

Frequently Asked Questions

1. What is a CPM?

Answer:

The critical path method (CPM) is a widely used technique for analyzing and managing task sequences in large projects. Based on calculating how long it takes to complete essential steps of a process and analyzing how those steps interrelate.

2. How is CPM useful in Projects?

Answer:

CPM is a visual and mathematical technique that gives managers the ability to effectively plan, schedule, and evaluate their projects.

3. Where is CPM used?

Answer:

CPM-associated techniques are probably most often used in large manufacturing and construction projects, but they are also applied to tasks like new product development cycles, marketing campaigns, software process modelling, and research programs.

4. How does CPM help the managers?

Answer:

CPM and related tools allow managers to determine which particular tasks most affect the total time of the project and enable managers to better schedule each task so that deadlines are met at the least possible cost.

5. What is the essential technique of the CPM model?

Answer:

The essential technique for using CPM is to construct a model of the project that includes the following: A list of all activities required to complete the project (typically categorized within a work breakdown structure), the time (duration) that each activity will take to completion, and the dependencies between the activities.

6. What does the CPM calculation indicate?

Answer:

CPM calculates the longest path of planned activities to determine which activities are "critical" (i.e., on the longest path) and which have "total float" (i.e., can be delayed without making the project longer).

7. What is a non-critical path?

Answer:

A project can have several, parallel, near critical paths. An additional parallel path through the network with the total durations shorter than the critical path is called a sub-critical or non-critical path.

8. What benefits does CPM provide?

Answer:

CPM provides the following benefits: Provides a graphical view of the project; Predicts the time required to complete the project and Shows which activities are critical to maintaining the schedule and which are not.

9. What does the CPM model project?

Answer:

CPM models and event of projects as a network. Activities are depicted as nodes on the network and events that signify the beginning or ending of activities are depicted as arcs or lines between the nodes.

10. What is a critical path?

Answer:

The critical path is the path through the project network in which none of the activities have slack, that is, the path for which ES is equal to LS and Ef is equal to LF for all activities in the path.

11. What are the three core concepts of the CPM model?

Answer:

CPM consists of three core steps: Planning, Analyzing and scheduling Controlling project tasks

12. What is a least cost scheduling?

Answer:

CPM is sometimes known as "least cost scheduling." By linking time variations with anticipated costs, the CPM model can be used to calculate the optimal project schedule to minimize costs.

13. Why is CPM a deterministic tool?

Answer:

CPM on the other hand is a deterministic tool taking only a single estimate of time for completion of any activity in a project. It also allows for estimate of costs, thereby being a tool that can control both time as well as costs.

14. What does the CPM model emphasis on?

Answer:

CPM was developed by Du Pont and the emphasis was on the trade-off between the cost of the project and its overall completion time.

15. What is CPM network model oriented?

Answer:

CPM is activity oriented i.e. CPM network is built on the basis of activities Also result Of Carious calculation are considered in terms of activities of the project.