Making Sense Out Of Costs And Margins: Part 2

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In the August issue of IMPO [2], we published the first installment of this article where authors Mike Collins and Charles France explore ways small and medium manufacturers (SMMs) can develop a practical cost/pricing system.

Besides the first three steps we explored in the first half of this article — hiring an advisor, reformatting the income statement, and implementing procedures to capture actual material and labor costs — SMMs should move forward with the following in mind:

4. Develop an annual budget that separates fixed costs from variable costs. Fixed costs are called "indirect" and include manufacturing overhead and S,G&A (office salaries and wages, rent, office supplies, advertising and promotion, miscellaneous, etc.). They do not vary with production or sales ($215,500 in Table 1). Variable costs, on the other hand, do vary with production or sales and primarily are materials and production labor ($715,500 in Table 1). The separation of costs into fixed and variable will be very useful in the development of an effective pricing strategy.

Table 1 is an example. Sales are budgeted at $1,000,000 with a 25 percent gross profit stemming from $750,000 in cost of goods sold. S,G&A expenses budgeted at $180,500 leave pre-tax income of $69,500. Fixed costs are $215,000 and variable costs are $715,000. The budget will be used subsequently to calculate two very important financial numbers: (1) breakeven sales (minimum sales volume to cover fixed and variable costs before profit is realized) and (2) contribution margin (the margin remaining after material, labor, and commissions are paid).

Breakeven is important to overall budgeting and business/sales forecasting because it shows the minimum sales volume needed to make a profit at your business' current cost structure and overall level of profitability. Contribution margin is critical to effective pricing strategy and policy.

5. Contribution margin. Contribution margin is a concept that can be an effective means to establishing not only pricing policy, but to developing basic marketing strategies as well. It is defined as sales less variable costs (in Table 1 this is $1,000,000 less $715,000 = $285,000). It is the amount of revenue remaining after paying for direct materials, direct labor, and commissions (in this example) to contribute to overhead and profit.

Think about this on a single product basis. Assume a unit selling price of $100, direct material of $55, direct labor of $15, and a commission of $2. After these costs are paid, $29 remains to contribute to factory and S,G&A overhead and profit. This equates to a 29 percent contribution margin ($29 contribution margin/$100 unit selling price) and is an excellent measure of the inherent profitability of the single product. The higher the contribution margin percent, the more margin to contribute to overhead and profit – the greater the profitability of that product.

This is a fundamental and critical concept: firms should want to sell products that have higher contribution margins. Pricing policies and marketing strategies that focus on high contribution margin products and services will generate more profit for the firm.

6. Breakeven sales. Breakeven sales is that amount of sales volume that equates to total expenses, both fixed and variable, inclusive of cost of goods sold and S,G&A. Since total sales equals total expenses, there is no profit; hence, the firm "breaks even." The formula for determining breakeven sales is fixed costs divided by CM percent (contribution margin percent).

In Table 2, the firm's fixed costs are $215,500 and its contribution margin percent is 29 percent, resulting in breakeven sales of $743,103. This means that at sales volume of $743,103, the firm's expenses are completely covered and there is no profit.

Summary

At this point our firm has established all of the ingredients for a pricing policy. Price setting then becomes a function of determining the direct material and direct labor content and calculating the selling price (SP) that will produce the target CM. If the market will bear a SP resulting in a CM higher than the target CM, the firm is okay. Conversely, if the market won't accept a SP with the target CM, the firm will then know how far down it can negotiate SP as long as it doesn't go below the CM minimum – or negotiate increased volumes to off-set the loss in contribution margin. Likewise for proposed discounts, the firm will be able to calculate the amount of discount it can accept and still remain within the pricing policy.

A common belief held by manufacturers is that price discounts can be justified because even at lower prices, the additional volume covers overhead. A review of the CM explanation earlier will show that this is true only if (1) the firm is operating above its breakeven sales levels and (2) that the proposed discounted project in fact possesses a positive contribution margin. If these two conditions are not met, the firm's acceptance of a price discount will result in a net loss because overhead is not being covered – the contribution margin is insufficient to contribute to overhead and profit.

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