Capital Budgeting

Meaning of Capital budgeting

- Capital budgeting is a process that businesses use to evaluate potential major projects or investments.
- Building a new plant or taking a large stake in an outside venture are examples of initiatives that typically require capital budgeting before they are approved or rejected by management.

Techniques of Capital Budgeting

- **Traditional Techniques**:
  Payback Period Accounting
  Rate of Return (ARR)

- **Discounted Cash Flow (DCF) Techniques:**
  Net Present Value (NPV)
  Internal Rate of Return (IRR)
  Profitability Index (PI)

Profitability Index Method

- Profitability Index Method is a Discounted Technique of Capital Budgeting
- It is a method of evaluating Investment Proposals
- PI is the Ratio between the PV of cash project Inflow and PV of cash outflow of the project ,that’s why it is also Called Benefit Cost Ratio .
- It is measure the value of a project in term of Rs. 1 or in percentage.

Selection of Project

- PVCIF>PVCOF = + NPV i.e PI>1 Project Accepted
- PVCIF<PVCOF = - NPV i.e PI<1 Project Rejected

Q. The initial Cash outlay of the project is R s. 1,00,000 and its generate cash inflow of R s. 20,000, R s. 40,000, R s. 60,000 & R s. 80,000 in 4 yrs. Assume 10% Rate of Discount calculate Profitability Index and also suggest whether to accept or reject a Project.

Year	Cash Inflows	PVF@10	PVCIF
1	20,000	0.909	18,180
2	40,000	0.826	33,040
3	60,000	0.751	45,060
4	80,000	0.683	27,320

$$\text{Profitability Index} = \frac{\text{PV of future cash flows}}{\text{Initial investment / cash outflows}}$$

- Total PVCIF = 1,23,600 & PVCOF i.e Cost of Inv. 1,00,000
- 1,23,600/1,00,000 = 1.236
- As the PI is higher than 1, the Project should be accepted

- Advantages of Profitability Index

  Simple And Widely Used Method

  Considers Time Value Of Money

  Easy To Make Decisions

  Accurate Rate Of Return

- Disadvantages

  Difficult To Estimate Discount Rate

  Possibility Of Incorrect Decision

  Difficult To Make Comparison