

EARNED VALUE MANAGEMENT

REVIEW EXERCISE SOLVED

DESCRIPTION

This document summarizes the answers to the exercise so that students can evaluate their work by comparing their answers to the ones in this document.

QUESTIONS AND ANSWERS

In order to do an EV analysis, we need to determine the project status at the end of the second trimester:

$$PV = \$2,360,000$$

$$AC = \$2,285,000$$

$$EV = \$2,340,000$$

1. How likely is it that the project will finish on time?

In order to evaluate the project schedule performance we can calculate the SV:

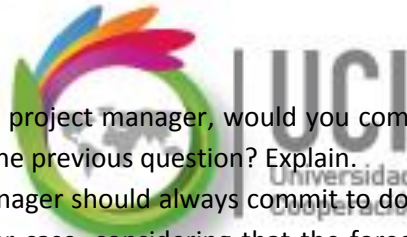
$SV = EV - PV = \$2,340,000 - \$2,360,000 = -\$20,000$, which reflects that the project is delayed. We can further analyze the delay by calculating that the $SPI = 0.992$. Given the fact that the project is still in its early stages (second trimester out of 11) and that the schedule deviation is minimal, if appropriate measures are taken, the project might be finished on time.

2. What is the CPI for the project?

The cost performance index $CPI = EV/AC = \$2,340,000 / \$2,285,000 = 1.024$, which means that the project's actual cost is a little less than planned for the current progress (notice that the fact that the project is costing less is not necessarily related to the fact that the project is slightly delayed, and if so, there is no way to establish that relationship through the use of EVM).

3. What is the estimated duration for the project?

The estimated duration for the project can be calculated with the time estimate at completion as: $EAC(t) = PD / SPI = 11 \text{ trimesters} / 0.992 = 11.09 \text{ trimesters}$.



4. If you were the project manager, would you commit to the estimated duration of the project as per the previous question? Explain.
The project manager should always commit to do his/her job in the best possible way. In this particular case, considering that the forecasted expected duration is just 0.09 trimesters, there is no foreseeable reason not to achieve the planned schedule.
5. Are there any activities for which you would not recommend the percent complete earned value measuring technique? Explain with an example for one of the activities from this project.
The percent complete is not recommended for activities where no tangible result is expected. For this specific project, most of the activities are very tangible. The only activity where one might think of a different earned value measuring technique is design, since the design process typically has some intermediate results, for which the progress might be difficult to measure.
6. The project sponsor requests that the earned value technique only be applied to the critical path activities. Will it be possible to use this technique in that context?
Yes it will be possible. However, the results might not be fully representative of the actual project status (for example all activities on the critical path might be doing well in cost or time, but all other non-critical path activities might be doing poorly).