The Mathis Group's

Messenger

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Successful Scheduling

The majority of us depend upon a calendar. We use all sorts of ways to keep track of our hectic schedules. Whether we use our phones, the computer, or an old-fashioned wall calendar, we try to have a semblance of structure to our lives. We keep track of meetings,



appointments, children's ball games, and a variety of other events to ensure that we don't miss a single activity. Why should our projects be any different? Do we spend enough time determining the length of activities? While it's important to determine in

advance the work to be done on a project, we must also assign specific times or dates to the work.

There are times when a project is not planned or scheduled properly. This could be because the

project team is being lazy, wants to avoid accountability, is unable to develop it, or they simply don't know how. The purpose of scheduling is to provide a road



map that represents how and when the project will deliver the products defined in the project scope and by the project team.

In order to effectively schedule your project, you must select the method and tool that works best for your organization. The method you choose can be done manually or by project management software. Oftentimes, a company has already made this selection for all projects. The scheduling tool is

used to assemble the schedule model and provide the means of adjusting various parameters and components that are typical in a modeling process. This tool helps factor in any leads or lags between activities, adds constraints, and creates a baseline schedule. Once the schedule has been made, you will have a clear picture of when activities are suppose to start and finish, a prediction of when the project will be completed, and a reflection of the vision of how the project will be performed.

There will be times, however, that it is impossible to create a precise schedule and you must estimate. You may have to estimate the amount of work effort required, the amount of resources required,

or the duration of the project in days or weeks. In figuring the amount of work effort required, consider who will do the activity, how much of their time will be needed, and when they are available. When estimating



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If you wait for everything to be perfect according to your preconceived plans, then you may well wait forever. If you go out and work with the current of life, you may find that success comes from building upon small things.

Deng Ming-Dao Writer

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resources, estimate the material and equipment required to complete the project. There are several factors to consider in order to estimate the duration of the project: constraints, assumptions, historical information, and risks are just a few.

There are four main tools that you can use when estimating activity duration.

Expert judgment of people who have done a schedule activity before



This will often come from project team members, but may also come from a consultant outside the organization. Your company has many resources for you to utilize. Talk with others who have experience in the type of project

you're doing. Learn from them what worked and what didn't.

Analogous estimating

Analogous estimating uses historical data on a similar schedule activity from another project. You then make adjustments to reflect the differences from the present project. While this may be relatively fast, it can be somewhat imprecise. This is most often used early on in the project when limited information is available

Parametric estimating

In parametric estimating, estimates are based on data from an outside source, often a commercial database of estimating information. A standard rate per unit is retrieved from the database and multiplied by the number of units in the present project.

PERT or 3-point estimates

A PERT estimate is regarded as the most accurate estimate to use. Instead of using only one estimate,

three are used: a pessimistic estimate (P), an optimistic estimate (O) and a most likely estimate (ML). An average of the three estimates is taken to calculate activity duration, weighting the most likely (best guess) more heavily. The formula for calculating three point estimates is:

(P+O+(4)ML)/6

Contingency reserves or buffers

This estimating tool has risks associated with it. It builds a reserve or contingency to buffer the project from duration overruns. It adds time to project deliverable dates that may or may not ever be used.



Realistically, even after the schedule has been made, changes will arise causing it to change. This is where schedule control comes in to play. Schedule control is part of the monitoring and controlling process group where we track actual performance versus the schedule baseline.

In order to maintain your schedule amid circumstances which arise, you should:

- Have an effective change control in place for successful project execution
- Determine how the project will approve and track changes as they occur throughout the project life cycle
- Status/update process occurs on a regular basis

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Change is not made without inconvenience, even from worse to better. Richard Hooker (1554-1600) Theologian

Messenger

Do you have a situation that no one in your organization can figure out a way to change?

Enroll in our Advanced Project Management Coaching and Mentoring Program. This coaching program assists people in making behavioral and performance changes. Each Advanced Project Management Coaching and Mentoring level will give you high interaction through webinars, one-on-one feedback, personal telephone coaching sessions, and indepth training to support the behavioral and performance changes desired. Please visit our website at www.themathisgroup.com to learn more about the Gold, Silver, and Bronze levels.

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- Collect and record the actual status of the work at a predetermined date/time for the project. This should include the actual start dates for all activities that have begun and actual finish dates for all activities that have been completed. Also, incorporate data on resource utilization and costs incurred.
- Enter status information into the schedule model and re-analyze the remaining work to determine the project status
- Compare the newly updated schedule model outputs with the stored baseline. This will help to manage schedule variances and make sure the project is still on track.
- Update the schedule with any agreed changes resulting from the overall change control process to ensure the schedule model represents 100% of the current work scope of the project
- Distribute reports in accordance with the project's communication plan once the updated schedule has been confirmed to be

- accurate
- Update the baseline if authorized scope changes have been incorporated into the updated schedule model
- Maintain records that explain all changes

While this may see like a long list to follow, careful examination of changes is vital to ensure that the project will not go over time and over budget; resulting in money wasted and unhappy upper management and/or clients.

At some point, you will encounter scheduling issues. Knowing how to schedule a project to the best of your ability will maximize your resources, time, and money.





