The Business Library — **Resource Report #1**

Solving Cash Flow Problems

50 Strategies That Increase Cash Flow Today

- **Start with the Basics**
- **Increase Cash Inflow, Decrease Outflow**
- **Sell More to Current Customers**
- **Add New Customers with New Approaches**
- **Streamline Ordering Process**
- **Target and Expand Products and Services**
- **Collect the Money Due You**
- **Tighten Internal Controls**

Part Two — Six Ways to Price Products to Increase Sales and Profits

THE BUSINESS LIBRARY™

16 Fox Lane, Locust Valley, NY 11560 • 516-671-8050 (Fax: 516-671-8077)
E-mail: businesslibrary@optonline.net • Website: www.yourbusinesslibrary.com

The Road to More Customer Sales

Here are some fundamental, but very important ideas, to increase sales and improve relationships.

- Focus on identifying what your customers want and need and then meet those needs.
- Be consistent in your dealings.
- Expose them to other products and services.
- Make it easy for them to order.
- Deliver on time.
- Keep communicating with them and make it easy for them to communicate with you.
- Promptly answer their complaints and warn them of problems.
- Extend reasonable, consistent credit.
- Treat small orders with respect. They could be your biggest customers a few years from today.

A qualified lead from a current customer is much more valuable than a telemarketing call or a cold-call visit on a new prospect.

You have plenty of company if you're struggling to manage your cash flow. The fact is any slow down in sales or an economic recession can throw off any company's business plan and undermine its projections. Long-time customers can sell out or even go bankrupt, inventories cut back, orders cancelled, expansions postponed, and everyone takes longer to pay their bills.

Many business owners and executives, even those who have managed to increase sales and profits, can have cash flow problems. *Our advice:* Pay close attention to your cash flow and, when problems arise, be prepared to act quickly and decisively. You know your company best. Only you can determine which expenses and disbursements can be eliminated or reduced immediately. Only you can pinpoint which resources can be tapped easily and quickly.

In *Part One* of this **Resource Report**, you will find a vast range of ideas, suggestions, and actions that have been used by other businesses to manage and improve their cash flow. Most are simple to implement but collectively, they can have a significant dollar impact on your cash flow and bottom line. Use them to develop an overall cash flow strategy that's right for you and your business.

In *Part Two,* we discuss product pricing and present six ways to increase company sales and profits.

Start with the Basics

#1. Build on what you already have. Hold back on spending money to develop high-risk new ideas or products. Focus on your *existing* products and services. Explore new sales approaches and new markets to your current product lines. Instead of launching expensive campaigns to attract new customers, *multiply* business to current customers by staying in close contact with them and adapting your products or services to better meet their needs.

#2. Stay on top of accounts receivable — *your cash inflow*. Remember, the longer you wait on past-due accounts receivable, the less likely you are to get paid. Statistics show that for receivables overdue by 120 days, you will never collect 20%. When more than 180 days overdue, the loss increases to 33%. The chances of never collecting on a bill continue to increase to 55% if one year past-due and 77% if two years past-due.

Insist on specifics! If a delinquent customer hasn't yet mailed payment, pin

him or her down on the exact date the payment will be mailed. If he or she says it's ready now, arrange to pick up the check or pay for overnight delivery.

Remember also, your collection efforts are most effective when you establish firm policies, put them in writing, and apply them consistently.

#3. Keep an eye on inventory — *a big cash outflow factor*. Review your needs monthly. For frequently-used inventory, negotiate a price discount for volume purchases and look into longer-term contracts to fix future prices. Smart purchasing can substantially increase your pretax profit margin. For example, if your pretax margin is 10% and your gross profit margin is 40%, a 3% savings on inventory purchases can represent up to a 12% increase on your pretax profit margin (40% gross profit times 3%).

#4. *Reduce labor costs*: (a) lower the number of employees by attrition, (b) reduce fringe benefit programs, (c) defer salary increases and bonuses, and (d) if permitted, hold back on making retirement contributions, particularly optional matching contributions.

More drastic action: Consider effecting across-the-board salary reductions of, say 10%, until cash flow improves. Your employees won't like it, but the burden is shared by all and it is more palatable than layoffs. Stress that it's only an *interim* measure and explain why it's necessary, e.g., the loss of a major customer. Don't forget to include yourself in the 10% salary reduction and be sure employee salary reductions are not in violation of any labor or employment contracts or state and federal laws.

#5. *Reduce cash outflow:* (a) go hand-to-mouth on inventory that is not frequently used or that is changeable — buy only what you need for a month or two, (b) identify and eliminate all unnecessary overhead, (c) increase deductibles on select insurance policies to lower the premiums, (d) lease equipment rather than purchase, (e) talk to your suppliers about extended credit, e.g., payment in 45 to 60 days rather than 30 days, (f) reduce recurring expenses, e.g., use three phone lines rather than five, and (g) eliminate or downgrade non-critical service contracts.

#6. *Increase cash inflow:* (a) borrow on select company assets, e.g., the cash value in life insurance policies, (b) eliminate slow-moving and low-profit-margin

products, (c) establish or increase the discount your company offers for payment of accounts receivable within 10 to 20 days, (d) in contrast, charge interest on delinquent accounts receivable, say, 1% to 1½% per month on the outstanding balance, (e) offer to settle (e.g., 80 cents on the dollar) on past-due accounts and other monies owed to you, and (f) get an advance payment upfront on large orders or increase the required deposit.

#7. Postpone new product development. It's costly and time consuming and the potential payoff is far in the future. Instead, investigate the reasons for past product failures. Historically, the two main reasons new products fail are: (a) inadequate marketing analysis, and (b) expanding for the sake of growth without regard to the expansion's contribution to profits. More on this subject later.

Cultivate Current Customers

Reasons: They know your company; you know them; and it costs much less to close a deal with a current customer than to identify, contact, negotiate, and close a deal with a new customer.

#8. *Learn more about your customers:* Visit their websites. What products and services do they offer? Are there any other products you can sell to them? If new purchase orders are declining, find out why.

#9. Concentrate on them. It's an established fact that many businesses neglect promoting new, redesigned, or related products to their existing customer base. But don't push customers too aggressively for more business. A friendly, how-can-we-help approach builds relationships and sets your company apart from competitors.

#10. Communicate more frequently with customers and be especially attentive to customers who represent 5% or more of your sales. Call them every month or two. Can we help in any way? Are our products meeting your specifications and quality standards? *Remember:* Qualifying a new sales lead takes a lot more time and energy than cultivating a current customer. Lose a large-volume, long-time customer and you usually need five to 10 new customers to replace that lost business.

#11. Ask customers for referrals to other companies and individuals who might be interested in your products. A qualified lead from a current customer is many times more valuable than a telemarketing call or a cold-call visit on a new prospect.

#12. Invest in training for customer service employees. Disappointed customers do not want to be contacted by a computer or a form letter. They want a real person to talk to, one who is qualified and empowered to help them.

#13. Be consistent in your dealings with customers, product deliveries, and service standards. Radical changes in the way you do business could alienate customers and reduce new orders.

Increase Cash Inflow

#14. Establish systems that track individual salespeople's performances with both customers and prospects. For a three-month period, provide a *special bonus* to salespeople for new business.

#15. Make it *very* easy for your customers and prospects to order. Simplify your order form and invest in a special telephone line, preferably a toll-free 800 number. Have individual customer profile information computerized and instantly available to your order department. Train sales staff to suggest *related* products to customers who place an order.

#16. To generate more cash and lower inventory levels, prepare a special product bulletin offering your customers and prospects a one-time discount on in-stock or surplus products.

#17. Treat small orders with respect. Many times your profit margin is higher on smaller orders and you're usually not asked to make concessions on price. Furthermore, these large orders could grow into much larger orders.

#18. Don't look at new customer orders as a one-time sale. Consider the value of those new customers' *repeat* business over a period of years. That attitude will reinforce *their* importance to your company and with your employees who

service the accounts.

#19. Contact customers who no longer buy from you or buy in reduced quantities. Even if you don't win them back, you might learn about service or product problems that could prevent you from losing other customers.

#20. Explore new methods to sell products to existing customers and prospects. Don't overlook your company's web page and the internet.

#21. Don't divert cash to high-risk new ideas and products without first exploring new customers and new markets to sell *existing* products and services.

#22. Know your profit margin on each product and consider offering your salespeople a higher commission for sale of the company's most profitable products.

#23. Know your customer — your cash inflow. Does he or she order every month? How much is purchased annually? Who else do they buy from? What would it take to increase business with them?

Collect the Money Due You

#24. Write down your company's policies and guidelines for extending credit. Investigate the credit of each potential customer and establish a credit line which cannot be exceeded without special approval.

#25. Continually check out the creditworthiness of new and existing customers.

#26. Settle disputes with customers immediately. Find out the exact nature of the problem and then take steps to remedy it. Keep a record of all complaints; a pattern may be developing on a specific product or individual in your company.

#27. If a customer is in financial difficulty and the amount due is sizable, try to get a formal promissory note for the full amount due with a specific repayment schedule and interest rate.

#28. For new customers whose credit is questionable, consider requesting a downpayment on the order, say, 10% to 25%, or specify that payment is due on delivery.

#29. In your efforts to increase sales with current customers and add new customers, never make exceptions to your credit policies. Consider price or discount concessions instead. *Remember*: If your company's profit margin is 10%, a bad receivable of $10,000 represents $100,000 in lost sales revenue.

#30. Be alert to customers' cash flow problems. Structure your bookkeeping department to prepare weekly reports on overdue payments. For a listing of the trouble signs, see *Your Customers' Problems Are Your Problems,* page 12.

Manage Cash Outflow

#31. Check all invoices from suppliers before making payments to be sure that: (a) the product was received in its entirety and in good condition or the services were performed, (b) the math on the invoice is correct, (c) any special charges are appropriate, (d) any available discount is taken, and (e) any sales tax is applicable and correct.

#32. Refinance existing loans and extend the repayment period over a longer time frame. This will lower your fixed monthly payment and increase cash available for other purposes. You also might want to talk to your lender about increasing the loan amount (e.g., back to the original principal amount) to generate more cash.

#33. Have someone periodically verify payments to vendors. *How:* Do as your auditors do. Send a written request to vendors for confirmation of the balance shown on your books. You can conduct a quicker check by simply telephoning select vendors to verify the balance in your accounts.

#34. Do not reimburse employee expenses without proper documentation; furthermore, obtain the original receipt, not a copy. Make all employees account for advances promptly, preferably before paying them.

#35. Petty cash should be under the control of only one person and that person should be responsible for the amount in the fund and its proper recordkeeping. In addition, periodic checks and reconciliation of the petty cash account should be made by a second person, who also should check the records of transactions and the stated reasons for the withdrawals.

#36. The person signing checks should have the authority, opportunity, and responsibility for reviewing all supporting documents (e.g., purchase orders, receiving reports, etc.).

#37. Require written authorization on the sale or purchase of any fixed assets, such as cars, office furniture, and equipment. Substantial sales or purchases should require approval by an officer.

#38. If you're keeping the balance in your checking account low and you don't have overdraft privileges, be sure you know the balance at all times. If your bank has an on-line service by which you can check your balances whenever and as frequently as you choose, consider using that service. In addition, talk to your banker about automatically investing, even overnight, any excess cash in a money-market account. The accumulated interest over the year can be substantial.

#39. Payments can be turned into usable capital sooner by photocopying and depositing checks on the day of receipt. Necessary bookkeeping work can be done later. In addition, for business conducted in a remote part of the country, a "lock box" may quickly turn collections into cash.

#40. Prepare conservative monthly cash flow projections (both minimum and probable) for one year, so you know *exactly* where you stand on cash. Show projected beginning and ending cash balances for each month and identify any monthly deficits immediately. Then get to work on solving that deficit. You also want to analyze monthly deviations in your budget forecasts versus actual results. This will help you adjust your monthly cash flow budget going forward and solve any liquidity problems before they become serious.

#41. Plan ahead to meet and finance any potential or expected cash flow deficits. If you wait until the deficit is reality, you could be risking the viability of

your business and jeopardizing your ability to raise capital.

Target and Expand Products and Services

#42. Expand on already-successful products and services and concentrate marketing efforts on higher-profit-margin products.

#43. Consult with important customers *before* introducing a new or revised product. *First,* their input is invaluable in refining the product and its marketing campaign; *second,* you have a potential buyer already lined up; and *third,* you let them know you respect their opinion and they are an important part of your business.

#44. Stay in the product area and industry you know best. Know your start-up costs and try to minimize the development time of new products.

#45. Don't shortchange the research stage on new products and new markets. Talk to potential customers, find out what your competitors are doing, determine the niche that is best for you and move quickly to fill it.

#46. When introducing *new* products, target initial sales to high-volume customers.

#47. Package your products and services with material to answer customer questions and show its many applications and benefits.

#48. Don't compromise product quality for the sake of lower costs in production, service, or delivery.

#49. Target a smaller industry or field; large companies generally don't concentrate on smaller industries. To further lessen risks, sell into a stable market.

#50. Don't fall in love with any product; assess each product objectively for its contribution to your company's sales and profits.

* * *

Prudent cash flow management is good business practice in any economic climate. But it is often overlooked when cash is flowing freely and growth is easy to come by. Use this **Resource Report** to get on top of your cash flow and refer to it regularly to keep your company lean on the expense side and healthy on the cash side. ☐

References:

Exhibit 1: Your Customers' Problems Are *Your* Problems — see next page

Part Two: Pricing Your Products to Increase Sales and Profits — see page 14

Lose a large-volume, long-time customer and you usually need five to 10 new customers to replace that business.

Exhibit 1

Your Customers' Problems Are *Your* Problems

Your customers affect your sales, accounts receivable, cash, inventory purchases, allocation of overhead, and eventually the company's profits. They also are the basis of the company's projections of cash inflow and outflow, projections you rely on to make important operating and financial decisions. It pays to know your customers and keep informed of their purchasing activity and bill-paying status.

> *Remember:* With a 10% operating margin, a $10,000 receivable writeoff is equivalent to $100,000 in lost sales ($10,000 writeoff divided by 10%). If your profit margin is 5%, it's worse. You will need $200,000 additional sales to replace $10,000 of bad receivables.
>
> *The Lesson:* Look at receivable losses in terms of the additional sales revenue you will need to make up for the loss.

Yes, monitor your accounts receivable, but do much more than that. Be able to project the impact on your business if the customer behind each overdue receivable is no longer part of your business. Better yet, try to identify customers with problems *before* their accounts become overdue and their orders decline or cease entirely.

Here are some common signs of problems that other businesses have used in setting up an early-warning system on customers. *The trouble signs:*

- When contacted regarding payment, the customer complains that the product or service which was delivered weeks earlier doesn't meet specifications.
- You get inquiries from other suppliers and lenders about this customer and questions on his or her credit history.
- The average order size placed with you by this customer declines sharply.

- You can't reach the owner.

- Your salespeople report that the customer has fewer employees, a key executive has left, the facilities need repair work, and/or phone calls are not being returned.

- Customer has switched banks.

- You get post-dated checks or checks missing a signature.

- The invoice is said to be lost or in error. ("Please send another one."). Or, you are told that payment was mailed. ("Let's wait a week to see if the check clears and then I'll issue another one.")

- The customer's bookkeeper doesn't return your calls. Worse, he or she is no longer employed by your customer.

- You get a partial payment on due-in-full invoices.

- The customer formerly took discounts for payment within 10 days, but doesn't anymore.

- The customer's major customer is in financial trouble.

A bad receivable means more than lost cash. It also means one less customer and lower sales and profits for your company. ☐

Part Two — **Six Pricing Examples**

Pricing Your Products To Increase Sales and Profits

- **Steps in Pricing an Order**
- **Contribution Profit Analysis**
- **Basics of Breakeven Analysis**
- **Adjusting Fixed and Variable Costs**
- **Pricing Volume Orders**
- **The Make-or-Buy Decision**

Cost/Pricing Tools to Maximize Sales and Profits

Six Cost/Pricing Decisions

1. Basic new product analysis.
2. Introducing a new product.
3. Adjusting fixed and variable costs.
4. Expanding your marketing.
5. Pricing volume orders.
6. The make-or-buy decision.

Using the calculations in this Part Two will help you make better pricing and expansion decisions.

Back to the fundamentals and using those fundamentals to increase your company's sales and profits. Computers have their place, but many times you can't beat hand-written cost and pricing analysis to identify key cost components in a new or existing product and to use that cost information to project sales and profitability.

Here are six examples to help you do just that. *The applications of such an analysis are many* — use it in pricing a new product or volume orders, increasing advertising expenditures, adding salespeople, expanding the company's facilities, or making the purchase-or-make decision.

Work through the questions and mathematics; instinctively, you may already be using such an approach, but this will be a good exercise to make sure you're not overlooking any cost components or pricing opportunities.

Steps in Pricing an Order

- **Step #1.** Obtain all relevant cost and pricing data, including the company's current fixed and variable costs.

- **Step #2.** Analyze your pricing and orders (both small and large orders). Include incremental (additional) costs associated with each order. Be sure to adjust for any additional fixed costs.

- **Step #3.** Determine the minimum selling price and potential profit by preparing a condensed profit and loss statement *only* on the new order(s).

There are critical pricing and expansion decisions faced at one time or another by every business executive. As a start, we will review two simple tools that can make these decisions much easier — and a successful outcome a lot more probable. The tools are *breakeven analysis* and *contribution profit analysis.* The combination of both pricing tools can be used to maximize sales and assure profits in all types of businesses, including service businesses.

Breakeven analysis will help you decide what sales and expense balance is needed to show a zero profit and loss. Obviously, that breakeven point is a starting point in any analysis of the affordability and potential profitability of any business venture. *Contribution profit analysis* shows you how to analyze sales and costs to make more money.

Some Basic Terms to Know

Breakeven in sales is determined by this formula:

$$\text{Breakeven} = \frac{\text{Fixed Costs + Zero Profit}}{\text{Contribution Margin}}$$

Fixed Costs: Production and operational costs that remain the same in dollar amount even when the number of units produced varies. *Example:* Rent.

Variable Costs: Costs that change in dollar amount as quantities (units) increase or decrease. *Example:* Materials used and sales commissions.

Contribution Profit Margin: Percentage of sales dollar that is needed to cover fixed costs. The formula is sales less variable costs divided by sales. *Example:* $18 selling price less $10 variable cost equals $8 contribution profit; $8 divided by $18 equals 44% contribution profit margin.

With breakeven and contribution profit analysis, you can compute how much *incremental* sales are needed to cover *incremental* costs. Then, you can determine what you can expect as a profit if you increase sales or the number of units by a given volume or quantity.

Problem #1: New Product Analysis

You have a good idea for a new product. *The main question:* Based on the projected costs, can you make a profit? Let's assume the following data:

- Fixed costs are $100,000.
- The product has a 40% contribution profit margin (or conversely, a 60% variable cost).

Based on that data, what volume of sales is needed to break even? Using the breakeven formula on the top of this page:

$$\text{Breakeven} = \frac{\$100{,}000 + \text{Zero Profit}}{40\%}$$

Breakeven = $250,000 Sales

A further increase in sales by $300,000 would increase profits by $120,000 ($300,000 sales times 40% contribution margin). It's that simple; the profit is $120,000 since all the fixed costs were covered by the first $250,000 in sales. Below is an illustration of what happens when sales increase above the breakeven point of $250,000:

	$250,000 in Sales	$550,000 in Sales
Sales	$250,000	$550,000
Less: Variable Costs (60%)	150,000	330,000
Contribution Profit (40%)	$100,000	$220,000
Less: Fixed Costs	100,000	100,000
Profit	$ 0	$120,000

This basic cost-volume-profit analysis can be used to determine whether or not a company should: (a) eliminate variable costs in favor of fixed costs, (b) increase certain fixed costs, or (c) increase variable costs. This will be discussed later in Problem #3.

Problem #2: Introducing a New Product

Let's review an already-established business that wants to introduce a new product (Q). Each unit of Q will sell for $6 with a variable cost of $4.20. In addition, your salespeople will receive a 10% commission on each unit sold and fixed costs on the new product will be $36,000.

Question. What is the breakeven point in sales dollars and units? Using the breakeven formula presented earlier, you can calculate the following:

Sales	$6.00
Variable Costs:	
Production ($4.20)	
10% Commission ($0.60)	-4.80
Contribution Profit	$1.20
Contribution Profit Margin	20%

Thus, your breakeven in sales and units is:

$$BE = \frac{\$36{,}000 + \text{Zero Profit}}{.20}$$

BE = $180,000 in Sales

BE = $180,000 divided by $6 per Unit

BE = 30,000 in Units

Problem #3: Adjusting Fixed and Variable Costs

Questions. What would happen if you eliminated the 10% sales commission in the example above for a fixed additional salary of $30,000 for a new salesperson? Would this be a desirable change and what would be the impact on your breakeven? What you are doing here is determining the bottom-line impact on profits of adjusting your various cost components.

In this Problem #3, fixed expenses would increase to $66,000 ($36,000 plus $30,000 for the new salesperson) and the contribution margin would now be 30% ($6.00 selling price less $4.20 variable production costs equals $1.80; $1.80 divided by $6.00 equals 30%). Based on this input, the breakeven is now:

$$BE = \frac{\$66{,}000 + \text{Zero Profit}}{.30}$$

BE = $220,000 in Sales

BE = $220,000 divided by $6 Selling Price

BE = 36,667 in Units

Because of the increase in the fixed expenses to $66,000, the number of units sold to reach breakeven has to increase by 6,667 (36,667 *less* the breakeven of 30,000 units in Problem #2 on the prior page). Although the contribution margin increased 10 percentage points (from 20% to 30%), this increase was not enough to cover the $30,000 increase in fixed expenses.

Bottom line: Additional units of 6,667 need to be sold to justify hiring the new salesperson.

Problem #4: Expanding Your Marketing

Question. Again, you're deciding if an additional investment in a product or activity is justified by its profit potential. You think sales of Product Q would increase to $600,000 if you started advertising it more heavily. Again, using the same cost data presented in Problem #2 (i.e., profit contribution of 20% and fixed costs of $36,000), by what amount can advertising costs (noted as Y) be increased while still earning a desired profit of 10% on sales? *Note:* The total sales desired is $600,000, which is 100,000 units times $6.

Your Desired Sales with a 10% Profit Margin =

(1) $$\frac{\text{Fixed Costs + Y + Desired Profit}}{\text{Contribution Profit Margin}}$$

(2) $$\$600{,}000 = \frac{\$36{,}000 + Y + 10\%}{.20}$$

(3) $$\$600{,}000 = \frac{\$36{,}000 + Y + \$60{,}000}{.20}$$

(4) $120,000 ($600,000 ÷ .20) = $96,000 + Y

(5) Y = $24,000

Advertising expenditures could be increased by $24,000 to reach your desired sales of $600,000 and still maintain your profit margin of 10%. If the sales are attained, here is your income statement.

Product Q
Income Statement

Sales (100,000 Units x $6)		$600,000
Less: Variable Expenses		
Production ($4.20 per Unit)	$420,000	
10% Commission ($0.60 per Unit)	60,000	-480,000
Contribution Profit (20%)		$120,000
Less: Fixed Expenses		-36,000
Less: Increase in Advertising Costs		-24,000
Profits (10%)		$ 60,000

Problem #5: Pricing Volume Orders

Now, what if you'd like to manufacture your basic product (Q) with a special attachment for a new customer? The new customer will purchase 30,000 units if the price is right.

Question. What is the lowest price that can be charged to the new customer for this product using the $4.80 variable costs presented in Problem #2 (top of page 19), and the additional cost related to the new product?

Answer. To manufacture the same product with the special attachment will cost $18,000 in additional fixed administrative/production costs, and 20 cents per

unit for the attachment. Your factory has a capacity of 400,000 units per year. In addition, you will not have to pay the usual 10% sales commission since this customer approached the company directly. Based on this new cost data, the following can be computed:

Basic Cost Data

Selling Price per Unit (100%)	$6.00
Variable Costs per Unit (70%)	-4.20
Contribution Profit (30%)	$1.80

Analysis of New Order

Incremental Costs:	
30,000 Units x ($4.20 + $0.20)*	$132,000
Increased Fixed Expenses	18,000
Total Incremental Costs	$150,000
Incremental Costs per Unit	$5.00

* Variable costs of $4.20 plus additional costs of $0.20 for attachment.

Thus, the *minimum* selling price you need to charge to cover your costs is $5 per unit, which is 16 2/3% below your current selling price of $6 for the product *without* the attachment. *Note:* If you want your usual 10% profit margin, the minimum selling price would be $5.55 ($5.00 divided by 90%, which would give you a profit of $0.55 per unit).

An easier way to compute. *Analyze "differences."* The new order will cost you $6,000 additional variable costs (30,000 times $0.20) plus $18,000 additional fixed costs. The total of $24,000 divided by 30,000 units equals $0.80 per unit. This $0.80 per unit cost, when added to your base variable cost of $4.20, equals $5.00 total added costs per unit, which is your breakeven or minimum selling price.

Problem #6: The Make-or-Buy Decision

Your company is now selling 200,000 units of Product Q.

A special component for each unit is being purchased from an outside supplier, which currently costs you $0.30 per unit ($60,000 annually). If you manufacture the part yourself, your fixed costs will increase by $27,000 ($15,000 is for new equipment) and your variable costs per unit to manufacture the product will be $0.15.

Question #1. How many units must you sell to break even?

Answer. Since the supplier is now charging you $0.30 per unit and your variable cost per unit will be $0.15, the contribution margin is 50% and the contribution profit is $0.15 (current cost of $0.30 less $0.15 variable cost). Thus, your breakeven to manufacture the part yourself is:

$$\text{Breakeven} = \frac{\text{Incremental Fixed Costs}}{\text{Incremental Profit Contribution}}$$

$$= \$27{,}000 \text{ divided by } \$0.15 \ (\$0.30 - \$0.15)$$

$$= 180{,}000 \text{ Units}$$

Question #2. What is your profit at the 250,000-unit level, which is 70,000 units above your breakeven level of 180,000 units?

Answer. The profit is computed as follows: (units needed less breakeven unit figure) times your incremental profit contribution of $0.15 per unit.

$$\begin{aligned} \text{Profit} &= (250{,}000 - 180{,}000) \times \$0.15 \\ &= 70{,}000 \times \$0.15 \\ &= \$10{,}500 \end{aligned}$$

The additional profit of $10,500 you would make at the 250,000-level does not necessarily mean you should make the component yourself. There are other considerations, including the fact that:

- you may now have a good source of supply who is responsible for on-time delivery and quality work, and
- the increase in fixed expenses of $27,000 associated with making the product in-house can be used in other ways to increase sales and profits, e.g., the increased advertising expenditures in Problem #4 on page 20.

Other considerations: Production in other areas of the company may be slow and you're looking for work to keep employees busy and avoid lay-offs. Also, your current supplier's quality standards may have slipped recently or late deliveries have upset your production schedules.

Observation: As your use of the components increases above the breakeven point, of course, your "profit" from bringing their production in-house does also. Let's see what happens when you use (manufacture and sell) 400,000 components a year (rather than 200,000).

Profit = (400,000 - 180,000 Breakeven) x $0.15
= 220,000 x $0.15
= $33,000 in Additional Profit

Summary: Get used to using pricing and contribution margin analysis routinely. It has many other applications. It will provide valuable information when: (a) deciding on the pricing of existing and new products, (b) changing your company's cost structure, (c) expanding your market by acquisition, (d) quoting a price for large-volume orders, (e) making the produce-or-buy decision, and (f) justifying the hiring of additional salespeople or use of manufacturers' reps to increase sales.

The calculations will help you to see quickly which expansions and pricing decisions are completely impractical; that way, you can spend more time devising strategies that are more certain to increase your sales and profits. □

About *The Business Library*

This **Report** is part of *The Business Library* (TBL), a collection of 90 Reports and Manuals on subjects of critical importance to business owners, executives, their families, and the professionals who advise them. TBL is produced by an editorial and research staff with an *average experience* of **28** years in helping businesses and individuals manage their finances better.

The company was formed in 1974 by Thomas J. Martin. Martin has written more than 900 articles and advisories and presented *hundreds* of workshops and seminars to *thousands* of business owners and executives on many of the subjects covered in *The Business Library*. He is an Investment Banker and an expert witness in Valuation and Succession Court Cases. He has helped *hundreds* of business owners and executives raise capital, refinance debt, prepare for succession, and value and sell their businesses.

The information in *The Business Library* has helped more than 300,000 business owners, executives, entrepreneurs, investors, and individuals manage their companies and finances better, using several million copies of our reports, manuals, advisories, books, seminar workbooks, and newsletters to guide them in their business and family planning.

Tricia Walsh, Publishing Director
The Business Library
16 Fox Lane, Locust Valley, NY 11560
516-671-8050 • Fax: 516-671-8077
E-mail: triciawalsh@yourbusinesslibrary.com

Copyright and Publishing Notice