



COMP 4356 – Software Project Management

Chapter 7: Project Cost and Budget

Assignment #4

Page 1 of 2

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.

$$\text{Planned Value} = \text{Planned Completion} * \text{BAC} = 6 \% * 1500000 = 90000$$

$$\text{Earned Value} = \text{Actual Completion} * \text{BAC} = 4 \% * 1500000 = 60000$$

$$\text{Cost Variance} = \text{EV} - \text{AC} = 60000 - 85000 = -15000$$

$$\text{Schedule Variance} = \text{EV} - \text{PV} = 60000 - 90000 = - 30000$$

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

$$\text{CPI} = \text{EV} / \text{AC} = 60000 / 85000 = 0.706$$

$$\text{ECAC} = \text{TBC} / \text{CPI} = 1500000 / 0.706 = 2124645.9$$

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.

$$\text{Planned Value} = \text{Planned Completion} * \text{BAC} = 16.67 \% * 54000 = 9001.8$$

$$\text{Earned Value} = \text{Actual Completion} * \text{BAC} = 11.67 \% * 54000 = 6301.8$$

$$\text{Cost Variance} = \text{EV} - \text{AC} = 6301.8 - 12500 = - 5698.2$$

$$\text{Schedule Variance} = \text{EV} - \text{PV} = 6301.8 - 9001.8 = - 2700$$

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

$$\text{CPI} = \text{EV} / \text{AC} = 6301.8 / 12500 = 0.504$$

$$\text{ECAC} = \text{TBC} / \text{CPI} = 54000 / 0.504 = 107142.9$$