Costs And Revenues Signal Capital Needs (IW Growing Companies, May 1998 issue, page 22)

We've all heard of an entrepreneurial venture with triple-digit annual sales growth. The factory cannot keep up with demand. The business is awash in excess positive cash flow. The company invests millions of dollars to expand and soon becomes a major market player. But this scenario is not typical of all emerging growth firms. In fact, rapid growth may not always be good business; without sufficient growth capital, cost structures can increase and profits can be eliminated.

The typical small- to medium-size manufacturing firm doesn't revolutionize an industry or ride an endless wave of increasing profitability. If you hope for rapid growth for your company, learn to properly plan for it. Many manufacturers think about expansion only after they reach maximum output or maximum market penetration, but there are several problems with this reasoning. It will take far more time than you can imagine to:

- Expand manufacturing assets and capacity. The transition to new facilities and equipment requires a carefully orchestrated productioncapability strategy.
- Revive neglected markets, further develop existing markets, or initiate entirely new markets.
- Upgrade technology. Converting old systems to new platforms and new applications to existing processes will be labor-, stress-, and timeintensive.
- Locate and secure funding of new investment capital to pay for all of the above.

What you need is lead-time to successfully manage growth. You can't spot growth on Friday and implement expansion plans by Monday morning. There

are reliable ways to figure out when it's time to start planning for growth and assess the positive and negative impacts to your firm. Learn to recognize the basic signals of imminent growth.

The first signals involve watching changes in costs and revenues. Harken back to microeconomics in college. Remember marginal cost and marginal revenue? These aren't theory but practical, highly effective measures of business performance. And they're easy to calculate and monitor over time.

Marginal cost is the change in total cost for producing each additional unit of your product. This drops dramatically when a facility first ramps up. It bottoms out when your firm is at its most efficient level of operations, but then begins to rise when growth forces you to squeeze additional output beyond what you're set up to handle. Extra shifts, emergency orders, overtime pay, using subcontractors, and leasing additional manufacturing or warehouse space all push marginal cost higher in order to meet the growth in new orders.

Marginal revenue is the change in revenue from selling one more unit. It drops over time as firms continue market penetration. With more distributors and new market entry, pricing structures can drop significantly due to volume discounts, trade credit, and dealing with larger buyers. As long as marginal revenue is greater than marginal cost, firms will continue to produce at a growing or steady profit margin. When marginal revenue drops faster than marginal cost, or when marginal cost begins to rise, profit margins will begin to narrow and eventually disappear.

When you produce more units, marginal cost for extra output often increases at a faster rate than revenue growth. Many firms continue to pursue sales growth unaware that marginal cost has become greater than

marginal revenue. That's like spending \$150 to make a product that you sell for \$99.95. And larger payables on upfront labor and material costs also can drain working capital, because new receivables might be pushed back for several months.

Provided you recognize early where your costs and revenues are headed, you will have built in the lead-time necessary for securing growth capital and rolling out a well-timed expansion plan. That, in turn, will allow you to shift marginal cost lower, accommodate increased production, and maintain profitability.