COMP 4356 – Software Project Management

Chapter 7: Project Cost and Budget

Assignment #4

Due Date: November 01, 2015 Name: Geraldo Braho Grade: _____

Problem 1:

A project team has a project to build a software system with a total budget of $1,500,000 dollars. The project is scheduled to be completed in 50 weeks and braked down into 2 tasks/ business day. (working weekly days are Monday to Friday)

After 3 weeks, 20 tasks were completed and the total cost was $85,000.

1. Find the cost and schedule variances.
   Planned Value = Planned Completion * BAC = 6 % * 1500000 = 90000
   Earned Value = Actual Completion * BAC = 4 % * 1500000 = 60000
   Cost Variance = EV – AC = 60000 – 85000 = -15000
   Schedule Variance = EV – PV = 60000 – 90000 = - 30000

2. Calculate the estimated cost and time to complete the project.

   CPI = EV/AC = 60000 / 85000 = 0.706
   ECAC = TBC/CPI = 1500000 / 0.706 = 2124645.9
   SPI = EV/PV = 60000/90000 = 0.67
   Time to Complete = 50/0.67 = 74.63 ~ 75 weeks

Problem 2:

You have a project to install Microsoft Windows 10 on all the machines at the local hospital of 8 departments, total of 600 computers. The project plan is to complete 100 computers /day. The budgeted cost for each computer is $90.

After day 1, 70 computers were completed and the total cost was $ $12,500 (extra resources were needed).

1. Find the cost and schedule variances.
   Planned Value = Planned Completion * BAC = 16.67 % * 54000 = 9001.8
   Earned Value = Actual Completion * BAC = 11.67 % * 54000 = 6301.8
   Cost Variance = EV – AC = 6301.8 – 12500 = - 5698.2
   Schedule Variance = EV – PV = 6301.8 – 9001.8 = - 2700

2. Calculate the estimated cost and time to complete the project.
   CPI = EV/AC = 6301.8 / 12500 = 0.504
   ECAC = TBC/CPI = 54000 / 0.504 = 107142.9
   SPI = EV/PV = 6301.8/9001.8 = 0.7
   Time to Complete = 6/0.7 = 8.6 ~ 9 days