

### Activity 1-1

Brainstorm the key skills that you will want in the members of this team.

Answers will vary, but key skills might include familiarity with the software to be migrated, experience migrating software solutions, customer service skills, the ability to create and execute a playbook to carry out a consistent process, the ability to maintain records and document actions, and troubleshooting skills.

You want to be able to validate that a proposed team member has the key skills you are looking for. What types of techniques might you be able to use to assess whether the team member would be a good fit?

Answers will vary, but can include any number of pre-assessment tools, including attitudinal surveys, specific assessments, structured interviews, ability tests, and focus groups.

You wish to establish a resource schedule for the project. What types of information should you include?

Lead students through a discussion of the types of information that is needed to create a resource schedule. Explain that students will be introduced to the various items and tools as they progress through the course. Answers could include how resources will be identified and acquired, the roles and responsibilities, the needed competencies, organization charts, training strategies and requirements, team development methods to be used, and resource controls for the management of physical resources to support the team. Also, project team resource management, including the guidance on the lifecycle of the team resources—how they are defined, staffed, managed, and eventually released. And finally, a recognition plan can provide details about how team members are rewarded and recognized.

### Activity 1-2

1. The team decides it should produce a team charter but is unsure of exactly what it should cover. What are some of the key areas that a good team charter should include?

Your teams should identify at least some of the following key items: shared values, guidelines for communications, use of collaboration tools, decision making approach, conflict management, when the team meets, shared hours, how the team improves. Your participants may identify many additional alternatives that are effective.

2. The team realizes that it will regularly require interaction with other stakeholders who are not part of the team. What are some of the key considerations for interaction with them?

Any of the following answers would be appropriate: identifying the stakeholders, identifying their interests in the project, determining the appropriate communications method; determining the appropriate communications frequency, determining who on the team will engage with the stakeholder, determining how feedback from the stakeholder will be managed and aligned, and creating effective visibility for the stakeholder into project progress.

3. Many of the team members have had poor previous experiences working in project teams due to lack of trust, politics, and lack of a healthy team culture. How can you as the project manager create a healthy environment for your teams to perform successfully?

Answers will vary, but successful, high-performance teams must go through the Forming, Storming, Norming, and Performing phases to get to be high performing. Good project managers will facilitate helping the team "storm" early, through its chartering process. Teams need to talk through how they will work together, how they will use collaboration tools to help facilitate visibility with one another, and how they will handle conflict. Remember that if you have good people on your teams, they will often disagree with one another on approaches to solve problems. Your charter should anticipate this, make this healthy, visible, and open to everyone, and set expectations up that 1) you will disagree about things and 2) when you do, here's the process you'll follow for working it out so you can move forward together.

### Activity 1-3

1. What are the main sections of a deliverables agreement? What are the key components you would expect to see in each section?

Answers will vary but should reflect the core guidelines for analyzing the bounds of a project agreement.

2. The client has a long list of requirements, and you wish to help them prioritize their needs to help identify a minimum viable product and to provide a basis for organizing the work in a backlog. What are some of the techniques you could use to help them?

Answers may include the Kano Model, Moscow (MSCW) Analysis, Paired Comparisons, and 100-point method.

3. The customer was hoping that the project team would get their requirements for the website, go and build it, and then bring it back ready to go when it's finished. You counsel them that getting much more frequent feedback is critical to ensure customer satisfaction and to help identify and prioritize different requirements that may emerge during the project. What techniques could the team use to maintain effective customer engagement?

Answers may vary but should go well beyond routine status reporting. If the project is run using Agile, regular daily engagement with a product owner and sprint reviews at the end of each iteration should help to get feedback and course correction early. More traditional projects nonetheless need frequent feedback from the customer on progress and to ensure that new or changing requirements are identified.

### Activity 1-4

1. During team formation, the team may want to discuss how they will make decisions, and how they may need to deal with conflicts along the way. Describe how you would facilitate this discussion, and how you might capture the team's decisions in the team charter.

Answers will vary but encourage the participants to brainstorm different potential approaches to decision-making, and to suggest approaches that have worked (and not worked) for them in the past.

2. The team wishes to use Agile Story Points to estimate effort. Given that this is a new team, how would you help them to facilitate benchmarking so they can estimate effectively?

Answers will vary but should focus on similar types of work with which the different team members have experience. Often the team will have a much better feel for this than trying to suggest something yourself, so encourage the team members to discuss their past work experiences on similar projects and see if they can identify a useful benchmark.

3. What tools can the project team use to facilitate collaboration and promote visibility?

Answers will vary, but should be driven by a broader goal, ensuring stakeholder visibility and transparency for the team. For a traditional project, this might be found in the project Gantt chart; in an agile project, this might be the use of a task board for tracking and managing teamwork or even the use of standup meetings to ensure team progress and commitment.

4. Your team plans to have a retrospective at the end of each iteration to identify potential improvements in how the team is collaborating. While there are many, many techniques for running retrospectives, what are some of the key activities common in many retrospectives?

Answers may include any number of different techniques, such as 4 Ls, Keep, Stop, Start, ESVP, and many others. In the big picture, good retrospectives should have a structure like this but may experiment with alternatives. Basically, you need to set the stage, gather and share data, generate insights, make decisions, and close.

### Activity 1-5

1. What types of options do you have for producing effective onboarding training? How might you deliver it? How critical is it to provide this training early to the team?

Answers will vary; options might include e-learning, instructor-led training, reading a cultural briefing, and other innovative options you might think of. For example, if you are near a museum with a history of a particular military branch, you might arrange a field trip!

2. Training on the software solution needs to be offered to more than 200 customer stakeholders; fortunately, their needs are relatively similar, so only one set of training materials needs to be produced. The client has people at four sites and will need to have hands-on practice in using the solution. What are some of the key areas of focus in planning this training initiative?

Answers may vary, and each section that follows has several subset areas. Planning for this initiative will be extensive, including at least identification of the required competencies, Gap Analysis and Training Outcome requirements, Training Delivery Method, Cost Estimates, Training Calendar and Resource Planning, Post-Training Mentoring Support, and Pre- and Post- Assessments and/or Certification.

### Activity 1-6

1. Your team immediately begins exploring potential tools and technologies they can use to manage the project and its deliverables. What should the team consider before making decisions about virtual tools?

Team planning and teaming agreements should precede decisions about specific tools. In short, the team should produce its team charter first, and identify key issues related to collaboration that will be exacerbated by not being co-located. These may include shared work hours, decision making, conflict management, team values, and how and when they will conduct their meetings.

2. What are some of the tooling alternatives the team could use to facilitate collaboration and communications?

Answers may vary and will likely include many specific vendor tools available on the market. In broad categories, these may include shared task boards and burndown/burn-up charts to promote visibility; shared messaging and chat boards to enable quick ad hoc communications; knowledge repositories to store shared documents; and videoconferencing tools to create more opportunity for face-to-face collaboration.

3. Your team has been progressing on the project for a month now. The team is generally performing well, but you are looking to challenge them to identify areas where they can improve their collaboration and improve visibility. What are some areas you may want to monitor to ensure your teams remain engaged and collaborative?

Answers will vary, but should include keeping the project data up to date to help the other members maintain visibility. Listen for clues that team members are uncomfortable or not fully sharing goals. Make your meetings count, timebox them, and coach them to stay on track.

### Activity 1-7

1. To ensure you have the necessary buy-in, commitment, and resources required to make the project a success, you offer to assist them in creating a formal project charter. What should be included, and who should sign it?

The charter should already be in place! However, too many projects start without a formal charter, and this sets the stage for lots of misunderstandings later. Your charter, at a minimum, should include the project's purpose, measurable project objectives and related success criteria, high-level requirements, a project description, boundaries, and key deliverables, project risk, milestone schedules, pre-approved financial resources, key stakeholders list, project approval requirements, exit criteria, the assigned project manager and responsibility/authority level, and the name and authority of the project sponsor. Anything in the list that doesn't exist needs to be identified and agreed with the project sponsor.

2. You have decided, due to the rapidly changing nature of the project's requirements, that you wish to run this project using an agile approach such as Scrum. Your team is unfamiliar with the agile ceremonies and wants you to explain what they are and how they work. What are the agile ceremonies that need to be included?

The agile ceremonies should include sprint planning meetings, daily standups, sprint reviews, and retrospectives.

3. As your team is unfamiliar with agile, they are also unfamiliar with some of the agile practices for achieving agreement, estimation of effort, and creating a shared vision of the solution they are trying to produce. What are some methods for achieving agreement?

Answers could include Fist of Five, Roman voting, and consensus.

4. What are some techniques for estimation?

Answers should discuss the use of techniques like planning poker, and the use of T-shirt sizing, modified Fibonacci, and other techniques to size the relative level of effort.

5. What are some techniques for establishing a shared vision?

Answers should include the use of a product vision statement, potentially the use of an XP Metaphor or Product Box, or the use of Brainstorming and Dot Voting to identify and prioritize options.

### Activity 2-1

1. The organization presents you with four projects. They seek your recommendation for which project management method is best suited for each. In questions 2 through 5, identify the appropriate method.

- Agile
- Predictive/Plan Driven
- Iterative
- Incremental

2. The capital project is one the organization has performed many times in the past for other cities. The objective is to replace all the old metal pipes under the city streets. Which method would you recommend?

Predictive/Plan Driven

3. The software project is one where there are many features and functions that must be updated, as well as more learned from community feedback. The objective is to roll out features to get user feedback and drive the priorities for potential future releases in the project. Which method would you recommend?

Agile

4. The employees in the organization are eager for small perks to be released based on a new company-wide initiative to boost morale. The objective is to deliver small bits of value on their way to the larger goal of higher employee satisfaction. Which method would you recommend?

Incremental

5. The marketing project is one the organization is using to raise awareness of their new software and services. The objective is to keep repeating various marketing techniques and after a while focus on the methods or tools that appear to have the largest impact. Which method would you recommend?

Iterative

6. You are asked to advise on a project to update all the bathrooms in a three-story office building with new high tech and water efficient equipment. Which life cycle type makes the most sense for this project?

Predictive life cycle



## Activity 2-2

### 1. Why is it important to properly manage the scope of your project?

Answers will vary but should include Because the scope determines what the project outcomes will be, you must make sure that it is constantly on track with the approved scope baseline.

### 2. What are some techniques you could use to elicit project requirements? (Choose four.)

- ! Document analysis
- ! Project Management Plan
- ! Observations
- ! Work breakdown structure
- ! Interviews
- ! Questionnaires

### 3. You and the project team draft a project scope statement. Which of the following are commonly part of the scope statement?

- ! Scope creep
- ! Acceptance criteria
- ! Budget
- ! Scope description
- ! Schedule

### 4. You are creating a scope statement which includes only the smallest collection of features that can be included in a product for customers to consider it functional. What product approach are you using?

- ! Release Planning
- ! Progressive Elaboration
- ! Minimum Viable Product
- ! Horizon Planning

### 5. The project team decomposes the scope of the project to create a WBS. The work packages in the WBS have a dictionary with information and referenceable details. What type of details might be in a WBS dictionary for items on the WBS?

The WBS dictionary can include any of the following and potentially others not listed: Code of account identifier, Description of work, assumptions and constraints, responsible organization, schedule milestones, associated schedule activities, resources required to complete the work, cost estimations, quality requirements, acceptance criteria, technical references, and agreement information.

6. As the project team decomposes the work in the WBS, they begin to populate product backlog. When must the team have the product backlog finished?

! By the first phase of the project

! By the first iteration

! By the time the business signs off on the project scope statement

! The product backlog is a living artifact that is finished at the end of the product.

7. To capture the business and end user needs and the value desired, user stories are often used to populate a product backlog. If the project seeks to make it easier for company employees to submit travel expense reports, how could you write a user story based on this need? You may use the template "As a [username or persona], I want to [objective or intent], so that I can [why the objective brings value]."

Answers may vary: As a company employee who travels for work, I want to submit my travel expense reports with little hassle, so that I may get reimbursed and get back to working on more important items.

### Activity 2-3

1. Which estimating technique was used to come up with the \$30,000 figure for the public meeting work package?

Analogous estimating was used because historical information from similar projects formed the basis of the estimate.

2. Open the Public Meeting Estimate document and refer to it as you work through the remaining questions.

- a) Navigate to File Explorer and browse to C:\ATPPMP1Data\Getting Started with the Project.
- b) Open Public Meeting Estimate.docx.

3. What is the estimated cost of the Conduct Planning Meetings work package?

The four 2-hour planning meetings involving 15 in-house people at \$80 an hour will cost \$9,600 ( $4 \times 2 \times 15 \times 80$ ), and the two catered lunches for the 15 people at \$15 per person will cost \$450 ( $2 \times 15 \times 15$ ). Therefore, the total cost of the Conduct Planning Meetings activity is \$10,050.

4. What technique did you use to estimate the cost of the Conduct Planning Meeting activity? Why is this technique beneficial?

Parametric modeling was used. It is reliable and can provide a high level of accuracy. However, the data used to provide the estimate must be accurate, quantifiable, and scalable.

5. Which estimating technique was used for the Arrange Staffing activity?

Analogous estimating was used for air travel and parametric modeling was used for the other costs.

6. Using the information in the Public Meeting Estimate document, estimate the cost of each of the activities.

The breakdown is: Conduct Planning Meetings \$10,050; Arrange Location \$4,950 to \$5,540; Arrange Staffing \$6,700; Publicize Event \$7,800 to \$8,300; and Hold Event \$3,000.

7. What is your total estimate for the Public Meeting work package?

The total estimate should be \$32,500 to \$33,590.

8. What is the degree of certainty of your cost estimate now?

You now have a definitive (control or detailed) estimate that has an accuracy of -5% to +10%.

9. Do you need to take any action regarding the sponsor's target of \$30,000? If so, what action should you take?

You can ask for more money, or if the sponsor declines your request, you can reduce the cost of one or more of the activities.

10. Compare your public meeting estimates to C:\ATPPMP1Data\Getting Started with the Project\Solutions\Public Meeting Estimate Solution.docx.

Activity 2-4

1. Do you have all the necessary inputs to establish a cost baseline?

Yes, you have the WBS with cost codes assigned, the project schedule with at least start and finish dates for each activity, and the cost estimates.

2. What cost assignment method will you choose to allocate funds? Why?

Answers will vary but may include: the Percentage Complete rule because the milestones are clearly defined and can be easily reported on.

3. What are the weekly cost estimates for the activities in the Public Meeting work package? Use the following table to estimate the costs per week, rounding to the nearest thousand.

1.1.4.2		Week									
Public Meeting	Total Budgeted Cost (K)	1	2	3	4	5	6	7	8	9	10
Conduct Planning Meetings	10										
Arrange Location	5										
Arrange Staffing	7										
Publicize Event	8										
Hold Event	3										
<b>Total</b>	33										
Cumulative											

Activity Solution: Completed Costs Per Week

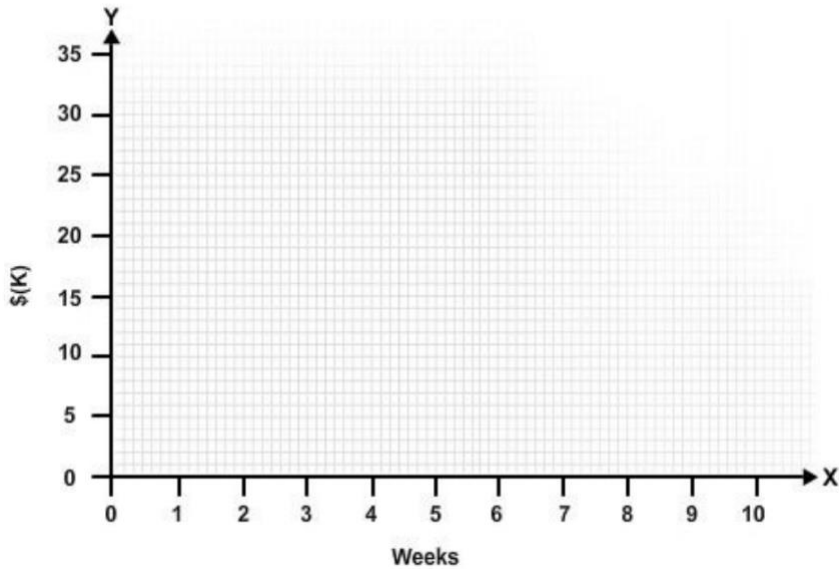
The allocation of costs will look like the table in the corresponding overhead.

4. Compare your completed cost table to C:\ATPPMP1Data\Getting Started with the Project\Solutions\Completed Costs Per Week.docx.

5. Will you include a contingency amount?

No, because this is a relatively low-risk work package.

6. How will you plot the estimates to create an S-curve? Use the graph to plot your results. Cost (in terms of thousands) is plotted on the Y-axis and time (in terms of weeks) on the X-axis.



Based on how the costs were allocated, the answers will look like the graph in the corresponding overhead, which plots the S-curve based on the previous Completed Costs Per Week table.

7. Compare your completed S-curve to C:\ATPPMP1Data\Getting Started with the Project\Solutions\Completed Graph.docx.

8. Close all open files.

### Activity 2-5

1. The first step in creating an activity list is to gather your resource materials. Which items will be helpful in creating your list? (Choose three.)

The WBS

The scope statements

Activity lists from similar projects

2. Create a milestone list for the 234 West Adams building project.

- a) Open C:\ATPPMP1Data\Getting Started with the Project\Milestone List.docx.
- b) Brainstorm some of the high-level milestones for the entire build project.
- c) Enter each milestone and record if it is mandatory or optional for the project.

3. Save the file as My Milestone List.docx and close it.

4. Create an activity list for the framing work package.

- a) Open C:\ATPPMP1Data\Getting Started with the Project\Activity List.docx.
- b) Using the information in the scenario, brainstorm the possible activities for the framing work package.
- c) In the Activity column, enter the framing activities.

Later in the lesson, you will complete the other columns in the Framing Activity List table. For now, it's enough for the students to create the list of activities.

5. Save the file as My Activity List.docx and leave it open for the next activity.

Activity 2-6

1. Open C:\ATPPMP1Data\Getting Started with the Project \Sequence Activities.docx and consider the order in which the activities need to be completed. Discuss with the class.

Activity	Activity Identifier	Predecessor Activities	Successor Activities	Logical Relationships	Leads and Lags
Install plywood flooring					
Frame exterior walls				After floor	
Frame interior walls				After exterior walls	
Frame roof				After interior walls	
Install doors				After roof framing	
Install windows				After roof framing	
Install drywall				After doors and windows	
Install trim				After drywall	

2. In the Framing Activity List table, complete the middle columns.

- a) In the Activity Identifier column, assign a number to each activity.
- b) Using the information in the Logical Relationships column, identify the Predecessor Activities and Successor Activities for each entry.

3. During a recent meeting with your project team, a decision was made to add five days between two activities—installing the plywood flooring and framing the exterior walls—due to other projects that some members of the team have already committed to. Will this be a lag or lead relationship that you should account for? Add it to the table and explain.

There will be a five-day lag between installing plywood flooring and framing exterior walls.

4. Open C:\ATPPMP1Data\Getting Started with the Project \Solutions\Sequence Activities Solutions.docx and compare your predecessor and successor activity answers.

5. Referring to My Activity List.docx, draw a network diagram for the framing work package with the following specifications.

- Make sure that all the required activities are included in your network diagram.
- Make sure your diagram shows the sequence constraints from left to right.



- Check to make sure the activities that are connected by arrows correctly indicate their precedence relationship.
- Inside each node, indicate any lag or lead time needed.

6. Compare your network diagram to the one shown on page 2 in the Sequence Activities Solutions document.

7. Close all open files.

## Activity 2-7

1. Since there are many areas where quality may be an issue, how does the product team determine what the quality standards are?

Answers may vary but should include that the quality standards are set for the project by the project team taking in and setting the standards from various resources and stakeholders. This requires the team to work on determining the standards for various aspects of the project. This may come from an industry standard, or from a company standard used on all their chocolate products, or from standards researched and set by the quality department, senior leadership, or from SMEs on the project. Standards can be based on benchmarks to other projects, products, competitors, or other sources.

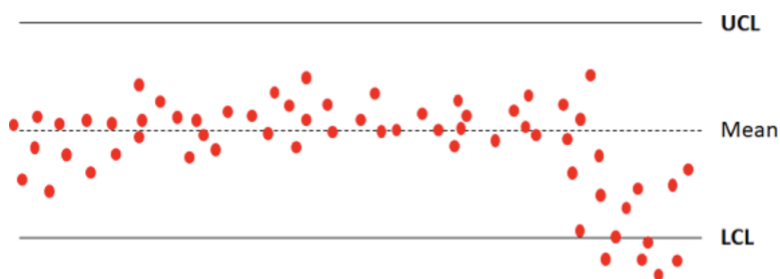
2. The project team includes quality engineers that want to include a quality check at the end of the production line to scan for foreign objects that may be in the chocolate. The scanning tool is \$30,000 to procure and install. What kind of project cost is this?

Cost of conformance

3. The chocolate must not exceed a set size with a 3% tolerance to fit in the packages and for those packages to fit in the shipping containers. For this quality metric, how could the project team measure conformance? (Choose two.)

By observing the amount of chocolate in the mold  
By using an electronic measuring tool

4. During the first production run, the quality measurements were examined closely. The first 100 chocolate pandas produced were measured on a scale to assure they meet the weight requirement. The control chart from those first hundred looked like the diagram below. What can be determined based on the chart? What should have been done at certain points in the production run?



Answers should include that the quality was within control limits at the start of the run, but near the end the process was out of control. At the first point where the results went outside the control limits, there should have been an investigation and an assigned cause.

### Activity 2-8

1. Reflecting on your project management experience, what types of project management plans have you worked with or created?

Answers will vary depending on students' experience. Project management plans can range from an informal, minimal-information-provided document to a formal, thorough, detailed document.

2. Which subsidiary plan deals with the closure of contracts, including those signed to bring in consultants?

The procurement management plan

3. The project team recognizes there are going to be a lot of changes to documents and procedures throughout the project. The importance of team members using the correct checklist, document, or file is key. Operating with the incorrect version can have a major impact. Which plan most addresses this project concern?

Configuration management plan

4. You are creating a sub-plan, which describes the problems the project might encounter if government standards, municipal laws, or internal processes are not correctly followed. What plan are you working on?

Compliance management plan

Activity 2-9

1. You will need six professional security guards for four hours during the evening of the public meeting. What contractual considerations are important as you select the security firm who will provide the guards? (Choose two.)

Fixed-price contract

Term contract

2. You will rent three large monitors so meeting attendees can see the speakers. Which of the following documents should you prepare first to procure the monitors?

Procurement Statement of Work

3. Your public meeting requires approximately 5,000 square feet of space. Which of the following selection criteria are most important? (Choose two.)

Past performance of company that owns the space

References from previous renters

4. The contract to rent the monitors stipulates that you should inspect them before the meeting. You are in a hurry and forget to do this, and as the meeting begins one of the monitors does not work. Which of the following is the correct term for this situation?

Waiver

Activity 2-10

1. Which of the following best represents the definition of governance?

A set of practices to help assure the success of the project.

2. When should the assumptions made about a phase be verified?

At the beginning of the next phase

3. The decision to move from one phase to another is known as which of the following? (Choose three.)

Kill point

Phase gate

Governance gate

4. Which of the following describes the most common phase-to-phase relationship in multi-phase projects?

Sequential

### Activity 2-11

#### 1. Are your project records ready for review by the project sponsor? Why or why not?

Yes, because you have collected performance measurement and product documentation as well as other relevant project records to archive.

#### 2. What document will you prepare before obtaining formal acceptance from your project sponsor to officially complete the project?

You should prepare a final project report. You should also complete a lessons-learned report.

#### 3. In this case, what might constitute formal acceptance?

Answers will vary but may include: a formal presentation to stakeholders followed by a memo from the project sponsor that the project is complete. Formal acceptance documentation should be distributed to the appropriate stakeholders and stored with the project archives. If the customer was external, you might also need to receive their formal acceptance in writing.

#### 4. What types of documentation or computer files should you store in the project archives?

Answers will vary, but may include: the project plan, project performance records, contract records, names of team members, and/or financial records.

### Activity 3-1

1. Open the file C:\ATPPMP1Data\Doing the Work\Risk Register.xlsx.
2. Use the following questions to fill in the first four columns of the risk register for the 234 West Adams project. The remaining columns will be filled in later.
3. Which of the following might be risks (either opportunities or threats) for this project? (Choose three.)

Fluctuating material costs

Weather

Vandalism

4. Would you classify the weather as a positive risk (opportunity) or a negative risk (threat)?

The answer depends on the weather. Bad weather is a threat because it might cause delays to the building schedule. Good weather is only an opportunity if it enables you to work longer or more hours and finish the house ahead of schedule.

5. What events might be considered triggers for the risks?

A news story forecasting possible inflation could cause material prices to rise dramatically. The weather forecast is a trigger for the bad weather threat. The occurrence of vandalism in the neighborhood is a trigger for possible vandalism at the job site.

6. Save the file as My Risk Register.xlsx
7. Open C:\ATPPMP1Data\Doing the Work\Solutions\Risk Register Solution.xlsx and compare your file to it.
8. Close all open files.

### Activity 3-2

1. There are so many features and functions that must be designed, developed, and deployed. The assembled project team is overwhelmed and unsure where to even begin. How would a preliminary examination of the business value of some of the features and functions assist the team at this early stage?

Answers may vary but could include exploring and examining the various features and functions of the services and products planned to be offered by the app can identify objectives of the project. The team can understand the benefits sought by the project. It can help the team appreciate and internalize the outcomes expected by their work and not be too focused on only the technical aspects of the work.

2. What is the value of doing this before having technical discussions?

Having a broad evaluation of the value, the team can recognize the needs and think about how they can design and deliver with them in mind. This means discussing the "why" before getting bogged down on the "how".

3. As the project team gains better understanding of the value their product might deliver, they are excited to make the product a reality. Due to the volume of features and the work required, the project team decides to deliver incrementally. What are some benefits to this strategy? (Choose three.)

Creates a sense of urgency to deliver part of a solution.

Allows progress to be realized.

Enables the end users to provide feedback.

4. You and the project team determine the minimal viable product (MVP) to release only one month after the project launch. Others in the organization are asking for many other features and designs to be included before it is released to the public. Should the project team hold off on the release until more features are added or should they move forward on their MVP plans?

The MVP is designed to deliver the minimal functionality and design to deliver some value to users. That realized value is not all the value possible or planned for the product but does deliver some value. Having tangible outputs for the business, customers, end users, or whomever the product is released to, allows stakeholders beyond the project team to experience the outputs and provide feedback as to whether the product does in fact deliver the intended results and where improvement can be made. Those additional features that others in the organization are requesting will be implemented—potentially, depending on feedback—in future releases of the product.



Activity 3-3

1. What communication skills can be used when working with the various people?

Answers will vary, but could include active listening, observation, direct questioning, coaching, resolving conflict, and educating.

2. Which item should you use to determine the communications needs of your project stakeholders?

Stakeholder analysis data

3. Given the scenario, what would be a good technology for enhancing team member interactions and building relationships throughout the life of the project?

High-quality virtual teleconferencing on a semi-weekly or weekly basis

4. Which of the following is NOT a component of the communications management plan?

The Stakeholder Register

5. After integrating the communications management plan into the overall project plan, what would be the next logical step?

Distributing the plan to all the stakeholders

### Activity 3-4

1. Open C:\ATPPMP1Data\Doing the Work\Engage Stakeholders.docx.
2. Given the information in the scenario, who is the sponsor of the 234 West Adams project? Enter your answer in the stakeholder register.

Linda Michaels

3. How are the mayor and local government involved in the building project? Enter your answer in the stakeholder register.

The mayor and others in the local government might need to be consulted on zoning or other development issues. It will be important to seek their counsel as early in the process as possible to avoid disruptions once the actual construction work begins.

4. What are some of the possible expectations that the homeowners will have? Enter your answers in the stakeholder register.

The homeowners will clearly be expecting to have a completed home to live in. To get to that outcome, they or their family and friends might also expect to provide "sweat equity" during the project.

5. Who are the external stakeholders involved in the actual construction of the home at 234 West Adams? Enter your answers in the first four columns of the stakeholder register.

For the actual construction, the external stakeholders include the building inspector, master carpenter, plumber, electrician, and landscaper—all the people who provide specific expertise.

6. Save the file as My Engage Stakeholders.docx
7. Compare your stakeholder register to C:\ATPPMP1Data\Doing the Work\Solutions\Engage Stakeholders Solution.docx.
8. Close all open files.

Activity 3-5

1. Why is it important to plan for stakeholder engagement?

Answers will vary but should include: the stakeholders having a large impact and influence on a project and what the outcomes will be. They are always emerging as a project progresses and so having a good stakeholder engagement plan will enable you to react and keep all stakeholders engaged. Because most of a project's requirements come from the stakeholders, keeping good track of them along with the stakeholder who is associated with the requirements is essential to good communication and project success.

2. Based on the scenario, enter the stakeholders in the following table.

Stakeholder	Unaware	Resistant	Neutral	Supportive	Leading

3. Based on the scenario, what classification would you use for Dave's level of involvement in this project? Enter your assessment in the matrix table above.

Resistant

4. Assess the remaining stakeholders' engagement levels and indicate them in the table.

5. Discuss your assessment of the stakeholders' engagement with the class.

6. How would you plan to manage Dave's resistance?

Answers will vary but might include asking Seth to speak one-on-one to Dave to convince him of the benefits. Additionally, letting Dave know that his accountants are neutral at the moment but will follow Dave's lead, so if he continues to be a roadblock, he's adversely affecting more than himself.

Activity 3-6

1. Which documents will you not prepare for the project to build a new house?

Release Plan

2. Which of the following is a tool used to manage changes to a product or service?

Configuration management

3. Which artifacts would you likely include under version control? (Choose three.)

Schedule Management Plan

List of assumptions

Project Charter

4. Which of the following systems is used to create, store, retrieve, and distribute project documents?

Artifact management

### Activity 3-7

1. Who will you involve in the change control process for the new build project and what is their role in the change control process?

The change control process should involve the development company senior executives and strategic planning individuals who are the key stakeholders. Their role will be to identify what will be considered a significant enough change from each baseline to require management approval. You should also include the PMO.

2. The carpenter informs you that the window and door installation will have a significant delay and is asking for a change in subsequent schedule dates. What action should you take first?

Document the change request in a change control system.

3. The carpenter contacted the window and door supplier and was able to secure half of the windows before the next regularly scheduled shipment. Based on your change control process, what further action, if any, should you take?

You should document the results of installing half the windows now and the remaining when the regular shipment arrives.

4. How do you ensure all functional areas are aware of the requested changes that may affect them?

Answers will vary but may include implement a CCB with representatives from each functional area and send weekly email messages with reports and ask managers to approve or disapprove the requests.

### Activity 3-8

#### 1. Describe the differences between a risk and an issue.

A risk is focused on the future, it can have a positive or negative effect on the project, and it is documented in the risk register. The response to a risk is called a risk response. An issue is focused on the present, it has a negative effect on the project, and it is documented in the issue log. The response to an issue is called a workaround.

#### 2. What should an issue log contain?

A description of the issue, when it was added to the log and when it should be resolved, its priority, an owner who will follow its resolution, the selected response, and the status (open or closed).

#### 3. Which of the following items are issues for the 234 West Adams project? (Choose two.)

A letter from the bank stating that the mortgage rate will increase in three weeks.  
The Andrews family's camping trip, which is scheduled during the time they are to close on the house.

Activity 3-9

1. When should transfer of knowledge take place?

Throughout the project

2. What are examples of tacit knowledge?

Beliefs, experience, and insights

3. Management of project knowledge exists on three levels. What are they?

Individual, project, and organization

4. When is the lessons-learned register created?

At the beginning of the project

5. Who is ultimately responsible for transferring knowledge learned during the project?

Project manager

### Activity 4-1

1. What benefit, if any, is there for the project manager to get all the various stakeholder groups—the business, the inventory staff, the developers, and the design team—to understand the project's vision and mission?

Answers may vary: Having all parties appreciate and align to the project's goals and overall mission helps ensure that all understand the primary aims of the project. Drawing attention to how each group is working together to strive towards a common goal pushes for more collaboration, support, and shared understanding.

2. What can a project manager do to bridge the gap between business and development? (Choose three.)

Communicate to the business the work and effort needed from the development team and their progress.

Communicate to the development team the needs and desires of the business.

Arrange collaborative sessions for the business team and development team to work on ideas and issues.

3. Which best represents the servant leadership style of the project manager?

She takes care of the administrative reporting when the team is focused and on a roll.

4. In their extensive research, the design team discovers that inventory staff enter a lot of information that is never used by any of their activities or by any other team. When the inventory staff is asked why that information is captured, the response was, "We just always have. No one knows why." How is challenging of the status quo going to support the project's aim of delivering value?

Answers may vary: Questioning and challenging the way things are done may validate its importance and value in which case the project can produce or enable more value. Or the status quo may be continuing unnecessary effort that produces no value (waste), in which case the project can remove inefficiencies or non-value efforts.



### Activity 4-2

1. You plan to measure project progress by comparing the actual performance against planned performance, as documented in the schedule and cost baselines. What method will you use?

EVM

2. According to your baselines, you expected to complete \$15,000 worth of work by the end of the eighth week. What is the term for this information?

PV

3. According to your status reports, you've completed 48% of the work so far. Based on this information, what is the EV and how did you calculate it?

A:  $EV = \$12,000 = (0.48 \times 25,000)$

4. How do you determine the AC for your project?

The actual cost (AC) is not a calculated amount. Rather, it is obtained from your bank statement or checkbook register.

5. Given the PV, EV, and SV values that you know, what actions should you take at this point? (Choose two.)

Use it to decide whether a corrective action is needed.  
Investigate the root cause of the variance.

6. What is the SV for your project, how did you calculate it, and what does it indicate?

$\$12,000 (EV) - \$15,000 (PV) = -\$3,000$ . A negative SV indicates the project is behind schedule.

7. What is the SPI for your project, how did you calculate it, and what does it indicate?

$\$12,000 (EV) / \$15,000 (PV) = 0.80$ . An SPI below 1 also indicates the project is behind schedule.

8. What should you do with the results of your performance measurement analysis?

Now that you know the project is behind schedule, you need to determine what activity is causing the problem. Once the activity has been identified, you must then determine whether it is on the critical path. If it is on the critical path, you most likely will have to take corrective

action such as fast-tracking, compression, or resource leveling to meet your milestone dates and your project deliverable deadline. Remember to analyze the impact of your corrective action on project cost and quality performance baselines. You should continue to carefully monitor the schedule performance to check the effectiveness of your corrective action.

### Activity 4-3

1. First, to ensure the various teams involved in the project are not wasting anytime or encountering any unnecessary bottlenecks or wasteful efforts, what would be helpful to identify potential issues in their processes?

A value stream map

2. As the team is progressing in the project, what charts or graphs would be useful to help keep the team on track?

Answers may vary but can include burndown charts to see how items from the backlog are being completed (burned down), burnup charts showing progress towards goals or releases, velocity charts to gauge the team's production rate over time, Earned Value charts to show costs and value gained by the project, Gantt charts, and other schedule tools to track progress over time.

3. At the end of the first month, the project team wants to gather for an hour to hold a retrospective session. What is the objective of this session and what typically occurs in such a gathering?

Answers may vary, but retrospectives focus on how the team can improve on their teamwork, project management, and in their processes. The team looks back on what is working well within the team and other stakeholders, celebrates those successes, and seeks ways to encourage its continuation and to improve on it. As well as the success, teams look at areas or improvement. As many ideas are generated, a few ideas are made into actionable items for the team to implement, explore, learn more about, and/or experiment with new ideas or techniques.

### Activity 4-4

1. The Procurement department needs to acquire the equipment from a third-party vendor but cannot finalize the details of the RFP until the Finance department releases the budget. The IT department cannot install and configure any of the equipment, causing them to be at a standstill in this project. The Education Services department continues to build training content although progress is slow because details on the process are constantly being updated. Based on the information provided, what would you consider as an impediment, obstacle, and blocker?

Answers may vary based on interpretation.

- Impediment: Final decisions on equipment for training material
- Obstacle: Procurement getting finance budget
- Blocker: IT cannot install without equipment.

2. As project team members bring impediments to light, how can the efforts to overcome these impediments be tracked or monitored?

Answers may vary: Dedicated impediment boards may be set up in a physical location where the project team is co-located or in a software tool. The status and other relative information on the impediments can also be included in Risk Lists (registers), Kanban boards, progress reports, and other tools used by the project.

3. Minor impediments may interfere with or slow down day-to-day progress. Which tool or practice can be used to bring attention to those impediments on a regular basis?

Daily standups

### Activity 4-5

1. As the project manager, what can you do to mitigate the negative effects of a staffing change?

Closely monitor Kevin's work to assess any possible risk.

2. What can be done to help the project team with the transition activities?

Remind all stakeholders of the vision and objectives of the project. Make certain there is clarity on how the transition activities fit within the overall purpose of the system upgrade project, as well as how short- and long-term transition activities fit within the project plans. Enable the team to support Kevin to get a handle on the tasks and work as a team to be self organized and address the project needs. You as a project manager can mentor Kevin in the project management best practices that Sarah was performing so well, plus some other tips.

3. You sit in a meeting being led by Kevin and team members working on the transition activities. The conversation gets passionate and intense about how to best implement a technical feature in which you have little knowledge or experience. What is your best option as project manager in this situation?

Avoid involving yourself as a decision maker.

4. Which of the following is typically included in a team charter? (Choose three.)

Team values

Team agreements

Team operating guidelines

### Activity 4-6

1. Stakeholders are worried about the current state of the project. How should you handle their concerns?

Conduct a face-to-face meeting with a clear agenda targeting their specific concerns.

2. Two stakeholders are out of town on a business trip and are available sporadically. A third person has an extremely busy schedule and can't squeeze another lengthy meeting into his day. You believe it's important to have regular face-to-face interaction with each stakeholder. How can you accommodate their needs? (Choose two.)

Use video conferencing.

Hold a brief summarization meeting.

3. During the face-to-face meeting with project stakeholders, you explain the need to remove an external resource from the project. It became necessary to add another internal resource to the team, which resulted in changes to the project cost baseline. While you are talking about this issue, you notice that one of the stakeholders continually looks down at the floor and rapidly taps her pen against the table. What does her behavior indicate? What might you do?

Answers will vary but may include assessing body language provides the project manager with an opportunity to determine if the stakeholder is pleased or not with the project's progress. Based on her body language, you can determine that the project stakeholder is uncomfortable with the information you are providing to the group. Draw her into a conversation to determine what aspect of the information is unsettling to her. Her answer will tell you if there are outstanding issues to address regarding project cost baselines, or any other issue that may be of concern to her.

4. When are lessons learned sessions conducted?

Throughout the project in both predictive, iterative, and agile life cycles

### Activity 4-7

1. As a veteran project manager, what are some ways you can mentor junior project managers?

Answers will vary. Examples can include leading more sharing sessions and documenting lessons learned. Other examples include having the junior project manager shadow you; having the new project manager ask you questions; observing and providing feedback to the PM; offering “office hours” to allow the junior PMs to visit and discuss things; and partnering with the PM on a project.

2. Now that your organization is transitioning to agile based project management, how can you be mentored and supported during this transformation?

Answers will vary. Examples include shadowing other project managers; working with an Agile Coach as they guide you through the various agile ceremonies; reading books, magazines, websites, and other publications; reading the lessons learned captured by colleagues or other resources in the PMO's knowledge management system; practicing or holding various roles within an agile structure; taking classes or other forms of training; asking questions and being inquisitive.

### Activity 4-8

1. During requirement gathering interviews with customer support team members, there is a common thread that managers do not listen to them, value them, or empathize with challenges they face. How would emotional intelligence training help in this situation based on these findings?

Answers will vary. Examples include both managers and customer support team members can be more aware of the emotions of others, read the changing emotions of others, and understand their own emotions better. Recognizing and practicing empathy would build trust and connection between all team members.

2. A project team is put together to implement some solutions to improve the customer satisfaction metrics. There are many ideas and perspectives shared by your project team. There is skepticism amongst the project team that you are considering the various options and are bent on pushing forward your own predetermined solutions. How can you change that false perspective?

Answers vary. Examples include being transparent about your personal aims and feelings. Communicating that you do not have a pre-conceived solution that must be enacted. Encouraging many divergent voices, inputs, and healthy debate. Challenging in constructive ways the suggestions presented, especially your own to model the positive conflict practice. Listening and acknowledging the input of all. Respecting different cultures, ages, perspectives, and other variations.

3. Work with one or more fellow learners to practice expressing some ideas for what could be done in this project.

- a. Pay close attention to your active listening skills.
- b. Try some active listening skills or techniques that you have not used before or want to practice.

4. Which aspects of active listening were demonstrated during this exercise and what were the results of this activity?

Answers will vary but might include reflecting to understand the gist of the message; attending to show that engagement; and following to demonstrate understanding with nonverbal gestures and questioning.



### Activity 5-1

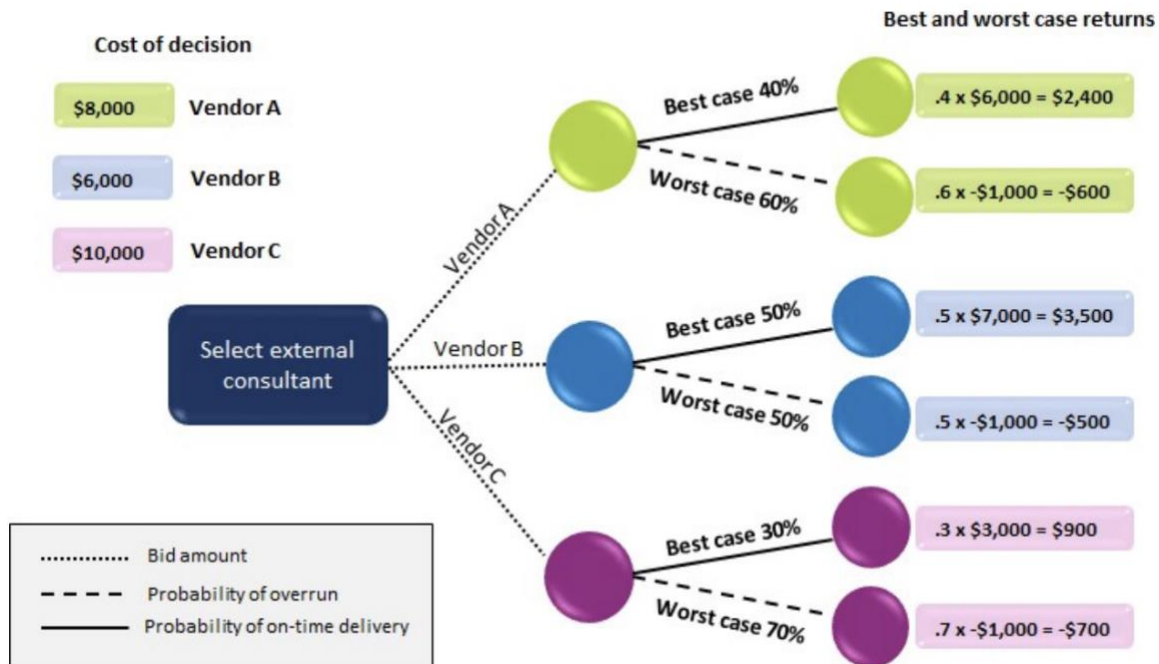
1. You become aware that the FAA is planning to change the flight paths for a major airport located just two miles from your nuclear plant. The new flight path would reduce airline noise for local residents but would require more than 50% of the air traffic to fly directly over the cooling towers. Outline the risks and the potential impacts, and then consider risk responses.

Answers may include various approaches; some may include different methods of Avoidance, Transfer, and Mitigation. You should also describe how you plan to manage Residual Risk.

2. Your company is subject to a broad array of regulatory compliance requirements for all its operations. What would you do to gather these requirements and ensure they are properly weighted as part of your risk assessment?

Answers will vary to both but should include detailed conversations about possible ways to reroute the flight path, assessments of potential financial (and other risks) and potential mitigation options, and how much residual risk is acceptable. The second question speaks to a large array of existing compliance requirements. These should exist in current policy documents, risk checklists, or other tools that can be leveraged and validated for this project. The project manager should avoid trying to research all of this from scratch, but instead leverage existing documentation wherever possible, subject to validation for accuracy and currency.

Activity 5-2



1. Which analysis technique was used in the image to determine the most cost effective choice of an external consultant?

Decision tree

2. What is the probability that Vendor A will complete the project on time?

40%

3. What is the probability that Vendor B will run over the allotted time for the project?

50%

4. What is Vendor C's expected monetary value?

\$200

5. Your team combines each vendor's EMV and costs. You want to choose the vendor bid with the most economic advantage for your organization. Based on this number, which vendor should your team choose?

Vendor B

### Activity 5-3

1. You are managing a traditional project and need to establish a change management process. What aspects do you need to consider?

Answers will vary widely, but should include how changes are requested, how and who assesses them for cost, risk, and value, who decides whether to approve the change (and what the tolerance level of the project manager is before it would need to be escalated to the project board or sponsor), how the change is integrated into the project plan, and how assurance is validated that the change delivered the expected value once built.

2. You are managing an agile project and need to establish a change management process. What aspects do you need to consider?

Answers will vary but should include identification of the product owner as a funnel for Requested changes from customer and user stakeholders, writing the change's user stories, scoping the change during backlog grooming and refinement sessions, team estimation of the change, and ultimately placement of the change in the prioritized product backlog. This may also affect some other project artifacts like project roadmaps.

3. You are coaching the business product owner. Since you are running a project using an agile approach, early delivery of the highest value aspect of the solution is possible, and you want the product owner to work together with their stakeholders to assess when enough of the solution is available to launch a minimum viable product (MVP). What considerations should you take, and how would you socialize this idea with the customer and their stakeholders?

Answers will vary but should include some education on the risk management benefits of early value delivery, early feedback to the teams, and that most agile solutions are in a constant state of iteration and improvement all the time, so the goal is to start accruing value and good quality feedback on how and what to prioritize going forward to optimize value for the customer.

### Activity 5-4

1. In addition to the departments listed in the scenario, your company also has a manager of project management to oversee all the ongoing projects. As one of the project managers, you report directly to the project management department but share staff with other departments. What type of organizational structure does this describe?

Matrix

2. Choose the organizational structure where the authority of the project manager is the highest.

Projectized

3. Which organizational structure is a combination of all the other types of organizations?

Composite

4. Describe the organizational culture, style, communication, and structure of one of your projects.

Answers will vary but may include motivation and rewards systems such as project milestone celebrations, code of conduct, work ethic, and work hours. All of these contribute to the team's work environment.

5. Describe the OPAs you have used on past projects.

Answers will vary but might include process and procedure documentation for procuring resources, industry standards that must be followed, and project document templates.

6. Describe any EEFs that you have experience with or factors that you can see coming across in the future as a project manager.

Answers will vary but may include: the political climate (if you are working within a government organization), the existing IT infrastructure, managing employees who work remotely, and working within health care regulations such as HIPAA.

Activity 5-5

1. Which of the following are key attributes of continuous improvement? (Choose three.)

Better design of products to improve service  
Higher level of uniform product quality  
Increasing sales through global markets

2. Which of the following individuals is often cited as the father of Total Quality Management?

Deming

3. Which continuous improvement approach is built upon ideas coming from the workers themselves and improvements coming from many small changes?

Kaizen

4. How is the Lessons Learned Register used in continuous improvement?

Lessons Learned Registers from previous projects should be used as a source of continuous improvement ideas throughout a project.