Cost-Volume-Profit (CVP) Analysis & Break-Even Report – FitGear Ltd.

As a financial analyst for FitGear Ltd., this report provides a CVP (Cost-Volume-Profit) analysis to evaluate the profitability of launching a new fitness tracker model. Using the provided data, the report calculates the contribution margin, break-even sales, and the number of units required to earn a target profit of $100,000.

# Financial Data Summary

• Selling Price per Unit: $100  
• Variable Cost per Unit: $40  
• Total Fixed Costs: $300,000

# Calculations

1. Contribution Margin per Unit = Selling Price − Variable Cost = $100 − $40 = $60

2. Contribution Margin Ratio = Contribution Margin / Selling Price = $60 / $100 = 0.60 or 60%

3. Break-even Sales (Units) = Fixed Costs / Contribution Margin = $300,000 / $60 = 5,000 units

4. Break-even Sales (Dollars) = Break-even Units × Selling Price = 5,000 × $100 = $500,000

5. Sales Volume Needed for $100,000 Profit = (Fixed Costs + Desired Profit) / Contribution Margin

= ($300,000 + $100,000) / $60 = 6,666.67 units (approx. 6,667 units)

# Summary Table

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| --- | --- | --- |
| Item | Calculation | Value |
| Contribution Margin per Unit ($) | $100 − $40 | $60 |
| Contribution Margin Ratio (%) | $60 / $100 | 60% |
| Break-even Sales (Units) | $300,000 / $60 | 5,000 units |
| Break-even Sales (Dollars) | 5,000 × $100 | $500,000 |
| Sales Volume Needed for $100,000 Profit (Units) | ($300,000 + $100,000) / $60 | 6,667 units |

# Strategic Analysis Questions

1. \*\*What does the contribution margin tell us about FitGear Ltd.’s profitability?\*\*  
 - The contribution margin of $60 per unit shows how much revenue is available to cover fixed costs and generate profit after covering variable costs. A higher margin implies better profitability potential per unit sold.

2. \*\*How can the contribution margin be used in pricing decisions?\*\*  
 - It helps determine the minimum price required to maintain profitability. A company can assess whether a price decrease is feasible by observing its effect on the margin and required sales volume.

3. \*\*If FitGear wants to reduce its $60 per unit margin, what effect would that have on the break-even point?\*\*  
 - A lower margin increases the number of units required to break even. This raises the risk of not covering fixed costs, especially if market demand is uncertain.

4. \*\*What strategies can FitGear Ltd. use to lower the break-even point?\*\*  
 - Reduce fixed costs through cost control or outsourcing.  
 - Increase the selling price (if market allows).  
 - Lower variable costs through better supply chain management.  
 - Introduce bundled products or value-added services to increase revenue per sale.

# Conclusion

The CVP and break-even analysis shows that FitGear Ltd. must sell 5,000 units of its new product to cover fixed costs. To achieve a profit of $100,000, it must sell approximately 6,667 units. The contribution margin of $60 provides flexibility for growth, and managing costs or pricing strategy can significantly affect profitability and break-even performance.

# References

- Corporate Finance Institute (CFI) – CVP Analysis: <https://corporatefinanceinstitute.com/resources/accounting/cvp-analysis/>   
- Investopedia – Contribution Margin: <https://www.investopedia.com/terms/c/contributionmargin.asp>