Project Management Road Trip®

For the Project Management Professional[®]

Your Key to PMP Certification and Understanding the PMBOK® Fourth Edition

J. Alex Sherrer, PMP www.PMRoadTrip.com *Project Management Road Trip for the Project Management Professional: Your Key to PMP Certification and Understanding the PMBOK Fourth Edition*

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Keywords

- \Box Active listening
- □ Casual/econometric forecasting methods
- □ Channel
- □ Communication skills
- □ Communications management plan
- □ Decode
- □ Effective listening
- □ Encode
- □ Feedback
- □ Interactive communication
- \Box Issue log
- □ Judgmental forecasting methods
- □ Lessons learned process
- □ Medium

- □ Message
- □ Noise
- □ Nonverbal communication
- □ Paralingual communication
- □ Project records
- □ Pull communication
- \Box Push communication
- □ Receiver
- □ Salience model
- □ Sender
- □ Stakeholder analysis
- □ Stakeholder management strategy
- □ Stakeholder register
- \Box Time series forecasting methods



The processes in Project Communications Management are:

- Identify Stakeholders: Determining the complete population of whom is affected by the project, what their individual expectations and interests are, and how their expectations and issues will be managed.
- Plan Communications: Determining what types and forms of communications will be needed.
- **Distribute Information**: Disseminating project information, including progress, issues, statuses, and lessons learned.
- Manage Stakeholder Expectations: Addressing ad-hoc information needs and managing and meeting stakeholder expectations, interests, and issues.
- **Report Performance**: Providing planned-versus-actual information on schedule, cost, quality, and scope.

The goal of project communication is to effectively transfer the right amount of information, such as scope, budget, schedule, risks, issues, and forecasts, to the right people, in the right format, and at the right time. Project communication occurs in many formats and involves everyone on the project, and is at the heart of all project activities. It's commonly estimated that a project manager will spend up to 90 percent of his or her time communicating with others on the project, and communication failures and breakdowns have traditionally been the number one cause of project failure.¹



An effective project communication strategy not only increases the chances of project success, but it makes the project more efficient and creates a better experience by:

- Keeping stakeholders, customers, vendors, management, and the project team actively engaged in and informed about the project.
- Facilitating issue identification and resolution through exposure of information.
- Helping to foster greater team work by eliminating project silos.
- Leading to better decisions through greater involvement and awareness.
- Generating commitment and enthusiasm for the project.

Communication

Effective project communication is not just disseminating project reports. It requires good **communication skills**, which are a broad subset of general management skills that help us clearly convey needed information to others and effectively receive information from others. Being good communicators is essential to our roles as project managers, meaning we have to be able to express ourselves clearly, directly, and appropriately; be excellent and active listeners; and have a good overall knowledge of all the elements involved in the subject of communication.

Communication models

Claude Shannon and Warren Weaver created a communication model that illustrates the basic elements involved in communication between the sender of a message and its recipient.² Since Shannon worked for Bell Telephone Company, the Shannon-Weaver model has elements that look similar to a telephone conversation.



Sender: The person encoding and transmitting the message.

Receiver: The person receiving the message.

Encode: The formulation of the message by the sender.

Message: The output of the encoding process.

Medium: The transport mechanism for the message chosen by the sender, such as telephone, e-mail, speech, or printed document.

Decode: The translation of the message by the receiver.

Noise: This is anything that disrupts the flow or understanding of the message. Noise can be auditory disruptions, like static or background noise, or even distractions such as somebody using a BlackBerry device during a meeting. "Noise" can even be generated by a recipient's unfamiliarity with the subject matter.



Communication is usually a two-way exchange between the sender and the receiver, so Wilbur Schramm introduced a model that included the concept of feedback from the receiver back to the sender.³ Feedback is essential for the overall communication process, and active listening (also known as effective listening) is when the receiver acknowledges the message through a physical response like body language, comments, or by asking for clarification. Acknowledgement generates feedback, and that feedback results in a second message loop from the receiver back to the sender.

It's the **sender's responsibility** to make the message clear, complete, and understood while it's the **receiver's responsibility** to make sure the message is received in its entirety and understood.



Communication channels

The more people involved in the exchange of information the more complicated the communication process will be. A **channel** refers to the path between parties involved in the communication process, and each channel adds complexities because it increases the change for miscommunication. The formula for calculating the number of channels is:

n (n-1) /2 (where *n* is the number of people)

In a simple one-on-one conversation, there is only one communication path between the two parties.

Channels: 2(2-1)/2 = 1

If two more people join the conversation, there are six channels of communication between those four people.

Channels: 4(4-1)/2 = 6





If there are eight people involved, the number of channels increases to 28.

Channels: 8(8-1)/2 = 28

Forming the message



Effective communication requires that the message has a clear purpose, be meaningful to the recipients, incorporate the correct tone, have the appropriate content, be delivered through a suitable medium, and be appropriate for the method of delivery. If any of these elements isn't right for the situation then there's likely to be a misunderstanding.

Purpose

Good communication begins with a primary purpose that provides the framework for all other choices we make in formulating our message. Is our intent to inform, motivate, entertain, reprimand, train, or build a relationship? If we don't have a clear, targeted purpose then our entire message will be unclear and leave our audience confused. One frequent mistake is trying to make a single communication serve too many purposes. For example, a project manager may want to produce a project status report that includes technical specifics needed by the project team, detailed financial information needed by the project management team, and a broad overview needed by organizational management. A single message trying to meet all these purposes may be ineffective, so the project manager may want to consider three separate status reports.

Audience

Our **audience** is those who'll receive our message, and it doesn't matter whether our message is verbal, written, or visual or whether our purpose is to inform, train, or entertain –if the audience can't relate to our message, it isn't going to listen, and our effort and time have been wasted. We have to anticipate our audience's needs well enough so that we construct the message's content, tone, medium, and method in a suitable manner.

That doesn't mean that every project status report needs to be written like a prize winning novel or be formatted like a flashy marketing brochure. But it does mean that we need to know the audience well enough to formulate the message so that it holds the recipient's attention and can be understood. Stakeholder analysis, performed as part of the Identify Stakeholders process, and normal day-to-day interactions with the project team help us to better understand who we're communicating with and what each person's interests and preferences are. It's as simple as this: If you don't know your audience then you can't make your audience *feel*, and then they aren't going to care and if your audience doesn't care they won't listen to you. Communicate and relate to your audience - right away. What are you going to give them?...How will you help their business grow?...How will you help them save time?...save money?...How will you make them feel!⁴

Wendi McNeill, owner of Charli Jane Speaker Management

We also need to gauge the audience's familiarity with the

subject matter. Acronyms and technical jargon should be infrequently used unless the audience is very familiar with the terminology. The audience may also need context beyond the core information. Context can be thought of as background information that is necessary to know in order to fully understand the message. As an example, if the communication is about an ongoing quality issue and it's being targeted to the project quality control personnel, they probably don't need anything but new information in the message. But if the communication is documenting the issue as part of the lessons learned process then the audience will be team members on subsequent projects who will not be familiar with the first-hand information surrounding the issue, so the communication needs to also include relevant background information.

People also grasp information in different manners, and certain information is more suited to different formats, so we'll have to construct our content in a manner that makes it easy to understand. Some people prefer textual and numerical information, others are visual and comprehend best through examples, diagrams, flow charts, or schematics, and some people are auditory and understand best by listening. Messages may have to combine several different formats to help all the recipients reach the same level of understanding.

Tone

The **tone** of a message refers to a second, indirect layer of information in the message that evokes an outward or subconscious emotional response in the receiver. The tone can either reinforce the primary message or it can deliver a different message on its own. Since direct and straight-forward communication is best in a project, the tone we choose should reinforce our primary message.

In speech, tone is primarily expressed through **paralingual communication** --the vocal elements, such as pitch and volume. **Nonverbal communication** includes factors such as body language, facial expressions,

posture, and hand gestures. In face-to-face communication, *words make up only seven percent of the message* while paralingual elements convey 38% and nonverbal elements convey 55%.⁵ So, in spoken communications the sender needs to be very conscious of his or her volume, pitch, and body language and make sure the message those elements are delivering are what he or she intends. In written communication the words chosen, rhythm, and even font style and color choices express tone.



Content

Content is the heart of communication because it's the information to be exchanged. In the project environment, content is usually data or facts, but content can also be an emotional call to action, such as generating enthusiasm. Other factors that directly affect the content are the complexity of the information and its urgency. Complex content that may be relevant in a training document would likely be irrelevant for an executive-level presentation, and if a message is urgent then its content should usually be very simple and direct.

We also need to determine the best methods for formatting the content so that it's understandable, which can sometimes mean a combination of visual, auditory, and textual methods. For example, if we need to provide content showing an increase in project costs, both a visual graph plotting the increase and a spreadsheet showing the raw data can supplement each other.

Medium

The **medium** is the transport mechanism for the message --book, brochure, memorandum, telephone call, voice mail, e-mail, instant message, videoconference, blog, and so on. The medium carries a

subconscious message about its urgency, importance, and formality. For example, a handwritten invitation delivered through the postal system will be perceived more formal than an invitation received through e-mail. Mediums dictate what content and formality is acceptable and

The most important thing in communication is to hear what *isn't* being said.⁶

Peter Drucker

appropriate. For example, complex information would not normally be delivered through a voice mail message, and it would be inappropriate to deliver bad news through an instant texting medium.

When practical, face-to-face meetings are best whenever the message will generate a strong emotional response. Choosing the wrong medium can generate hard feelings that can damage team relationships.

There are four general types of formality that are primarily driven by the medium chosen:

- Informal Written: This is the most common form within a project, and it includes e-mails, memos, blogs, and instant messages for ad-hoc exchanges, project status reports, issues, work performance information, and progress reports.
- Formal Written: This level usually involves "public" documents that become part of project records, such as contracts or press releases. The medium is usually a printed document or its electronic equivalent.
- **Informal Verbal:** This is probably the second most common type of communication within a project, and it involves meetings, telephone calls, video conferences, webinars, and so on. For very simple messages, informal verbal, such as face-to-face discussions, is most effective.
- **Formal Verbal:** This type is rare on most projects because it involves public speaking events, such as press conferences and executive presentations.

Communication method

While formulating the message, the intended method of delivery is also an important consideration.

$$\mathring{\mathbb{X}} \longleftrightarrow \mathring{\mathbb{X}}$$

Interactive communication: The message is exchanged through a synchronous or multidirectional method, meaning that the recipients have an opportunity to ask questions, provide feedback, and that the sender has an opportunity to clarify. Interactive communication involves meetings, instant chats, electronic social messaging, telephone calls, forums, and conferences.

Push communication: The message is delivered to recipients in a form which provides them no way of immediately giving feedback or seeking clarification. In push (and pull), the sender has no definitive way to know that the receivers read and understood the communication. Push communications utilize e-mails, voice mails, newsletters, letters, memorandums, reports, RSS feeds, and most text messages.

Pull communication: The message is posted to a repository and the sender must seek out the information at his or her discretion. As with push communication, there's no immediate way for the sender to provide clarification or to know that the receivers definitively understood the message. Pull communications involve web sites, intranet repositories, podcasts, recorded webcasts, project libraries, and e-learning materials.

10.1 Identify stakeholders



A successful project is a two-way street between the project team and the stakeholders. expectations The needs and of the stakeholders directly impact the development of project's scope, and since the communication is effective only when the right information is provided to the people who need or expect it in a manner they can understand, we have to begin discovering the stakeholders and learning about them immediately after the project is chartered.

The best place for initially finding stakeholders is through the project charter, contracts, request for proposals, and statements

When stakeholder concerns, perceptions, needs, and causes are identified early and translated into appropriate, derived requirements against which alternative solutions may be evaluated, stakeholder opposition is minimized and consent can be achieved. It must be emphasized that it is not a realistic goal, nor is it necessary to attempt to gain the active support of all stakeholders, that is, unanimous agreement or consensus. Stakeholders may grant consent in spite of continued objections when they have been shown that solving the problem is important for the greater good...⁷

Rick Fawcett, D.A., and George L. Kramer, Ph.D., Consent Versus Consensus

of work. Stakeholders can also be found by looking at the organizational chart and informal reporting structure and relationships within the organization. Stakeholders can also come from outside the organization, including customers, suppliers, vendors, investors, industry groups, labor organizations

As we look for stakeholders, we need to keep in mind that not everyone will perceive our project as being beneficial. Whether their opposition comes from real or imaginary factors, we can't ignore these negative stakeholders. We need to identify them, discover the root cause of their opposition, and develop strategies for addressing their issues or mitigating the risks their opposition can create.

The causes of stakeholder opposition are often rooted in:

- the project's objectives
- the methods the project will use to achieve its objectives
- the direct or indirect changes or transformations the project's objectives will generate
- the financial or human resource needs of the project
- the people chosen (or not chosen) for the project or their roles
- the vendors or suppliers chosen (or not chosen) for the project.

Stakeholder register

The **stakeholder register** is the list of all people positively or negatively affected by the project. It includes basic identification, like name, title, position, location, and contact information, as well as

characteristics that may be uncovered later, like their expectations, interests, and influence in the project. Since the stakeholder register is generally a shared document, it shouldn't contain any comments that could be construed as being derogatory.

The key items that should be considered for the register are:

- Stakeholder's name, title, company, department/business unit, and contact information
- The list of people reporting to the stakeholder
- The person the stakeholder reports to
- The stakeholder's general interest in the project
- Any areas of particular interest the stakeholder has in any specific project components
- The project information needs of the stakeholder
- The preferred methods and frequency of communication.

Stakeholder analysis

Stakeholder analysis investigates the interests, expectations, and influences of the project's stakeholders. Stakeholder analysis useful for three main reasons:

- In order to be successful, the project must satisfy the needs of the key stakeholders, so we have to know who these people are so that they can be included in project planning activities.
- Both supportive and negative stakeholders generate risk factors in the project. We have to understand all stakeholders to effectively gauge what levels of risk could be generated by their activities.
- It's likely that the stakeholder population will be quite large. That makes it impossible for every stakeholder to be actively included in project planning, and it makes it difficult for the project manager to determine which stakeholders are crucial to the project's success and should therefore receive the most of his or her time. Stakeholder analysis helps us determine on whom our time and effort is best spent.

Stakeholder analysis is not a passive activity. Though some preliminary judgments may be performed by the project manager, a thorough analysis involves interaction with the stakeholders through formal or informal discussions, interviews, forums, round tables, and surveys. The information collected is then assessed using a wide variety of tools, ending up with a clear idea of each stakeholder's influence, what he or she expects from the project's deliverables and from the project management team, and the stakeholder's level of interest in the project. Armed with that information, we'll later be able to develop a stakeholder management strategy.

The results from stakeholder analysis are usually shown on a **stakeholder analysis matrix**, which can be thought of an as extension to the stakeholder register. It contains additional, detailed characteristics about each stakeholder, such as the answers to the questions shown above. It can also be used to contain the stakeholder management strategy for maintaining or increasing their support of the project or for mitigating risks associated with negative stakeholders.

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To perform stakeholder analysis, we'll need to:

- 1. **Make sure we've identified every person, group, or entity affected by the project.** We'll want to review the stakeholder register and make sure it's complete. That includes exposing "hidden" stakeholders, which are people who often become evident only later in the project. For instance, in a project that will result in the installation of new equipment, hidden stakeholders might be those who'll have to repair the equipment after the project is completed or the internal supply depot that'll need to keep replacement parts on hand.
- 2. Assess each stakeholder's interests in the project by asking ourselves the following questions about each stakeholder:
 - What are the stakeholder's general expectations as they relate to the project?
 - What are the political or organizational interests the stakeholder will try to protect or promote?
 - What are the project's beneficial impacts on the stakeholder?
 - What are the project's detrimental impacts on the stakeholder?
 - What resources does the stakeholder control?
 - What actions might the stakeholder take that could have a positive or negative impact on the project? Under what situations might the stakeholder perform those actions?

3. Know the influence each stakeholder holds:

- What are the direct responsibilities the stakeholder has within the organization (title, department, business unit)?
- What are the indirect responsibilities and influences the stakeholder has within the organization (alliances, friendships)?
- What are the political, organizational, social, or economic influences the stakeholder holds that impacts the project or its resources?
- 4. **Develop proactive strategies for dealing with stakeholders.** Based on the answers from the above questions, the project manager needs to determine a communication and management strategy for each stakeholder that meets their needs, interests, and influences.
- 5. What level of involvement should the stakeholder have in the project, and how much effort should the project manager plan on managing the stakeholders?
 - Collaboration/Partnership: For influential stakeholders, the project and stakeholders are best served by joining forces and some level of power-sharing over certain elements, decisions, or requirements.
 - **Information giving:** For stakeholders with power but less interest in the project, they are best served by receiving regular information about the project but not necessarily constant involvement.
 - Consultation/Dialogue: For stakeholders with a high interest in the project but low power, the project is best served when the project manager seeks and considers their advice and opinions, but the stakeholders have no direct authority in decisions.
 - Information gathering: For stakeholders with both low interest and low power, the stakeholders have only a need for infrequent information, though the project manager will want to monitor these stakeholders, watching for changes that may increase their influence or power within the project.

Grids

Grids are a tool to plot a stakeholder's position along two axes that each represents a separate key factor. The two axes split the grid into four quadrants, and where the plotted point falls gives us an indication of what level of participation the stakeholder needs and how much effort the project manager will want to expend on meeting the stakeholder's expectations.

Keep
SatisfiedManage
CloselyMonitorKeep
Informed

In the upper-right quadrant are stakeholders who need actively engaged in the The most common gap I've seen in communications plans is a failure to identify potential negative reactions. The "ostrich approach" rarely works. You're not doing anyone favours by pretending people won't react negatively when you expect them to do so.⁸

Dave Fleet, "How To Write A Good Communications Plan"

project, usually in a partnership or collaborative relationship. In the upper-left quadrant are stakeholders who need occasional engagement with the project and project manager. The project manager needs to keep an open and regular dialogue with the stakeholders in the lower-right quadrant. And those in the lower-left quadrant need to receive occasional follow-up and information about the project, but the project manager doesn't want to overwhelm them with

communication. The levels of interest, power, or influence for stakeholders in a project are not always static, so a project manager wants to monitor all stakeholders for a change that moves them into another quadrant requiring a different management strategy.

Commonly used grids are Power/Interest, Power/Influence, and Influence/Impact.



Salience model

Salience refers to the level of power, legitimacy, and urgency stakeholders have in the project. The **salience model**, introduced by Mitchell, Agle, and Wood⁹, is a Venn diagram that helps the project manager understand the priority and level of attention a particular stakeholder will need.

- **Power:** This is a subjective determination of how much influence the stakeholder has to impose his or her will. For example, a chief executive in the company usually has a very high level of power even if he or she isn't directly involved in the project.
- Legitimacy: This is a gauge of how much vested interest the stakeholder has, giving the stakeholder a legitimate stake in the project. For example, a marketing manager probably has no legitimacy in a project for the accounting department.
- Urgency: This is an assessment of how quickly the stakeholder will expect his or her will to be acted upon.

Based on the plotted position in the Venn diagram, the project manager can get a good idea of the best strategy for managing the stakeholder.

A. **Core stakeholders:** People falling into this classification are the project's key stakeholders. They have power, legitimate authority, and a high urgency for most issues. The project manager will want to pay close attention to these stakeholders.



- B. **Dominant stakeholders:** These people have power and legitimacy within the project but don't have a high expectation of urgency for most issues. The project manager will want to pay close attention to these stakeholders, but their demands are usually less critical than core stakeholders.
- C. **Dependent stakeholders:** Stakeholders in this class have legitimate authority and an expectation of urgency, but they have no real power to impose their will. The project manager needs to engage and solicit the input of these stakeholders because if they grow dissatisfied, they might be able to ally themselves with someone of power.
- D. **Discretionary stakeholders:** These stakeholders have a vested interest in the project (legitimacy), but they have no power and carry no sense of urgency. These people need to be kept informed and are generally receivers of regular project communication but they have few demands.
- E. Latent stakeholders: These stakeholders have power, but they have no legitimacy in the project or urgency characteristics. The project manager should keep these people informed of high-level project information but shouldn't overburden them too many details. They also need monitored because should they grow dissatisfied, they have the power to give themselves legitimate authority in the project, especially if dependent stakeholders ally with them.
- F. **Demanding stakeholders**: This group of stakeholders believes their demands are always urgent, but they have no real power in the project. Mitchell, Agle, and Wood called these "mosquitoes" because they can be annoying. The project manager doesn't want to fall prey to spending too much time dealing with these stakeholders at the expense of efforts focused on influential stakeholders.

- G. **Dangerous stakeholders:** Dangerous stakeholders have power and characteristics of urgency, but they have no vested interest in the project. They are dangerous because they have the clout to enmesh themselves in the project and give themselves legitimacy, so the project manager wants to keep these stakeholders informed and appropriately engaged to keep them satisfied.
- H. **Non-stakeholders:** Anyone falling outside the Venn diagram is by definition a non-stakeholder because they have no power, legitimacy, or urgency. The project manager wants to double-check and make sure the person really is a non-stakeholder.

Stakeholder management strategy

The project manager is responsible for ensuring that the needs and expectations of the stakeholders are identified and met while also mitigating the potential obstacles that negative stakeholders might raise. These efforts are described in the **stakeholder management strategy**, which is a proactive plan covering both generalized and targeted strategies for keeping positive stakeholders satisfied and mitigating the risks posed by negative stakeholders.

Developing a strategy can be approached as simply as asking ourselves these questions about each stakeholder:

- How will positive stakeholders be kept satisfied?
- How could we reduce or eliminate the opposition from negative stakeholders?
- How can we mitigate the risks negative stakeholders may generate?
- What's the role of others (outside the project) in managing stakeholders?
- What types of communications, forums, and face-to-face opportunities will work best for the various types of information and issues that will need addressed?

The stakeholder management strategy will be executed during the Manage Stakeholder Expectations process. These efforts can take a significant amount of the project manager's time, but if they aren't done well, the project can experience significant problems. Many a project manager has been caught off guard by unseen "political" issues raised by an unhappy stakeholder even though the project appears to otherwise be running smoothly.

A successful stakeholder management strategy looks at stakeholders as partners in the project and tries to forge a collaborative relationship based on a common understanding of shared goals, open dialogue, and straight-forward information sharing.

10.1 Process decomposition



Inputs

□ Project charter

The project charter formally authorizes the project and the project manager. It also provides the business case, objectives, and success criteria of the project. Charters directly or indirectly identify key stakeholders.

Procurement documents

If the project is using outside resources or purchasing goods, material, or services then the collection of procurement documents, like contracts, identify additional project stakeholders.

□ Enterprise environmental factors

The organizational structure, hierarchy, and formal and informal reporting relationships indicate project stakeholders.

□ Organizational process assets

Project plans, stakeholder registers, and lessons learned from other projects can help identify stakeholders.

Tools and Techniques

□ Stakeholder analysis

Stakeholder analysis uses a variety of techniques to qualitatively and quantitatively identify the interest, expectations, influences, and needs of stakeholders.

□ Expert judgment

Expert judgment is used to assess the interests, influences, and power of stakeholders.

Outputs

□ Stakeholder register

The stakeholder register identifies all project stakeholders and contains attributes such as the person's name, title, position, project interest, expectations, and influence.

□ Stakeholder management strategy

This document describes the approach that will be taken to maintain or increase the support of stakeholders in the project or to mitigate the risks or remove the obstacles that negative stakeholders can cause.

10.2 Plan communications



Activities in the **Plan Communications** process improve the project by determining what information everyone expects, who receives what information, when information will be provided, and how it will be delivered. This preplanning eliminates confusion and makes the project experience smoother for the customer, stakeholders, and the project team. The project manager is responsible for ensuring that project communications are effective and being carried out, and this includes making sure that the communications planning process is done satisfactorily. But this does not mean that the project manager is sole communication within the project. Everyone needs to have good communication skills to be an effective team member.

Many project factors go into determining how detailed the communications planning process should be. At a minimum, required project communications should be identified in the plan and responsibilities assigned. But even small projects may need in-depth planning depending upon the stakeholders, customer, or business priorities of the project.

Communications planning should cover both

One formula for communications planning is RACE:

Research: Investigate the overall project and its need for communications.

Analyze: Review the stakeholders and project team, determining their goals and objectives, and develop a communication strategy.

Communicate: Implement the communications plan. Evaluate: Check whether the plan is being successful, and fine-tune as necessary.

the formal and informal communication needs. Formal needs include progress meetings, status reports, performance reports, issue disposition, and other customer, stakeholder, management, or team communication items that are expected. Informal communications are those generally considered as social interactions or impromptu meetings --ad-hoc conferences, lunches, or hallway conversations. These are necessary because they're a form of networking and team building, and it's often through informal communication that the first signs of project problems can be discovered. While it isn't possible to plan for specific informal communication exchanges, it is possible to establish a basis for them in the communication plan.

Communications requirements analysis

In order to develop the project communications plan, **communications requirements analysis** must be done to determine the needs of the project. This analysis looks not only at what is generally required for all projects, but what communication needs are specific to the project being undertaken and its environment. Different projects will require somewhat different approaches, but in general the analysis starts by determining the communication needs and expectations of the stakeholders. The results from stakeholder analysis are very useful in communications planning because they provide the overall expectations of the stakeholders which can be turned into communications requirements and methods tailored to each stakeholder.

Another important factor to consider is the interest level of the stakeholders in different types of project communication. Much depends upon the project, but as an example stakeholders in the accounting department will have different information needs than will stakeholders in the manufacturing department. If the two groups are barraged with detailed information that isn't relevant to their interests then they'll become overwhelmed with project information and begin ignoring project communications even when the information is important to them. All project communications should be the minimum necessary to keep people informed, but not so much communication that it overwhelms them.

Other project-level factors to consider is how often specific information needs to be updated (e.g., daily, weekly, monthly), the risk level of the project, and whether the project team is co-located, disbursed across multiple locations, or is operating wholly or partially as a virtual team. Some projects with large public exposure may also require official communication channels to be identified, designating who can officially communicate with whom and over what subject matter.

Communications management plan

The primary output of the communications planning process is the **communications management plan**. This is a subsidiary component of the project management plan, and it details the communications needs and requirements of the project and of the stakeholders, assigns responsibility, details the frequency and methods for communication elements, and defines the escalation paths for issues. Communication responsibilities are part of project management overhead, and communication activities need identified as deliverables with sufficient time allotted to them in the project schedule.

Not every single type of communication can be planned for in the communications plan, and trying to go into too much detail can needlessly bog down the communications planning process. The point of communications planning is to identify and *expend resources only on communication that contributes to the success of the project or where a lack of communication can lead to project failure¹⁰ --nothing more and nothing less. The communications management plan should cover the major types of communications that will need to occur, and provide enough of a framework so that the project team knows what to do when unexpected communication needs arise.*

A communications plan typically contains:

- A glossary of project-specific terminology that serves as a common lexicon
- Communications types and characteristics:
 - Description of the information to be communicated (for example, schedule progress reports and budget forecasts).
 - The level of detail, content, and format of the information.
 - Who is responsible for creating and delivering the messages and information.
 - To whom the communication should be delivered to.
 - The frequency the information is to be communicated.
 - Constraints or other restrictions that may be applicable to information or communication.
 - The mediums and organization of the communication repository (for instance, folders that communication will be published to on a web portal).
- Escalation paths for issues.

- Methods for updating the communications management plan when needed.
- Templates or guidelines, such as agendas and meeting minutes.

The table below shows the major project management documents that are routinely communicated to (or needed from) the project team, stakeholders, and the performing organization. The communication methods and storage locations of these documents, as applicable to the project, should be described in the plan.

Initiating	Executing	
Project charter	Lessons learned	
Stakeholder register	Project staff assignments	
	Resource calendars	
Planning	Ground rules	
Project management plan	Qualified seller list	
Scope management plan	Bidder conferences	
Schedule management plan	Selected sellers	
Cost management plan	Procurement contracts	
Quality management plan		
Process Improvement Plan	Monitoring & Controlling	
Human resource management plan	Change log	
Staffing management plan	Change requests	
Communications management plan	Change dispositions	
Risk management plan	Issue log	
Procurement management plan	Issue dispositions	
	Forecasts	
Project scope statement	Performance reports	
Stakeholder register	Work performance information	
Requirements documentation	Work performance measurements	
Work breakdown structure		
WBS dictionary	Closing	
Activity list	Administrative closure	
Activity attributes	Contract closures	
Milestone list		
Project schedule		
Quality checklists		
Risk probability and impact assessment		

Risk register



Inputs

□ Stakeholder register

The stakeholder register identifies all project stakeholders and contains attributes such as the person's name, title, position, project interest, expectations, and influence. The communications management plan needs to accommodate the information and project communication expectations of the stakeholders.

□ Stakeholder management strategy

This document describes the approach that will be taken to maintain or increase the support of stakeholders in the project or to mitigate the risks or remove the obstacles that negative stakeholders can cause. The communications management plan needs to incorporate that planned strategy.

□ Enterprise environmental factors

Any of the many enterprise environmental factors and systems that influence the project should be considered as they relate to the communications management plan.

□ Organizational process assets

Lessons learned relating to project communications from past projects are of particular interest.

Tools and Techniques

□ Communications requirements analysis

Communications requirements analysis identifies the minimum information, type, format, and frequency needed that will contribute to the project's success or where a lack of communication can lead to failure.

□ Communications technology

The technologies available and applicable to the project affect planning for communications. The size of the project, geographical disbursement of the team, overall project duration, and application area of the project have a bearing on which technologies will be most effective.

Communication models

Communication models illustrate how information passes from the sender to the receiver(s). They include encoding, feedback, medium, noise, and decoding.

Communication methods

Communication methods are how information is shared. Methods fall into three broad categories: interactive communication, push communication, and pull communication.

Outputs

□ Communications management plan

The communications management plan is a subsidiary plan of the project management plan, and it details the communications needs and requirements of the project and of the stakeholders, assigns responsibility, details the frequency and methods for communication elements, and defines the escalation paths for issues.

□ Project document updates

Communications planning may result in changes to the stakeholder register, stakeholder management strategy, or provide additional information for stakeholder analysis documents.



The **Distribute Information** process gets general project information to those who need and expect it by executing the communications management. This process also ensures that project documents are archived and that lessons learned are collected, documented, and stored for later project teams.



Information needed is gathered and retrieved from sources like electronic databases, project management software, project libraries, and issue logs. Effective communication skills are needed to reformulate the information into a message that is clear, concise, and meaningful to those for whom it's intended. Distributed information is then shared through appropriate business mediums such as e-mail, paper documents, meetings, portals, intranets.

Distributed information falls into three broad categories. **Project reports** include status reports, presentations, issue dispositions, and ad-hoc requests. **Project records** are generally miscellaneous correspondence, memos, and historically important documents like contracts. Lessons learned is the third category.

Lessons learned

Lessons learned are part of organizational process assets and are inputs to all project planning processes. Lessons learned are usually from prior projects (though lessons learned from the current project may be relevant also). The **lessons learned process** analyzes what has occurred within the project and identifies the strategies that worked well and where improvements could have been made, and it makes sure that these experiences and knowledge are properly collected, documented, organized, and made available to the performing organization.

These experiences help later project teams avoid mistakes. One way to think about this process is that "lessons learned" for the current project become "lessons applied" in later projects, circumventing future mistakes.

Lessons learned for the existing project are gathered and collected throughout the entire project life cycle. There are usually team sessions devoted specifically to reviewing, discussing, and documenting lessons learned. Lessons learned should be developed with later project teams in mind, so the lessons need to be clear, descriptive, significant (not state the obvious), and be as empirical as possible.

Because lessons learned is a valuable tool that increases the chances that later projects will be successful, project managers have a professional obligation to ensure that the lessons learned process is undertaken. Everyone on the project team should participate in collecting lessons learned, and at certain points within the project, such as phase transitions or major milestones, the lessons learned collection should be reviewed by the team. It's probably best to have one team member serve as the information gatekeeper for

Capturing lessons-learned may require admitting that you made a mistake...The solution is to move from a culture of punishing mistakes to one of not repeating mistakes. ...create a "safe proving ground" environment that encourages identifying and correcting errors when they are small—long before they can grow into a larger and possibly catastrophic failure. This approach not only prevents repeated errors, but also promotes habitual learning and innovation, putting you on an upward trajectory of sustained performance improvement.¹¹

Art Murry and Jeff Lesher. The Future of the Future: Breaking the lessonslearned barrier

lessons learned because he or she can make sure that items aren't duplicated and that they meet documentation standards.



Inputs

□ Project management plan

The communications management plan, a subsidiary component of the project management plan, contains all the details about how project information will be distributed.

□ Performance reports

These provide performance reporting on activities, accomplishments, forecasts, progress, and issues. They're an output of the communication process Report Performance.

□ Organizational process assets

Templates can provide assistance in compiling information to be distributed.

Tools and Techniques

Communication methods

Communication methods are how information is shared. It includes meetings, conversations, presentations, and conferences.

□ Information distribution tools

Communication is distributed via a variety of means that are appropriate for the message and content. Distribution tools include hard copy reports, electronic databases, e-mail, telephone, voice, video conferences, webinars, postal mail, websites, intranet, and project portals.

Outputs

□ Organizational process assets updates

As information is distributed, it becomes part of the organization's knowledge base. Distribute Information results in project reports, project records, lessons learned documentation.

10.4 Manage stakeholder expectations Monitoring & Initiating Planning Executing Closing Controlling 10.1 Identify 10.2 Plan 10.3 Distribute 10.5 Report Stakeholders Communications Information Performance COMMUNICATIONS 10.4 Manage Stakeholder Expectations

The **Manage Stakeholder Expectations** process uses communication and interpersonal skills to keep stakeholders satisfied and engaged in the project and to uncover, address, and resolve stakeholder issues. Activities in this communication process execute the stakeholder management strategy as defined in Identify Stakeholders (10.1). Active involvement in the project by stakeholders is one of the key success factors identified in the Standish Group's CHAOS report.¹² Nothing can derail a project faster than a loss of stakeholder support, which is often caused by a lack of communication, miscommunication, or a lack of follow-through on issues.

The project manager is the one ultimately responsible for managing stakeholders but that doesn't mean

that it's only the project manager who communicates with the stakeholders. Everyone on the project team should understand good stakeholder relations and how to communicate appropriately with them. The communications management provides details plan the and responsibilities for regular stakeholder communications based upon their expectations and needs, but it should also contain strategies for ad-hoc stakeholder issues.

Managing expectations primarily involves making sure that the visions of stakeholders are aligned with the project's deliverables and the project management service level. The art of managing Another essential factor when building trust is to study and respect the culture of stakeholders in order to be able to better listen to and understand them. By working to understand why stakeholders think what they do and practicing reflective listening with them, a change leader communicates that his or her stakeholders have important values and needs themselves.

Although stakeholders will not always agree with a change agent's course of action, if you take active steps to influence their positive trust for you by giving them access, context, and reflective listening, they will begin to understand and trust you and have a positive perception of your value and intentions.¹³

Leadership Lessons from West Point

stakeholders relies on a mix of political acumen, people skills, management skills, and excellent communication skills. These skills are especially important because *resolving* stakeholder issues does not always mean *satisfying* the original request or issue as stipulated by the stakeholder. Rather, resolving issues often means reaching a mutually agreeable outcome to the issue. And it means responsibly, honestly, and directly dealing with stakeholders whose issues can't be addressed to their satisfaction.

Staying on top of ad-hoc issues can be difficult, so it's important that all stakeholder and project team issues be properly logged, assigned responsibility for resolution, and their dispositions communicated. This is done through the issue log. The **issue log** is for ad-hoc, actionable items that don't warrant a defined project activity. Issue log items are usually not directly tied to a project deliverable, but are instead needed to maintain a good working relationship between team members or stakeholders.

Managing stakeholders isn't a one-time event. It will occur throughout the project life cycle, and it's especially important that it doesn't get overlooked once project execution is underway nor should this process occur only when there are negative events or issues. Keeping the project stakeholders engaged and informed about the project even when things are running as planned can help control the situation should the project run into difficulties. When issues do come up that cannot easily be resolved, face-to-face meetings are the most effective way for them to be addressed. Though not always practical due to geographical or time constraints, e-mails, phone calls, electronic meetings, and other forums can be just as effective when used properly.



<u>Inputs</u>

□ Stakeholder register

The stakeholder register identifies all project stakeholders and contains attributes such as the person's name, title, position, project interest, expectations, and influence.

□ Stakeholder management strategy

This document describes the approach that will be taken to maintain or increase the support of stakeholders in the project or to mitigate the risks or remove the obstacles that negative stakeholders can cause.

□ Project management plan

The communications management plan, a subsidiary component of the project management plan, contains all the details about how stakeholders expectations and needs will be addressed.

\Box Issue log

The issue log is a written document that helps manage project issues relating to stakeholders, including project team members.

\Box Change log

The change log tracks all requested changes to any component of the project. It includes a full description of the proposed change, including assessment information about the change, such as impact, cost, time, and risk. Proposed changes and their final disposition need fully communicated to applicable stakeholders.

□ Organizational process assets

Templates, such as for issue tracking, are often available. The organization may also have procedures and guidelines for issues and change management.

Tools and Techniques

□ Communication methods

Communication methods are how information is shared. It includes meetings, conversations, presentations, and conferences.

□ Interpersonal skills

Strong interpersonal skills are needed to build and maintain a constructive and healthy relationship with the stakeholders.

□ Management skills

Good management skills, such as negotiating and communicating, help to build effective relationships.

<u>Outputs</u>

□ Organizational process assets updates

Lessons learned from the Manage Stakeholder Expectations process become part of the organization's knowledge base.

□ Change requests

This process may result in the need to adjust the stakeholder management strategy or uncover the need for corrective or preventative actions.

□ Project management plan updates

This process may identify a need for a change to the communications management plan.

□ Project document updates

The issue log is updated to reflect new issues or updates to issues already identified. Other project documents that may be updated include the stakeholder register and stakeholder management strategy.



Activities in the **Report Performance** process gather, compile, and distribute information related to the project performance measurement baseline, which include scope, schedule, cost, and quality. Activities in this process are focused on comparing actual work to what was planned.

The Report Performance process can sometimes be confused with the Distribute Information process, but there are some key differences:

- *Distribute Information* is concerned with general project information, such as meeting minutes, issues, and correspondence. *Report Performance* focuses on performance reporting against baselines, such as scope, schedule, cost, or quality.
- *Report Performance* uses time, cost, and related work performance information.
- Because *Report Performance* compares what is actually occurring with what was planned, it's in the Monitoring and Controlling process group. *Distribute Information* is an executing process.



In order to identify where the project currently stands, status review meetings, time reporting systems, cost reporting systems, electronic databases, project management software, and other sources provide what work has been accomplished. Work performance measurements showing planned versus actual helps develop forecasts.

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Making predictions about the future performance of the project is done through four general approaches.

Time series methods

These methods involve using historical data to predict future results. They involve:

- **Trend estimation:** This method uses measurements over a period of time to develop a forecast for the future.
- Moving average: A moving (or rolling) average is used to keep short-term fluctuations from causing erratic predictions.
- **Exponential smoothing:** Exponential smoothing is similar to a moving average, except it applies a decrease weight to older measurements to better reflect more recent trends.
- Linear prediction: A mathematical technique that can be used for linear systems. Linear systems are those whose current outputs are highly dependent upon past inputs, and therefore predictable.
- Growth curve: A growth curve is a set of past and regular measurements plotted onto a graph.
- Extrapolation: Uses formulas to determine what a future measurement will be based on a set of known measurements.

Casual/econometric methods

These forecasting methods attempt to identify the factors that influence an outcome and thereby be able to predict behavior. These methods include:

- Regression analysis: This method relies on determining the dependencies and relationships of variables that can influence an outcome.
- Autoregressive moving average (ARMA) and Autoregressive integrated moving average (AIRMA): These methods uses a time series of measurements and the Box-Jenkins model, which incorporates an autoregressive (AR) part and a moving average (MA) part.
- Econometrics: These methods combine principles from economics and statistics to predict future behavior.

Judgmental methods

These methods of forecasting rely on expert judgment and include methods like:

- **Composite forecasts:** This approach uses predictions from multiple forecasts based on different methods.
- Surveys: Surveys collect data that can be quantitatively analyzed to forecast future behavior.
- Delphi method: The Delphi method uses data collected from experts in several rounds of surveys.
- Scenario building: Scenario building anticipates behavior that can occur based upon different situations.
- **Technology forecasting:** This method is generally used for procedures, techniques and machines since it predicts future behavior based on an assessment of future technological change.
- Forecast by analogy: This method uses similar historical events to predict the future behavior.

Other methods

- **Simulation:** This method constructs a model that can be used to gain insight into its behavior and introduce variables to see how the model behaves.
- **Probabilistic forecasting:** This approach uses several methods to derive a forecast based on occurrence/magnitude probability.
- **Ensemble forecasting:** This method is a form of Monte Carlo analysis, which is a simulation technique.
- Reference class forecasting: An approach based on the theories of Daniel Kahneman and Amos Tversky that attempt to overcome the tendency to overestimate benefits and underestimate risks.
- Prediction market: This method uses speculation in market-based event to determine the probability of an event's outcome.



Inputs

□ Project management plan

The project management plan details how the project will be executed, managed, and controlled, including many subsidiary plans as to how changes to major project components, such as scope, budget and schedule, will be handled, and how important factors such as communication, risk, and quality will be managed. It also includes the performance measurement baseline (scope, cost, schedule, and quality) which is used to identify variances.

□ Work performance information

Work performance information is any data that can be considered related to the work which produces the project deliverables. Examples are schedule and progress status information, budget and cost status, quality status, estimates to complete, resource utilization information, and lessons learned.

□ Work performance measurements

These are performance measurements that are communicated to stakeholders, and include items such as planned versus actual performance for the schedule, cost, and quality.

□ Budget forecasts

Budget and cost forecasts from the Control Cost process predict future financial performance.

□ Organizational process assets

The organization may have templates that can be used for performance reporting, and it might also have enterprise-wide variance limits and tolerances.

Tools and Techniques

□ Variance analysis

Variance analysis uses appropriate methods to measure the differences between what was planned for and what is actually occurring. It is especially important to identify the root causes of variances.

□ Forecasting methods

Forecasts are predictions for future project performance. Forecasting methods include time series methods, casual/econometric methods, judgmental methods, and other approaches.

Communication methods

Communication methods are how information is shared. Methods fall into three broad categories: interactive communication, push communication, and pull communication.

□ **Reporting systems**

These are tools that help the collection, storage, dissemination, and retrieval of project cost, schedule, performance, quality, and technical performance.

Outputs

Performance reports

These provide performance reporting on activities, accomplishments, progress, variances, and issues.

□ Organizational process assets updates

Performance reports and the results from variance analysis add to the knowledge base of the organizations and provide lessons learned information.

□ Change requests

Variance analysis can result in the need for corrective or preventative actions, including change requests to the project management plan.

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Chapter summary

Project communication processes make sure that information is collected, organized. and distributed to those who need and expect it. Project communication requires good communication skills and knowing how to best use communication to keep the project running efficiently and minimize the chances that miscommunication or a lack of communication occurs. Communicating information in one form another is where the project manager will spend the bulk of his or her time, but everyone on the project team has a responsibility for understanding good communication processes and skills

The basic communication model involves an interaction between a sender of a message and the receiver of the message. The sender encodes the information into a message which is delivered through a medium to the receiver, who decodes the message. Throughout this model, noise is anything that disrupts the flow or understanding of a message. It's the sender's responsibility to make sure the message is clear, complete and understood by the receiver, and it's the receiver's responsibility to make sure the message was received in its entirety and that he or she understands the message. Channels are paths of communication between parties, and the number of channels adds complexity to project communications. The formula for determining the number of channels is n(n - 1)/2.

Since good communication is integral to meeting the needs of stakeholders, this knowledge area includes the Identify Stakeholders and Manage Stakeholder Expectations processes. In these two processes, the stakeholder register is established and stakeholder analysis will help develop the stakeholder management strategy, which is put during Manage Stakeholder into action Expectations.

Effective communication involves knowing what content should be included in the message, who the audience is, and what the appropriate mediums are for the message. In spoken communication, paralingual and nonverbal elements carry more information than the words chosen. Paralingual elements are the pitch, and tone of voice, and nonverbal volume. communication is body language. The medium plays the biggest part in the formality of a message. E-mails, memos, project status reports, and general correspondence is usually informal written while public documents, like contracts, are formal written. Telephone calls, meetings, and video conferences are usually informal verbal, while speeches in front of a large group of people are usually formal verbal.

Plan Communications is the planning process which establishes the types of communication needed, its frequency, who'll provide the information, and how the information will be Communication delivered needs are determined through communications requirements analysis. The project communication details are described in the communications management plan, which is a subset of the project management plan. The communications management plan identifies the type, frequency, mediums, and responsibility for communications. Some projects will include a glossary of terminology in the communications management plan.

The Distribute Information process delivers project reports, and ensures that project records and lessons learned are organized and made available as part of organizational process assets. Project managers have a professional obligation to make sure that the lessons learned process is performed, and the lessons learned are documented so that later project teams can learn from those experiences. Project performance information is gathered, compiled, and distributed as part of the Report Performance process, resulting in forecasts and performance reports. Forecasts and project performance reports are based on earned value measurements, like CPI, SPI, EAC, and ETC. Forecasts can use time series methods, casual and econometric methods, judgmental methods, and other methods like simulation to predict future behavior. The causes of performance variances will be documented in the lessons learned. Since this is a monitoring and controlling process, it can result in recommended corrective actions to bring what is occurring back in line with what was planned.

Activities in Manage Stakeholder Expectations make sure that communication is used as tool to satisfy stakeholder requirements and resolve any issues they may raise. Issue logs help make sure that all issues are resolved and properly communicated to those interested. Managing stakeholders is the responsibility of the project manager, involving excellent interpersonal and managerial skills.

Exam summary

- □ Processes within the Project Communications Management knowledge area make sure that project information is generated, collected, distributed, and organized.
- □ The basic sender-receiver communication model involves seven components:
 - Sender: The person encoding and transmitting the message.
 - Receiver: The person receiving the message.
 - Encode: The formulation of the message by the sender.
 - Message: The output of the encoding process.
 - Medium: The transport mechanism for the message chosen by the sender, such as telephone, e-mail, speech, or printed document.
 - Decode: The translation of the message by the receiver, such as listening or reading, and understanding the message.
 - Noise: This is anything that disrupts the flow or understanding of the message.
- \Box The sender is responsible for making sure the message is clear, concise, and understood by the receiver.
- □ The receiver is responsible for making sure the message was fully received and is understood.
- □ The formality of a communication is largely determined by the medium chosen:
 - □ Informal Written: This is the most common form within a project, and it includes e-mails, memos, blogs, and instant messages for ad-hoc exchanges, project status reports, issues, work performance information, and progress reports.
 - □ Formal Written: This level usually involves "public" documents that become part of project records, such as contracts or press releases. The medium is usually a printed document or its electronic equivalent.
 - □ Informal Verbal: This is probably the second most common type of communication within a project, and it involves meetings, telephone calls, video conferences, webinars, and so on. For very simple messages, informal verbal, such as face-to-face discussions, is most effective.
 - □ Formal Verbal: This type is rare on most projects because it involves public speaking events, such as press conferences, speeches, public relations, and similar mass communication methods.
- □ Nonverbal communication conveys information through body language and facial expressions.
- □ Paralingual communication conveys information through vocal tone, volume, and pitch.
- □ Stakeholders are identified on the stakeholder register.
- □ Stakeholder analysis uses a variety of methods to determine the needs and expectations of the stakeholders.
- □ The purpose of the stakeholder management strategy is to create or maintain relationships with the stakeholders and minimize potential obstacles that might be raised by stakeholders.
- □ The Plan Communications process identifies and details the communication needs of the project.
- □ Environmental factors, such as organizational culture, geography, and reporting structures affect the communication needs.
- □ Communication technology factors like urgency, availability of technology, and the length of the project need to also be considered during communications planning.

- □ Communication requirements analysis evaluates the appropriate balance of communication that will best lead to project success or where a lack of communication can lead to project failure.
- □ The communications management plan is part of the project management plan.
- □ The communications management plan includes:
 - Communication requirements, like the type of information that needs communicated and who it needs communicated to
 - Format, content, level of detail, frequency, and delivery mechanisms for each type of communication need
 - Who is responsible for handling each communication need
 - Escalation paths for issues
 - o Glossary of common terminology
- □ The Distribute Information process disseminates general project information and makes sure that project reports, project records, and lessons learned are organized and available during the project and as organizational process assets after the project is completed.
- □ The lessons learned process identifies and documents project successes and project failures, and makes recommendations on changes to improve future performance.
- □ The project manager has professional obligation for ensuring that the lessons learned process is performed.
- □ The Report Performance process gathers, compiles, analyzes, and distributes actual-versus- planned performance information to stakeholders.
- □ The Report Performance process uses the performance measurement baseline, which includes the scope, schedule, cost, and quality baselines.
- □ Forecasts are developed using time series methods, casual/econometric methods, judgmental methods, or other approaches.
- □ The Manage Stakeholder Expectations process uses communication to resolve stakeholder issues and manage their expectations.
- □ Face-to-face meetings are the most effective manner for resolving stakeholder issues.
- □ Issue logs are used to track stakeholder and team member issues, assign responsibilities, and track and issue resolutions.