# The management of the projects with MS Project



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## What is Microsoft Project?

- Microsoft Project is a project management software program developed and sold by Microsoft
- Designed to assist project managers in developing plans, assigning resources to tasks, tracking progress, managing budgets and analyzing workloads
- The application creates critical path schedules, and critical chain which can be visualized in a Gantt chart
- Available currently in to editions, Standard and Professional

#### Short History of MSP

- The first version of Microsoft Project was released for DOS in 1984 by a company working for Microsoft
- Microsoft bought all rights to the software in 1985
- During 1980's couple of versions for DOS were released
- The first Windows version in 1990
- During 1990's there were also versions for Mac
- Subsequent versions V3 (1992), V4 (1993), 1995,1998, 2000, 2002, 2003, 2007, 2010 and 2013

## Microsoft Project Overview

- MS project is a project management software program
- MS project is developed and sold by Microsoft
- MS project requires software or hardware installations





## The purpose of program MSP

- List each task necessary to complete a project in the order they should be performed
- Assign start and finish dates to tasks or let the program set them for you by specifying the duration of the task
- Display the tasks graphically over a time line to get an overall view of the project

- Assign workers, contractors and their resources to tasks and print their schedules
- Compute the hours and cost necessary to complete a task or the entire project
- Monitor a project's progress and compare it to your original estimate
- Analyze such items as cost, hours, slack time, resource allocation etc. using tables and graphs

#### **MSP** Offers

- MSP enables you to stay informed and control:
  - Project work
  - Schedules
  - Finances
- And to keep project teams aligned



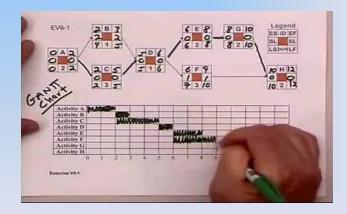




#### **Scheduling Techniques**

- Mathematical Analysis
  - Network Diagrams
    - PERT
    - CPM
    - GERT
- Bar Charts
  - Milestone Chart
  - Gantt Chart

_	Dependency	Duration	Task ID
-		7	A
		3	В
	A	6	С
	B	3	D
T	D,F	3	E
S_	В	2	F
	C A	3	G
	E,G	2	н
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#### **Mathematical Analysis**

- PERT
  - Program Evaluation and Review Technique
- CPM
  - Critical Path Method
- Sometimes treated synonymously
- All are models using network diagrams





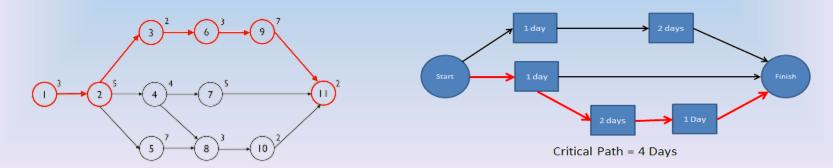
### What is CPM?

The Critical Path Method or Critical Path Analysis, is a mathematically based algorithm for scheduling a set of project activities

-It is an important tool for effective project management

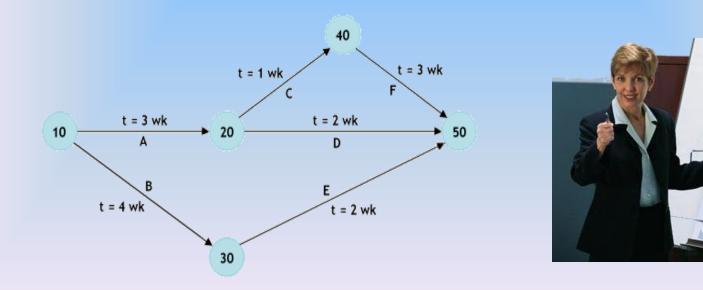
-Commonly used with all forms of projects, including construction, software development, research projects, product development, engineering, and plant maintenance, among others

- Any project with interdependent activities can apply this method of scheduling



#### What is PERT?

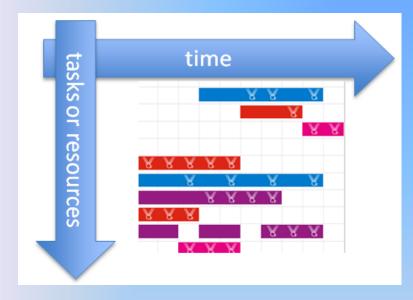
Program (Project) Evaluation and Review Technique (PERT): is a project management tool used to schedule, organize, and coordinate tasks within a project. It is basically a method to analyze the tasks involved in completing a given project, especially the time needed to complete each task, and to identify the minimum time needed to complete the total project.

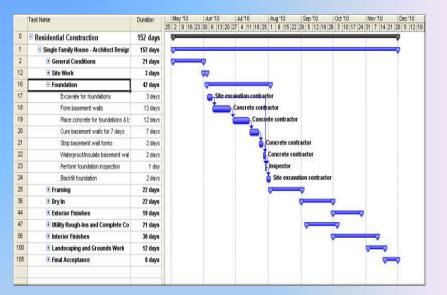


#### What is Gantt Chart?

- A GANTT chart is a type of bar chart that illustrates a project schedule.
- After the PERT/CPM analysis is completed, the following phase is to construct the GANTT chart and then to re-allocate resources and re-schedule if necessary.
- GANTT charts have become a common technique for representing the phases and activities of a project work breakdown structure.
- It was introduced by Henry Gantt around 1910 1915.

#### **Gantt Chart**









#### **Advantages and Disadvantages**

#### Advantages

- -Simple
- -Good visual communication to others
- -Task durations can be compared easily
- -Good for scheduling resources

#### Disadvantages

Dependencies are more difficult to visualise
Minor changes in data can cause major changes in the chart

#### Enhancements

- Microsoft Project's capabilities were extended with the introduction of:
  - Microsoft Office Project Server
  - Microsoft Project Web Access
- Also, newer versions provide for cross-functionality with products like:
  - PowerPoint
  - Visio









#### Thank you

- Thank you for your participation.
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