CEE-9510 Practice Exam

Good luck everyone

June 27, 2012

18 questions

Final Tutorial

Tricks for taking the exam:

1) Answer from theory, not from what you might have seen done in the workplace. A key reason we gave the week 1 lectures on the history of project management is so that you could see the evolution of the skill set. It is still evolving and you are in this class to learn best practices. You may need to be a leader in the work place.
2) There may be more than one CORRECT answer. Give the BEST answer for full marks.
3) Watch out for answers that are true choices, but not the answer to the question.
4) Watch out for choices that contain project management errors. They are purposely there to see if you now understand project management philosophy.

more tricks.....

5. Be ready to eliminate 2 of 4 possible answers that are highly implausible. Many questions have 2 possibly correct answers and 2 obviously incorrect answers.
6. There are questions that require that you understand the chronological process of project management, so make careful note of words like "first", "last", "next", "best", "never", "always", "except", "most likely", "less likely", "most", etc.
7. Attempts have been made to make all choices the same length, so don't follow the old rule that the longest answer is correct.
8. Answer C) may not be the answer. 20% probability for a-e questions and 25% probability for a-d questions.
9. Watch for double negative questions! Read carefully. These are the "All of the following, EXCEPT" type questions.

Question: You are a project manager. In which of the following ways do you interact with the Human Resources manager in your strong matrix company?

A. You don't. Human resources typically only hires and fires project employees.
B. He helps you via disciplining difficult employees when you raise the issue to him. He also may run the project bonus program you have access to.
C. He pays your salary, but your team members are paid by their departments. Pensions are handled separately through the functional department.
D. He possibly works with you to identify proper training for your team employees during the project execution phase.

Typical Multiple Choice Questions

Question: The earned value is $10,000, the actual cost is $15,000. The planned value is $20,000. The budget at completion is $100,000. If the cost performance index is considered typical at this point of measurement, what are the project CPI, SPI, EAC, and ETC to the nearest thousand?

A. 0.667, 0.500, $135,000, $120,000

B. 0.500, 0.667, $105,000, $90,000

C. 0.667, 0.500, $195,000, $210,000

D. 1.500, 2.000, $150,000, $135,000

Typical Multiple Choice Questions

Question: The responsibility assignment matrix (RAM):

A. Is used for the development of the project budget
B. Is developed at the activity level and used to closely link project roles and responsibilities to project network activities.
C. Is used to show the connections between work that needs to be done and project team members. It can show responsibilities at various levels of detail.
D. Is used to show accountabilities in individual performance appraisals.

Question: During the 6th monthly update of a ten month, $30,000 project, the analysis shows that the cumulative PV is $20,000, the cumulative AC is $10,000, and the cumulative EV is $15,000. In planning its action, management can conclude all of the following from these figures EXCEPT:

A. Less has been accomplished than was planned.
B. Less has been spent than was planned.
C. Continuing performance at this efficiency with no management intervention, the project will probably be completed ahead of schedule and over budget.
D. Continuing performance at the same efficiency with no management intervention, the project will probably be completed behind schedule and under budget.

Question: A project is:

A. A set of sequential activities performed in a process or a system
B. A revenue generating activity that needs to be accomplished while achieving customer satisfaction including all time cost, and risk activities
C. An ongoing endeavor to meet customer or market requirements.
D. A temporary endeavor undertaken to create a unique product, service, or result. It has a defined start and finish.
E. All of the above

Being assigned as a project manager, you noticed during executing that conflicts arise in the team on both, technical and interpersonal level. What is an appropriate way of handling conflicts?

- ○ Conflicts distract the team and disrupt the work rhythm. You should always smooth them when they surface.
- ○ A conflict should be handled in a meeting so that the entire team can participate in solution finding.
- ○ Conflict should be addressed early and usually in private, using a direct, collaborative approach.
- ○ You should use your coercive power to quickly resolve conflicts and then focus on goal achievement.

A customer requires from you a minor scope change and expects you to do this without delays and additional costs. You believe that you have adequate authorization to make the decision by yourself, but you are not quite sure.

What should be your next steps?

- ○ A requested change is always an opportunity to get more money paid by the customer and to secretly solve schedule and quality problems. You should make some reasonable estimates on time, costs, risks etc. and then add a nice margin on top of that to calculate the new price.

- ○ Customer satisfaction is your top priority. The customer gives you an opportunity to increase their satisfaction, which you should use to the maximum benefit. Most project managers have contingencies to cover risks; these can be used to pay the additional costs.

- ○ Before making a decision you should have a look at the customer's parking lot. If you find there many expensive, new models, it is likely that you can use the requested change to increase the profit from the contract. Otherwise you should reject the request.

- ○ Handle the request according to the integrated change control processes described in your management plans. Then make a decision together with the appropriate change control body, whether the increased customer satisfaction will be worth the extra costs, work, risks etc.

During execution in a project to build a major road bridge, your team found a hefty flaw in the technical drawings. On an ad-hoc base, they had to find and implement a workaround to avoid delays and mitigate technical problems. What should you do next?

- ○ Meticulously document the problem and the workaround to create a requested change to the project management plan, which will then be passed to the body responsible for the change control decision.
- ○ The workaround was performed on a technical level only. As long as it does not influence the function of the bridge or the organizational configuration of the project, a change request will not be necessary.
- ○ A formal change request from hind side is not sensible. Create some additional documents describing the workaround and sign them by yourself, you can present them during the next regular CCB meeting.
- ○ It is normal in projects that, during project execution, inconsistencies arise between planning documents and actual implementation. This is no problem as long as the functional status of the product is maintained.

Some colleagues told you that they are planning, executing, monitoring and controlling a project by use of milestones only with durations between 1 and 4 weeks. What do you think?

- ○ The approach is erroneous. A milestone is a significant point with zero duration to highlight achievements.
- ○ It is a good approach as long as the milestones reflect fixed or imposed dates during the project lifecycle only.
- ○ It is a good approach if the milestones are used for reviews between consecutive project phases only.
- ○ It is a good approach because it saves from progress measurement on activities and work packages.

You need a batch of 100 identical valves which will be custom made for your project to build a food processing plant. There is a risk of deterioration of victuals during processing; therefore you placed requirements on the quality of the raw materials for the valves, which will make production very costly.

Unfortunately, in order to test the valves against these requirements, you would have to destroy them. And you have no experience with the vendors at all. What should you do?

- ○ Do 0% inspection. You have to trust the selected supplier that they will use the materials according to your specification.
- ○ Negotiate a contract over more than 100 items and perform acceptance sampling for the surplus of the batch on delivery.
- ○ Require the seller to supply the valves together with appropriate certificates from their raw materials suppliers.
- ○ Do 100% inspection on delivery to your premises, then order another batch of 100 valves.

You are the manager of a major project to develop a system of barriers to prevent a seaside city from flooding. Together with your team you created a *Code of conduct* stating that the *Change control board* must be immediately notified of gifts when the value exceeds $90. The same applies to invitations when the value exceeds $150.

Today, a contractor executive sent you an invitation for a night at an opera with a value of $95. It is a one-time event and you tried to obtain tickets by yourself without success. The person told you that he would so much wish to join you, but he will not be available on that day, and he could get hold of only one ticket anyway.

What do you have to do?

- ○ You are allowed to accept invitations with a value of up to $150, so there should be no problem.
- ○ One may regard the ticket as a gift, but it is just at the limit: You do not have to notify the CCB.
- ○ The ticket is a gift and over of the limit. You have to notify the CCB who will make the decision.
- ○ You are the project manager. The rules are in place to strengthen your position. They do not apply to you.

The use of scarce resources must be decided upon with functional managers before it causes delays in your project. Which is probably your most important skill right now?

- ○ Planning
- ○ Negotiating
- ○ Facilitating
- ○ Documenting

Your project team is on its way to finish work on the project, while you have the impression that a staff member is already negotiating the next assignment in another project. You are afraid that the person may come under pressure to start working on the other job before she has finished her work for your project. Her task is very complex, and it would be hard for someone else to take up the partial results and finish them.

What action is most likely to resolve the situation?

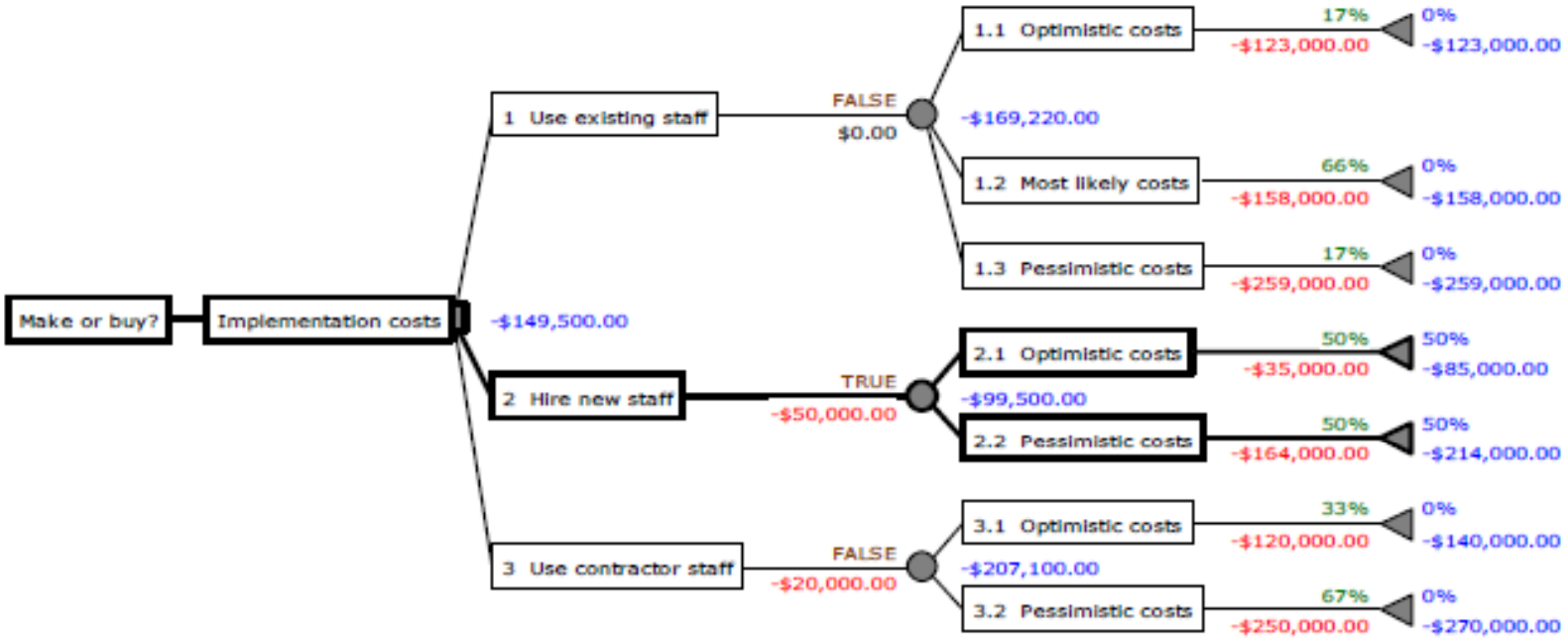
- ○ Have a private meeting with the person and discuss your observations. Make the person aware of the contract and of the legal consequences of unfinished work.
- ○ Have a meeting with the entire team and discuss the person's expected early leave. Use team dynamics to buy in the commitment from the person to finish work orderly.
- ○ Use your network of project managers to find another assignment for the person which allows for smooth transition and does not conflict with your needs.
- ○ Ignore your observations and let the team member do her job. It is quite uncommon that staff drops work for a project before it is completely finished.

You are project manager for a strategic project with a multi-million Dollars value assigned by a company that is listed at a US stock exchange.

Recent *Earned value analysis* after app. 25% completion told you that your project has a CPI of 0.76. What should you do right now?

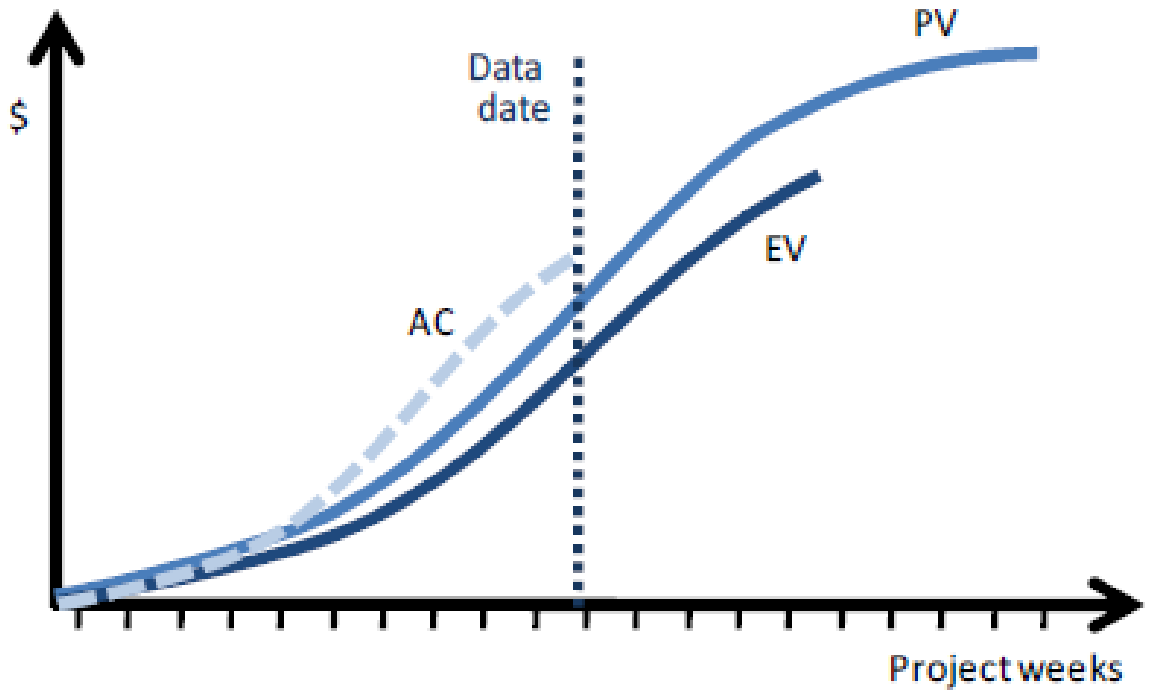
- ○ The variance is a signal of a sound project which is well under budget. There is no need for action.
- ○ A project that much under budget may be a problem for negotiating future budgets. Try to spend money somewhere else.
- ○ You should immediately inform your management, which should then assess whether this CPI constitutes a material financial issue.
- ○ It is still early in the project and data are yet inaccurate. Wait a while and allow numbers from the project to stabilize.

Which technique has been applied to develop the following diagram?



- ○ *Decision tree*
- ○ *P/I matrix*
- ○ *Strategic scoring*
- ○ *Risk breakdown structure*

What is wrong in this diagram?



- ○ The data date must be accurately between weeks.
- ○ AC cannot be higher than PV when EV is lower.
- ○ EV cannot be assessed beyond the data date.
- ○ PV cannot be assessed beyond the data date.

You monitored figures on cost and planned/earned value for each individual project week until the data date at the end of the sixth week. What is the status of this project at this date?

Project week	Actual costs	Earned value	Planned value
1	$65,000	$61,000	$67,000
2	$85,000	$79,000	$89,000
3	$100,000	$102,000	$110,000
4	$125,000	$124,000	$121,000
5	$135,000	$133,000	$139,000
6	$125,000	$120,000	$131,000

- ○ The project is ahead of schedule and over budget.
- ○ The project is ahead of schedule and under budget.
- ○ The project is behind schedule and over budget.
- ○ The project is behind schedule and under budget.

A project was budgeted at $1,000,000. The project is meanwhile being executed, and the following current figures have been assessed:

PV: $500,000
EV: $450,000
AC: $550,000

Assuming that the *Cost variance* was caused by one-time cost drivers, which are no more effective, what *Estimate at completion* (*EaC*) can you derive from these figures?

- ○ $900,000
- ○ $1,000,000
- ○ $1,100,000
- ○ $1,222,222