|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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