

QUESTION

1. A company is considering a new investment project. The project requires an initial investment of \$100,000 and is expected to generate cash flows of \$30,000 per year for 5 years. The company's cost of capital is 10%. Calculate the Net Present Value (NPV) of the project.

ANSWER

The NPV of the project is calculated as follows:

Calculation

NPV = $\frac{30,000}{1.10^1} + \frac{30,000}{1.10^2} + \frac{30,000}{1.10^3} + \frac{30,000}{1.10^4} + \frac{30,000}{1.10^5} - 100,000$

NPV = $\frac{30,000}{1.10} + \frac{30,000}{1.21} + \frac{30,000}{1.331} + \frac{30,000}{1.4641} + \frac{30,000}{1.61051} - 100,000$

NPV = $27,272.73 + 24,793.39 + 22,548.53 + 20,498.66 + 18,616.57 - 100,000$

NPV = $113,729.88 - 100,000$

NPV = $13,729.88$

Conclusion

Since the NPV is positive, the project is expected to be profitable and should be accepted.

Additional Information

The project's payback period is approximately 3.33 years, which is less than the 5-year life of the project. This further supports the decision to accept the project.

THE

PROCEEDINGS OF THE

GENERAL ASSEMBLY

Held at the City Hall, New York, on

the 15th day of

January, 1901.

