Assignment 5: Earned Value Management

Total Points (20)

You are managing a project where you have been allocated a total of $ $356,500 to deliver this project. You will need 5 people to work on this project on a 40-hour schedule per week. The expected duration of the project is 32 weeks. You realize that you just completed the 15th week and the team has only completed 52% of the work. You have spent a total of $265,000 so far.

a) Calculate the following: (16 points)

1. BAC = $356500

2. PV

Planned % Complete = (15/32) X 100 = 46.8%

Planned Value = (Planned % Complete) X (BAC)

= 47% X $356500

= $167,555

3. EV

Earned Value = % of completed work X BAC

= 52% X $356500

= $185,380

4. AC = $265,000

5. SV

Schedule Variance (SV) = EV – PV

= $185,380 - $167,555

= $17,825

6. CV

Cost Variance (CV) = EV – AC

= $185,380 - $265,000

= - $79,620

7. SPI

Schedule Performance Index (SPI) = EV/PV

= $185,380 / $167,555

= 1.11

8. CPI

Cost Performance Index (CPI) = EV/AC

=$185380 / $265,000

= 0.7

b) What is your opinion about the project's performance in terms of schedule and budget? (4 points)

Submit your completed assignment as an attachment (.doc, .docx, or .pdf) via eLearning.

The planned value (PV) is $167,555, this is the assigned project cost over time at the 15th week of the total 32-week project. Actual cost is $265000 is the cost incurred in accomplishing work on an activity in 15 weeks. $185,380 is the Earned Value (EV) value of the work completed to date.

Even though the percentage of the work completed is greater than the percentage of the work that has to be completed by the 15th week which is a good thing, and it means the project will be completed by time or before the deadline. But the Earned Value is greater than the Planned Value. This indicated that the project is ahead of schedule.

Cost Variance is in the negative. The money spent is more than that is designated to the work that needed to be accomplished for the activity at 15 weeks. The team spent more than that is planned to be spent on the 15th week. The difference $185,380 - $167,555, that is, $17,825 is spent more than it is decided at the 15th week. This fact is a cause for concern. The project manager must re-adjust the costs assigned to various activities, so the project can be completed within budget decided. CPI of 0.70 means that the total budget is 70 cents to every financed dollar. Since the CPI < 1, it means the project is over budget.

The percentage completed of the project is 52%, when it should have been 47%. Schedule Variance is positive, so the team is ahead of the schedule. If this project is a critical project, the sooner the team finishes the project the better and it is a good sign. But finishing the project early by spending more than the BAC is something that must be a concern and if there is a problem then it must be identified. Schedule Performance Index (SPI) is 1.11 which means for every dollar of work scheduled for completion a dollar and ten cents worth of work was completed. Since the SPI > 1, we once again find the project is ahead of the schedule.

Therefore, the project manager must focus on the costs associated with the project and make sure the costs don't exceed the decided-upon budget. The schedule looks good at the moment but hypothetically if it means the costs can be reduced and bought back on-track to the planned value in the coming weeks, then slowing down the project under careful, watchful eye (without going behind schedule) is recommended.