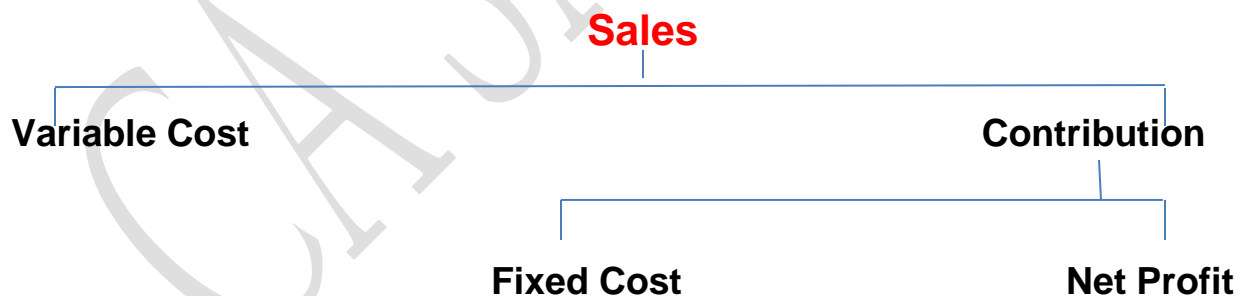


Marginal Cost Sheet

Sales Value		XXXX
Less : Variable cost		
Direct Material, Direct Labour,		
Variable FOH, AOD, S& D OH		<u>XXXX</u>
	CONTRIBUTION	<u>XXXX</u>
Less : Fixed Cost		<u>XXXX</u>
	PROFIT	XXXX



$$\text{Break even point (in Rs.)} = \frac{\text{Fixed Cost}}{\text{P/V ratio}}$$

$$\text{Break even point (in units.)} = \frac{\text{Fixed Cost}}{\text{Contribution per unit}}$$

Margin of Safety = $\frac{\text{Net Profit}}{\text{P/V ratio}}$

Margin of Safety = $\frac{\text{Net Profit}}{\text{Contribution p.u.}}$

- Break even sales + Margin of safety = Total Sales
- Composite break even point (i.e more than one product with common fixed cost)
- Break even point = $\frac{\text{Fixed Cost}}{\text{Average contribution / unit}}$
Or PV ratio
- In case of Perishable product
Break even point = opening stock + $\frac{\text{Remaining fixed cost}}{\text{Contribution per unit}}$
- Break even point for Capital Budgeting
Discounted cash inflow = Discounted cash outflow
- Break even point for decision making
 $\frac{\text{Total relevant fixed cost + opportunity cost}}{\text{Contribution per unit}}$

Difference between Absorption & Marginal

Valuation of Stock (Opening & Closing Stock)

Absorption

Variable Production Cost per unit
+ Fixed Production Cost per unit

Marginal

Only Variable
Production Cost
Per unit

Note: C.O.P under marginal does not include fixed factory ends & therefore, value of Cl. Stk comprises of only variable costs. No part of fixed expenses is included in the value of Cl. Stk. and carried over to the next period.

Irrelevant Cost

- **Sunk cost [Already incurred]
(Eg. Mkt Research)**
- **Apportioned, Notional Int., historical, Imputed**
- **Even Committed costs**



**To be incurred in future, but committed
(eg. Dep'n, Rent, Taxes)**

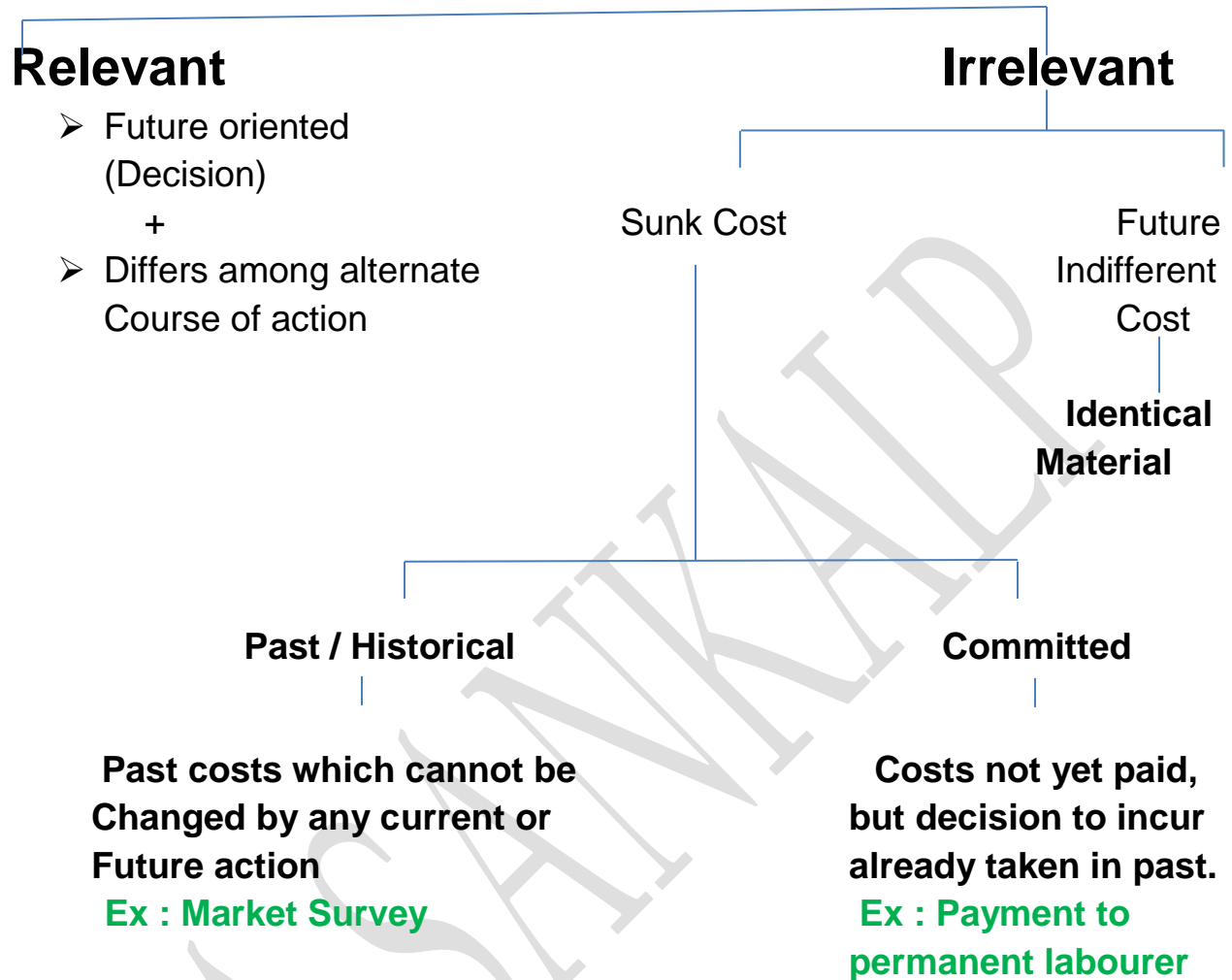
Decision Making**1) Relevant cost?**

- **Costs to be incurred
(future) XXX**
- **Benefit Lost
(opportunity cost) XXX**
- **Benefit Gained (XXX)**

Relevant Cost → That Cost which changes with change in Decision Making

A cost is relevant for the decision if it is influenced by the decision under consideration.

Costs

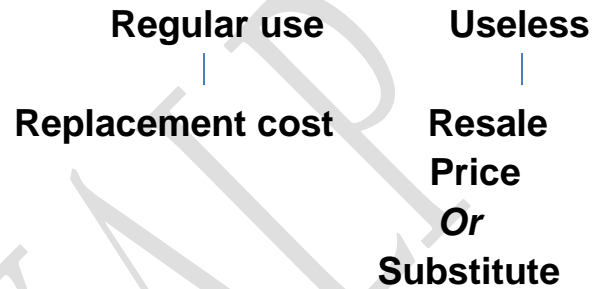


Relevant Cost of Material

Out of stock

Replacement cost
or Purchase Price

In stock



Relevant Cost of Labour

Casual

Normal
Labour cost
to be
incurred

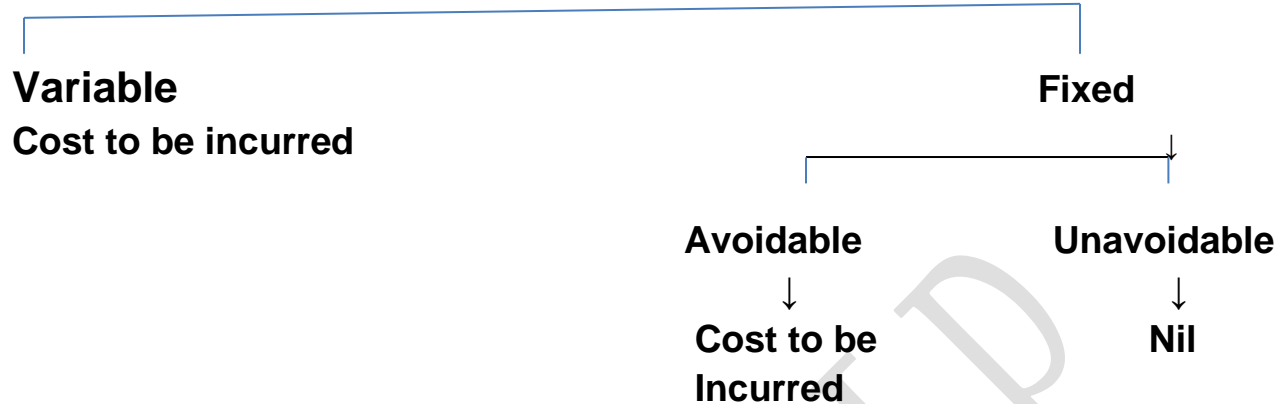
Busy
Labour cost
+
Contribution cost

Permanent

Idle
Nil

Busy
Only
contribution
cost

Relevant Cost of Overheads



- ✓ Unavoidable FC are sunk costs and ignored for decision making.
- ✓ If FC is changing due to decisions, then increase in FC is relevant for decision making

Indifference Point

$$\text{C.I.P} = \frac{\text{Diff.in F.C.}}{\text{Diff.in V.C.}}$$

C.I.P. represents a cutoff indicator for deciding on the most profitable option

<u>Level of Sales</u>	<u>Option to Choose</u>
Below Indiff. Pt.	With lower FC
At Indiff. Pt.	Either
Above Indiff. Pt.	With lower VC

Shut down point

$$\text{S.D.P (in units)} = \frac{\text{Available Fixed Cost}}{\text{Contribution per unit}}$$

$$\text{S.D.P (in Rs.)} = \frac{\text{Available F.C}}{\text{P/V ratio}}$$

<u>Level of Sales</u>	<u>Option to Choose</u>
Below SDP	CLOSE
At SDP	CONTINUE
Above SDP	CONTINUE

Key factor / Limiting factor

Limit achievable output. Best paying product becomes that which yields the highest contribution per unit of limiting factor.

$$\text{Profitability} = \frac{\text{Contribution}}{\text{Limiting factor}}$$