

1. [2+2 marks] Calculate the Break-Even Point and Return of investment using the following information.

	Year 0	Year 1	Year 2	Year 3
Total benefits		35,000	45,000	50,000
Total costs	75,000	15,000	12,000	20,000

Return on investment = 
$$\frac{\text{Total Benefit} - \text{Total cost}}{\text{Total Cost}}$$
$$= \frac{(35000 + 45000 + 50000) - (75000 + 15000 + 12000 + 20000)}{(75000 + 15000 + 12000 + 20000)}$$
$$= 0.06557$$
$$= 6.557\%$$

Break even point = total number of years with negative cash flow + 
$$\frac{\text{that year's net cash flow} - \text{that year's cumulative cash flow}}{\text{that year's net cash flow}}$$
$$= 2 + \frac{30000 - 8000}{30000}$$
$$= 2.7333$$

2. [3 marks] How can we assess a project's economic value?

We can assess a project's economic value by Tangible and intangible values. There are operational and developmental costs. By analyzing these values and calculating projects costs and benefits, we can assess projects economic value.

3. [3 marks] What is benchmarking in analysis strategy? Suppose you are developing a new search engine called "Toggle". How would you carry out benchmarking analysis on your system?

© Benchmarking analysis strategy is the process where a organization compares itself with other organizations similar projects informally. Here, generally companies try to compare their similar product or project to identify which one is better performing and where is the scope of improvement. So, if we are developing a new search engine called "Toggle" we need to compare with the other existing search engines like, Google, Bing, Yahoo, etc. After comparing we need to find the room for betterment and other scopes.