

Conduct feasibility study/analysis for the given scenario. Imagine that you are going to invest your money in developing the system for ABC company

Calculate the onetime cost and recurring cost associated with that project

Estimate the yearly cashflow(benefit)

Calculate present value, net present value, discounted pay back period, ROI, IRR, perform break-even analysis and conclude whether you are going to invest or not

Transportation Management System

Cost		
One time cost	Bus	800000
	Software	100000
	Accessories	50000
Total one time cost		950000
Recurring	Salary	500000
	Maintenance	100000
	Gasoline	600000
	Engine Oil	20000
	Room Rent	200000
Total recurring cost		1420000
Benefit		
Tangible	Error reduction	450000
	Reduction in turnover	500000
Total Benefit		950000

	Total						Interest rate
Year	0	1	2	3	4	5	
Net economic benefit	0.00	3050000.00	3050000.00	3050000.00	3050000.00	3050000.00	15250000.00
PV of Benefit	0.00	3050000.00	3043909.14	3040868.27	3037830.44	3034795.64	15207403.49
NPV of Benefit	0.00	3050000.00	6093909.14	9134777.41	12172607.85	15207403.49	

Total One time cost							950000.00
NPV of One time cost							945264.22
Total Recurring cost	1420000.00	1420000.00	1420000.00	1420000.00	1420000.00	1420000.00	8520000.00
PV of Recurring cost	1420000.00	1418581.42	1417164.25	1415748.51	1414334.17	1412921.25	8498749.60
NPV of Recurring cost	1420000.00	2838581.42	4255745.67	5671494.18	7085828.35	8498749.60	

NPV of all costs							9444013.82
Overall NPV							5763389.67
ROI							0.61

Yearly Cash Flow	-2370000.00	681418.58	676744.88	675119.76	673496.27	671874.39
Overall Cash Flow	-2370000.00	-1688581.42	-1011836.54	-336716.77	336779.50	1008653.89
Breakeven Fraction	0.00	3.48	2.50	1.50	0.50	-0.50
Breakeven Point					1.50	

IRR **13.15%**

It is beneficial to invest on this project as after 1.5 years we will be making profit.