

Week 6 Problem Solution

1) This question concerns promotional analysis.

Consider the following price promotion scenario for a given brand, where the duration of each period is the same.

	Pre-promotion period	Promotion period	Immediate post-promotion period
Brand's unit share	6%	9%	5%
Category sales	500,000	500,000	500,000
Variable cost per unit	\$50	\$50	\$50
Selling price per unit	\$80	\$70	\$80

- i) Based only on the information contained in the above table, evaluate the price promotion, and interpret your answer.
- ii) Now suppose that following the promotion, the brand's unit share eventually stabilises at 7% in the long-run. What impact, if any, does this have on your evaluation of the price promotion?

Solution:

	Pre-promotion period	Promotion period	Immediate post-promotion period
Brand's unit market share	6%	9%	5%
Category sales	500,000	500,000	500,000
Variable cost per unit	\$50	\$50	\$50
Selling price per unit	\$80	\$70	\$80
Contribution per unit	\$30	\$20	\$30
Baseline sales	30,000	-	-
Incremental sales	-	15,000	-
Sales shortfall	-	-	5000

(a) Contribution from incremental sales = $15,000 \times \$20 = \$300,000$

Contribution foregone from baseline sales due to reduced margin = $30,000 \times \$10 = \$300,000$

Contribution foregone from baseline due to post promotion sales shortfall = $5000 \times \$30 = \$150,000$

Net effect of promotion = $\$300,000 - \$300,000 - \$150,000 = -\$150,000$

The net contribution from promotion is negative and hence it is not profitable to promote the product.

(b) If the long run market share stabilizes at 7%, then an additional 5000 units $((7\% - 6\%) \times 500,000)$ will be sold at the regular margin \$30 every period in the future. This gives an additional contribution of \$150,000 to profits per period. Hence the loss from the promotion is overcome in the 3rd period itself and profits accumulate for all subsequent periods. Therefore, the promotion in this case is profitable.