TSSM™

Creating VCE Success

SAMPLE

Informatics
Teach Yourself Series
Topic 2: Project Management

Contents

Project Management

Project Management refers to the tools and techniques used to plan, organise, lead and control a project.

Project Management Terms
As it appears in Units 1, 3 and 4

There are a number of key terms you should understand in relation to Project Management.

- Project
  - A set of interrelated tasks carried out over a fixed period and within a budget and other constraints.
  - This goal must be achieved in order to solve some sort of information problem which exists in the organisation.
  - A project is temporary, that is, it has a defined start and end date.
  - Usually, projects involve a team, many people with different skills who are allocated tasks which they need to complete at a specified point in time.

- Project Manager
  - The person responsible for planning the project and coordinating all the resources (ie. people, money and equipment) to ensure that it is completed successfully by the due date.

- Milestone
  - A point in the project that marks the completion of a key event in the project.
  - It has zero duration

- Task
  - A part of the project that needs to be completed as part of the whole project.

- Gantt Chart / PERT Chart
  - Tools used to visually represent the tasks that need to be completed, the length of each task and when the tasks will be completed.
- Resources
  - May include money, equipment (hardware or software) or people that a task needs in order for it to be completed.

- Critical Path
  - The consecutive tasks from the beginning to end of the project that take the longest time.
  - It would delay the end date of the project if any of the tasks were to take longer than expected.

- Predecessor
  - A task that must be completed before the current task can begin.
  - This is also known as a dependent task.

Review Questions

1. Which of the following is used to visually represent the tasks of the project?
   - **A.** Work breakdown structure
   - **B.** Resources
   - **C.** Gantt chart
   - **D.** Milestone

2. Which of the following does not describe a project?
   - **A.** It has a defined start and end
   - **B.** Aims to achieve a certain goal
   - **C.** It is ongoing
   - **D.** It involves many people with various skills

Project Table

As it appears in Units 1 and 2

A project table allows a project manager to brainstorm the tasks that will be involved throughout the project. This can be used to help plan, create, implement and evaluate the solution. The project table usually outlines the following information:

- Task name
- Task description
- Length of each task
- Resources required to complete the task
- Dependent tasks

Task Name	Description	Duration	Resources Required	Dependent Tasks

Benefits of using a project table:
- Allows all tasks to be identified without being concerned about the sequence.
- Easily identifies dependent tasks.
- Provides details about what the task involves.
- Identifies the resources that are needed for each task.

Limitations of using a project table:
- Does not indicate length of project.
- Difficult to identify the critical path.

Review Questions

3. A project table should be created:
   - **A.** Before a Gantt chart
   - **B.** After a Gantt chart
   - **C.** In place of a Gantt chart
   - **D.** All of the above

Solutions to Review Questions

1. The correct answer is: C

A Gantt chart is one of the tools that are used to represent the timeline of a project. Work breakdown structure (A) is the list of tasks that will appear in a Gantt chart. Resources (B) will be needed to complete each task. A milestone (D) is a significant point of a project that will be identified in a Gantt chart.

2. The correct answer is: C

A, B and D are all true descriptions of a project. C is not true as a project is temporary.

3. The correct answer is: A

A project table is usually produced in the initial planning stage of a project (A). There is little benefit in creating a project table after a Gantt chart (B) as the Gantt chart helps sequence to tasks. A Gantt chart provides added benefits over a project table, so the project table should not replace the Gantt chart (C).

4. The correct answer is: B

Saturday and Sunday are not working days in this project. Also Task B and Task C are being completed at the same time.

5. The arrows represent the predecessor tasks. In this case, Task D is dependent on both Task B and Task C, however, Task E is only dependent on Task B.

6. The correct answer is: C

It is difficult to identify the critical path of a project in a Gantt Chart. The other options are all good reasons to use a Gantt chart.

7. The correct answer is: A

Option A will take 14 days to complete, option B will take 12 days, option C will take 13 days and option D is not a valid path.

8. The correct answer is: B

From Task E to Task I there are two sets of tasks that need to be completed concurrently: Tasks F and H; and Task G. Task F and H will take 4 days, whereas Task G will only take 2 days. This means that Task G could be delayed by 2 days without delaying the start of Task I.

9. The correct answer is: B

PERT charts easily identify which tasks are dependent on other tasks (B). PERT charts are complex to use for large projects (A). The vectors do not represent the length of tasks, therefore it is hard to compare the length of each task in a PERT chart (C). PERT charts have no standard way to show the progress of completion (D).