PROFIT/ VOLUME RATIO (P/V RATIO OR C/S RATIO)

P/ V Ratio = Contribution/ Sales

Where,

Contribution = Sales – Variable Cost

Therefore,

P/V Ratio = (Sales – Variable Cost)/ Sales

From Marginal Cost Equation we know:

Sales- Variable Cost = Fixed Cost +/- Profit/Loss

Therefore,

P/V Ratio= (Fixed Cost + Profit) / Sales

PV Ratio can also be expressed as :

Change in Profit or Contribution / Change in Sales

SIGNIFICANCE OF P/V RATIO

❑It reveals the effect of changes in the volume or sales on profit;

❑P/V ratios can be used to identify the product, department or process which is more profitable.

❑Higher the P/V ratio, more will be the profit and lower the P/V ratio, less will be the profit.

Thus, the businesses aim to increase the PV ratio.

SIGNIFICANCE OF P/V RATIO

The PV ratio can be increased by:

❑Increasing the selling price per unit;

❑Reducing the variable or marginal cost;

❑Changing the sales mixture and selling more profitable products

for which the PV ratio is higher.

SIGNIFICANCE OF P/V RATIO

Useful to calculate:

❑ Break- Even Point

❑ The profit at a given volume of sales

❑ The sales volume required to earn a desired amount/ level of profit

❑ Volume of sales required to maintain the present profits, if selling price is reduced or costs of input are increased

ILLUSTRATION

Sales: Rs. 100000

Profit: Rs. 10,000

Variable Cost : 70%

Find out:

P/V Ratio

Fixed Cost

Sales Volume to earn a Profit of Rs. 40000

ILLUSTRATION

Sale of a product amounts to 200 units per month at Rs. 10 per unit. Fixed overhead cost is Rs. 400 per month and variable cost is Rs. 6 per unit. There is a proposal to reduce selling price by 10 %.

Calculate the present and future PV Ratio.

Also calculate how many units must be sold to earn the present total profits.