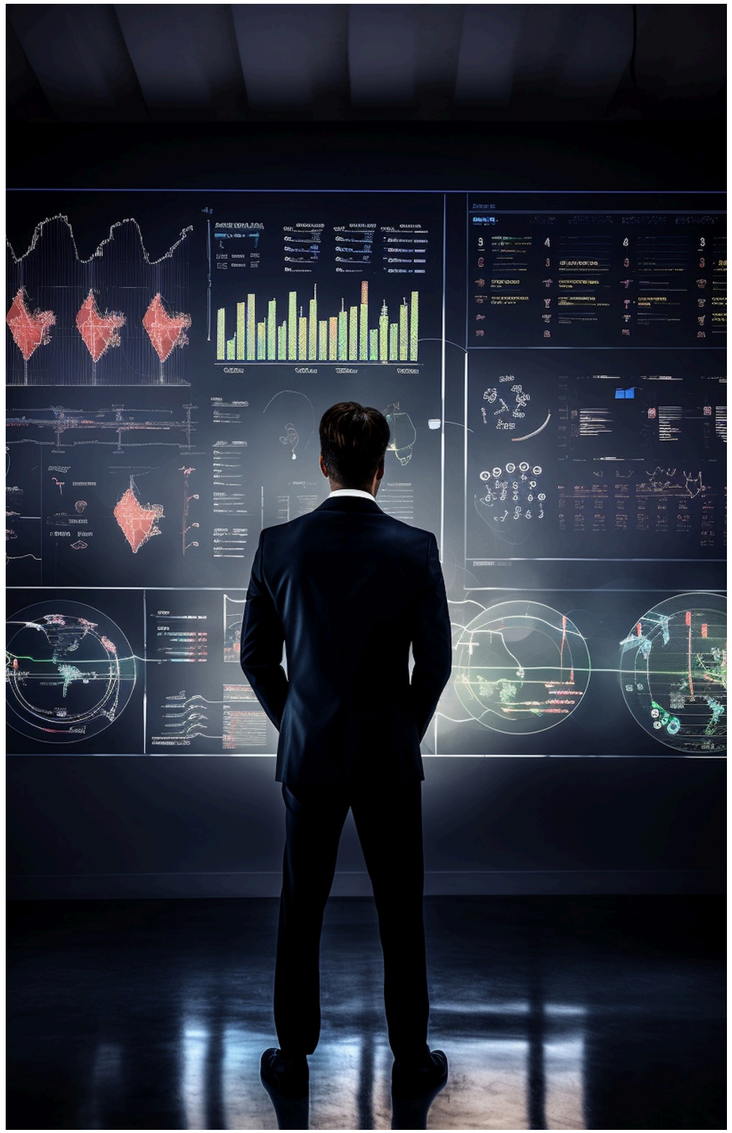


Cracking the Code: Breakeven analyisis in Managerial Accounting

Introduction

- PROFIT PLAYS THE **"HERO ROLE"**
- ELEMENTS THAT DETERMINE PROFIT ARE:

1. COST OF PRODUCTION
2. SELLING PRICE
3. VOLUME OF SALES

- ALL THE THREE ELEMENTS ARE **INTERDEPENDENT**
- BREAKEVEN ANALYSIS IS ALSO KNOWN AS COST-VOLUME-PROFIT-ANALYSIS
- A MANAGEMENT ACCOUNTING TOOL FOR PROFIT PALNNING

BROAD & NARROW VIEW

1. DETERMINING BREAKEVENPOINT
2. STATE THE REALTIONSHIP BETWEEN COST VOLUME AND SALES AT DIFFERENT LEVEL OF OPERATIONS

A BREAKEVEN ANALYSIS INDICATES THE LEVEL AT WHICH COST AND REVENUE ARE IN EQUILLIBRUIM
-MATZ CURRY AND FRANT

BASIC ASSUMPTIONS

- ALL THE ELEMENTS OF COST CAN BE SEGREGATED
- COST AND REVENUE ARE INFLUENCED BY VOLUME
- SELLING PRICE PER UNIT IS UNCHANGED
- VARIABLE COST CHANGES
- TFC IS CONSTANT
- PRODUCTIVITY PER WORKER IS UNCHAGED
- IT RELATES TO ONLY ONE PRODUCT
- CETIRUS PARIBUS

BREAK-EVEN POINT

- A POINT WHERE TOTAL SALES IS EQUAL TO TOTAL COST
- A POINT WHERE THERE IS NO PROFIT OR LOSS
- INCOME OF THE BUISNESS IS EQUAL TO ITS EXPENDICTURE
- AT THIS POINT,CONTRIBUTION IS EQUAL TO FIXED COST.
- COMPUTATION OF POINT;

1. ALGEBRAIC FORMULS METHOD
2. GRAPHIC OR CHART METHOD

ALGEBRAIC FORMULA

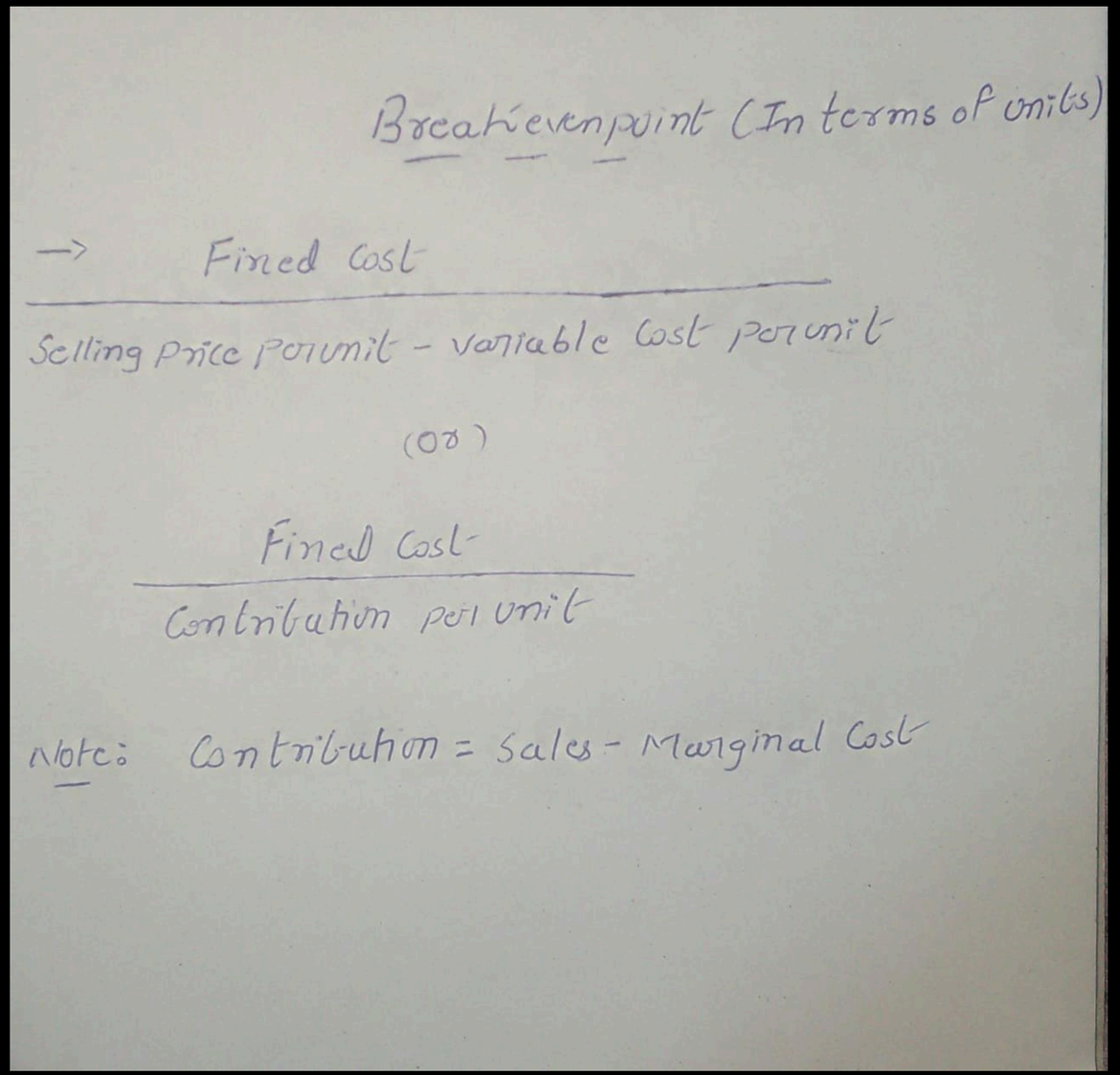
1. BREAKEVEN POINT IN UNITS
2. IN TERMS OF BUDGET OR MONEY VALUE
3. AS A PERCENTAGE OF ESTIMATED CAPACITY

IN TERMS OF UNIT

- THAT QUANTITY OR VOLUME OF SALES WHERE COST IS EQUAL TO EXPENDICTURE
- A FIRM WHICH PRODUCES SINGLE PRODUCT

QUESTION?

FIXED COST=2,00,000
SELLINGPRICE=20
VARAIABLE COST PER UNIT=10
BEP=2,00,000/20-10=20,000 units



Breakeven Point (in terms of money)

- BEP = BEP (in units) x Selling price per unit
- $BEP = \frac{TFC \times S.P}{\text{contribution per unit}}$
- $BEP = \frac{TFC \times TS}{\text{Total Contribution}}$
- $BEP = \frac{F.C \times Sales}{Sales - VC}$
- $BEP = \frac{TFC}{P/V \text{ ratio}}$

→ Note: $P/V = \frac{Contribution}{Sales} \times 100$

- BREAK EVEN POINT IN TERMS OFSALES
- ALSO KNOWN AS BREAKEVEN POINT IN TERMS OF BUDGET
- USE THEM AS PER THE QUESITON'S REQUIREMENT

BREAKEVEN CHART

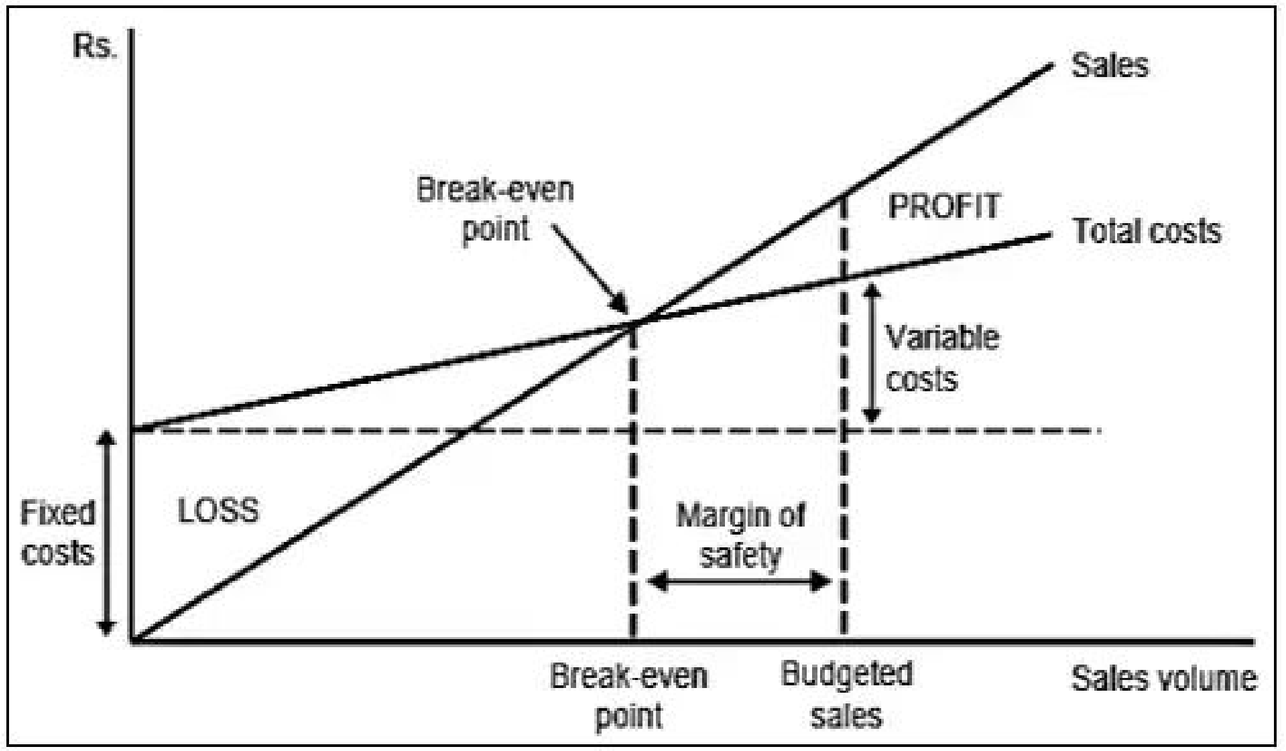
- BREAKVENE POINT CAN BE COMPUTED GRAPHICALLY
- IT SHOWS A PICTORIAL VIEW OF RELATIONSHIP BETWEEN CVP
- BEP IS INDICATED AT THE POINT WHERE TOTAL COST LINE AND TOTAL SALE LINE INTERSECT

IT HIGHLIHTS

- FIXED COST,VARIABLE COST,TOTAL COSTS
- SALES VALUE
- PROFIT OR LOSS
- BEP
- MARGIN OF SAFTEY

BREAK EVEN CHART

- X AXIS DISPLAYS VOLUME OF SALES
- Y AXIS DISPLAYS TOTAL COST AND SALES
- BEP IS THE BREAKEVEN POINT WHERE REVENUE LINE AND COST LINE COINCIDE
- DOTTED LIFE REPRESENTS TFC
- TOATAL COST=TFC=TVC
- LOSS AND PROFIT ZONES
-



TIME OF A QUESTION

PLOT THE FOLLOWING ON GRAPH AND DETERMINE THE BEP:

1. LABOUR=100 PER UNIT
2. DIRECT MATERIAL=40/UNIT
3. VARIABLE COST IS 100% OF DIRECT LABOUR
4. FIXED OVERHEAD=7000RS
5. SELLING PRICE 400RS

Total variable cost (per unit)

Labour — 100 * Selling price = 400

Direct Material — 40

variable overhead — 100

240

Contribution = Selling price − V.C

= 400 − 240 = 160

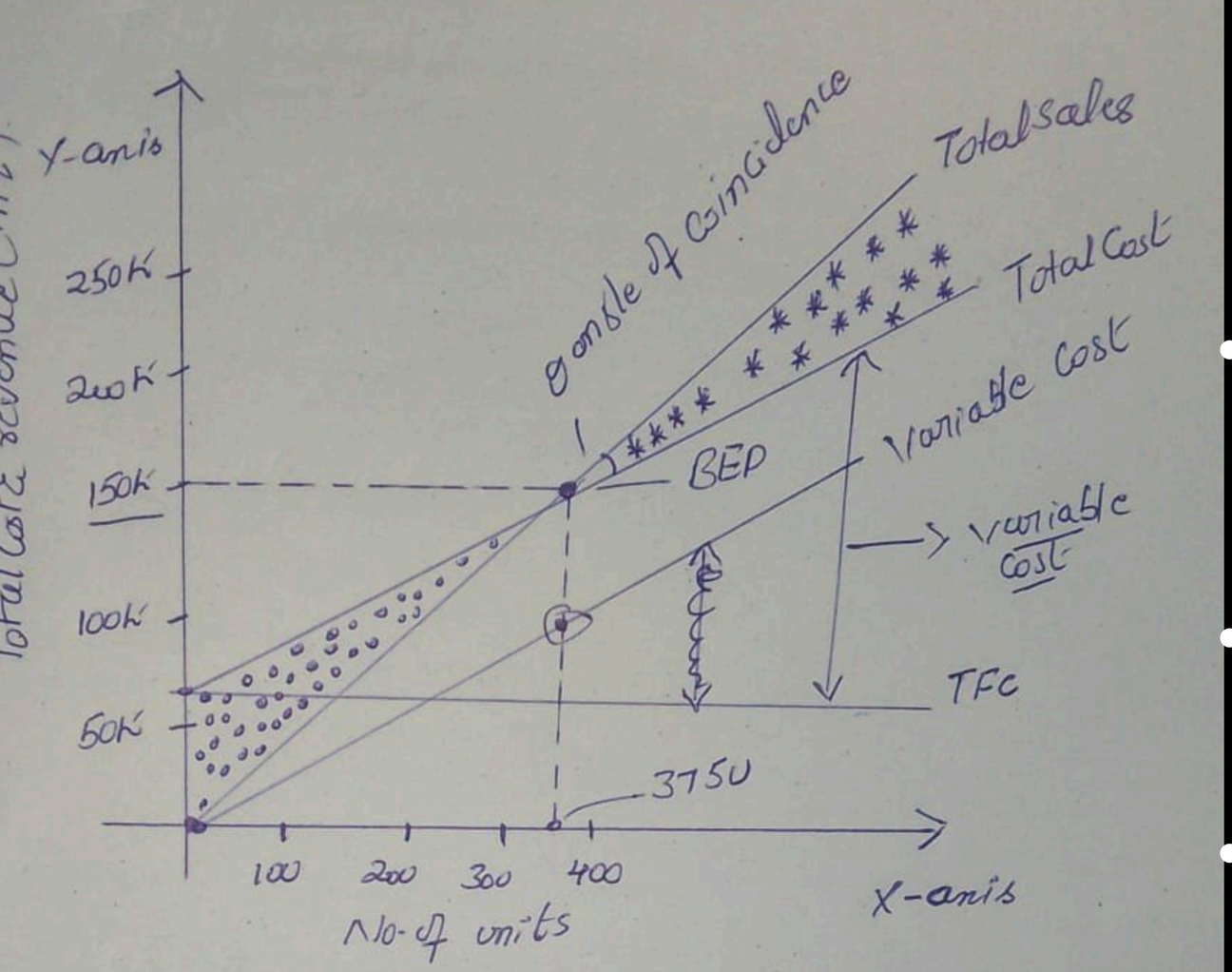
$$BEP(\text{in unit}) = \frac{FC}{\text{Contribution per unit}} = \frac{60,000}{160}$$

= 375 units

BEP (value) = BEP in units × selling price

= 375 × 400 = 1, 50,000

LETS PLOT IT



KEY TAKE AWAYS

- WE COMPARE THE GIVEN ANALYSIS WITH PROJECTED SALES TO MAKE SURE WETHER THE BUISNESS UNIT IS OPERATING PROFITABLY OR NOT
- SAY ACTUAL SALES THAT YEAR WAS 200K THE IT FALLS UNDER PROFIT ZONE
- SIMILARLY IF THE PROJECTED SALES WAS 100K IT WOULD FALL UNDER LOSS ZONE

Thanks!

ANY QUESTIONS FEEL FREE TO .....

STILL GOT QUESTIONS

STILL GOT QUESTIONS

STILL GOT QUESTIONS

STILL GOT QUESTIONS