

Planning for Growth

Don't let a surge in business take you by surprise: Use last year's sales to predict this year's volume.

by Peter Feinmann

Last January, I ran a help-wanted ad for a carpenter, and was amazed at the high quality of the applicants. During the interviews, I also discovered that most of these carpenters were applying to only a few companies. This surprised me a little because, even though I didn't yet have a lot of work lined up, I knew I was going to have my biggest year ever. I also knew that if I waited to hire more help until May and June, when I would be swamped with work, the pickings would be slim. The lack of demand for the highly-qualified carpenters I was interviewing could only mean one thing: Other builders in my area didn't yet know that their volume of business was going to be up over last year.

How did I know so early in the year that my volume would be higher? Most owners of small construction companies simply react to growth. Their annual dollar volume steadily increases because they continually take on more work than they can handle. But a rapid increase in dollar volume is the biggest trap a builder can fall into. Unplanned growth works for a while, but eventually it catches up with you.

I would rather manage my company's growth than simply react to market demand. So I use sales data from past years to predict how much future work I can reasonably expect. The advance notice enables me to plan an increase or decrease in my labor force, to redouble or reduce my marketing efforts, and to better manage my subcontractors.

pitfalls (see "Growing Pains"). But even if a company stays in the same market doing the same type of work at the same price, planning for increased or decreased volume is crucial. If a company's volume of work increases too rapidly, it becomes difficult to hire enough qualified help to maintain quality. More work also means more management time, and unless you plan for increased supervision, your efficiency on the site will suffer. Similarly, if a company's volume decreases unexpectedly, valuable employees may have to be laid off. A sudden drop in sales also

leaves little time to design and implement a marketing plan that will counteract the downturn.

Fortunately, all of these problems can be avoided by keeping track of monthly sales revenues, then calculating the ratio of monthly sales to total sales volume for the year. The dollar amounts will change from year to year, but the ratio is surprisingly constant. That historical ratio can then be used to predict the volume of future work.

I'm busy year-round, but in Massachusetts, where I live and work, winter is the slow season. So I use the months of

Monthly Volume Comparison								
	1991		1992		1993		1994	
	Revenue	%	Revenue	%	Revenue	%	Revenue	%
Jan	\$30,000	8	\$35,000	8	\$45,000	6	\$75,000	8
Feb	25,000	7	30,000	7	40,000	5	50,000	5
Mar	20,000	5	25,000	6	70,000	9	65,000	7
Apr	25,000	7	25,000	6	40,000	5	65,000	7
May	25,000	7	25,000	6	65,000	8	95,000	10
Jun	30,000	8	35,000	8	90,000	12	95,000	10
Jul	60,000	16	40,000	9	80,000	10	100,000	10
Aug	50,000	13	45,000	10	95,000	12	110,000	11
Sep	40,000	11	45,000	10	50,000	6	80,000	8
Oct	25,000	7	30,000	7	70,000	9	90,000	9
Nov	20,000	5	45,000	10	55,000	7	85,000	9
Dec	25,000	7	60,000	14	70,000	9	80,000	8
Total	\$375,000		\$440,000		\$770,000		\$990,000	

Figure 1. The author uses a spreadsheet to compare monthly and annual sales volume. The percentages show what proportion of annual volume occurs in a given month. The historical percentages can be compared with current sales figures to predict annual volume.

Revenue Ratio

Construction companies grow in many different ways, each of which has its own

Leads/Sales Comparison

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
LEADS	1991	8	22	9	18	10	17	12	10	10	20	20	8	164
	1992	17	5	13	14	12	7	11	7	18	14	9	8	135
	1993	6	6	8	13	10	8	6	5	16	8	11	8	105
	1994	8	15	17	12	14	11	13	12	16	14	16	10	158
BIDS	1991	9	10	5	13	8	7	5	7	7	11	15	8	105
	1992	8	3	10	5	8	7	6	8	7	7	8	8	85
	1993	2	3	4	6	8	3	5	4	4	12	9	8	68
	1994	3	4	7	8	7	2	2	5	4	10	3	8	63
SALES	1991	2	1	2	2	5	3	3	2	4	5	4	4	37
	1992	3	1	3	5	5	2	2	2	4	3	1	6	37
	1993	2	1	4	2	6	0	2	2	2	7	7	3	38
	1994	2	1	3	2	4	0	2	4	0	4	3	4	29

Figure 2. This spreadsheet keeps track of the number of leads received, the number of proposals made from those leads, and the number of contracts, or sales, actually signed each month. The historical figures can then be compared with the current rate of leads, bids, and sales.

January through March to plan for the coming summer and fall. I use sales data gathered in the first few months of the year to predict work volume for the other nine months of the building season.

The more historical data you have, the more accurate your predictions will be. I have been using a spreadsheet to keep close track of monthly sales volume since 1991 (see Figure 1). This enables me to use averages from several years to predict my total sales volume for the coming year. But you can perform the same calculations based only on your total volume for last year. As an example, let's use the amounts from Figure 1 to see how the system works. (All of these calculations can be done by hand, although a computer spreadsheet is faster and reduces errors.)

January 1993. My annual volume jumped from \$440,000 in 1992 to \$770,000 in 1993 — just the kind of growth spurt that catches many builders unprepared. The biggest increases in monthly volume for 1993 didn't come, however, until June, July, and August. If I had waited until the summer months to find additional carpenters and to line up a second tier of subcontractors, I would have been in serious trouble.

Fortunately, I was able to predict this increase in volume using a simple formula:

$$\frac{\text{Monthly Volume}}{\text{Annual Volume}} = \frac{\text{Percentage of}}{\text{Annual Volume}}$$

Using historical data from 1992, the ratio of January volume to annual volume is 8%:

$$\frac{\$35,000}{\$440,000} = .08, \text{ or } 8\%$$

In January of 1993, I used the figures from 1992 to predict total 1993 volume. In other words, I assumed that all things being equal, the ratio of monthly sales to annual sales would be about the same in 1993 as it was in 1992. Since January 1993 sales were \$45,000, I plugged this number into the formula to predict total 1993 volume. The equation is rearranged to solve for the unknown — this year's annual volume:

$$\frac{\$45,000}{.08} = \$562,500$$

So by the end of January 1993, I already had a good indication that my company would do more work than the year before.

February 1993. I performed the same calculations at the end of February, only this time I averaged the dollar amounts and percentages for both January and February:

$$\frac{\$42,500 (\text{Jan.-Feb. '93 Avg.})}{.075 (\text{Jan.-Feb. '92 Avg.})} = \$566,667$$

Again, the result confirmed that I

would be doing more business this year than last.

March 1993. The same calculation in March was a real eye-opener. Again I used averages, but this time I discovered I was on pace to nearly double my previous year's volume:

$$\frac{\$51,667 (\text{Jan.-Mar. '93 Avg.})}{.07 (\text{Jan.-Mar. '92 Avg.})} = \$738,100$$

The revenue ratio can be used by itself to predict annual sales volume. But it's not infallible. The more historical data you have, the more accurate your predictions will be. Instead of using average percentages for two or three months of a single year, for example, you can use averages from several years.

It's possible, however, that heavy sales in the early part of the year may skew the overall numbers. As a check against this kind of anomaly, I also check my historical record of job leads.

Tracking Leads

I use a lead sheet to track the number of people who call my company about possible projects. The information on the sheet helps me to decide which jobs to pursue, and which are not worth the effort (see "Selecting Quality Customers: The Art of Prequalification," 2/95). To make it easy to count leads, as well as to track the number of leads that progress to proposals and finally to sales, I use a preprinted triplicate form. The pink copy is filed in a folder labeled Leads; the yellow copy, in a folder labeled Proposals. When I eventually sign a contract, I file the white copy in a folder labeled Sales.

At the end of each month, I enter the total leads, proposals, and sales into another spreadsheet (Figure 2). I use this data to double-check my revenue ratios. For example, in January of 1993, I received six leads, for which I submitted two bids that led to two sales. Compared with 1992, these numbers were a little low, but the dollar volume was higher. I took this as a sign that my revenue ratio for January 1993 might be predicting a higher annual volume than was warranted. After all, the dollar value of the two contracts I signed in January could simply have been a little higher than

Growing Pains

A sudden increase in work volume is the most common problem for growing construction companies. But any kind of change can spell disaster if builders are caught unprepared. If you're company is growing in one of the following ways, be sure to plan for the problems you're likely to encounter.

Change in geographic territory.

Expanding the area you work in — even working in an unfamiliar part of town — means increased travel time and expenses for your employees and subcontractors. This will affect the job's budget and schedule. An unfamiliar building inspector may give you a hard time on details you thought were standard. And local suppliers may have higher prices and a delivery schedule that differs from what you expected. The same is true of local subcontractors you may have to use.

Also, the farther a job site is from your base of operations, the more difficult it will be to administrate. Communications will take longer and more misunderstandings will occur. You will also be less able to respond quickly to problems both during construction and after the work is complete.

Change in scope of work. An interior remodeler who takes on a room addition, for example, will have to deal with excavators and concrete subs for the first time. New materials and procedures may also require employee training and increased supervision.

Change in job size.

On large jobs, payments are spread out over longer periods of time, creating cash-flow problems. The long delay between rough-in and finish also causes scheduling problems for subcontractors. Scheduling is also a problem on smaller jobs. A small delay in material delivery, or the inability to get your own personnel and subcontractors to the site can seriously upset your plans — and your clients.

Change in source of work. A design-build contractor will need to develop a new set of administrative skills the first time out on an architect-designed

project. Having to deal with a third party upsets the familiar flow of communicating directly with the owner. Similarly, working for state and local governments often means working with a third party, and introduces a new set of requirements for documentation and inspections. The same is true of insurance work.

Change in type of client.

A contractor accustomed to tight budgets may have trouble adjusting to high-end clients, who often have higher expectations and require more service. Your subcontractors may not be accustomed to the standard of quality required on higher-priced jobs.

Likewise, a contractor who does mostly high-end work may have trouble taking on value-priced jobs. Labor costs, for example, may break the budget because employees are accustomed to working to a higher standard.

— P.F.

usual. If the number of leads I was getting was lower, larger contract amounts might not make up for the difference and my volume might end up lower than predicted.

February's lead figures confirmed, however, that my revenue ratio was probably correct. I took in six leads, sent out three bids, and signed one job — right on target compared with averages for previous years. In March, I took in fewer leads and sent out fewer proposals than in previous years, but I also signed a higher percentage of contracts. These numbers indicated that if the rest of 1993 followed the same pattern, I would indeed do the \$738,000 worth of work my revenue ratio predicted.

Working Smart

Why bother to keep track of all these numbers? Accurately predicting annual volume helps me make smart management decisions concerning

personnel (both in the field and in the office) and subcontractors. Instead of getting caught short-handed during the summer of 1993, I hired more carpenters and a part-time bookkeeper before the end of April. Not only did I have my pick of high-quality people, but I had plenty of time to train them. The predicted increase in work volume also prompted me to start looking for backup subs in all trades. When the summer crunch came, I already had commitments from subs who would otherwise have been too busy working for other builders to attend to my jobs.

Knowing how much work my company will be doing also helps me manage my marketing budget. In 1990, for example, I used a large part of my budget to buy a booth at a local home show. Of the leads I got at the show, three ended up as signed contracts, and I more than recouped my marketing money. But early in 1993, my leads were strong, and

I already knew that my company would almost double the volume of work performed in 1992. There was no reason for me to spend money on the home show.

My lead sheets also tell me where my leads come from. Over the years, I've discovered that 88% of my work comes from past clients and referrals from past clients. As long as the number of leads I get each month falls within historical totals, I know I don't need to explore new markets. Instead, I concentrate my marketing efforts on past clients. The payoff is clear from the sales volume for 1994 in Figure 1. My business has grown in predictable ways, and very little of the time and money I spend marketing, estimating, and selling is wasted. ■

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