

PERT And CPM

PERT And CPM

PREPARED FOR

Engineering Students

All Engineering College

(SPM)
PREPARED BY: MS. SHWETA TIWARI
Published On: April 12, 2022

FALL SEMESTER, YEAR (VIth, 3rd)
FALL SESSION (2021-22)

What is the difference between PERT and CPM?

- Project Management can be understood as a systematic method of planning, scheduling, execution, monitoring, control of various aspects of a project,
- so as to achieve the goals undertaken at the time of project formulation.

What is the difference between PERT and CPM?

- PERT and CPM are two network-based project management techniques that demonstrate the flow and sequence of activities and events.
- Program (Project) Management and Review Technique (PERT) is suitable for those projects where the time required to complete various activities is not known.
- On the other hand, the Critical Path Method or CPM is suitable for projects that are recurring in nature.

What is the difference between PERT and CPM?

- The two scheduling methods use a common approach to design the network and trace its critical path.
- They are used in the successful completion of a project and hence are used in conjunction with each other.



WHAT Is PERT?

WHAT IS PERT?

- Program (Project) Evaluation and Review Technique (PERT) is an activity to understand planning, arrangement, scheduling, coordination and governance of a project.
- This program helps to understand the technique of study done to complete a project, identify the shortest and minimum time taken to complete the whole project.
- PERT was developed in the 1950s with the objective of cost and time of a project.



WHAT Is CPM?

WHAT Is CPM?

- The Critical Path Method or CPM is a well-known project modeling technique in project management.
- It is a resource using algorithms that were developed in the 1950s by James Kelly and Morgan Walker.
- CPM is mainly used to determine critical and non-critical tasks in projects that will help prevent conflicts and reduce bottlenecks.

WHAT Is CPM?

- In a nutshell, CPM is all about choosing a path in a project that will help calculate the shortest amount of time that is required to complete the task with the least amount of wastage.



WHAT Is CPM?

COMPARISON For PERT CPM

BASIS FOR COMPARISONPERT CPM

1. Meaning:

PERT is a project management technique, used to manage uncertain activities of a project.

CPM is a statistical technique of project management that manages well defined activities of a project.

2. What is it?:

A technique of planning and control of time.

A method to control cost and time.

3. Orientation:

Event-oriented

Activity-oriented

COMPARISON For PERT CPM

BASIS FOR COMPARISON PERT CPM

4. Evolution:

Evolved as Research & Development project

Evolved as Construction project

5. Model:

Probabilistic Model

Deterministic Model

6. Focuses on:

Time

Time-cost trade-off

7. Estimates:

Three time estimates

One time estimate

COMPARISON For PERT CPM

BASIS FOR COMPARISON PERT CPM

8. Appropriate for:

High precision time estimate

Reasonable time estimate

9. Management of:

Unpredictable Activities

Predictable activities

10. Nature of jobs:

Non-repetitive nature

Repetitive nature

COMPARISON For PERT CPM

BASIS FOR COMPARISON PERT CPM

11. Critical and Non-critical activities:

No differentiation

Differentiated

12. Suitable for:

Research and Development Project

Non-research projects like civil construction, ship building etc.

13. Crashing concept:

Not Applicable

Applicable