**Case Study: Monitoring via EVM**

* CV: Cost Variance = EV – AC
* CPI: Cost Performance Index = EV / AC
* SV: Schedule Variance = EV – PV
* SPI: Schedule Performance Index = EV / PV
* EAC: Estimate at Completion = BAC / CPI

**The below table shows the phase status of completion, the cost, and the payment which has been spent at each:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Activity** | **Status** | **% of work complete** | **Total Days** | **Man-days Spent** | **Payment** |
| **Phase 1: Initiating** | Completed | 100% | 20 | 20 | 5,000 AED |
| **Phase 2: Planning** | Completed | 100% | 37 | 37 | 5,500 AED |
| **Phase 3: Executing** | On Progress | 45% | 52 | 24 | 122,000 AED |
| **Phase 4: Monitoring and Controlling** | Pending | 0% | 18 | 0 | 0 AED |
| **Phase 5: Closing** | Pending | 0% | 26 | 0 | 0 AED |

In our project, we have used Earned Value Management to identify the total cost and actual cost used to spend for the work completed in the five phases of the project.

There are some of the numbers that are necessary for the project are:

**Estimated project cost: 325,000 AED**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **What is** | **Calculation** | **Answer** | **Interpretation of the answer** |
| 1 | PV | 8/34\*325,000 | 76,470.5882 |  |
| 2 | EV | 0.4\*325,000 | 130000 |  |
| 3 | AC | 11,000 | 11,000 |  |
| 4 | BAC | 325,000 | 325,000 |  |
| 5 | CV | 140000-11,000 | 129000 | Under planned cost |
| 6 | CPI | 140000/11000 | 12.73 | Under planned cost |
| 7 | SV | 140000-8235.29 | 131764.71 | Ahead of a schedule |
| 8 | SPI | 140000/8235.29 | 17.0000085 | Ahead of a schedule |
| 9 | EAC | 325,000/12.73 | 25,530.2435 |  |
| 10 | ETC | 27494.11-11,000 | 16494.11 |  |
| 11 | Estimate  Time  To complete |  |  |  |
| 12 | VAC | 325,000-27494.11 | 279,505.89 | Under planned cost |