

# ROI Vision Builder

## Team Details:

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## Objective

The objective of the **ROI Vision Builder** project is to develop a web-based application that allows businesses, startups and project managers to **visually simulate and calculate Return on Investment (ROI)** for various business scenarios and decisions.

This tool is designed to empower users with a clear, intuitive interface to estimate outcomes, weigh costs against returns and make data-driven strategic choices. It supports interactive modules that guide users through different financial models to assess profitability, payback periods and net returns.

## Code Snippets for Key Functions

### 1. ROI Calculation

```
export const calculateROI = (
  averageAnnualProfit: number,
  totalInvestment: number
): number => {
  if (totalInvestment === 0) return 0;
  return (averageAnnualProfit / totalInvestment) * 100;
};
```

### 2. NPV

```
export const calculateNPV = (
  cashFlows: number[],
  initialInvestment: number,
  discountRate: number
): number => {
  // Convert discount rate to decimal
  const rate = discountRate / 100;
```

# Output

ROI Vision Builder

Comprehensive software project financial analysis tool for calculating ROI, NPV, and Payback Period

Project Details

Project Name

Airbnb

Initial Investment (\$)

1500000

Project Duration (Years)

5 years

Discount Rate (%)

10%

Financial Metrics

Key indicators for project assessment

Net Present Value (NPV)

\$321,367.14

Positive NPV indicates project profitability

Return on Investment (ROI)

33.29%

Strong return on investment

Cash Flow Projections

Reset Values

Year	Cash Flow (\$)	Present Value
Year 1	300000	\$300,000.00

Cash Flow Projections

Reset Values

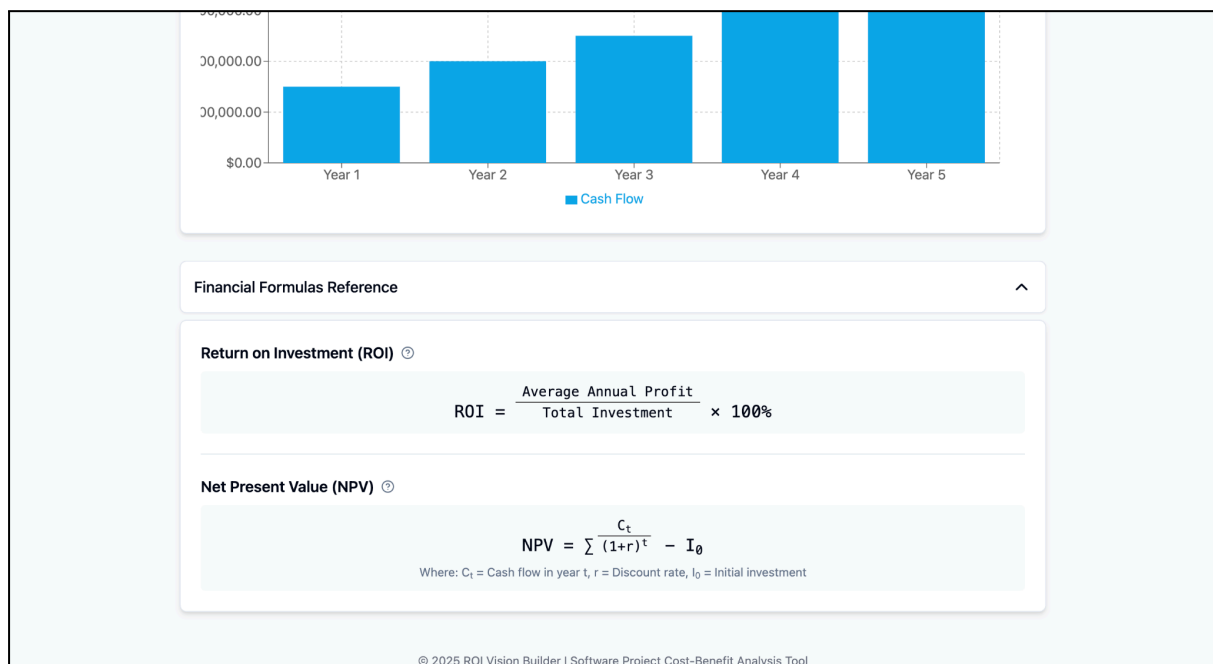
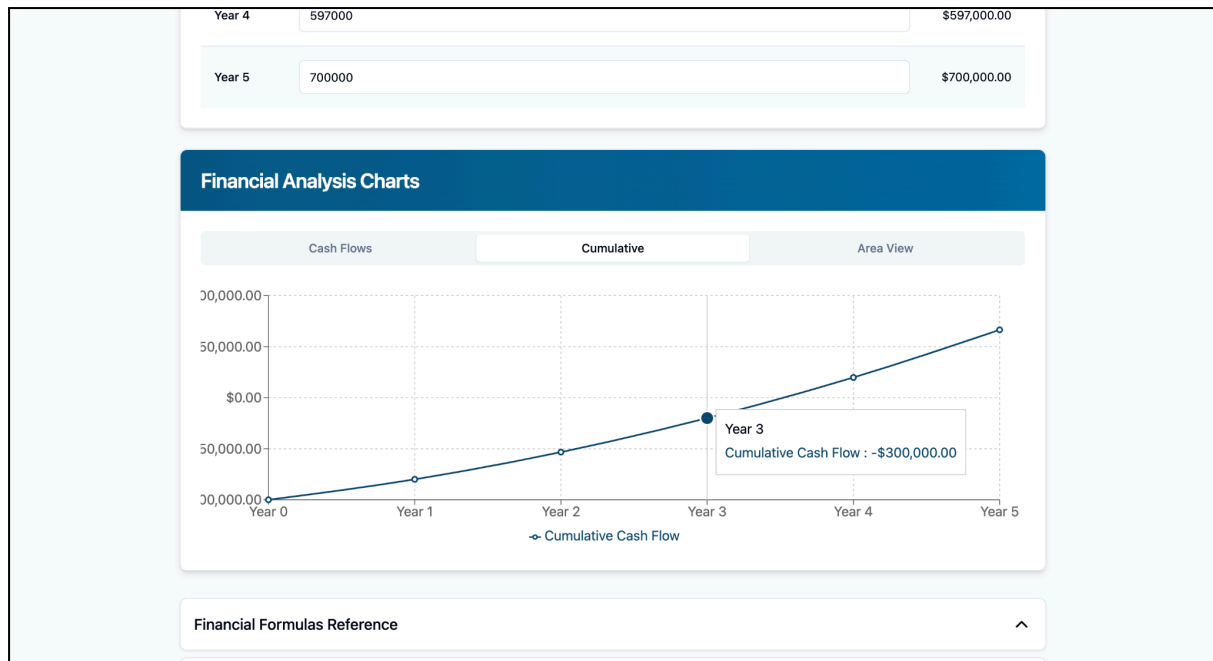
Year	Cash Flow (\$)	Present Value
Year 1	300000	\$300,000.00
Year 2	400000	\$400,000.00
Year 3	500000	\$500,000.00
Year 4	597000	\$597,000.00
Year 5	700000	\$700,000.00

Financial Analysis Charts

Cash Flows

Cumulative

Area View



## Tools / Technologies

- **React.js** – Frontend library for building interactive UI.
- **TypeScript** – Superset of JavaScript providing static typing and improved development experience.
- **JavaScript** – Programming logic.
- **Lovable / Low-code platform** – (Specify exact tool/platform used).
- **Visual Studio Code** – Development Environment.
- **Firebase (optional)** – For user authentication or cloud storage.
- **Git & GitHub** – Version control and collaboration.

## **Future Scope**

- Integrate AI-powered forecasting for ROI prediction based on historical data.
- Add user authentication and cloud-based profile/project storage.
- Export results as PDF or Excel reports for stakeholders.
- Support for industry-specific templates (e.g., marketing ROI, SaaS, manufacturing).
- Include a risk analysis module for comprehensive financial planning.
- Mobile version using React Native.