Faculty of Computer Science & Information Technology
University of Malaya
Semester 1, 2016/2017 Session

WIX2002: Project Management

Tutorial 5 - Answers

1. How does earned value give a clearer picture of project schedule and cost status than a simple plan versus actual system?

   Earned value gives a clearer picture than a simple plan versus actual system because the earned value system includes the time variable in measuring progress. Plan versus actual can lead to false conclusions. Earned value measures what work was accomplished for the money spent.

2. Why is it important for project managers to resist changes to the project baseline?

   The usefulness and integrity of the baseline, as a mechanism for monitoring progress and tracing back to the problem, can be eroded by constant changing of the baseline. Therefore, changes in baselines should be limited to major scope changes. For example, when the project will fail or the change represents a significant improvement of the project.

3. Under what conditions would a project manager make changes to a baseline?

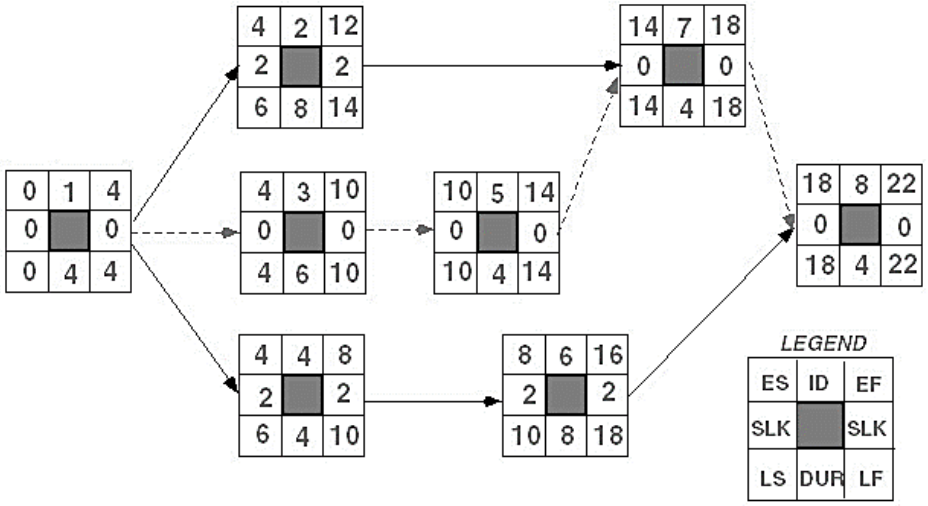
   The conditions that a project manager would make changes to a baseline are:
   a) Customers request for scope changes.
   b) Scope changes can come from internal project personnel such as significant design changes to improve a product.
   c) Natural disasters that force a baseline change.
   d) Complete elimination of a cost account also can result in a baseline change.

4. In month 9, a project has an earned value of RM2100, an actual cost of RM2000, and a planned cost of RM2400. Compute the SV and CV for the project. What is your assessment of the project?

   SV = EV - PV = 2100 - 2400 = -300
   CV = EV - AC = 2100 - 2000 = +100

   The project is under cost but behind schedule.

5. The following data have been collected for a British health care IT project for two-week reporting periods 2 through 12. Compute the SV, CV, SPI, and CPI for each period. Plot the EV and the AC on a summary graph. Plot the SPI, CPI and PCIB on a graph. What is your assessment of the project at the end of period 12?



Baseline (PV)
(00$)

Task	Dur.	ES	LF	Slack	PV (00$)	0	2	4	6	8	10	12	14	16	18	20	22
1	4	0	4	0	8	4	4										
2	8	4	14	2	40			10	10	10	10						
3	6	4	10	0	30			10	15	5							
4	4	4	10	2	20			10	10								
5	4	10	14	0	40						20	20					
6	8	8	18	2	60					20	20	10	10				
7	4	14	18	0	20								10	10			
8	4	18	22	0	30										20	10	
Period PV Total						4	4	30	35	35	50	30	20	10	20	10	
Cumulative PV Total						4	8	38	73	108	158	188	208	218	238	248	

STATUS REPORT: ENDING PERIOD 2

Task	%Complete	EV	AC	PV	CV	SV
1	50 %	4	4	4	0	0
Cumulative Totals		**4**	**4**	**4**	**0**	**0**

STATUS REPORT: ENDING PERIOD 4

Task	%Complete	EV	AC	PV	CV	SV
1	Finished	8	10	8	-2	0
Cumulative Totals		**8**	**10**	**8**	**-2**	**0**

STATUS REPORT: ENDING PERIOD 6

Task	%Complete	EV	AC	PV	CV	SV
1	Finished	8	10	8	-2	0
2	25%	10	15	10	-5	0
3	33 %	10	12	10	-2	0
4	0%	0	0	10	0	-10
Cumulative Totals		**28**	**37**	**38**	**-9**	**-10**

STATUS REPORT: ENDING PERIOD 8

Task	%Complete	EV	AC	PV	CV	SV
1	Finished	8	10	8	-2	0
2	30 %	12	20	20	-8	-8
3	60 %	18	25	25	-7	-7
4	0 %	0	0	20	0	-20
Cumulative Totals		**38**	**55**	**73**	**-17**	**-35**

STATUS REPORT: ENDING PERIOD 10

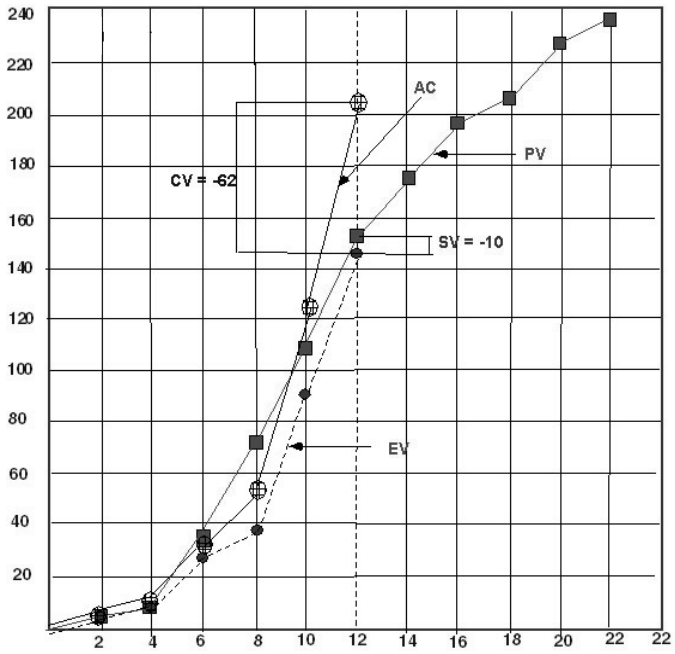
Task	%Complete	EV	AC	PV	CV	SV
1	Finished	8	10	8	-2	0
2	60 %	24	30	30	-6	-6
3	Finished	30	40	30	-10	0
4	50 %	10	20	20	-10	-10
5	0 %	0	0	0	0	0
6	30%	18	24	20	-6	-2
Cumulative Totals		**90**	**124**	**108**	**-34**	**-18**

STATUS REPORT: ENDING PERIOD 12

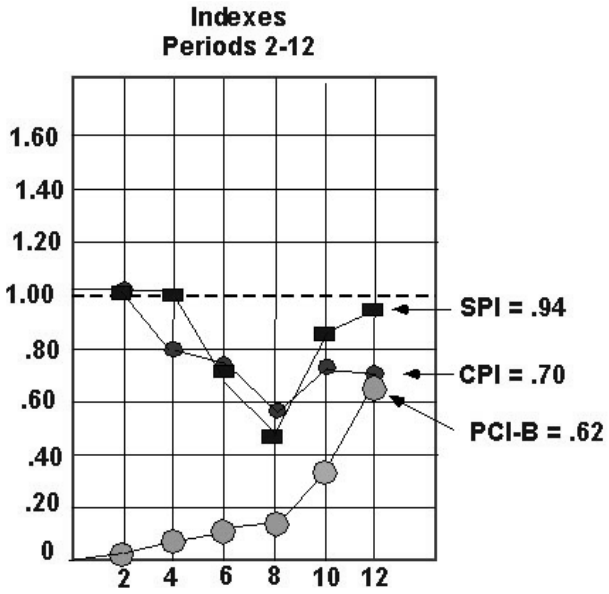
Task	%Complete	EV	AC	PV	CV	SV
1	Finished	8	10	8	-2	0
2	Finished	40	50	40	-10	0
3	Finished	30	40	30	-10	0
4	Finished	20	40	20	-20	0
5	50 %	20	30	20	-10	0
6	50%	30	40	40	-10	-10
Cumulative Totals		**148**	**210**	**158**	**-62**	**-10**

Period	SPI	CPI	PCIB
2	4/4 = 1.0	4/4 = 1.0	4/248 = 0.02
4	8/8 = 1.0	8/10 = 0.80	8/248 = 0.03
6	28/38 = 0.74	28/37 = 0.76	28/248 = 0.11
8	38/73 = 0.52	38/55 = 0.69	38/248 = 0.15
10	90/108 = 0.83	90/124 = 0.73	90/248 = 0.36
12	148/158 = 0.94	148/210 = 0.70	148/248= 0.60

SPI = EV/PV
CPI = EV/AC
PCIB = EV/BAC



At the end of period 12, the project is behind schedule and over cost.



The schedule index (SPI) indicates that $0.94 worth of work has been accomplished for each $1.00 worth of scheduled work to date. The CPI of 0.70 shows that $0.70 worth of work planned to date has been completed for each $1.00 actually spent.

The Percent Complete Index (PCIB) indicates the work accomplished represents 62% of the total budgeted (BAC) dollars to date.

6. How does the project closure review differ from the performance measurement control system?

Project closure review is a macro view of project performance as a part of the total organisation. Although closure is concerned about current or past performance of the project, project closure is also concerned with assessing organisational culture and support of projects, the project's fit within the total portfolio of projects, project priorities, team performance, and lessons learned. The closure review is intended to include all factors relevant to the project and managing future projects.

7. What major information would you expect to find in a project review?

   The major information that would be found in a project review are:
   - Classification of the project such as large/small, platform/incremental, complex/typical
   - Analysis of information gathered
   - Recommendations
   - Lessons learned
   - An appendix with backup information to support recommendations.

8. Why is it difficult to perform a truly independent, objective review?

   In most cases those performing the review have some previous knowledge of the project, which presents opportunities for bias. Sometimes the review team, or facilitator, is perceived as a jury, but even jury members come with built-in biases. For example, internal politics have been known to enter into decisions concerning closure of a project. The simple point is that every attempt should be made to keep the review independent and objective. If the review of projects is a regular procedure for all projects, the negative stigma of audits is minimised.

9. What is the purpose to include “lessons learned” section in the final project report?

   New project teams often study those past project reports which are similar to the projects that they are about to start. The purpose to include “Lessons learned” section will help these project teams to avoid many pitfalls and thus, contributing to smoother project implementation. Hence, “Lessons learned” is an important section in the final project report which can help to improve project success rate.

10. What is the purpose of project evaluation? In your opinion, what are the four (4) main aspects that need to be evaluated during team evaluation?

    The purpose of project evaluation is to assess how well the project team, team members, and project manager performed.

    The four (4) main aspects that need to be evaluated during team evaluation are:
    a. Measurement of customer and user satisfaction with project deliverables (i.e. the project results) because quality of the deliverables is the responsibility of the team.
    b. Team building process.
    c. Effectiveness of group decision and problem-solving process.
    d. Trust among team members.