EARNED VALUE MANAGEMENT

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

1. What earned value management (EVM) techniques are used to estimate the EV?
   Based on what is shown in the cash flow file, there is evidence of the use of fixed formula (see work package 1.1.2.2) and weighted milestone (see work package 1.2.1.2).

2. What is the time/schedule status of the project?
   The time/schedule status of the project is that the project is delayed.
   Considering a cumulative PV of $14,000, AC of $14,125, and EV of $13,800:
   SV = EV – PV = $13,800 – $14,000 = $-200
   SPI = EV/PV = $13,800/$14,000 = 0.986

3. What is the cost status of the project?
   The cost status of the project is that the project is costing more than planned.
   Considering a cumulative PV of $14,000, AC of $14,125, and EV of $13,800:
   SV = EV – AC = $13,800 – $14,125 = $-325
   CPI = EV/AC = $13,800/$14,125 = 0.977

4. What is the overall status of the project?
   The overall status of the project is that it is slightly delayed and spending a little more than planned for the current status. One way to visualize the overall status is by calculating the time-cost index (T-C-I) = SPI x CPI = 0.986 x 0.977 = 0.963. Since the combined effect of time and cost gives an index of less than one, it can be established that the project's overall status is not in conformance with the plan.

5. In your opinion, what are the chances or possibilities of finalizing the project on time and on budget? Explain your answers.
   Even though the project status is slightly delayed and over budget, it is considered possible to align the performance by establishing several measures in order to correct the situation. Currently the PV is approximately 35% of the BAC, which leaves enough room to improve. The measures can include more control or the use of less expensive resources with similar capacity, among others.

6. If the project performance continues with the same trend during the remainder of the project, what is your estimation of the total project cost? Present your calculations.
   In order to calculate the cost estimation, we can use the formula, EAC = BAC/CPI:
   EAC = BAC/CPI = $40,000/0.977 = $40,942, which means that instead of costing $40,000, the project will cost $40,942 Uruguay pesos if the same cost trend continues.

7. If the project performance follows the originally planned behavior during the remainder of the project, what is your estimation of the total project cost? Present your calculations.
   In order to calculate the cost estimation, we can use the formula, EAC = BAC/CPI:
   EAC = AC + BAC – EV = $14,125 + $40,000 – $13,800 = $40,325, which means that instead of costing $40,000, the project will cost $40,325 Uruguay pesos if the planning cost behavior continues for the remainder of the project.