## Lab Practical #05:

Perform a financial analysis for a project to calculate NPV, ROI, and year in which pay back occurs for the given values.

## Practical Assignment #05:

Perform a financial analysis for a project using the format provided in earlier example. Assume that the projected costs and benefits for this project are spread over four years a follow: **Estimated costs are ₹12,00,000 in Year 1 and ₹200,000 in year 2 and ₹1.5 lakh in Years 3,** and **4. Estimated benefits are ₹18,00,000 in Year 1 and ₹14,00,000 in Year 2, ₹6,00,000 in Year 3 and ₹4,00,000 in Year 4.** Use a **9 percent discount rate**, and round the discount factors to two decimal places. Create a spreadsheet or use the business case financials template on the companion website to calculate and clearly display the **NPV**, **ROI**, and **year** in which payback occurs. In addition, write a paragraph explaining whether you would recommend investing in this project, based on your financial analysis.

## Description:

| Rate = 9% | | | | | | Total |
|---|---|---|---|---|---|---|
| Discount Rate | 1 | 2 | 3 | 4 | | |
| cost | ₹ 12,00,000.00 | ₹ 2,00,000.00 | ₹ 1,50,000.00 | ₹ 1,50,000.00 | | |
| | | | | | | |
| Discount Factor | 0.92 | 0.84 | 0.77 | 0.71 | | |
| Discount Cost (Discount factor * cost) | ₹ 11,00,917.43 | ₹ 1,68,336.00 | ₹ 1,15,827.52 | ₹ 1,06,263.78 | | 1491345 |
| | | | | | | |
| Benefit | ₹ 18,00,000.00 | ₹ 14,00,000.00 | ₹ 6,00,000.00 | ₹ 4,00,000.00 | | |
| Discount Factor | 0.92 | 0.84 | 0.77 | 0.71 | | |
| Discount Cost (Discount factor * Benefits) | ₹ 16,51,376.15 | ₹ 11,78,351.99 | ₹ 4,63,310.09 | ₹ 2,83,370.01 | | 3576408 |
| | | | | | | |
| | | | | | | |
| Discount Benefits - Discount Costs = | | | | ₹ 20,85,063.50 | | 1.39811 |
| NPV/Discount Cost | | | | 1.398 | | |

**Date: 10/07/2025**

## Chart:
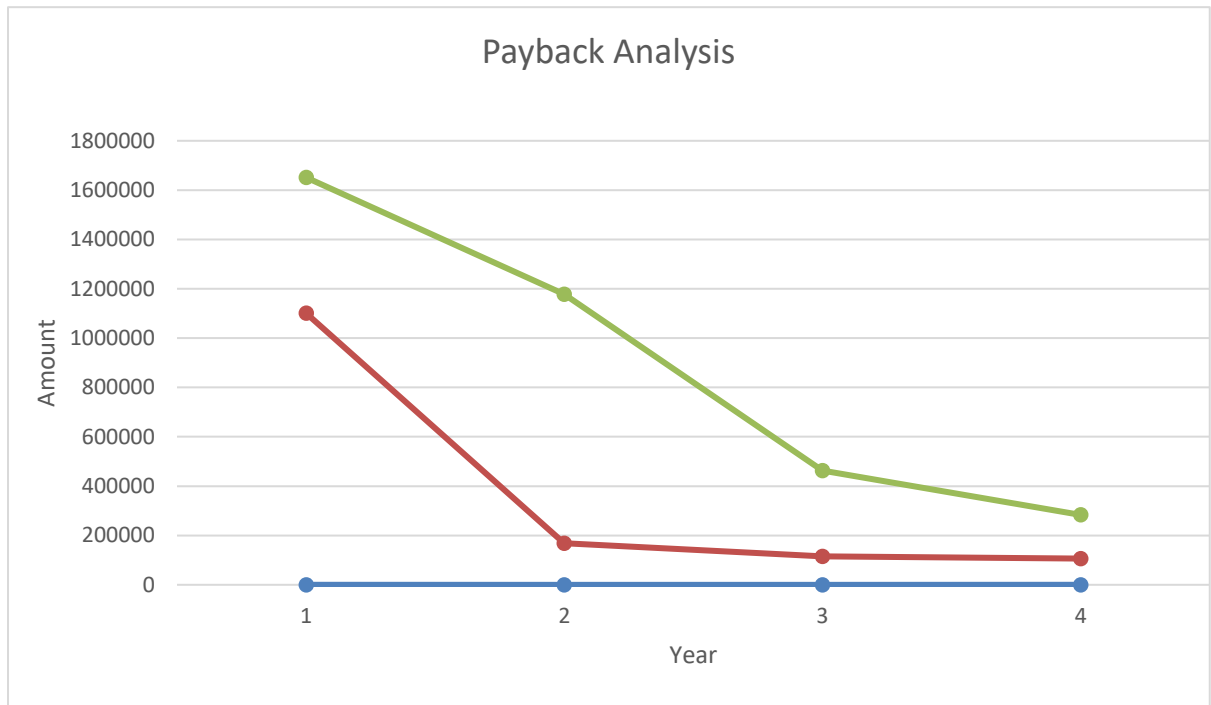


Payback Analysis

## Conclusion:

Based on this financial analysis, the project demonstrates strong financial viability. With a payback period of under 1 years and a ROI over 139%, it recovers its cost quickly and delivers high returns. The positive NPV of 20.85 Lakhs further supports this. Therefore, it is financially sound to proceed with this investment