11 Communications

Introduction

Have you ever sent a message you were certain was very clear but then you got a lot of questions about it after it was received, or you learned later that it was misunderstood? What about times when you've left a voicemail or an email for a particular person only to find out later it would have been received much more quickly if you had texted the person instead? What are your communication preferences? Maybe you've recently received a voicemail in the office when you are now used to checking only your mobile phone.

When you think about it, communication is involved in almost everything you do as a project manager. There are so many technologies and methods to choose from, and so many variations in ways to interpret a given message that issues with communications are inevitable. From sheer volume alone it is no surprise that project managers identify communication-related issues as the number-one problem experienced most frequently on projects.

Communications Management Overview

The project manager must plan, manage, and control communications carefully so the best technologies and methods are chosen for a given audience. Then, the project manager has to craft each message carefully for clarity and the optimal amount and types of detail. Here are just a few examples of factors affecting project communications:

- Projects often involve virtual teams, requiring complex communication tactics and strategies.
- The rapid rate of change on projects necessitates continually revisiting communication tactics and strategies, and past communications.
- Stakeholder communication preferences lead to a need to choose communication tactics and strategies carefully.

Planning and managing communications may also include:
- Assessing stakeholder communication needs (part of stakeholder identification and analysis)
- Determining what methods will be best for the project
- Understanding what communication channels are available
- Deciding on the frequency and level of detail of particular types of project communications
- Ensuring appropriate methods for effective feedback loops are provided and understood
- Considering the richness of available communication channels in choosing communication technologies and methods
- Revisiting decisions regarding the selected communication tactics and strategies to ensure they remain effective throughout the project

On the exam, communications questions are frequently combined with other topics. Stakeholder engagement is an obvious content area that feeds into decisions needed to create well-planned communication plans and to carry them out. All other knowledge areas are affected as well.

Examples Tools related to scope management—WBS, story backlog, or release—are also used to communicate with stakeholders.

The *Examination Content Outline* and Process Groups Model

The following table illustrates that the ECO combines communications management activities into a single task called Manage Communications, while the Process Groups model has communications management activities broken into three main processes mapped to the planning, executing, and monitoring and controlling process groups.

ECO	Process Groups Model		PMBOK® Guide
Domain II	**Communications Management**		**Domain 2.1** Stakeholder
Task 2 Manage communications	Plan Communications Management	Planning	**Domain 2.2** Team
	Manage Communications	Executing	**Domain 2.4** Planning
	Monitor Communications	Monitoring & Controlling	**Domain 2.5** Project work
			Domain 2.8 Uncertainty

Think about it. In addition to "Manage communications" from the ECO, many other ECO tasks are connected to communications management. Review the below tasks in the ECO and think about how they are all holistically involved in managing communications, and how they in turn depend on communications management. The following examples are not all-inclusive.

We mapped the Process domain tasks here more directly to project integration management to give you an opportunity to review these again. As a project manager, integration of everything happening on a project is one of your primary responsibilities.

Examples

People (Domain I)

All People domain tasks are critical to effective project communications. The reverse is true as well: Effective project communications are integral to success in all People domain tasks.

Process (Domain II)

- Execute project with urgency to deliver business value (task 1)
- Engage stakeholders (task 4)
- Integrate project planning activities (task 9)
- Establish project governance structure (task 14)

Now take some time to review the communications management process according to the Process Groups model. The Process Groups model perspective gives you an overview of the general process, which can guide you through the rest of the chapter.
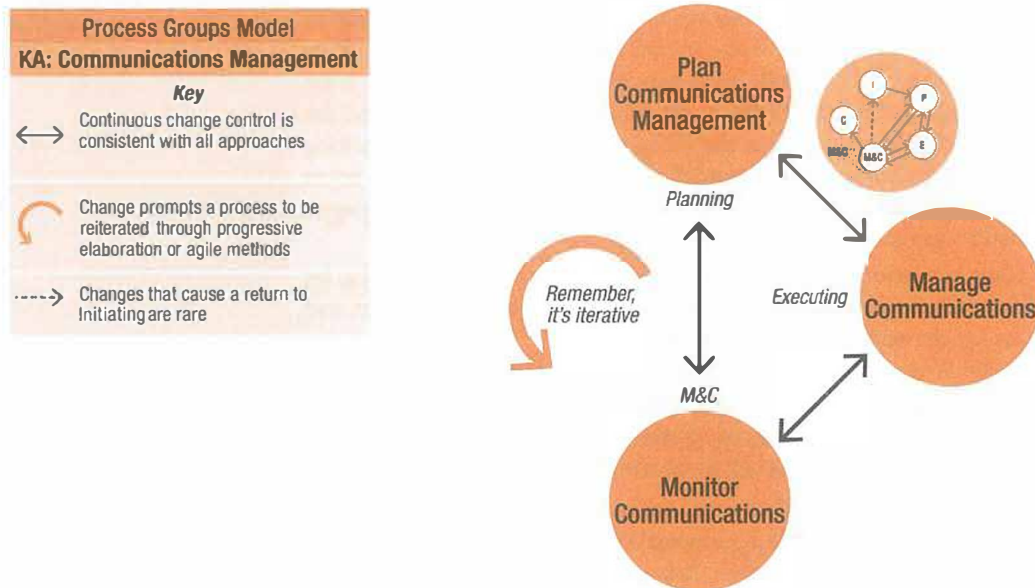

FIGURE 11.1   *Communications management process*

Before delving into the more technical project management aspects of communication management, you may want to skim through the Communication Skills section of the "Leadership Skills" chapter. Keep this and all the People domain tasks in mind as you study this chapter.

Desired Outcomes from Successful Communication Management

Assume for the exam that project communications are properly planned and managed unless information in an exam question indicates otherwise. This means that the following outcomes should be expected as a result of communication management:

- Communications are planned and executed so that the right information gets to the appropriate stakeholders using the appropriate technologies, is clear and understandable, and arrives to stakeholders at the right times and in the appropriate formats.

- The project manager solicits feedback from receivers of communications to ensure a common understanding of all information conveyed as well as the need, if any, for follow-up actions.

- Communication strategies and tactics are measured and analyzed on a regular basis and appropriate changes are made as situations or communications needs on the project changes.

- The project communication management strategies and tactics contribute to stakeholder satisfaction because stakeholders understand what communications to expect and when. They also are confident that they will receive communications appropriate to their needs on the project.

Communications Planning

Planning is about considering the project's overall communications approach for the project, and about how the project manager will sort out the fine detail. The plan should identify what systems and processes are already in place to support communications, as well as what processes and documents must be created. This effort includes planning what information will be communicated to whom, when, using what methods, and how frequently. The plan will guide the project manager and the team in managing and monitoring communications to ensure information is getting to where it is needed, is clear and understandable, and allows stakeholders to act as necessary. Finally, it should have the flexibility to change as the project progresses and the information and stakeholders' needs change.

Process Groups Model
PG: Planning
Process: Plan Communications
ECO
Domain II
Task 2 Manage communications
PMBOK® Guide
Domain 2.1 Stakeholder
Domain 2.2 Team
Domain 2.4 Planning
Domain 2.8 Uncertainty

To plan communications, the project manager will refer to the project charter and other artifacts like requirements documentation, the stakeholder register, and the stakeholder engagement and resource management plans. The communications plan should explain how project communications will support related areas.

On your projects, do you take the time to ask stakeholders about their communications requirements? Communications requirements need to be analyzed to determine how they can be met and to make sure that meeting them will add value to the project and will be worth the effort and cost involved.

Project size, life cycle, and development approach are all factors for consideration in communications planning. The project manager needs to be equally comfortable with planning communications for projects large and small, using predictive, adaptive, or hybrid approaches. A large project may have a team of over 100 people in different countries, speaking different languages, with diverse approaches to communication, possibly influenced by culture. A small project may be accomplished entirely from one location or may have simpler communication needs. In other words, communications efforts must be tailored the project.

In hybrid environments, for example, project leaders communicate some project information through both predictive and agile methods. Leaders of agile teams in hybrid environments must often update weekly status reports, Gantt charts, and earned value reports in addition to tracking agile metrics like velocity and burnup and burndown information.

Think About It. Communication management is important on the exam. Think about everything you have read so far in this chapter as you look at the following list. Do you do the following?

- Use multiple methods of communicating.
- Ask people what information they need and when.
- Tailor communication practices to project size, complexity, life cycle, and approach.
- Plan communications for each stakeholder or group based on individual needs and interests.

- Plan how you will confirm communication is received and understood.
- Cater to the need for communication to go in multiple directions, at all levels, internal and external to the organization.
- Analyze how location, culture, security, privacy, and language impact communications.
- Have a system for storing, maintaining, and retrieving project information.

11.1 Exercise

Test yourself! Write down in your Exercise Notebook what information needs to be communicated on a project.

Answer

Some possible answers are:

- Project charter
- Stakeholder contact information
- Types of emails to be sent to each stakeholder or group
- Artifacts (plans, release maps, user stories, backlogs, WBS, network diagram)
- Dependencies
- Impacts to and from other projects
- When resources will be needed
- Team norms
- Working agreements
- Definition of done
- Burn charts
- Information radiators
- Meeting schedule
- Work assignments

- Status
- Uncertainties (esp. new risks uncovered)
- Problems
- Successes
- Project and product scope changes
- Schedule of management reviews and planning updates
- Change request results
- Upcoming work (e.g., scheduled WBS components or iteration backlogs)
- Delays
- Date of next milestone completion
- Performance reports
- Retrospective results; lessons learned
- Issue logs
- Configuration management issues

Communications Requirements

Understanding and fulfilling communications requirements helps the project manager maintain stakeholder engagement by ensuring that communication needs are met. More information about requirements analysis is in the "Scope" chapter.

Use the following information to determine and analyze communication requirements:

- Stakeholder register
- Stakeholder personas
- Stakeholder engagement plan

- Locations of stakeholders
- Number of communication channels

Artifacts of Communications Planning

As a result of planning communications, the project manager should have a documented description of the communications needs of stakeholders and a strategy to meet them. Plan components may include:

- What communications to prepare and disseminate among stakeholders
- How information should be named and stored
- Who has access to what communications
- Who has the ability to edit what

- Who has responsibility for sending and receiving which communications
- Tailored approaches to language and culture
- Tailored approaches to level of detail needed
- Information on how communication effectiveness will be evaluated

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Because communications are complex, a communications management plan should be in writing for most projects. Figure 11.2 shows some of the considerations for what you might include in a communications plan.

What Needs to Be Communicated	Why	Between Whom	Best Method for Communicating	Responsibility for Sending	When and How Often

FIGURE 11.2   *Sample portion of a communications management plan*

Managing Effective Communications

During planning, the communications needs of stakeholders are determined and documented. Throughout the project, the project manager and team satisfy these needs through meetings and other in-person communication, as well as through other communications such as reports, graphics, information radiators, and emails.

Almost nothing on the project gets done without communicating, so it's important that information is flowing back and forth on the project in accordance with the planned strategy. Communicating effectively is about facilitation and practicing flexible approaches in dynamic environments. It also includes providing opportunities for stakeholders to request additional information and clarification.

TRICKS OF THE TRADE While reports and other formal written communications are important aspects of the project's historical records, they should not require a great deal of a project leader's or team's time.

Often communications are tailored to the audience. In hybrid environments, a project leader might discuss "points," "Planning Poker®," "velocity," and "blockers" with the team, and then use more traditional terminology like "completed work," "progress," "estimates," and "threats" with a more plan-driven-focused steering committee.

Example With the team, a project leader might say, "I have a stakeholder meeting. I'll be showing our burndown rates by iteration." With the steering committee, they might say, "These are our average feature completion rates as measured every two weeks."

It is vital to use the interactive communication model (as shown in figure 5.3 in the "Leadership Skills" chapter) and appropriate methods and technology planned for the project so everyone knows what to do with the information they need to convey. The communications management plan, project documents, work performance reports, and everyday interactions will give the project manager the data and information about what needs to be communicated. Whether it's information from recent risk reviews, forecasts on project performance, or details about changes that have gone through a formal integrated change control process, the project leader and team need to follow the communications management plan.

Tailoring is also often needed in response to stakeholder feedback, the culture of the organization (which is always evolving), and other factors.

Process Groups Model
PG: Executing
Process: Manage Communications

ECO
Domain II
Task 2 Manage communications

PMBOK® Guide
Domain 2.1 Stakeholder
Domain 2.2 Team
Domain 2.5 Project work
Domain 2.8 Uncertainty

Agile Focus

Methods for Communication

Communication methods were discussed in the "Leadership Skills" chapter. A large range of communication and interpersonal and team skills also helps the project manager manage communication choices. These may include but are not limited to active listening, conflict management, cultural awareness, meetings management, networking, and political awareness. Developing and delivering presentations and reports are also important competencies, as is tailoring communications to the audience at a given time on the project.

Meeting Management

Meetings are often key elements of the effort to manage communications. We have already said that the project manager and the team need to decide during planning how information will be shared on the project. Meetings provide a way to communicate with the team and stakeholders. Having a strategy for meetings is essential to making time spent in meetings efficient and effective. This includes sticking to the planned strategy for how meetings will be conducted, who needs to attend, and when they are most appropriate.

Effective meetings may seem easy to plan but they are not easy to conduct consistently. Consider the following meeting rules:

- Meet regularly as appropriate
- Bring the right people together
- Schedule recurring meetings in advance
- Have a purpose for each meeting
- Cancel an instance of a recurring meeting if it is unnecessary
- Set time limits and keep to them
- Have and agenda and stick to it
- Distribute the agenda beforehand
- Chair and lead meetings with a set of rules

- Remind attendees of their meeting responsibilities as appropriate
- Make all participants responsible to enforce rules (not just the facilitator)
- Assign deliverables and time limits for assignments that result from meetings
- Document and publish meeting minutes, as appropriate
- Adhere to inherent rules for particular types of meetings (e.g., daily standups)

Hybrid environments may present short-term challenges in relation to meetings. An agile team's "less formal" practices may make traditional stakeholders uncomfortable at first. A way to resolve this is to have stakeholders observe the agile team's daily standup meeting. This is a great way to learn about team dynamics and current work activities. And since these meetings are normally held in the team's work area, there are likely to be information radiators on the walls to help inform stakeholders.

TRICKS OF THE TRADE®

People unfamiliar with agile worry that reporting is too informal for traditional stakeholders. The fact is, in agile the same things are being tracked even though effort is counted in story points rather than hours or days.

On a weekly basis the team may be concerned only with the current iteration's story points, but over time this data can easily be turned into an earned value measurement (EVM) report (see figure 11.3).
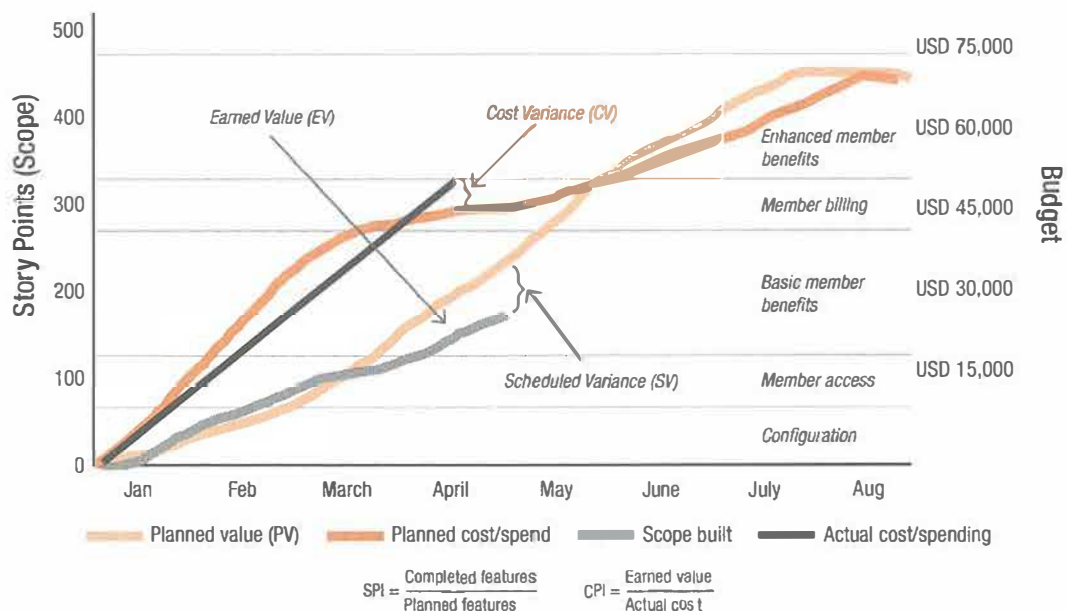

$$SPI = \frac{Completed\ features}{Planned\ features} \qquad CPI = \frac{Earned\ value}{Actual\ cost}$$

FIGURE 11.3   *Agile earned value measurement (EVM)*

Standup Meetings Standup meetings may be used to learn about progress, opportunities, threats, and issues. They may also be used to share information between team members and other stakeholders.

Iteration Reviews These are meetings with the specific purpose of the team giving a demo to the customer of newly developed scope, and either getting acceptance and sign-off on that scope increment or gathering the feedback needed to do so at a later time.

Retrospective Findings These may also be included on an information radiator. In hybrid environments retrospective findings can serve as ongoing lessons learned. Then, the requisite lessons learned reports at the end of a project are constructed from them, contributing to organizational process assets.

Project Reporting

Project reporting involves communicating to stakeholders about how the project is going and how it is projected to go in the future. Much of that information comes from work performance reports. It also involves asking for feedback from stakeholders to ensure they have received the information they need and have understood it, and to determine whether they need more. Outside of daily interactions, meetings, and information radiators, this communication may take the form of written reports, presentations, and intranet updates as outlined in the communications management plan.

Make sure you remember the following about reports. They should:

- Be designed to fit the needs of the project.
- Provide information and at the level of detail required by stakeholders.
- Include measurements against the performance measurement baseline set for the project, phase, or iteration (for scope, schedule, cost, and quality).
- Use the most appropriate communication method when sending information.
- Be truthful. This should go without saying but because it is not always the case, there may be exam questions about reports connected to professional and social responsibility.
- Help team members know when to recommend and implement corrective actions.

In addition, feedback from stakeholders (who receive reports as part of this process) should be analyzed to allow for tailoring of future communications to continue to or better meet stakeholder needs. A project manager might issue the following types of reports:

- **Status report** Describes project performance compared to the performance measurement baseline.
- **Progress report** Describes what has been accomplished.
- **Trend report** Examines results over time for performance improvement or decline.
- **Forecasting report** Predicts future project status and performance.
- **Variance report** Compares actual results to performance measurement baselines.
- **Earned value report** Integrates scope, cost, and schedule measurements to assess project performance relative to baselines and variances.
- **Progress metrics** Reports such as Cumulative Flow Diagrams and burnup charts are used to assess performance.
- **Retrospective findings** Used to inspect, adapt, and improve project and team performance.
- **Lessons learned** Summaries of lessons learned that may be used immediately on the project or used for future projects.

Knowledge Sharing

Any of the reports listed previously can be used on projects to share information. Discussing this information and what it means in order to help each other improve individual and project performance is knowledge sharing. This is a key component of successful project management communications. Information is a basic element of any project so it must be distributed and shared. Have you managed a project for which the team reported they didn't have all the necessary information, or they didn't know how to use the information they had received?

Example Let's say a team member was unable to complete a task or activity because of missing information or knowledge. This was due to a team member's vacation that was not communicated to the whole team. How would that impact the project? What could have been done differently to avoid such an issue? If the project team properly shared information and knowledge, that team member would not have trouble completing their work.

Agile projects embrace knowledge sharing using a variety of tools:

- Daily standup meetings
- Kanban boards
- Personas
- Release and iteration planning

- Product demos
- Information radiators
- Wireframes (a type of low fidelity prototyping)
- Retrospectives

Similarly, agile emphasizes collaborative planning, estimating, and retrospectives. This allows the project team to collectively gather and share project knowledge.

Information Radiators

A Kanban board (see figure 11.4) is a method for limiting work in progress (WIP), and it is an information radiator showing WIP. A Kanban board is a great way to track workflow, project progress, and to illustrate WIP.

Informal meetings often take place in front of these task boards. Seeing the finished work piling up to the right of the board also provides inspiration for stakeholders and team members alike.
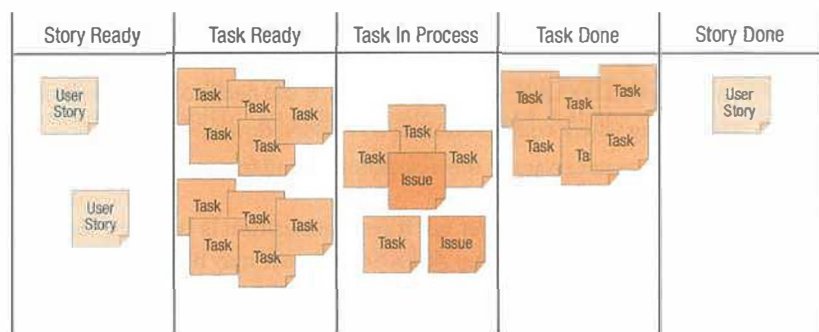

FIGURE 11.4   *Kanban board*

The types of information shown via information radiators may include large charts, graphs, data summaries—or even a computer screen showing continuous integration results on software projects. Displayed in high-traffic areas, they allow anyone to see the project progress at any time.

Information displayed using information radiators may include:

- Features delivered to date and features remaining to deliver
- Features for the current iteration
- List of issues, threats and opportunities (risks)
- Burn charts

- Who is working on what
- Velocity metrics
- Defect metrics
- Story maps

Artifacts of Manage Communications

Reports, information radiators, and the individual communications are the artifacts of project communications, usually kept in writing in the PMIS. Handmade information radiators are often photographed before they are changed in a significant way. For example, a drawing on a whiteboard may be recorded this way before it is erased and redrawn using new options. Here are some of the more formal artifacts that are updated on a regular basis:

- Project communications
- Communications management plan
- Stakeholder management plan updates
- Project document updates
  - √ Issue log
  - √ Lessons learned
  - √ Risk register
  - √ Stakeholder register
- Organizational process assets

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Communications   E L E V E N

Monitor Communication Effectiveness

Of course, as the project manager is managing (or carrying out) effective communication on the project, they are at the same time monitoring it to ensure its continued efficacy. The project leader should assess and ensure that information is flowing as planned—in the right way, to the right people, and at the right time. This effectively keeps stakeholders and the team informed and maintains the desired levels of stakeholder engagement. The previous section listed types of data and reports with the assumption you know what and how to collect data and transform it into information.

If you're not familiar with data collection and evaluation techniques, think about how you would use them and how they may differ on different types of projects. This process involves:

- Observing to determine whether the communications management plan is being followed
- Confirming communications and feedback are understood
- Ensuring that communications are meeting the needs of the stakeholders
- Identifying where communication is breaking down (if needed)
- Adjusting as necessary to meet stakeholder and team needs

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Process Groups Model
PG: Monitoring and Controlling
Process: Monitor Communications

ECO
Domain II
Task 2 Manage communications

PMBOK® Guide
Domain 2.1 Stakeholder
Domain 2.2 Team
Domain 2.5 Project work
Domain 2.8 Uncertainty

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How can the project manager tell if communication is breaking down? In addition to the established metrics, they rely on interpersonal and leadership skills. Some issues may be clearer than others. Project stakeholders may let the project manager know, for example, if they're not getting the reports or information they're meant to receive. Or the project manager will be informed if the project team isn't following up on action items established through earlier communications. Also, project team members should report any communication problems they experience and help to identify ways communications can be improved on the project. These are the reasons it's important to encourage all stakeholders to let the project manager know whether the project communications are meeting their needs. Do you do this on your projects?

Putting It All Together

Communications is more than technology; it also involves the interpersonal and team skills every project manager needs to be a successful leader. Make sure you understand the various communication methods and what is in a communications management plan.

Important concepts can be found on the Quicktest at the beginning of the chapter. Use it to find any gaps in your knowledge. Review the chapter again to fill those gaps, then complete the following exercise.

11.2 Exercise

Give examples of the communication challenges the project manager may have with each of the stakeholder or stakeholder groups from our library case study. Suggest ideas for good communication plans.

Stakeholder or group	What will be the communication challenges with this stakeholder?	How will the PM best communicate with this stakeholder?
Mayor		
City Council		
Patrons		
Librarian		
Construction team		

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Answer

Here are some sample answers. You may have come up with some other ideas.

Stakeholder or group	What will be the communication challenges with this stakeholder?	How will the PM best communicate with this stakeholder?
Mayor	Mayor is busy and has many other issues to manage.	Since the mayor is probably busy, the project manager will want to get to know the mayor's assistant and ask for the best ways to communicate.
City Council	Some council members are always up for re-election and may be using the library as an issue.	The project manager should communicate the same messages to all council members.
Patrons	Large group, little direct contact.	Public notices in newspapers and magazines. Surveys.
Librarian	The librarian may be comfortable with the current library and resist change.	Keep the librarian engaged in all decisions.
Construction team	Managed by another company so the project manager does not have direct authority	Work with the construction company management to communicate information to the workers.

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