**Monitoring via EVM**

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| --- | --- | --- | --- | --- | --- | --- |
| Task  ID | Activity | Pred. | Duration  (Month) | Budget  (K$) | Progress | AC |
| 1 | Preparation | - | 2 | 600 | 100% | 600 |
| 2 | Design | 1 | 3 | 1200 | 100% | 1400 |
| 3 | Implementation | 2 | 2 | 400 | 50% | 200 |
| 4 | Testing | 2 | 3 | 1200 | 33.3% | 500 |
| 5 | Deployment | 4 | 3 | 300 | 0% | 0 |

Duration: it will deliver after 11 Month

Currently the project achieved 6.5 months from the schedule.

BAC = 600 +1200+400+1200+300 = 3700 K$

**After 6.5 Months from the project:**

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| PV = 600 + 1200 + 200 + 400 = 2400 K$ |
| AC = 600 +1400 +200 + 500 = 2700 K$ |
| EV = 600 +1200 +200 + 399.6 = 2399.6 = 2400 K$ |
|  |
| CV = EV-AC = 2400 – 2700 = - 300 (Since CV < 0 Then we are Over Budget) |
| SV = EV-PV = 2400 – 2400 = 0 (Since SV = 0 Then we are on schedule) |
| CPI = EV/AC = 2400 / 2700 = 0.889 (Since CPI < 0 Then Over Budget) |
| SPI = EV/PV = 2400 / 2400 = 1 (Since SPI = 1 Then on Schedule) |
| EAC = BAC / CPI = 3700 / 0.889 = 4161.97 = 4162 K$ |

**Questions**

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| Q1: By how much is it over/under budget? |
| Over budget by 300 K$ |
| Q2: By how many days is it ahead/behind the schedule? |
| The project will deliver on schedule but with more budget. |
| Q3: By the end of the project, by how much will it be over/under budget? |
| It will be over budget by 500 K$ (200 K$ for Design and 300 K$ for Testing) |
| Q4: Calculate CV, SV, CPI, SPI & EAC |
| CV = -300 K$ SV = 0 CPI = 0.889 SPI = 1 EAC = 4162 |