

1. If suppliers are on the critical path of a project, how does one set the deadline for these suppliers?

- Set the deadline at the earliest finish time unless there is some benefit in allowing more time. Slack time is precious and one has to keep control of it - should keep the suppliers firm at the early finish date.
- It's a tradeoff: If you set the supplier's deadline early, you'll have to stock the product and you've thrown away any flexibility for last-minute changes. This has to be balanced with the risk of your supplier slowing down the whole project if delivery is set late and not respected.
- For very expensive components you may want to have the component delivered just in time, assuming that you pay upon delivery, so as to save on interest.

2. What's your view on the utility of CPM / PERT?

- They are useful for identifying which tasks are to blame for an eventual project delay.
- It helps define the critical things you'll have to check at milestones.
- Both are useful in providing the first step in finding how things would be done ideally
- It is often useful to try to avoid having multiple critical paths (if this is possible), since a critical path is the parallel of a bottleneck - the more tasks on it, the higher the probability of delays.

3. What's your take on task duration variations?

- For the most part we make guesses on how long each task will take but one can easily be 100% off. CPM helps to map out the flow of information, so one can think about the interactions and the groups organizations.
- Meta-tasks: Concept used in some PM tools: Tasks that conceptually form an entity are lumped together. This allows for a simplified overview of complex projects.

4. What's your view of DSM and how is its value different from PERT / CPM?

- DSM allows for tracing quality problems since one can track information flows - it's a good diagnostic tool
- CPM helps understand the initial sequence of the tasks- DSM cannot be used instead of CPM.
- PERT/CPM are mainly used for scheduling. It's true that not much work had been done on the rework - iteration area (DSM).

5. What's your take on System Dynamics as a method or tool? How does it fit with the other methods / tools?

- SD helps understanding the big underlying factors
- Sets the focus of the management perspective on what is within the company's control.
- A basic premise is that the structure of the system controls the outcome. By modifying the structure, one can influence the outcome.

6. Why can't we get a realistic project plan?

- Managers often contend that "engineers lie", in the sense that they overestimate needed resources and time or over-scope the project.
- There are often many "distortions" that occur in the translation of a mission into specific tasks - the mission is not always clear or readily quantifiable.
- Proposing a realistic plan takes a lot of effort and coordination and you assume that everybody involved really cares about the project. However, in large organizations you often have different stakeholders - different levels of motivation, unions, older mentalities ("this is the way it's always been done"). Experience shows that often mistakes are made, money lost and instead of postmortem analysis, management is blamed and eventually fired. New managers make the same mistakes, divisions that are consistently losing money are closed, and this cycle repeats itself.
- Sometimes the competitive environment forces project managers to plan aggressively and stretch goals in order to capture business that comes by infrequently.
- Internally, being honest one what a project will really need for success may disqualify it upfront.
- Psychological factors: Often management only wants to hear from the people that can promise good / fast results with minimum resources. Once projects fail because of poor planning, there are always external factors to blame.
- A realistic plan contains more unknowns than many people are willing to listen to.