**BUS 395: Assignment 3**

**Earned Value Management (EVM)**

**Assignment Grade: 20 Points**

**Assignment Due Date: June, 5th**

**Project 1 (10 Points)**

You are managing a mobile application development. The project has a budget of $200,000 and is expected to be completed in 9 months. After 5 months, you analyze the project’s progress and gather the following information:

PV= $ 125,000

EV= $ 100,000

AC= $ 150,000

Use the EVM technique and answer the following:

1. What is the cost variance, Schedule Variance, cost performance index (CPI), and schedule performance index (SPI) for the project?
2. How is the project going? Is it a head of schedule or behind the schedule? Is it under budget or over budget?
3. Use the CPI to calculate the estimate at completion (EAC) for this project. Is the project performing better or worse than planned?
4. Use the SPI to estimate how long it will take to finish the project.

**Note: Show the formulas and calculations in your submission**

**Project 2 (10 Points)**

Use the following information extracted for an agile project to assess the project performance and calculate its time-phased earned value.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sprint # | Planned Value for each sprint | Actual Cost | % Of Completed Work | Earned Value |
| Sprint 1 | $ 5,000 for Sprint 1 | $ 4,500 | 100% | ----- |
| Sprint 2 | $ 8,000 for Sprint 2 | $ 7,800 | 100% | ----- |
| Sprint 3 | $13,500 for Sprint 3 | $ 10,500 | 75% | ----- |
| Sprint 4 | $3,500 for Sprint 4 | ------ | ----- | ------ |

**Scenario 1: EVM after the competition of 2 sprints**

1. What is the planned value (PV) of the first 2 sprints in this project? (You should combine the PV for both sprints)
2. What is the earned value after complementing 2 sprints in this project?
3. What is the cost variance (CV), schedule variance (SV), cost performance index (CPI), and schedule performance Index (SPI)?
4. How is the project going? Is it a head of schedule or behind the schedule? Is it under budget or over budget? Explain.
5. Use the CPI to calculate the estimate at completion (EAC) for this project. Is the project performing better or worse than planned?

**Scenario 2: EVM after the competition of 3 sprints.**

1. What is the planned value (PV) of the first 3 sprints in this project?
2. What is the earned value after complementing 3 sprints in this project?
3. What is the cost variance (CV), schedule variance (SV), cost performance index (CPI), and schedule performance Index (SPI)?
4. How is the project going? Is it a head of schedule or behind the schedule? Is it under budget or over budget? Explain.
5. Use the CPI to calculate the estimate at completion (EAC) for this project. Is the project performing better or worse than planned?