

Economic Feasibility Analysis for 3 years

One –time cost = 75000 \$

Benefit per year = 85000 \$

Cost per year = 35000 \$

Discount rate = 12%

#net present value of Benefit

Years	Y1	Y2	Y3
Benefits	85,000	85,000	85,000
rate	0,893	0,797	0,712
Present value	75,893	67,761	60,501
Net present value	75,893	143,654	204,155

#net present value of cost

Years	Y0	Y1	Y2	Y3
Benefits	75,000	35,000	35,000	35,000
rate	-	0,893	0,797	0,712
Present value	75,000	31,250	27,902	24,912
Net present value	75,000	106,250	134,152	159,064

ROI= (204,155-159,064)/159,064=0.28%

Break even analysis

years	Y0	Y1	Y2	Y3
Yearly npv	-75,000	44,643	39,859	35,589
Overall npv	-75,000	-30,357	9,502	45,091

Break even occurs between y1 and y2

Break even fraction= (39,859-9,502)/39,859=0, 76