December 1988

Achieving a Desired Gross Margin Through Retail Sales

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In marketing products to consumers through a retail outlet, it is important to establish a gross margin that will (a) cover the costs of the business and (b) provide a satisfactory profit. Gross margin is defined as the difference between the cost of the product and its selling price. Gross margin percentage is determined as follows:

Gross Margin = Retail Price - Cost of Goods

Retail Price

$$\text{Retail Price(\$)} = \frac{\text{Cost of Goods Sold (\$)}}{100(\%) - \text{Desired Gross Margin (\%)}} \times 100$$

After the retail prices are established that will produce the desired gross margin for each product to be sold, it is often necessary to lower certain prices: (1) to meet competition, (2) to attract customers to the retail outlet (i.e., advertised specials) or (3) to sell products that may have been damaged or are spoiling. When price reductions or changes are necessary it is important to calculate the impact of such a price change on the total gross margin of the business. This can be done by using the "contribution method" or "blend method." This is a method of using weighted averages and is illustrated in the following example. Assume a retailer is selling

just five items from a produce store. The percentage of sales and gross margin for each product is shown below.

Contribution to Total Sales and Gross Margin

Item	Percent of Total Sales	Percent Contribution to Gross Margin	Total Gross Margin
Red Delicious	35	30	10.5
Pears	10	35	3.5
Pumpkins	15	30	4.5
Honey	10	20	2.0
All Others	30	20	6.0
Total	100%		26.5%

The retailer has calculated the gross margin for each product sold using the cost of goods (a cost of production or market wholesale price) and has also calculated the approximate sales contribution for each product -- as a percent of total sales.

In this situation, if the retailer decided to lower the price on pumpkins as Halloween approaches -- to meet a lower price by a competitor or to sell out -- the impact of the price reduction on the total sales and profits of the business could be calculated. If the price reduction resulted in a gross margin of 10 percent (a drop from 30 percent) and increased sales to 20 percent of the total (up from 15 percent) the following calculations would produce the new gross margin forecast for the business:

Item	Percent of Total Sales	Percent Contribution to Gross Margin	Total Gross Margin
Red Delicious	33	30	9.90
Pears	9	35	3.15
Pumpkins	20	10	2.00
Honey	10	20	2.00
All Others	28	20	5.60
Total	100%		22.65%

Therefore, using the "contribution method" the retailer could forecast a drop in gross margin from 26.5 to 22.65, or a loss of -3.85 in gross margin percent. If sales for the business averaged $5,000 per week, this would mean a loss of: $ 5,000 x -0.0385 = -$ 192.50

However, if the lower price on pumpkins attracted more customers and resulted in an overall increase in business of $900, the results would be an increase in total gross margin revenue for the retailer.

Before the Price Reduction $5,000 x 0.265 = $1,325.00

After the Price Reduction (with a $900 sales increase) $5,000 x 0.2265 = 1,336.35

Now there is a slight gain in total gross margin.

When price reductions are necessary to meet competition, or to sell out a seasonal product, the contribution method is a useful approach for retailers in making sales and gross margin projections. This type of planning is always SMART MARKETING.