

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]























[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]































[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



## QUESTION

1. A company is considering a new investment project. The project has a life of 5 years and requires an initial investment of \$100,000. The project is expected to generate cash flows of \$25,000 per year for the first 3 years and \$30,000 per year for the last 2 years. The company's cost of capital is 10%. Calculate the NPV of the project.

## SOLUTION

1. NPV =

$$= -100,000 + \frac{25,000}{1.10} + \frac{25,000}{1.10^2} + \frac{25,000}{1.10^3} + \frac{30,000}{1.10^4} + \frac{30,000}{1.10^5}$$

$$= -100,000 + 22,727.27 + 20,661.16 + 18,782.96 + 20,165.29 + 18,782.96$$

$$= -100,000 + 81,019.64$$

$$= -18,980.36$$

$$= -18,980.36$$

$$= -18,980.36$$

2. NPV =

$$= -100,000 + \frac{25,000}{1.10} + \frac{25,000}{1.10^2} + \frac{25,000}{1.10^3} + \frac{30,000}{1.10^4} + \frac{30,000}{1.10^5}$$

$$= -100,000 + 81,019.64$$

1. **Introduction**  
2. **Methodology**  
3. **Results**  
4. **Discussion**  
5. **Conclusion**

Year	Q1	Q2	Q3	Q4
2018	10	15	20	25
2019	12	18	22	28
2020	15	20	25	30
2021	18	22	28	32
2022	20	25	30	35

6. **References**  
7. **Appendix**  
8. **Footnote**  
9. **Disclaimer**  
10. **Contact Information**



## 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%.

2. The company is also considering a second investment project. This project requires an initial investment of \$150,000 and is expected to generate cash flows of \$40,000 per year for 5 years. The company's cost of capital is 10%.

3. The company has a limited budget of \$250,000 and must choose between these two projects. Which project should the company invest in?

## ANSWER

1. To determine the NPV of the first project, we need to calculate the present value of the cash flows. The present value of \$30,000 per year for 5 years at a 10% discount rate is:

$$PV = \frac{30,000}{0.10} \left( 1 - \frac{1}{1.10^5} \right) = 111,470.24$$

Therefore, the NPV of the first project is:

$$NPV = 111,470.24 - 100,000 = 11,470.24$$

2. To determine the NPV of the second project, we need to calculate the present value of the cash flows. The present value of \$40,000 per year for 5 years at a 10% discount rate is:

$$PV = \frac{40,000}{0.10} \left( 1 - \frac{1}{1.10^5} \right) = 148,287.00$$

Therefore, the NPV of the second project is:

$$NPV = 148,287.00 - 150,000 = -1,713.00$$

## 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 is calculated as follows:

$$NPV = \sum_{t=0}^n \frac{CF_t}{(1+r)^t} - \text{Initial Investment}$$

Where:

- $CF_t$  = Cash flow at time  $t$
- $r$  = Cost of capital (10%)
- $n$  = Number of years (5)

Initial Investment = \$100,000

Cash flows = \$30,000 per year for 5 years

## QUESTION

2. 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 Internal Rate of Return (IRR) of the project.

The IRR is the discount rate that makes the NPV of the project equal to zero. It is calculated as follows:

$$NPV = \sum_{t=0}^n \frac{CF_t}{(1+IRR)^t} - \text{Initial Investment} = 0$$



[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]







1. **Introduction**  
 2. **Methodology**  
 3. **Results**  
 4. **Discussion**  
 5. **Conclusion**

Year	Q1	Q2	Q3	Q4
2018	10	15	20	25
2019	12	18	22	28
2020	15	20	25	30
2021	18	22	28	32
2022	20	25	30	35

The following table shows the results of the experiment. The data indicates a clear upward trend in the measured variable over the five-year period. This suggests that the intervention or process being studied is effective in achieving the desired outcome.

The results are consistent with the theoretical framework and previous research in this area. The observed increase in performance over time supports the hypothesis that the implemented strategy leads to sustained improvement.

In conclusion, the findings demonstrate the positive impact of the intervention. Further research could explore the long-term sustainability of these results and the role of external factors in maintaining the gains.



## 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%.

2. The company is also considering a second investment project. This project requires an initial investment of \$150,000 and is expected to generate cash flows of \$40,000 per year for 5 years. The company's cost of capital is 10%.

3. The company has a limited budget of \$250,000 and must choose between the two projects. Which project should the company invest in?

## ANSWER

1. To determine the NPV of the first project, we need to calculate the present value of the cash flows and subtract the initial investment. The NPV is calculated as follows:

$$NPV = \sum_{t=1}^5 \frac{CF_t}{(1+r)^t} - I_0$$

where  $CF_t$  is the cash flow in year  $t$ ,  $r$  is the cost of capital, and  $I_0$  is the initial investment.

## QUESTION

4. 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%.

5. The company is also considering a second investment project. This project requires an initial investment of \$150,000 and is expected to generate cash flows of \$40,000 per year for 5 years. The company's cost of capital is 10%.

6. The company has a limited budget of \$250,000 and must choose between the two projects. Which project should the company invest in?

7. The company is also considering a third investment project. This project requires an initial investment of \$200,000 and is expected to generate cash flows of \$50,000 per year for 5 years. The company's cost of capital is 10%.

## 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 NPV of the project.

## ANSWER

The NPV of the project is calculated as follows:

$$NPV = -100,000 + \frac{30,000}{1.1} + \frac{30,000}{1.1^2} + \frac{30,000}{1.1^3} + \frac{30,000}{1.1^4} + \frac{30,000}{1.1^5}$$
$$NPV = -100,000 + 27,273 + 24,793 + 22,539 + 20,490 + 18,713$$
$$NPV = 13,798$$

## QUESTION

2. 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 IRR of the project.

The IRR of the project is calculated as follows:

$$100,000 = \frac{30,000}{IRR} + \frac{30,000}{IRR^2} + \frac{30,000}{IRR^3} + \frac{30,000}{IRR^4} + \frac{30,000}{IRR^5}$$

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

[Redacted text]

