended outcome.

- *Provide an agenda to participants before the meeting*. Meetings are most effective when the participants come prepared. Did they read reports before the meeting? Did they collect necessary information? Some professionals refuse to attend meetings if they do not have an agenda ahead of time. Insisting on an agenda forces meeting organizers to plan the meeting and gives potential participants the chance to decide whether they need to attend.

- *Prepare handouts and visual aids, and make logistical arrangements ahead of time*. By creating handouts and visual aids, you must organize thoughts and ideas. This usually helps the entire meeting run more effectively. It is also important to make logistical arrangements by booking an appropriate room, having necessary equipment available, and providing refreshments or entire meals, if appropriate. It takes time to plan for effective meetings. Project managers and their team members must take time to prepare for meetings, especially important ones with key stakeholders.

- *Run the meeting professionally*. Introduce people, restate the purpose of the meeting, and state any ground rules that attendees should follow. Have someone facilitate the meeting to make sure that important items are discussed, watch the time, encourage participation, summarize key issues, and clarify decisions and action items. Designate someone to take minutes and then send them to all participants soon after the meeting. Minutes should be short and focus on the crucial decisions and action items from the meeting.

- *Set the ground rules for the meeting*. State up front how the meeting will be run. For example, can people speak at will, or will the facilitator lead discussions? Can attendees use their laptops or other electronic devices during the meeting? Don't assume that all meetings are run in the same way. Do what works best in each specific case.

- *Build relationships*. Depending on the culture of the organization and project, it may help to build relationships by making meetings fun experiences. For example, it may be

appropriate to use humor, refreshments, or prizes for good ideas to keep meeting participants actively involved. If used effectively, meetings are a good way to build relationships.

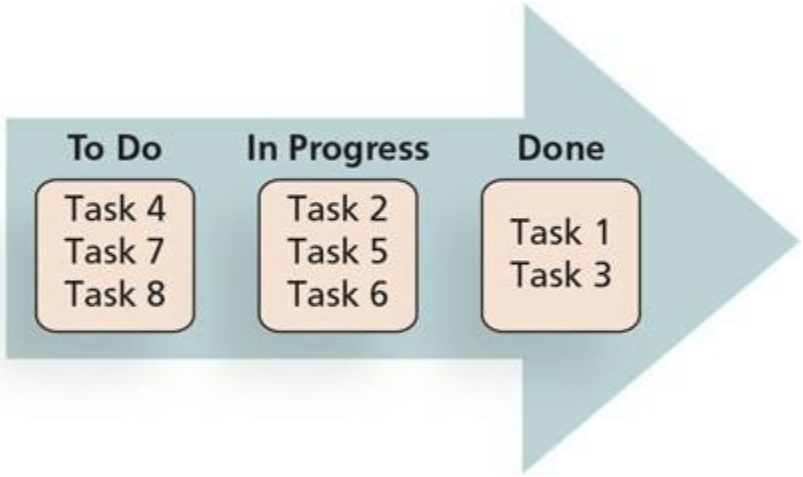
Using E-Mail, Instant Messaging, Texting, Kanban Boards, and Collaborative Tools Effectively

Because most people use e-mail and other electronic communication tools now, communications should improve, right? Not necessarily. In fact, few people have received any training or guidelines on when or how to use e-mail, instant messaging, texting, video conferencing, kanban boards, or other collaborative tools, such as Microsoft SharePoint portals, Google Docs, or wikis. A **SharePoint portal** allows users to create custom websites to access documents and applications stored on shared devices. **Google Docs** allows users to create, share, and edit documents, spreadsheets, and presentations online. A **wiki** is a website that enables anyone who accesses it to contribute to or modify its content. Kanban boards visually show tasks that need to be done, are in progress, or are completed. They have become a popular tool to improve communications, as described in the Best Practice feature.

Best Practice

One of the main features of kanban is visualizing workflow, which is often done by using kanban boards. **Figure 10-3** provides a very simple example of a kanban board. Notice that the main categories where tasks are placed include To Do, In Progress, and Done. Team members work together to complete all of the tasks, clearly showing which ones need to be done (in the To Do section), which ones are being worked on (in the In Progress section), and which ones are completed (in the Done section). People using kanban boards can tailor the concept to meet their needs. For example, they could create a physical board or use a wall in their office environment, write the names of tasks on sticky notes, and physically move the sticky notes along the board or wall. Or, a team could use an online tool to enter and track their workflow. They could add people's names to each task, color code tasks, include a calendar, or use whatever approach helps the team improve their performance.

Figure 10-3. Sample kanban board



Source: Kathy Schwalbe, *An Introduction to Project Management*, Fifth Edition (2015)

Even if people do know when to use e-mail or other tools for project communications, they also need to know how to use the tools. New features are added to software programs with every release, but often users are unaware of these features and do not receive training on how to use them. Do you know how to organize and file your e-mail messages, or do you have hundreds of them in your inbox? Do you know how to use your address book or how to create distribution lists? Have you ever used sorting features to find e-mail messages or documents by date, author, or key words? Do you use filtering software to prevent spam? Do you know how to share your desktop with instant messaging to teach someone how to use software on your computer? Do you know how to track and incorporate changes in Google Docs to create reports and spreadsheets as a collaborative effort? Does everyone on your project team know how to use important features of your SharePoint portal or wiki? Are you using a software tool for creating kanban boards that is tailored to meet your needs? Project teams and organizations that emphasize using a shared repository for good communications are often more productive. Many project management software tools include the ability to share project documents and other communications, but processes must be established first and followed.

Something as simple as a standard college course illustrates these issues. Many college courses now use online course management software like Moodle or Blackboard. Instructors have learned to post the course syllabus, handouts, lecture notes, and other documents for the entire class to share. Students are often required to take quizzes, participate in discussions, and post their own files on a central site. Posting all information in one location enhances communications. If the instructor states in the syllabus that students must check their e-mail frequently for course information, they will do so, even though they might prefer to use text messaging. If they fail to check their e-mail, participate in discussions, or generally use the online course tools, the consequences will affect their grades.

Even if you know how to use all the features of these communication systems, you will likely still need to learn how to put ideas into words clearly and effectively. For example, the subject line for any e-mail message you write should clearly state the intention of the e-mail. Folder and file names for collaborative projects should be clear and follow file naming conventions, if provided. A business professional who does not write well might prefer to talk to people than to send an e-mail or instant message. Poor writing often leads to misunderstandings and confusion.

Project managers should do whatever they can to help their project stakeholders use e-mail, instant messaging, texting, and other tools effectively and not waste time with poor or unclear communications. Information sent via e-mail, instant messaging, texting, or a collaborative tool should be appropriate for that medium. If you can communicate the information better with a phone call or meeting, for example, then do so. If you introduce a new technique, such as kanban boards, be sure to tailor it to meet your needs. Do not use new tools because they are the latest fad. Use them because they improve communications and productivity. Learn how to use important features of your e-mail, texting, instant messaging, and collaborative software, and make sure that everyone on your team also learns.

The following guidelines can help you use e-mail as a more effective communication tool:

- Be sure to send e-mail to the right people. Do not automatically "reply to all" on an e-mail, for example, if it is not necessary.
- Use meaningful subject lines in e-mails so readers can quickly see what information the message contains. If the entire message can fit in the subject line, put it there. For example, if a meeting is cancelled, just enter that message in the subject line. Also, do not continue replying to an e-mail thread when the subject has changed without changing the subject line. The subject line should always relate to the latest topic.
- Limit the content of the e-mail to one main subject. Send a second or third e-mail if it relates to a different subject.
- The body of the e-mail should be as clear and concise as possible. Use as few words as possible while maintaining a clear and friendly tone. If three questions need to be answered, number them as questions 1, 2, and 3 and put each on a separate line.
- Always reread your e-mail before you send it. Also, be sure to check your spelling using the spell-check function.
- Limit the number and size of e-mail attachments. If you can include a link to an online version of a document instead of attaching a file, do so.

- Delete e-mail that you do not need to save or that does not require a response. Do not even open e-mail that you know is not important, such as spam. Use the e-mail blocking feature of the software, if available, to block unwanted junk mail.

- Make sure that your virus protection software is up to date. Never open e-mail attachments if you do not trust the source.

- Respond to e-mail quickly, if possible. It will take you longer to open and read the e-mail again later. In addition, if you send an e-mail that does not require a response, make that clear as well.

- If you need to keep e-mail, file each message appropriately. Create folders with meaningful names to file the e-mail messages you want to keep. File them as soon as possible.

Most people are comfortable with using e-mail, but some may not be familiar with other technologies. Develop a strategy for getting users up to date, and discuss when it's best to use other technologies versus e-mail. The following additional guidelines can help you use other communication tools more effectively:

- Collaborative tools continue to advance. Make sure that your team is using a good tool. Many, like Google Docs and several wikis, are available for free.

- Be sure to authorize the right people to share your collaborative documents. Also ensure that other security is in place. Confidential project documents should probably not be stored on Google Docs. Use more secure tools when needed.

- Make sure that the right person can authorize changes to shared documents and that you back up files.

- Develop a logical structure for organizing and filing shared documents. Use good file-naming conventions for folder and document names.

Using Templates for Project Communications

Many intelligent people have a hard time writing a performance report or preparing a 10-minute technical presentation for a customer review. Some people in these situations are too embarrassed to ask for help. To make it easier to prepare project communications, project managers need to provide examples and templates for common project communications such as project descriptions, project charters, monthly performance reports, and issue logs. Good documentation from past projects can be an ample source of examples. Samples and templates of both written and oral reports are particularly helpful for people who have never

had to write project documents or give project presentations. Finding, developing, and sharing relevant templates and sample documents are important tasks for many project managers. Be sure to check if there are standard templates available and/or required by your own organization or sponsor. Several examples of project documentation are provided throughout this text, including a business case, project charter, scope statement, stakeholder analysis, WBS, Gantt chart, and cost estimate. The Companion website for this text includes the actual files used to create the templates for these sample documents. A few of these templates and guidelines for preparing them are provided in this section.

Figure 10-4 shows a sample template for a brief project description. This form could be used to show a snapshot of an entire project on one page. For example, top managers might require that all project managers provide a brief project description as part of a quarterly management review meeting. Peter Gumpert, the program manager in the opening case, might request this type of document from all of his project managers to get an overall picture of what each project involves. A project description should include the project objective, scope, assumptions, cost information, and schedule information. This template suggests including information from the project's Gantt chart to highlight key deliverables and other milestones.

Figure 10-4. Sample template for a project description

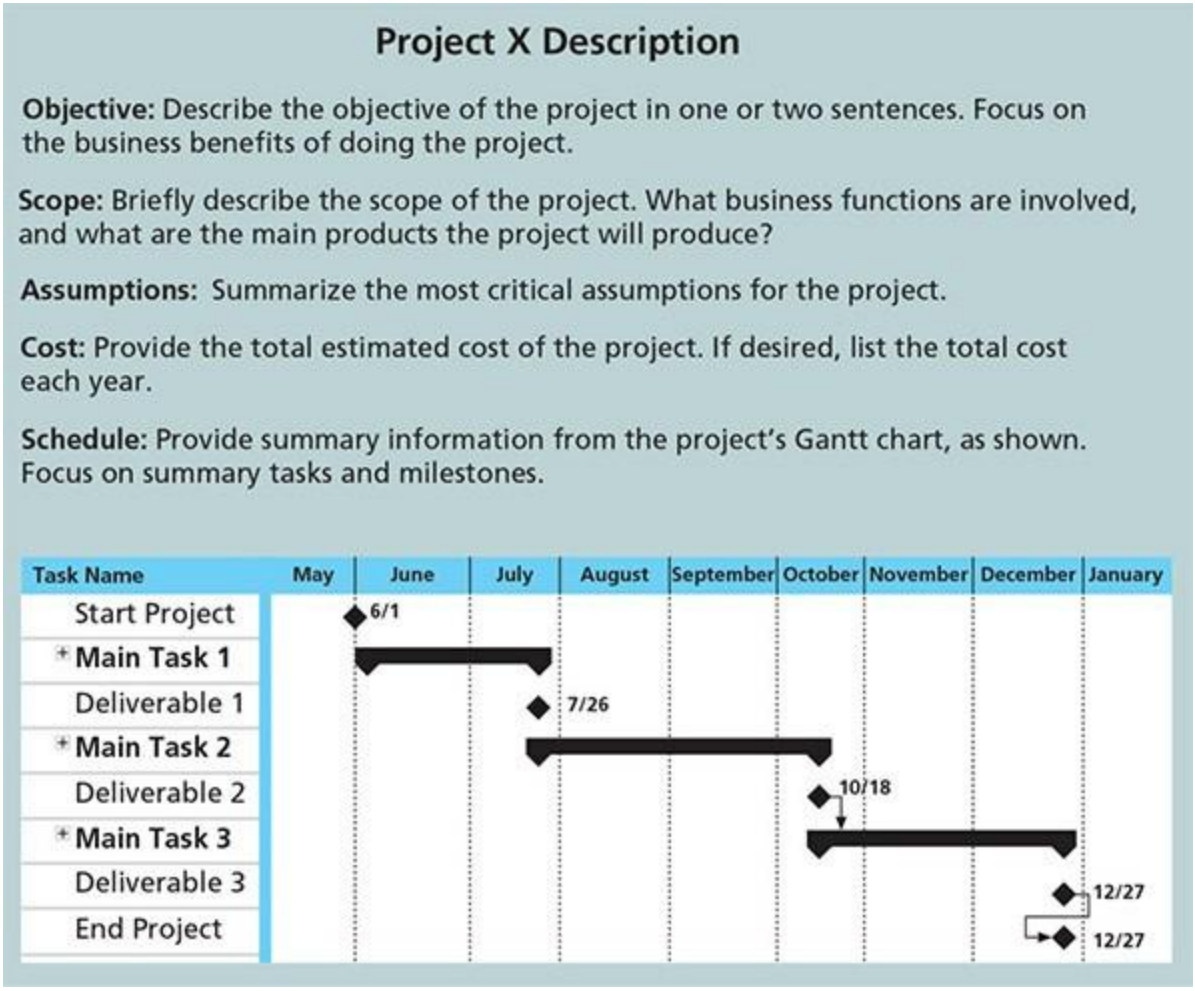


Table 10-3 shows a template for a monthly progress report. Sections of the progress report include accomplishments from the current period, plans for the next period, issues, and project changes. Recall that progress reports focus on accomplishments during a specific time period, while status reports focus on where the project stands at a certain point in time. Because progress and status reports are effective ways to communicate project information, it is important for project teams to tailor the reports to meet their specific needs. Some organizations, such as JWD Consulting from Chapter 3, combine both progress and status information on the same template.

Table 10-3. Sample template for a monthly progress report

I. Accomplishments for January (or appropriate month):

- Describe most important accomplishments. Relate them to project's Gantt chart.
- Describe other important accomplishments, one bullet for each. If any issues were resolved from the previous month, list them as accomplishments.

II.	**Plans for February (or following month):** • Describe most important items to accomplish in the next month. Again, relate them to project's Gantt chart. • Describe other important items to accomplish, one bullet for each.
III.	**Issues:** Briefly list important issues that surfaced or are still important. Managers hate surprises and want to help the project succeed, so be sure to list issues.
IV.	**Project Changes (Dates and Description):** List any approved or requested changes to the project. Include the date of the change and a brief description.

Table 10-4 provides a list of all of the documentation that should be organized and filed at the end of a major project. From this list, you can see that a large project can generate a lot of documentation. In fact, some project professionals have observed that documentation for designing an airplane seems to weigh more than the airplane itself. (Smaller projects usually generate much less documentation!)

Table 10-4. Final project documentation items

I.	Project description
II.	Project proposal and backup data (request for proposal, statement of work, proposal correspondence, and so on)
III.	Original and revised contract information and client acceptance documents
IV.	Original and revised project plans and schedules (WBS, Gantt charts and network diagrams, cost estimates, communications management plan, etc.)
V.	Design documents
VI.	Final project report
VII.	Deliverables, as appropriate
VIII.	Audit reports
IX.	Lessons-learned reports
X.	Copies of all status reports, meeting minutes, change notices, and other written and electronic communications

The project manager and project team members should prepare a **lessons-learned report** — a reflective statement that documents important information they have learned from working on the project. The project manager often combines information from all of the lessons-learned reports into a project summary report. See Chapter 3 for an example of this type of

lessons-learned report. Some items discussed in lessons-learned reports include reflections on whether project goals were met, whether the project was successful or not, the causes of variances on the project, the reasoning behind corrective actions chosen, the use of different project management tools and techniques, and personal words of wisdom based on team members' experiences. On some projects, all project members are required to write a brief lessons-learned report; on other projects, just the team lead or the project manager writes the report. These reports provide valuable reflections by people who know what worked or did not work on the project. Everyone learns in different ways and has different insights into a project, so it is helpful to have more than one person provide inputs on the lessons-learned reports. These reports can be an excellent resource and can help future projects run more smoothly. To reinforce the benefits of lessons-learned reports, some companies require new project managers to read past lessons-learned reports and discuss how they will incorporate some of the ideas into their own projects. It is also important to organize and prepare project archives. **Project archives** are a complete set of organized project records that provide an accurate history of the project. These archives can provide valuable information for future projects as well.

In the past few years, more and more project teams have started putting all or part of their project information on project websites, including various templates and lessons-learned reports. Project websites provide a centralized way of delivering project documents and other communications. Project teams can develop project websites using wikis, Web authoring tools, or by using free or paid sites available from Google, Basecamp, Atlassian, and many other companies. The project team should be sure to address important issues in creating and using a project website, such as security, access, and the type of content that should be included.

Project teams can use one of the many software products available to assist in project communications through the Web. These products vary considerably in price and functionality, as you learned in **Chapter 1**. For example, Figure 10-5 shows the six core tools available when using Basecamp, a tool available to educators for free for an unlimited time. Note, however, that several key features such as creating Gantt charts and network diagrams are not listed. Many project teams want to access project information on mobile devices, so many tools now include this capability.

Figure 10-5. Basecamp core tools

Source: Basecamp

Figure 10-6 shows an example of using Jira by Atlassian, a popular online tool used to run an agile project. This screenshot shows some of the reporting charts available, including a burndown chart, a burnup chart, a sprint report, a cumulative flow diagram, a velocity chart, and a version report. Brief descriptions of each chart are included in the figure. Chapter 3 of this text includes more details on creating a burndown chart, and template in Excel is provided on the Companion website. Consult other references for more details on these and other charts.

Figure 10-6. Jira agile reporting

Source: Atlassian

When the project team develops its project communications management plan, it should determine what templates to use for key documentation. To make it more convenient to use templates, the organization should make project templates readily available online. The project team should also understand what types of documents are expected by top management and customers for each project. For example, if a project sponsor or customer wants a one-page monthly progress report for a specific project, but the project team delivers a 20-page report, there are communication problems. In addition, if particular customers or top managers want specific items to be included in all final project reports, they should make sure that the project team is aware of those expectations and modifies templates for those reports to account for the requirements.

Using Software to Assist in Project Communications

Many organizations are discovering how valuable project management software can be in communicating project information across the organization. Project management software can provide different views of information to help meet various communication needs. For

example, senior managers might only need to see summary screens with colors indicating the overall health of all projects. Middle managers often want to see the status of milestones for all of the projects in their area. Project team members often need to see all project documentation. Often, one of the biggest communication problems on projects is providing the most recent project plans, Gantt charts, specifications, meeting information, and change requests to stakeholders in a timely fashion. Most project management software allows users to insert hyperlinks to other project-related files. In Project 2016, you can insert a hyperlink from a task or milestone listed in a Gantt chart to another file that contains relevant information. For example, there might be a milestone that the project charter was signed. You can insert a hyperlink from the Gantt chart to the Word file that contains the project charter. You could also link appropriate tasks or milestones to Excel files that contain a staffing management plan or cost estimate or to Microsoft PowerPoint files with important presentations or other information. The Project 2016 file and all associated hyperlinked files could then be placed on a local area network server or Web server, allowing all project stakeholders easy access to important project information. (See Appendix A for more information on using Microsoft Project 2016 to assist in project communications management.)

Even though organizations routinely use many types of hardware and software to enhance communications, they need to take advantage of new technologies and adjust existing systems to serve the special communications needs of customers and project teams. In addition to diverse customer and project needs, they have to address the changing expectations of consumers and the workforce. For example, several television shows have harnessed communications technology to engage their audiences by letting them vote online or via cell phone for their favorite singers, tweet celebrities, or access information on their websites or Facebook pages. Many people, especially younger people, use instant messaging or text messages every day to communicate with friends. Some business and technical professionals also find instant messaging and text messaging to be useful tools for quickly communicating with colleagues, customers, suppliers, and others. **Blogs** are journals on the Web that allow users to write entries, respond to another poster's comments, create links, upload pictures, and post comments to journal entries. Blogs have also become popular as a communication technology. If television shows and nontechnical people can use advanced communications technologies, why can't project stakeholders?

Employers have made changes to meet changing expectations and needs in communications. On several IT projects, project managers have found that their team members can be more productive when they are allowed to work from home. Other project managers have no choice in the matter when some or all of their project team members work remotely. As you learned in **Chapter 9**, Project Resource Management, studies show that providing a quiet work environment and a dedicated workspace increases programmer productivity. Most people

who work from home have well-equipped, comfortable offices with fewer distractions and more space than corporate offices. Workers also appreciate the added bonus of avoiding traffic and having more flexible work schedules. However, it is important to make sure that work is well defined and that communications are in place to allow remote workers to work effectively.

Several products are available to assist individual consumers and organizations with communications. Many products were developed or enhanced in recent years to address the issue of providing fast, convenient, consistent, and up-to-date project information. Many organizations use SharePoint or similar products for document management and storage and tools like WebEx or Skype for video conferencing. Screen sharing software like Zoom and GoTo Meetiing can also improve communications. Webcasts are now a common tool for presenting video, graphics, sound, voice, and participant feedback live over the Web. Podcasts and YouTube videos have also become popular tools for providing various types of audio and video information, from exercise instructions to class lectures. Most working adults and students have cell phones that they use to take and send pictures or send and receive text messages or e-mail. Many students text or tweet their friends to plan social activities or discuss academic topics.

These same technologies can enhance project communications. For even more powerful and integrated communications, enterprise project management software provides many workgroup functions that allow a team of people at different locations to work together on projects and share project information. Workgroup functions allow the exchange of messages through e-mail, intranet, wireless devices, or the Web. For example, you can use Project 2016 to alert members about new or changed task assignments, and members can return status information and notify other workgroup members about changes in the schedule or other project parameters.

Many project management software products also provide the following tools to enhance communications:

- *Portfolio management*: By providing a centralized and consolidated view of programs and projects, the user can evaluate and prioritize activities across the organization. This feature makes it possible to maximize productivity, minimize costs, and keep activities aligned with strategic objectives.

- *Resource management*: Maximizing human resources is often the key to minimizing project costs. This feature enables the user to maximize resource use across the organization to help plan and manage the workforce effectively.

- *Project collaboration*: Sharing project information is often a haphazard endeavor. Project

collaboration enables an organization to share knowledge immediately and consistently to improve communications and decision making, eliminate redundancies, and take advantage of best practices for project management.

Even with all of the technology available, many organizations have problems communicating on global projects. In addition to the difficulty in finding an acceptable time for remotely spaced project teams to meet, there are often issues with audio or video conference calls in trying to understand each other. Teams often have to insert technical translators into the process when discussing critical requirements so that each side can fully understand what the other means. This process impedes what most people think of as a simple situation in which virtual teams should be able to easily work together using technology across the globe. They can, but only when they share the culture and language. Some companies have resorted to expending the money to station members of their staff in the other organization's location to act as translators and promote more effective and productive communications. Another potential communications problem involves "follow the sun" project management, in which teams spaced around the globe use their own business day (eight hours) to perform a segment of the work and then hand it off to the next in the rotation as their day ends and the next team's day begins. Problems develop when the handoff communication does not address issues properly, causing the whole cycle to fail until someone can clarify or correct the problem. While this approach theoretically can keep teams working on a project around the clock, it can actually idle the project as well when the communication during the handoff is not effective.

Considerations for Agile/Adaptive Environments

The *PMBOK® Guide – Sixth Edition* provides the following information for project communications management:

> Project environments subject to various elements of ambiguity and change have an inherent need to communicate evolving and emerging details more frequently and quickly. This motivates streamlining team member access to information, frequent team checkpoints, and collocating team members as much as possible.
>
> In addition, posting project artifacts in a transparent fashion, and holding regular stakeholder reviews are intended to promote communication with management and stakeholders.*

These considerations are true for all project environments. Communications should be up to date, easily available, and reviewed regularly with stakeholders. Although it may be easier for team members to communicate when they are collocated, the reality is that many projects involve people who do not work in close proximity to each other. Effectively planning for good

project communications and using appropriate technology become even more important in these situations.

Communication is among the more important factors for success in project management. While technology can aid in the communications process and be the easiest aspect of the process to address, it is not the most important. Far more important is improving an organization's ability to communicate. Improving this ability often requires a cultural change in an organization that takes a lot of time, hard work, and patience. IT personnel, in particular, often need special coaching to improve their communications skills. The project manager's chief role in the communications process is that of facilitator. Project managers must educate all stakeholders—management, team members, and customers—on the importance of good project communications and ensure that the project has a good communications management plan.

Case Wrap-Up

Christine Braun worked closely with Peter Gumpert and his project managers to develop a communications management plan for all of the fiber-optic undersea telecommunications projects. Peter was very skilled at running effective meetings, so everyone focused on meeting specific objectives. Peter emphasized the importance of keeping himself, the project managers, and other major stakeholders informed about the status of all projects. He emphasized that the project managers were in charge of their projects, and that he did not intend to tell them how to do their jobs. He just wanted to have accurate and consistent information to help coordinate all of the projects and make everyone's jobs easier. When some of the project managers balked at the additional work of providing more project information in different formats, Peter openly discussed the issues with them in more detail. He then authorized each project manager to use additional staff to help develop and follow standards for all project communications.

Christine used her strong technical and communications skills to create a website that included samples of important project documents, presentations, and templates for other people to download and use on their own projects. After determining the need for more remote communications and collaboration between projects, Christine and other staff members researched the latest hardware and software products. Peter authorized funds for a new project led by Christine to evaluate and then purchase smartphones, apps, and enterprise project management (EPM) software with wiki capability that could be accessed via the Web. All managers and technical staff, including Peter, received their own devices, and any project stakeholder could request one and get one-on-one training for how to use it with the new apps and EPM software.

Chapter Summary

Failure to communicate is often the greatest threat to the success of any project, especially IT projects. Communication is the oil that keeps a project running smoothly. Project communications management involves planning communications management, managing communications, and controlling communications.

Project managers can spend as much as 90 percent of their time on communicating. Several keys to good communications include focusing on individual and group communication needs, using formal and informal methods for communicating, providing important information in an effective and timely manner, setting the stage for communicating bad news, and understanding communication channels.

A communications management plan of some type should be created for all projects to help ensure good communications. Contents of this plan will vary based on the needs of the project.

Managing communication includes creating and distributing project information. The various methods for distributing project information include formal, informal, written, and verbal. It is important to determine the most appropriate means for distributing different types of project information. Project managers and their teams should focus on the importance of building relationships as they communicate project information. As the number of people who need to communicate increases, the number of communication channels also increases.

Reporting performance involves collecting and disseminating information about how well a project is moving toward meeting its goals. Project teams can use earned value charts and other forms of progress information to communicate and assess project performance. Status review meetings are an important part of communicating, monitoring, and controlling projects.

The main goal of controlling communications is to ensure the optimal flow of information throughout the entire project life cycle. Project managers and their teams should consider using facilitators and other experts to provide assistance.

To improve project communications, project managers and their teams must develop their communication skills. Suggestions for improving project communications include learning how to run more effective meetings, how to use e-mail, instant messaging, texting, kanban boards, and collaborative software more effectively, and how to use templates for project communications.

New hardware and software continue to become available to help improve communications.

As more people work remotely, it is important to make sure they have the necessary tools to be productive. Enterprise project management software provides many features to enhance communications across the organization.

Be sure to consider how communications management can differ in agile/adaptive environments.

Discussion Questions

1. Think of examples in the media that poke fun at the communications skills of technical professionals, such as Dilbert® or xkcd.com cartoons. How does this satire influence the industry and educational programs?

2. What courses in your educational program address the development of communications skills? What skills do you think employers are looking for? Do you think there should be more emphasis on communications skills in your degree program?

3. Discuss the importance of understanding tone of voice and body language in comprehending the meaning of what people say. Give examples of how the same words said in different ways have totally different meanings.

4. What items should a communications management plan address? How can a stakeholder analysis assist in preparing and implementing parts of this plan?

5. Discuss the advantages and disadvantages of different ways of distributing project information.

6. What are some of the ways to create and distribute project performance information?

7. Discuss the advantages and disadvantages of telecommuting.

8. Explain why you agree or disagree with some of the suggestions in this chapter for improving project communications, such as creating a communications management plan, stakeholder analysis, or performance reports. What other suggestions do you have?

9. How can software assist in project communications? How can it hurt project communications?

Quick Quiz

1. What do many experts agree is the greatest threat to the success of any project?

    a. Lack of proper funding

b. A failure to communicate

c. Poor listening skills

d. Inadequate staffing

2. In face-to-face interactions, how is most information conveyed?

a. By the tone of voice

b. By the words spoken

c. By body language

d. By the location

3. Which of the following is not a process in project communications management?

a. Planning communications management

b. Controlling communications

c. Managing communications

d. Managing stakeholders

4. What strategy can a project manager use to deliver bad news?

a. Tell a joke first.

b. Tell senior management as soon as possible so they can develop alternatives and recommendations.

c. Ask the project champion to deliver the news.

d. Set the stage by putting the news into context, emphasizing the impact on the bottom line.

5. If you add three more people to a project team of five, how many more communication channels will you add?

a. 2

b. 12

c. 15

d. 18

6. A(n) ____ report describes where a project stands at a specific point in time.

   a. status

   b. performance

   c. version

   d. earned value

7. What term describes information that is sent to recipients at their request via websites, bulletin boards, e-learning, knowledge repositories like blogs, and other means?

   a. Push communications

   b. Pull communications

   c. Interactive communications

   d. Customer communications

8. Which of the following is not a recommendation for improving project communications?

   a. You cannot overcommunicate.

   b. Project managers and their teams should take time to develop their communications skills.

   c. Do not use facilitators or experts outside of the project team to communicate important information.

   d. Use templates to help prepare project documents.

9. Which of the following is not a guideline to help improve time spent at meetings?

   a. Determine if a meeting can be avoided.

   b. Invite extra people who support your project to make the meeting run more smoothly.

   c. Define the purpose and intended outcome of the meeting.

   d. Build relationships.

10. A ____ report is a reflective statement that documents important information learned from working on the project.

    a. kanban

    b. lessons-learned

    c. project archive

    d. progress

Exercises

1. Research the topic of understanding body language. What are some common body movements that can help you understand how people are really feeling? What does it mean if someone looks up a lot when talking versus looking down or side to side? What does it mean when people cross their arms, touch their noses, or make other common gestures with their bodies? Perform a role-play of common project scenarios, and have people take turns saying something that does not match their body language. For example, someone might say that work is going well on a particular task when it is not.

2. Find examples of how project teams use new technologies to communicate project information. Which technologies seem to be most effective? Document your findings in a short paper, citing at least three references.

3. Review the following scenarios, and then write a paragraph for each one describing what media you think would be most appropriate to use and why. See **Table 10-2** for suggestions.

    a. Many of the technical staff on the project arrive at work from 9:30 a.m. to 10:00 a.m., while the business users always arrive before 9:00 a.m. The business users have been making comments. The project manager wants to have the technical people come in by 9:00, although many of them leave late.

    b. Your company is bidding on a project for the entertainment industry. You know that you need new ideas on how to put together the proposal and communicate your approach in a way that will impress the customer.

    c. Your business has been growing successfully, but you are becoming inundated with phone calls and e-mails asking similar types of questions.

    d. You need to make a general announcement to a large group of people and you want to make sure they receive the information.

4. How many different communication channels does a project team with six people have?

How many more communication channels would there be if the team grew to 10 people?

5. Review the templates for various project documents provided in this chapter. Pick one of them and apply it to a project of your choice. Make suggestions for improving the template.

6. Assume that in an agile project sprint, task T1 has already been completed. Ted is working on task T2, and tasks T4, T5, and T6 have not yet been assigned for anyone to work on. Create a kanban board depicting the status of all these activities. You can draw the kanban board or use the software of your choice.

7. Use the following data to answer the questions that follow.

Sprint Day	Remaining effort (story points)
1	75
2	55
3	45
4	0
5	0
6	0
7	0
8	0

Average velocity = (Remaining effort Day 1 – Remaining effort Current Day)/(Current Day – Day 1)

Estimated completion date = Current Day + (Remaining effort/Average velocity)

   a. Create a burndown chart for the given data using Excel or the software of your choice. (Hint: You can just create a line or column chart showing the Days on the horizontal axis and Remaining effort on the vertical axis. You do not need to show Ideal velocity.)

   b. What is the average velocity for the project, in story points per day? (Assume the Current Day is Day 3).

   c. What is the project's expected completion date?

8. Write a lessons-learned report for a project of your choice, using the template provided on the Companion website and the sample in **Chapter 3** as guides. Role play presenting the lessons-learned report, assigning roles of the project manager, project sponsor, etc. Do you think it is important for all project managers and team members to write lessons-

learned reports? Would you take the time to read them if they were available in your organization? Why or why not?

9. Research new software products that assist in communications management for large projects. Write a short paper summarizing your findings. Include websites for software vendors and your opinion of some of the products.

Running Case

Part 7: Project Communications Management

Several issues have arisen on the Global Treps Project. Ashok, your team member in India, broke his wrist playing tennis yesterday and cannot work on the project at all for three weeks. His work, which involves helping to edit the videos, starts in one week, so you need to reassign it to others.

Bobby suggests you use kanban boards to list all of the tasks for editing the videos and to track where they are in the work flow. Bobby, a techie and not known for being a good communicator, is the only person who's ever used kanban boards. You have not yet broken down the tasks into much detail and need more information from Angela, the contractor in charge of creating the videos.

Alfreda is having difficulties communicating with her main contact in Ethiopia, Dr. B. He is very busy all the time and does not use texting, Alfreda's preferred communications medium. He has also not communicated key information with students who could be candidates for their event, which is only a month away. Alfreda is not sure if he booked a room for the event yet.

1. Describe how you would communicate to Ashok and the rest of the team about Ashok's injury. What actions would you take? What communications medium would you use with different stakeholders?

2. Prepare a partial communications management plan to address some of the challenges mentioned in Part 7 of the case.

3. Research free online tools for using kanban boards and choose one to use. Prepare a list of at least 10 tasks that would be done in editing the videos and enter them into your tool of choice. Prepare or find a short guide or video explaining how to use the kanban boards.

4. Write a one-page paper describing options for communicating with Dr. B. and making sure students at his university get information about your event.

Key Terms

blogs p.415

communications management plan p.398

forecasts p.404

Google Docs p.408

lessons-learned report p.413