

# Kaji agrawal essay sample



**ASSIGN  
BUSTER**

Breakeven analysis Klear Camera Company is considering introducing a new video camera. Its selling price is projected to be \$1,000 per unit. Variable manufacturing costs are estimated to be \$500 per unit. Variable selling costs are 10% of sales dollars. The company expects the annual fixed manufacturing costs for the new camera to be \$3,500,000. Required

(a) Compute Klear's contribution margin per unit and contribution margin ratio. (b) Determine the number of units Klear must sell to break even. (c) Klear is considering a design modification that would reduce the variable cost of the camera by \$50 per unit. Explain whether this change will cause Klear's breakeven point to increase or decrease, compared to the initial plans. Solution

(a) Contribution Margin Per Unit = Sales Price Per Unit - Total Variable Costs Per Unit  
 $\$1000.00 - \$500.00 - \$100.00 = \$400.00$   
 Contribution Margin Ratio = Contribution Margin Per Unit / Sales Price Per Unit  
 $\$400.00 / \$1000.00 = 0.40$

(b) Assume X number of units, Klear must sell to break even

Selling Price for X units =  $\$1000.00X$

Total Variable Costs for X units =  $\$600.00X$

Selling Price = Annual Fixed Manufacturing Costs + Total Variable Costs

$\$1000.00X = \$3,500,000.00 + \$600.00X$

$\$1000.00X - \$600.00X = \$3,500,000.00$

$X = 8750.00$  Units

(c) Variable cost is indirectly proportional to the contribution margin per unit so if the variable cost per unit will decrease, the contribution margin per unit will increase.

Breakeven Points = Fixed Costs/ Contribution Margin

So the Breakeven Point will decrease.

New contribution margin per unit = \$1000.00 - \$450.00 = \$450.00

New Breakeven Point = \$3,500,000.00 / \$450.00 = 7,778.00 units

(Rounded up)

#### References

Atkinson, A., Kaplan, R., EM, & Young, SM. (2012), Management Accounting: Information for Decision-Making and Strategy Execution, 6th Edition.