## Time and Effort Estimates

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## WHAT'S COVERED

In this lesson, we'll discuss how a project manager gathers estimates on the following factors:

## 1. Effort

The project manager will request estimates on each task from all the resources assigned to the task. It's important to ask all members since variation and expertise among the team might result in significantly different estimates for the time and effort involved.

When estimating effort, each team member should determine how long it will take for the work required to complete his or her assigned tasks or activities. Estimate are generally provided in hours, and team members should be allowed to cooperate and ask for a consultation when they're creating the estimates.

Team members with less experience will often need more time and effort than those with greater experience, and might also need more assistance coming up with accurate estimates. The project manager should assist with the estimation of effort by compiling information from past projects that contain similar work.


#### Abstract

$\square$ HINT

In the case of projects with poorly defined processes or work that's new to the organization, the project manager should note that estimates are highly speculative, and additional time should be added to account for this.


## 2. Time

Time estimates are the duration of the actual time it would take to complete a task. Time estimates are impacted by the availability of a resource, dependencies, and the amount of effort expected to complete the task.
$\rightarrow$ EXAMPLE If the effort estimate on a task is 8 hours, but the resource is only available for $50 \%$ of the day, the time estimate will be two days since work can only be done for 4 hours per day. If the dependency leading into the task has a lag time of one day, then the total time to complete the task would increase to three days.
Remember that it's the project manager's role to teach people about the impacts, of factors such as resource availability and dependencies, and to document them clearly so everyone understands how the workflow will

## 3. Average Estimate

One method used to estimate time or effort on a task is the average estimate. In this method, the project manager asks a team member to give two estimates:

- The least amount of effort or time the task may take.
- The greatest amount of effort or time the task may take.

The two values are then averaged, and the estimate is used in the schedule.
$\rightarrow$ EXAMPLE The project manager asked a team member to estimate the effort needed to program a quiz onto a web page.

The lowest effort estimate is 5 hours, and the greatest effort estimate is 12 hours.

The project manager then adds the 5 -hour and the 12 -hour values together and then divides by 2 to come up with 8.5 hours. This is the estimate the project manager then places in the schedule.

SUMMARY

In this lesson, you learned how to estimate the time, which is impacted by dependencies andeffort, which reflects an individual's work to complete the individual task. You also learned how to use the average time estimate method, which includes a project manager requesting the minimum and maximum time it would take to complete a task, then dividing by two.

Source: this work is adapted from Sophia author jeff carroll.

