

CSE 471

Feasibility Analysis and Project management

Group: 05

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Task 1

	Year 0 (BDT)	Year 1 (BDT)	Year 2 (BDT)	Year 3 (BDT)	Total (BDT)
Total Benefits		85,270	93,000	1,05,500	2,83,770
Total Cost	1,10,000	41,600	54,300	56,000	2,61,900
Net Benefits (Total Benefits – Total Costs)	(1,10,000)	(43,670)	38,700	49,500	21,870
Cumulative Net Cash Flow	(1,10,000)	(66,330)	(27,630)	21,870	

$$\begin{aligned}\text{ROI} &= (\text{Total benefits-total costs}) / \text{Total Costs} \\ &= \frac{2,83,770 - 2,61,900}{2,61,900} = 8.35\%\end{aligned}$$

BEP =

$$\begin{aligned}\text{Number of years of negative cash flow} + \frac{\text{That year's net cash flow} - \text{That year's cumulative cash flow}}{\text{That's year's net cash flow}} \\ = 2 + \frac{49500 - 21870}{49500} = 2.56 \text{ years}\end{aligned}$$

Task 2

Description	Total Number	Complexity			Total
		Low	Mid	High	
Inputs	8	4*3	3*4	1*6	30
Outputs	15	10*4	3*5	2*7	69
Queries	25	10*3	9*4	6*6	102
Files	4	2*7	2*10	0*15	34
Program Interface	4	2*5	1*7	1*10	27
Total Unadjusted Function Points (TUFp):					262

Total processing complexity, (PC) = 5

Adjusted project complexity = $1 + (0.01 * 5) = 1.05$

Total adjusted function point = $1.05 * 262 = 275$

Effort = $1.4 * \text{KLOC}$ ($\text{LOC} = 275 * 67 = 18425$, since for php= 67)

= $1.4 * (18425 / 1000)$

= 25.795

Time = $3 * (25.795)^{1/3} = 8.86$ months