MKT100 Metrics Formula Sheet

Metrics 1: Understanding and Managing Costs

Variable Costs: Depends on the company's production volume. Usually includes the word 'per.' Includes things such as direct materials, direct labour, transportation, and commission.

Fixed Costs:

- Capital Costs: costs that happen regardless of the quantity produced or sold and are deducted in more than one period [includes depreciation and PP&E]
- Operating Costs: costs that happen regardless of the quantity produced or sold and are deduced in one period [includes rent, utilities, insurance]

Total Margin = Total Revenue – Total Variable Costs (or Cost of Goods Sold)

Markup ($) or Margin ($) = Selling Price – Cost

Metrics 2: Percentage Change

$$Percent\ (\%)\ Change\ = \frac{(New\ Value - Old\ Value)}{Old\ Value}\ x\ 100$$

Net Profit = Total Margin ($) – Fixed Costs

Herfindahl Index = Sum [(% Market Share of each Product/Company)^2]

- If greater than 0.18 = high concentration, not competitive
- If less than 0.18 = low concentration, competitive

Three [Four] Firm Concentration Ratio = % Market Share Competitor 1 + % Market Share Competitor 2 + % Market Share Competitor 3 [+ % Market Share Competitor 4]

- If greater than 67% = high concentration, not competitive
- If less than 67% = low concentration, competitive

Metrics 3: Market Share and Market Analytics

$$Market\ Share\ (\%) = \frac{Brand's\ sales\ (\$\ or\ \#)}{Total\ Market\ Sales\ (\$\ or\ \#)} x\ 100$$

$$Relative\ Market\ Share\ (\%) = \frac{Brand's\ Sales\ (\$\ or\ \#)}{Largest\ Competitor's\ Sales\ (\$\ or\ \#)} x\ 100$$

Metrics 4: Contribution Margin

$$Contribution\ Margin\ (\%)\ = \frac{Contribution\ Margin\ (\$)}{Revenue\ (\$)}\ x\ 100$$

METRICS FORMULA SHEET

Gross Profit = Total Revenue – Total Variable Costs (*or* Cost of Goods Sold)

Net Profit = Gross Profit – Fixed Costs

Percent (%) Change = $\frac{\text{(New Value – Old Value)}}{\text{Old Value}} \times 100$

Herfindahl Index = Sum [(% Market Share of each Product/Company)^2]

Three [Four] Firm Concentration Ratio = % Market Share Competitor 1 + % Market Share Competitor 2 + % Market Share Competitor 3 [+ % Market Share Competitor 4]

Market Share (%) = $\frac{\text{Brand's Sales (in \$ or \#)}}{\text{Total Market Sales (in \$ or \#)}} \times 100$

Relative Market Share (%) = $\frac{\text{Brand's Sales (in \$ or \#)}}{\text{Largest Competitor's Sales (\$ or \#)}} \times 100$

Contribution Margin (%) = $\frac{\text{Contribution Margin (\$)}}{\text{Revenue (\$)}} \times 100$ *OR* = $\frac{\text{Contribution per Unit (\$)}}{\text{Selling Price per Unit (\$)}}$

Contribution Margin per Unit (\$) = Price per Unit – Variable Cost per Unit

Markup (%) = $\frac{\text{Markup (\$)}}{\text{Cost (\$)}} \times 100$ *OR* = $\frac{\text{(Selling Price – Cost)}}{\text{Cost}} \times 100$

Margin (%) = $\frac{\text{Margin (\$)}}{\text{Selling Price (\$)}} \times 100$ *OR* = $\frac{\text{(Selling Price – Cost)}}{\text{Selling Price}} \times 100$

Selling Price = Cost + Contribution Margin (\$)

OR = Cost x (1 + Markup %)

OR = $\frac{\text{Cost}}{\text{(1 – Margin \%)}}$

Supplier Selling Price (\$) = Customer's Selling Price (\$) – Customer's Margin (\$)

OR = Customer's Selling Price (\$) x [1 – Customer's Margin (%)]

Break-even Revenue (\$) = Break-even Volume (#) x Price per Unit (\$)

OR = $\frac{\text{Fixed Cost (\$)}}{\text{Contribution Margin (\%)}}$

Break-even Volume (#) = $\frac{\text{Fixed Cost (\$)}}{\text{Contribution per Unit (\$)}}$

ROMI (%) = $\frac{\text{Incremental Revenue (\$) x CM (\%) - Mktg Spending (\$)}}{\text{Marketing Spending (\$)}} \times 100$

Incremental Revenue = $\frac{\text{(1 + ROMI) x Incremental marketing investment}}{\text{Contribution Margin (\%)}}$

$$Contribution\ Margin\ (\%) = \frac{Contribution\ per\ Unit\ (\$)}{Selling\ Price\ per\ Unit\ (\$)}$$

Contribution Margin per Unit ($) = Price per Unit – Variable Cost per Unit

Metrics 5: Markup and Margin

$$Markup\ (\%) = \frac{Markup\ (\$)}{Cost\ (\$)} \quad OR \quad Markup\ (\%) = \frac{(Selling\ Price - Cost)}{Cost} x\ 100$$

$$Margin\ (\%) = \frac{Margin\ (\$)}{Selling\ Price\ (\$)} x\ 100 \quad OR \quad Margin\ (\%) = \frac{(Selling\ Price - Cost)}{Selling\ Price}\ x\ 100$$

Metrics 6: Pricing Wholesale to Retail

Manufacturer >Wholesaler>Retailer>Customer

Selling Price = Cost + Contribution Margin ($)

OR = Cost x (1 + Markup %)

OR = Cost / (1 – Margin %)

Supplier Selling Price ($) = Customer's Selling Price ($) – Customer's Margin ($)

OR = Customer's Selling Price ($) x [1 – Customer's Margin (%)]

Metrics 7: Break-Even

Break-Even Revenue ($) = Break-even Volume (#) x Price per Unit ($)

OR = Fixed Cost ($) / Contribution per Unit ($)

$$Break - even\ Volume\ (\#) = \frac{Fixed\ Cost\ (\$)}{Contribution\ per\ Unit\ (\$)}$$

Profit = Sales – Variable Costs – Fixed Costs, set P=0 to find Break-Even Price

Metrics 8: Return on Marketing Investment (ROMI)

$$ROMI\ (\%) = \frac{Incremental\ Revenue\ (\$)\ x\ CM\ (\%) - Mktg\ Spending\ (\$)}{Marketing\ Spending\ (\$)} x\ 100$$

$$Incremental\ Revenue = \frac{(1+ROMI)x\ Incremental\ Marketing\ Investment}{Contribution\ Margin\ (\%)}$$