Refine Project Schedule

The project schedule is one item that the project efforts are measured against. Based on the breakdown of the work, the schedule tells the team what and when tasks need to be done. The tasks, resources and the effort estimate for each task from the project definition process is used as the basis for developing the project schedule.

Review /Verify Information from Project Definition

The next step is to verify the preliminary schedule that was developed during project definition. Review the tasks and make sure all that are needed are included. Check the dependencies, the effort estimates and the skills that are needed. Modify the schedule as needed.

Consider the Constraints

Constraints are factors that limit the project manager's flexibility in managing the project. These factors can range from delivery dates imposed on the project by law and regulation or the business's strategic and operational plans to the availability of a particular resource or the delivery time of ordered items.

The existing constraints or those identified during project definition must be taken into account in the schedule. Factor the constraints into the schedule. Review the schedule to see if the constraints have created any situations where the plan cannot be accomplished. If so, the project manager must look for alternative ways to accomplish the work. If the alternatives do not impact the agreed upon dates the best alternative can be applied to the project. If dates are impacted, the project manager must discuss the situation with the project sponsor to see which of the alternative methods is acceptable.

Identify the Milestones/Deliverables

The tasks, effort, and dependencies are now part of the draft project schedule. This schedule must specify what deliverables/milestones that each series of tasks produces. One reason to have milestones is that sponsors and other customers often "manage by milestones," by measuring the progress of the project by how consistently milestones or deliverables are achieved.

The project manager can support this process by using milestones to define the completion of each major deliverable and any other significant events of the engagement. Dividing long-lasting plans into smaller interim milestones also makes tracking and showing progress easier.

Consider Risks, Communication and Quality in the Schedule

The project manager needs to consider how risks, communication and quality efforts will impact the schedule. The effort associated with these tasks may

increase if new risks are identified or more communication is needed to support the project or additional quality tasks are required to meet the customer's needs.

Consider Contingencies

Contingencies are planned and substantiated reserves for the project manager to control. Most often a contingency is used for the analysis of change requests or as risk mitigation strategies. Contingencies are not just extra "padding" to the schedule to make up for bad estimation. Contingencies are well-planned amounts of time set aside for a specific purpose that the sponsor/customer understands and accepts.

Balance Work Among Resources

After all of the tasks and the associated data are entered into the schedule, the project manager will review the work assigned to each of the team members. This review ensures that one person is not overloaded with work while another person does not have enough work to fill his or her time. If the work is not balanced, the project manager must make the appropriate changes to balance the workload across the team.

Understand the Critical Path

The longest chain of tasks in the project is, by definition, the critical path. It is an essential monitoring device for project managers to use in tracking the schedule of their project. The critical path can change during the project life cycle; thus it's important to monitor the entire path regularly and not simply the individual tasks.

With the project schedule complete, the project manager can turn his/her efforts to completing the rest of the project plan.