SNS College of Technology

Coimbatore - 35

23BAT611 - Financial Management

Problem Related to Investment Decisions

Presented by

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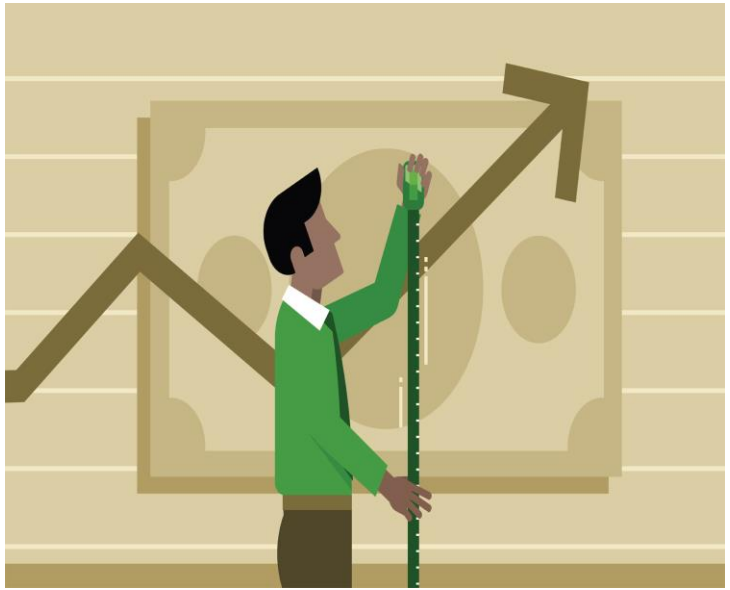
Design Thinker

1st Indian Institution to Implement Design Thinking Curriculum

Redesigning Common Mind and Business Towards Excellence

Topic



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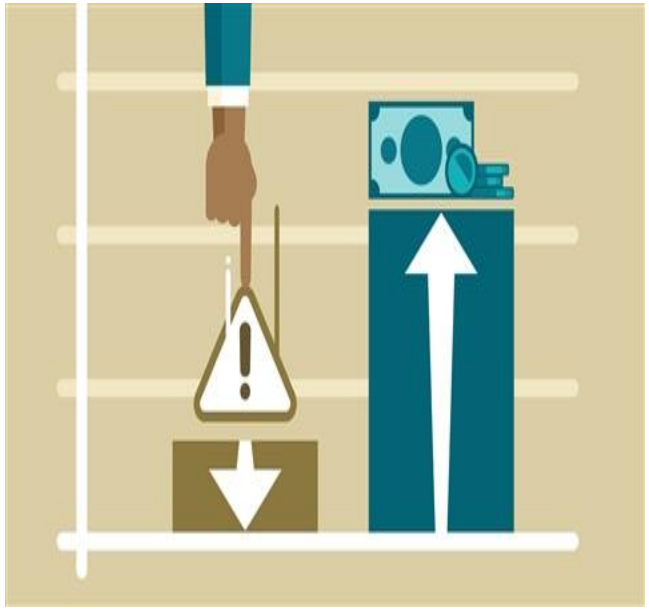


Net Present Value

Problem 8

The alpha Co. Ltd., is considering the purchase of a new machine. Two alternative machines (A and B) have been suggested, each having an initial cost of Rs 4,00,000 and requiring Rs 20,000 as additional working capital at the end of 1st year. Earnings after taxation are expected to be as follows.

a) Calculate Net Present Value

b) Present Value Index (or) Profitability Index

Problem 8

Cash inflows			
Year	**Machine A**	**Machine B**	**P.V Ratio Factor @ 10%**
1	40,000	1,20,000	0.91
2	1,20,000	1,60,000	0.83
3	1,60,000	2,00,000	0.75
4	2,40,000	1,20,000	0.68
5	1,60,000	80,000	0.62

Solution

Year	P.V Ratio Factor @ 10%	Machine A Cash Inflow Rs	Machine A Present Value Rs	Machine B Cash Inflow Rs	Machine B Present Value Rs
1	0.91	40,000	36,400	1,20,000	1,09,200
2	0.83	1,20,000	99,600	1,60,000	1,32,800
3	0.75	1,60,000	1,20,000	2,00,000	1,50,000
4	0.68	2,40,000	1,63,200	1,20,000	81,600
5	0.62	1,60,000	99,200	80,000	49,600
T.P.V of Cash Inflow			5,18,400		5,23,200
Less- Cash Outflow (4,00,000 – 20,000) 0.91			4,18,200		4,18,200
NPV			1,00,200		1,05,000

Solution

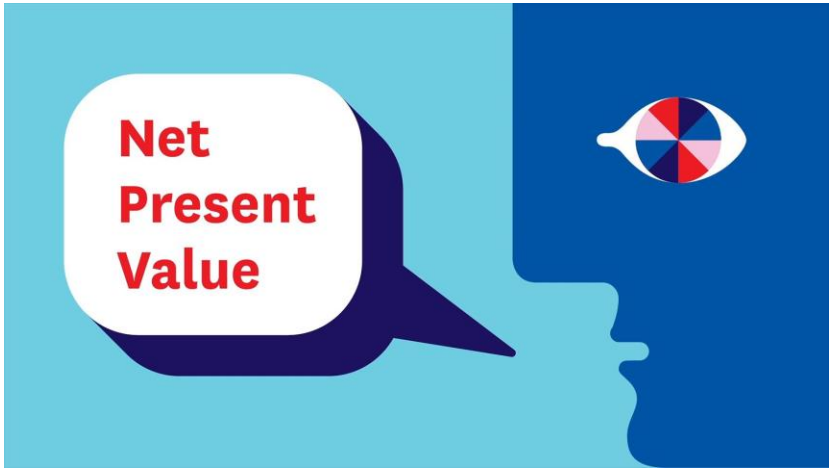
Present Value Index (or) Profitability Index

Present Value Index (or) Profitability Index = Total Present Value of Cash Inflows / Total Present Value of Cash Outflows * 100

Present Value Index (or) Profitability Index = 5,18,400 / 4,18,200*100 = 124%

Present Value Index (or) Profitability Index = 5,23,200 / 4,18,200*100 = 125%

Assessment



Summarize

Net Present Value

Present Value Index (or)

Profitability Index

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