

COMP313 Project Management

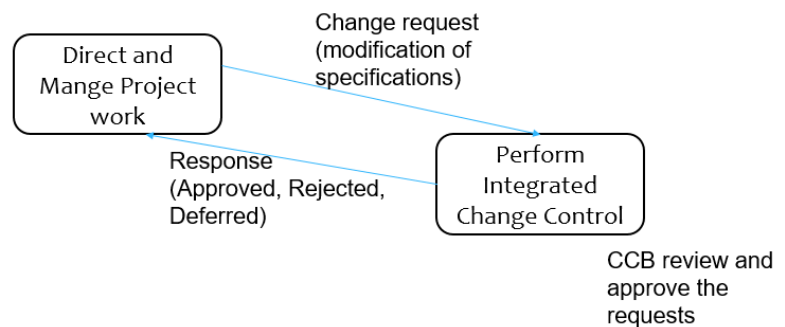
Exercise 3 (Chapter 3)

1. A change request has been raised by the end-users which leads to a modification of the course enrollment function. The modification is estimated to require 5 to 7 extra man-hours.
 - a. How do the processes work to tackle this problem? You can use a DFD to help in describing the processes.
 - b. There is another form of change request. How is this handled? You can use a DFD to help in describing the processes.

- a) The requested changes are raised in the process of Direct and Manage Project work and passed onto Perform Integrated Change Control process, where the requested changes are then approved or rejected after reviewing all change requests.

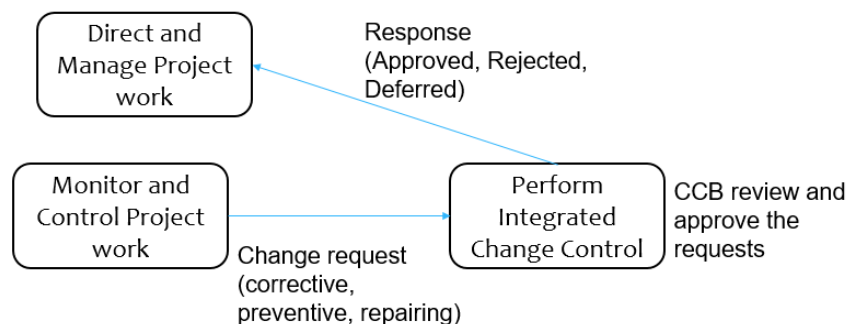
It gathers all changes and determine how the changes affect all other areas: Scope, Time, Costs, Quality, HR... If the change could potentially jeopardize the Time and Costs, thus the success of the whole project, you may think about abandon the change and find the alternative. If the change doesn't provide any benefits to

any stakeholder, the change should be abandoned as well. The response will then go to Direct and Manage Project work process to modify the project management plan if approved.



- b) Another kind of request comes from the Monitoring and Control process to reflect that the current works deviate from the plans and need corrective, predictive, and repairing actions.

Again, this kind of change request will then be passed onto Perform Integrated Change Control to review. The response will then go to Direct and Manage Project work process to modify the project management plan if approved.



2. What is the Project Management Plan? What essential elements does it contain?

The management project plan is a document used to coordinate all project planning documents and help guide a project's execution and control.

It essentially contains 3 baselines and the subsidiary management plans from other 9 knowledge areas.

3. What is a Baseline? What is its purpose?

The Baseline is a document that is used as a reference to compare with the actual works of the project for the validation and control in terms of Scope, Schedule and Cost.

4. ~~Currently, the operating cost for a company is \$20,000 each year. The manager proposes to purchase a software system with a cost of \$50,000. After the software system being deployed, it is expected that its operation will incur costs worth \$10,000 annually. Let's assume that the software is going to be used for 5 years and the discount rate is 5%. What financial method you should use to reflect a more realistic amount of initial investment for cost-benefit analysis? What is the present value for the net earnings/loss by the end of the 1st year? Show your steps.~~

5. You need to perform a financial analysis for a project using the format provided below. The project is estimated to complete in 1 year at the total development cost of \$100,000 before being adopted for operations. Assume that the projected operating costs and benefits for this project are spread over the next 3 years as follows. The expected operating cost for each year is \$25,000 and the estimated benefit is \$80,000 each year. Assume the discount rate is 5%.

- 5.1 Fill in the following table by calculating the present values. Identify the NPV (Net Present Value).

<i>Discount rate: 5%</i>	Year			
	1	2	3	4
Costs	100,000	25,000	25,000	25,000
Discounted costs	95238	22676	21596	20568
Benefits	0	80,000	80,000	80,000
Discounted benefits	0	72562	69107	65816
Discounted benefits – costs (Net)	-95238	49887	47511	45249
Cumulative benefits – costs (Net)	-95238	-45351	2160	47408

- NPV = total discounted benefit – total discounted cost = 47,408

5.2 Calculate the ROI (Return On Investment) and the year in which payback occurs.

- Payback occurs in the 3rd year.
- $\text{ROI} = \text{net earnings} / \text{total cost} = 47,408 / 160,077 = 29.6\%$