What is Capital Budgeting?

Worksheet

Capital budgeting is the process of planning and evaluating long-term investment projects by estimating their future cash flows and comparing them against the initial cost, typically using NPV, IRR, Payback Period, or Profitability Index.

Questions

1. Which of these is NOT a standard capital budgeting technique?

A) Net Present Value
B) Internal Rate of Return
C) Gross Profit Margin
D) Payback Period

2. What is the first step in the capital budgeting process?

A) Post-audit
B) Identifying investment opportunities
C) Ranking final projects
D) Paying dividends

3. Under capital rationing, which technique best ranks projects by value per dollar invested?

A) Payback Period
B) Profitability Index
C) Accounting Rate of Return
D) Gross margin

4. Why is NPV generally preferred as the primary capital budgeting rule?

A) It ignores cash flow timing
B) It directly measures dollar value added and accounts for the time value of money
C) It's the simplest to calculate
D) It doesn't require a discount rate

5. A company considers a $150,000 machine expected to generate $40,000 per year for 6 years, with a discount rate of 8%. Apply the NPV method to decide.

6. A project has an internal rate of return (IRR) of 14%, and the company's cost of capital is 10%. Should it be accepted under the IRR method?

7. Two mutually exclusive projects: Project X has NPV of $25,000 and a 3-year payback; Project Y has NPV of $18,000 and a 2-year payback. Which does the NPV rule favor?

8. Define: What is capital budgeting?

9. Define: Name the four main capital budgeting techniques.

10. Define: Which technique is considered the best single decision rule?

Answer Key

1. C) Gross Profit Margin - Gross Profit Margin is a profitability ratio, not an investment evaluation technique.

2. B) Identifying investment opportunities - The process starts by generating and identifying potential investment projects.

3. B) Profitability Index - PI expresses value created per dollar invested, ideal for ranking under limited capital.

4. B) It directly measures dollar value added and accounts for the time value of money - NPV discounts all cash flows and shows the actual dollar wealth created.

5. PV annuity factor (8%, 6 years) 4.6229 PV of cash flows = 40,000 4.6229 = 184,916 NPV = 184,916 150,000 = 34,916 Since NPV > 0, accept the project.

6. Decision rule: accept if IRR > cost of capital 14% > 10%, so the project earns more than the required return Accept the project.

7. Compare NPVs: Project X ($25,000) > Project Y ($18,000) The payback method favors Project Y (faster recovery), but ignores total profitability Under the primary NPV rule, select Project X - it maximizes shareholder wealth.

8. The process of evaluating and selecting long-term investment projects based on their expected cash flows and risk.

9. Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period, and Profitability Index (PI).

10. NPV, because it directly measures the dollar value added to the firm and accounts for the time value of money.