

Chapter 27: Project Management

Brandon Olson, PhD, PMP

Learning Objectives

- Differentiate between project and operations activities
- Identify and explain the three sources of projects
- Describe the purpose of each of the project management process groups
- Associate the project roles with the activities in the project management process
- Identify and describe the skills and abilities needed for project management
- Explain the use of a WBS and Gantt chart in project planning
- Determine the purpose for each step in the change management process
- Differentiate among project management, program management, and portfolio management

Key Terms

Administrative supervisor	Program	Project scope
Agile approach	Program management	Project sponsor
Balanced matrix organization	Project	Project stakeholder
Compliance projects	Project budget	Project team
Consultant	Project champion	Projectized organization
Contractor	Project coordinator	Requirements document
Expense projects	Project expeditor	Revenue projects
Functional organization	Project failure	Scope creep
Gantt chart	Project management	Strong matrix organization
Industry knowledge	Project management constraints	Triple constraint
Iterative approach	Project management lifecycle	Users
Matrix organization	Project manager	Variance
Operations	Project performance	Waterfall method
Organizational experience	Project portfolio management	Weak matrix organization
Outsourcing agency	Project portfolio manager	Work breakdown structure (WBS)

Real-World Cases

1. Mercy Health System, like many healthcare organizations, is experiencing a shortage of qualified coders. Over the past three years, the vacancy rate for coders has been 20% to 25%. With more than \$2.7 million billed on a daily basis, this vacancy level has the potential to result in an increase in accounts receivables. Several past initiatives have attempted to resolve this issue without any success. These include outsourcing backlogged work, and paying out \$50,000 in retention bonuses and more than \$6,000 in recruitment bonuses. Based on published best practices in the HIM field, we believe that the establishment of a home-based coding system will solve our coder vacancy problem.

Discussion Questions:

- a. Prepare a project charter document that includes the project objectives, deliverables, high-level project activities, assumptions and constraints, an estimated project schedule, and estimated project costs.
- b. Prepare a roles and responsibilities document that includes the project organizational structure.
- c. Prepare a project task list. For each task, indicate the task predecessor(s), the resources assigned to work on the task, and the estimated work effort for each resource.
- d. Document the project risks. For each risk, indicate the probability factor, the impact factor, and the contingency plan.

2. Reimbursement rules require that the chargemaster drive a facility's charges. To receive the optimal reimbursement for services rendered, the chargemaster must be up-to-date and all-inclusive and must meet any payer rules and regulations.

The facility has decided to undergo a review of its chargemaster to ensure that it meets the above criteria. In addition to the comprehensive evaluation, one of the other objectives of the project will be to institute the procedures to ensure that all additions, revisions, and deletions meet the chargemaster standards.

Discussion Questions

- a. How could the facility measure the success of the chargemaster review project?
- b. Which facility departments should be included on the project team? Describe the role and responsibilities of each team member.
- c. Who would be the most appropriate project sponsor? Who are the project stakeholders?
- d. Prepare a list of tasks that need to be performed.
- e. What departmental policies and procedures will need to be updated?
- f. Describe the training program that should be put in place to ensure ongoing chargemaster compliance.

Application Exercises

1. Review the objectives in table W27.1 and reword the content so that the objective is measurable.

Table W27.1

Type of Project	Non-measurable Objective	Measurable Objective
Implementation of a physician prescription entry system	Increase user satisfaction	
Project to improve the processes associated with the revenue cycle	Streamline the activities associated with the revenue cycle	
Project to create an in-house coding education program	Create an in-house coding education program to alleviate the chronic shortage of qualified coders	
Review of corporate compliance program	Increase effectiveness of the corporate compliance program	

2. Review the risk analysis example in table W27.2 and the vacation project plan in table W27.3. For each documented contingency, use table W27.4 to translate the text description into specific project plan changes for work, duration, and cost.

Table W27.2. Example of risk analysis

Risk Description	Probability Factor Low=1 Medium=3 High=5	Impact Factor Range is 1-10 Low=1 High=10	Risk Factor (Probability x Impact)	Contingency
Forget to pack an item	5	3	15	Prepare a packing list
Traffic congestion on the way to the airport	1	10	10	Check road construction hotline and radio traffic reports; allow extra travel time
Rain during the vacation	3	8	24	Plan some indoor activities
Luggage doesn't make it to the destination	1	10	10	Purchase additional baggage insurance
Hurricane strikes the resort	5	10	50	Purchase trip cancellation insurance

Table W27.3. Vacation project plan

ID	Task Name	Work	Duration	Cost
1	Decide where to go			
2	Determine travel budget	4 hrs	2 days	
3	Search web	6 hrs	3 days	

4	Get and read travel books from the library	12 hrs	8 days	
5	Call travel agent	2 hrs	1 day	
6	Decide when to go	2 hrs	1 day	
7	Finalize plan			
8	Ask for time off	1 hr	2 days	
9	Make plane reservations	2 hrs	1 day	\$600.00
10	Make hotel reservations	2 hrs	1 day	\$800.00
11	Make car reservations	1 hr	1 day	\$300.00
12	Prepare for trip			
13	Get passports	3 hrs	90 days	\$120.00
14	Get immunizations	2 hrs	1 day	\$30.00
15	Stop mail and paper	1 hr	1 day	
16	Ask neighbor to watch house	1 hr	1 day	
17	Plan activities	2 hrs	2 days	\$800.00
18	Get camera supplies (batteries, memory card)	1 hr	1 day	
19	Go on trip			
20	Pack	3 hrs	2 days	
21	Alert credit card company of possible charges	1 hr	1 day	
22	Give itinerary to neighbors, parents	1 hr	1 day	
23	Drive to airport	1 hr	1 hr	

Table W27.4. Project plan changes for contingency

Contingency	Task	Work	Duration	Cost
Prepare a packing list				
Check traffic reports, allow extra time				
Plan some indoor activities				
Purchase additional baggage insurance				
Purchase trip cancellation insurance				

3. Using the form in table W27.5, prepare a list of five tasks or activities you have planned for the next two weeks. Estimate the start date, expected work effort (in hours), and finish date for each task.

Table W27.5. Task list

Task Description	Estimated Start	Estimated Work	Estimated Finish

After this list is completed, begin to track your time on these tasks. Copy the form shown in table W27.6. Transcribe the tasks from table W27.5 onto the form—use a separate form for each task. On each day, log the number of actual hours spent on the task and the estimate of the number of hours that are remaining. When the task is completed, determine the actual start date, the actual finish date, and the total work expended.

Table W27.6. Tracking form

Task Description:															
Week 1								Week 2							
S	M	T	W	Th	F	S	S	M	T	W	Th	F	S		
Actual Work															
Estimated Remaining															
Actual Start Date:				Actual Finish Date:				Actual Total Work:							

At the end of the two-week period, be prepared to discuss the following questions.

- How accurate were your estimates?
- If the total actual work was higher than what you estimated, what were some of the reasons for this difference?
- If the actual start or finish dates were later than originally planned, what caused this?
- What are your thoughts on the process for keeping track of your time?
- Did you log your time every day? Did you miss any days and then attempt to remember how you spent your time? If you didn't keep track of your time every day, how do you think this affected the accuracy of the information?

4. The project plan displayed in table W27.7 shows a project plan for an office move. For each task in the plan, the table shows the baseline and current or actual values for the start date, finish date, work, and cost. Dates shaded in gray and designated with an "A" mean that the date is an actual date instead of an estimated or scheduled date. Assuming that the current date is February 1, review the information and answer the following questions.

Table W27.7. Variances

ID	Task	Start		Finish		Work		Cost	
		Baseline	Estimated or Actual	Baseline	Estimated or Actual	Baseline	Estimated or Actual	Baseline	Estimated or Actual
1	Office Space								
2	Identify requirements for new office space	Jan 3	Jan 3 A	Jan 5	Jan 5 A	20 hrs	20 hrs	\$2,000.00	\$2,000.00
3	Identify potential office sites	Jan 6	Jan 6 A	Jan 12	Jan 12 A	10 hrs	20 hrs	\$1,000.00	\$2,000.00
4	Make final decision on office space	Jan 13	Jan 13 A	Jan 19	Jan 21 A	5 hrs	5 hrs	\$500.00	\$500.00
5	Finalize lease on office space	Jan 20	Jan 24 A	Jan 25	Jan 27 A	5 hrs	5 hrs	\$500.00	\$500.00
6	Design office space	Jan 26	Jan 28 A	Feb 25	Mar 1	100 hrs	100 hrs	\$10,000.00	\$10,000.00
7	Assign office space	Feb 28	Mar 2	Mar 4	Mar 8	10 hrs	10 hrs	\$1,000.00	\$1,000.00
8	Office Equipment								
9	Order office furniture	Jan 20	Jan 20 A	Jan 24	Jan 24 A	30 hrs	30 hrs	\$53,000.00	\$63,000.00
10	Order new office equipment	Feb 28	Feb 28	Mar 2	Mar 2	30 hrs	30 hrs	\$43,000.00	\$43,000.00
11	Order phone system	Feb 28	Feb 28	Feb 28	Feb 28	10 hrs	10 hrs	\$31,000.00	\$31,000.00
12	Moving Companies								
13	Select the move day	Jan 26	Jan 26 A	Jan 26	Jan 26 A	2 hrs	2 hrs	\$200.00	\$200.00
14	Obtain estimates from moving companies	Jan 27	Jan 31 A	Feb 11	Feb 15	15 hrs	50 hrs	\$1,500.00	\$5,000.00
15	Hire movers	Feb 14	Feb 16	Feb 14	Feb 14	5 hrs	5 hrs	\$500.00	\$500.00

- a. Which tasks are causing a variation in the work?
- b. Which tasks are causing a variation in the project schedule (that is, the start and finish dates)?
- c. Which tasks are causing a variation in the cost?
- d. Which tasks require some type of action in order to get the project back on track?

Review Quiz

Instructions: Choose the most appropriate answer for the following questions.

1. Which of the following factors is not a consideration when revising a project to keep it on track?
 - a. Deferring a required feature to the next project
 - b. Adding a person to help another project team member
 - c. Holding a kickoff meeting
 - d. Working overtime
2. All of the following could result in a change to the scope of a project except:
 - a. A new regulation
 - b. The resignation of a project team member
 - c. More copies of a deliverable
 - d. Defining the work breakdown structure
3. What is change control used for?
 - a. Handing off deliverables from one team member to another
 - b. Managing scope modifications
 - c. Determining the project dependencies
 - d. Documenting the project organizational chart
4. What is risk?
 - a. An answer to an unknown question
 - b. A situation that can affect the success of the project
 - c. A situation that prevents completion of a project task
 - d. A change in the project scope
5. What is a baseline?
 - a. The documentation of the project issues
 - b. The project definition document
 - c. The original estimates for the work effort, cost, and project time line
 - d. The tracking of project progress

6. Which of the following are not attributes of both projects and daily operations?
 - a. Responsible managers
 - b. Roles and responsibilities
 - c. Products or services
 - d. Defined finish dates

7. Which of the following affect performance, time, and scope?
 - a. Project cost
 - b. Project office
 - c. Project management life cycle
 - d. Project team

8. Which of the following activities is not part of the project management life cycle?
 - a. Preparing a WBS
 - b. Establishing a project budget
 - c. Project status reporting
 - d. Formulating a project office

9. Which of the following is not a type of project team structure discussed in the project management literature?
 - a. Tree
 - b. Projectized
 - c. Functional
 - d. Matrixed

10. What is a work breakdown structure?
 - a. A list of the project deliverables
 - b. A hierarchical list of the project tasks
 - c. A document that defines team roles and responsibilities
 - d. A list of project scope changes

11. Which statement is not a description of a project assumption?
 - a. Constraint on what is and is not included in the project
 - b. An answer to an unknown question
 - c. An indicator of resource and timeline estimates
 - d. A project goal

12. Project scope is _____.
 - a. the project budget
 - b. the magnitude of the work to be done
 - c. the project schedule
 - d. the quality of the work products

13. All of the following are types of project resources except:
 - a. Equipment
 - b. Materials
 - c. Project plan
 - d. Personnel

14. The project role responsible for defining project goals and scope is/are the _____.
 - a. stakeholders
 - b. project owner
 - c. project champion
 - d. steering committee

15. In terms of project success, which of the following statements is considered a change from the common definition?
 - a. How closely the project outcomes align with the perceptions held by the key project personnel
 - b. Meeting the project objectives
 - c. Being at or under budget
 - d. Meeting the scheduled end date

16. All of the following are functions of the Project Manager except:
 - a. To recommend plan revisions
 - b. To set project expectations
 - c. To approve the project budget
 - d. To prepare project communication

17. The purpose of the project charter or statement of work is to _____.
 - a. detail the tasks to be performed
 - b. set expectations for the what, when and how of the project
 - c. document project issues
 - d. provide detail estimates for work effort and start and finish dates

18. Which of the following is not considered a project management competency:
 - a. Project performance
 - b. Organizational experience
 - c. Process knowledge
 - d. Technical expertise

19. An output of the planning process group is the _____.
 - a. Project charter
 - b. Project requirements
 - c. Updated planning documents
 - d. Lessons learned document

20. An example of a project requirements document is a(n) _____.
a. Requirements matrix
b. Work breakdown structure
c. Issue log
d. Gantt chart
21. Incremental unplanned changes to the project scope over a period of time is referred to as _____.
a. task variance
b. change management
c. scope creep
d. change control
22. One purpose to hold a kick-off meeting is to _____.
a. make sure everyone understands why the project is being undertaken
b. resolve project issues
c. celebrate success
d. decide who will be on the project team
23. A collection of related projects is referred to as a(n) _____.
a. project suite
b. program
c. investment portfolio
d. project work load
24. What is the name of the document used to formally propose changes to the project scope?
a. Work breakdown structure
b. Change request
c. Project charter
d. Scope deviation log
25. All of the following are types of project communication except:
a. Issue log
b. Status reports
c. Department organization chart
d. Project plans