



Critical path management

Critical Path Analysis and PERT are powerful tools that help you to schedule and manage complex projects. They were developed in the 1950s to control large defense projects, and have been used routinely since then.

As with Gantt charts, Critical Path Analysis (CPA) helps you to plan all tasks that must be completed as part of a project. They act as the basis both for preparation of a schedule, and of resource planning. When you are managing a project, they allow you to monitor achievement of project goals, and help you to see where remedial action needs to be taken to get a project back on course.

The benefit of using CPA over Gantt Charts is that Critical Path Analysis formally identifies tasks which must be completed on time for the whole project to be completed on time (these are the tasks on the critical path), and also identifies tasks which can be delayed for a while, if resources need to be redeployed to catch up elsewhere.

The disadvantage of CPA is that the relation of tasks to time is not as immediately obvious as with Gantt Charts. This can make them more difficult to understand.