

I'm a carpenter turned remodeling contractor. I know carpentry best, but when necessary I can also do some wiring, plumbing, painting, and plastering, among other specialties. Nevertheless, I subcontract those and other trades, because my subs can do them better and more cost-effectively.

There's one job, however, that I've never subbed out during the eight years I've been in business: bookkeeping and accounting. I'm not especially skilled or talented in this area, and doing it myself doesn't save me money. But I've found that to really know what's going on in my business from week to week, I'm best off crunching the numbers myself. Keeping and analyzing my own books enables me to spot trends and react to them quickly, both within a job and in my business as a whole; to see which individual activities make money and which lose it, and why; and to gain an intuitive understanding of how my business works. This has given me much greater control, and, I believe, probably kept me from going under in the worst days of the latest recession.

My number crunching has fallen into two fairly distinct categories: basic bookkeeping, or recording of basic financial data; and the use of analytical accounting tools.

### The Basic Books

The routine bookkeeping is mainly a matter of recording transactions and printing the simplest reports. This information lays the groundwork for the more complex, analytical tools I use. I update the basic bookkeeping data daily, weekly, monthly, and at the end of each job. I'll describe these more mundane procedures quickly. They include:

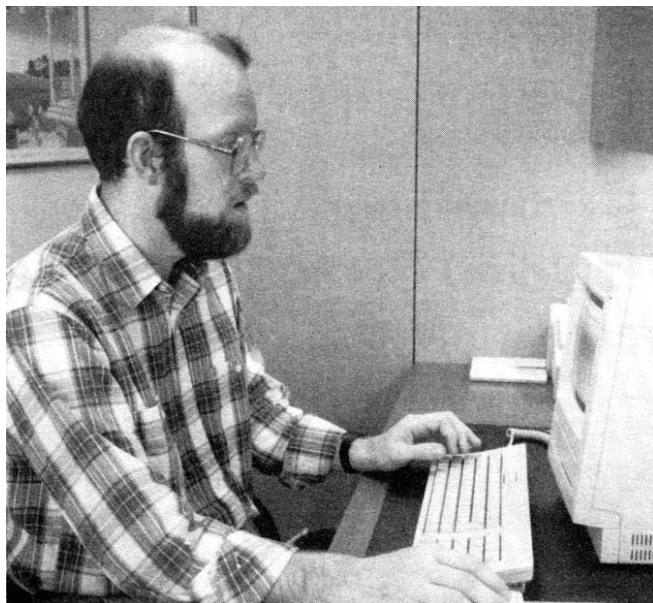
**Income and expenses.** Every morning I record the previous day's accrued debits and credits.

**Payroll.** I do this the easy way: I use a payroll service and direct deposit. The service also automatically submits my quarterly tax payments.

**Billing.** At the end of each week, I prepare and mail any bills payable

# WHY I KEEP MY OWN BOOKS

by Paul Eldrenkamp



## CRUNCHING HIS OWN NUMBERS CAN GIVE A REMODELER INSIGHTS HE CAN'T GET FROM AN OUTSIDE ACCOUNTANT

the following week. Then I can collect at the next weekly client meeting.

**Cash-flow projection.** This is computed weekly. It projects how my bank balance should fare over the next 30 days, based on expected receipts and expenses.

**Profit-and-loss statement.** This standard bookkeeping report shows

profit or loss for the month. This p&l statement includes both the actual and budgeted expenses and income and a balance sheet showing my company's net value.

### Analytical Tools

Along with this fairly routine bookkeeping, I also do some of the basic accounting reports to keep

things on budget, as well as more analytical reports and ratios that reveal how my company is doing. Some of these are fairly standard, either in business in general or in construction. A few are things that probably aren't unique, but which I've developed myself to suit the way I do business. It is these tools that have proved most valuable, and which I don't think I would have developed if I didn't keep my own books.

### Job-Cost Accounting

This provides a crucial check to keep jobs within budget and estimates accurate. Every week on big jobs, and at job's end on small jobs, I record the material costs (from invoices) and labor costs (from time cards showing how much time my workers spent on each construction category) of each job by estimating category. I also compare actual to budgeted expenses for each category (see Figure 1). I plug these figures into a spreadsheet template that also includes the original estimate. This lets me crank out quick compare-to-budget reports at any stage of the job, so I can spot cost overruns early.

The final job-cost accounting report for each job includes unit costs for the project: what it cost per lineal foot of foundation, per square foot of wall framing, per window, and so on (see Figure 2). This information allows me to update our unit-cost estimating database frequently and quickly.

I also do monthly compare-to-budget reports for overhead expenses, to keep them in line.

### Labor Budget Analysis

I've found that budgeting and accounting for our time, particularly our production time, has been the key to increasing the profitability of our jobs.

I have only three employees, all carpenters. Obviously, production is their main job, and most of their time is budgeted to it. But because the two lead carpenters (Lisa Jablonski and Dick Galyon, two of the best) inevitably do some warranty work, project management,

Weekly Job-Cost Accounting Report

Stimson																									
Porch Restoration																									
Week ending 9/20/91																									
	Dick		Lisa		Labor		Mat's		Subs		Total		Total		Total										
	week	actual	budget	week	actual	budget	week	actual	budget	week	actual	budget	week	actual	budget	variance									
Demolition and disposal		0.00	0.00		17.00	8.00	0	407	192		0	0		700	750	0	1,107	942	-166						
New footings		3.00	0.00		17.00	4.00	0	479	96		271	300		250	600	0	1,000	996	-5						
New framing		27.00	32.00		35.00	32.00	0	1,485	1,533		1,004	852		0	0	0	2,489	2,385	-104						
New decking		20.00	16.00		15.25	20.00	0	844	862		2,189	1,990		0	0	0	3,033	2,852	-181						
Railing & column repair	15.00	15.00	25.00	22.50	22.50	26.00	898	898	1,221	186	225	400		0	0	0	1,084	1,123	1,621	498					
Primer & preservative		0.00	4.00		9.50	8.00	0	228	287		144	75		0	0	0	372	362	-9						
<b>Totals</b>		<b>15.00</b>	<b>65.00</b>		<b>77.00</b>	<b>22.50</b>		<b>116.25</b>	<b>98.00</b>		<b>898</b>	<b>4,341</b>	<b>4,191</b>		<b>186</b>	<b>3,834</b>	<b>3,617</b>		<b>0</b>	<b>950</b>	<b>1,350</b>	<b>1,084</b>	<b>9,125</b>	<b>9,158</b>	<b>33</b>

Figure 1. The weekly job-cost report uses information from time cards and invoices to compute weekly and cumulative costs by category. Comparing budgeted amounts to actual costs provides an easy check against cost overruns.

## Final Job-Cost Accounting Report

Stimson Porch Restoration								
Final unit costing update								
	Labor	Mat'l's	Subs	Total	Unit	Qty	Unit cost total	Unit cost labor
Demolition and disposal	407	0	700	1,107	sq.ft	720	1.54	0.57
New footings	479	271	250	1,000	ea.	18	55.58	26.61
New framing	1,485	1,004		2,489	sq.ft.	720	3.46	2.06
New decking	844	2,189		3,033	sq.ft.	720	4.21	1.17
Railing & column repair	898	225		1,123	ln.ft.	110	10.21	8.16
Primer & preservative	228	144		372	sq.ft.	720	0.52	0.32
<b>Totals</b>	<b>4,341</b>	<b>3,834</b>	<b>950</b>	<b>9,125</b>		<b>720</b>	<b>12.67</b>	<b>6.03</b>

Figure 2. The final unit-cost update for a job summarizes the information compiled in the weekly job-cost reports. The resulting unit costs for labor, material, and subs help the author update his unit-cost price book.

## Profit Analysis Report

Lead #	Type of job	Sales hours invested in project	Total production hours	Final gross profit	Final gross profit per production hour	Final gross profit per sales hour	Final gross profit margin
90 033	Porch	13.00	189.25	\$9,995	\$52.81	\$768.85	69.92%
90 036	Energy upgrade	4.00	10.00	\$512	\$51.20	\$128.00	14.97%
90 037	Bathroom, laundry	14.00	156.25	\$4,698	\$30.07	\$335.57	47.29%
90 038	Porch	8.00	166.00	\$7,156	\$43.11	\$894.50	65.33%
90 040	Bathroom	7.25	108.75	\$4,661	\$42.86	\$642.90	46.31%
90 041	Window replacement	5.25	47.25	\$2,526	\$53.46	\$481.14	27.16%
90 043	Cabinets or trim	9.25	136.00	\$6,593	\$48.48	\$712.76	41.24%
90 051	Bathroom	17.25	138.25	\$5,363	\$38.79	\$310.90	33.75%
90 051	Deck	11.75	165.25	\$4,735	\$28.65	\$402.98	49.50%
90 052	Bathroom	3.00	45.75	\$1,055	\$23.06	\$351.67	50.24%
90 058	General cosmetic upgrade	21.75	105.75	\$6,277	\$59.36	\$288.60	41.27%
90 063	Porch	4.50	5.00	\$500	\$100.00	\$111.11	20.00%
91 009	Repair	4.00	11.00	\$1,539	\$139.91	\$384.75	40.31%

Figure 3. This report shows each job's profit margin and gross profit per production hour. The latter number, the author has found, is the key to meeting his profit goals. These two profit indicators don't necessarily move together. For instance, the window replacement job (Lead 90.041) produced a gross profit of only 27%, but a profit per production hour of \$53.46 — well above the author's target that year of around \$40 per production hour — making the job a winner. One of the bathrooms, however, Lead 90.052, brought a 50% gross profit margin but only \$23.06 gross profit per production hour — a relative loser.

and administrative tasks, we budget a few of their hours to those categories as well.

My own time is budgeted more widely: 30% sales, 25% production, 6% warranty and marketing, and so on. I spend just over 8% of my time on bookkeeping and accounting functions.

So that we can hit these targets, everyone gives me weekly time cards showing not only the hours they spend on each production category, but also any time spent doing administrative or warranty work. Once I plug this information into my computer, I can do weekly, monthly, quarterly, and annual reports showing the time everyone spent on the various categories.

More importantly, I can use this labor category information to figure some crucial ratios: profit per production hour and profit per sales hour (see Figure 3).

**Profit per production hour.** This is the single most important ratio I calculate, and has led to some of the most profitable changes I've made in my company.

At year's beginning, I project our expected number of production hours (roughly 1,750 production hours per full-time production worker) and our expected gross income. From those I figure the

gross profit per production hour needed to generate a gross profit margin of 33%. For instance, with the three employees I had this past year, and myself putting in 25% of my time in production, we figured to log about 5,700 production hours. I was projecting around \$700,000 in business. To make sure that 33% of the \$700,000 (\$231,000) was gross profit, we needed to make a gross profit per production hour of about \$40 ( $\$231,000 \div 5,700$ ). Pricing to generate that gross profit puts us toward the top of what our market will bear; but pricing lower robs me of the safety provided by the 33% gross profit margin.

To see if a given job is worth doing, then, I can compare its expected gross profit per production hour to our goal. For example: If I mark up a \$1,000, 40-hour job 50% to \$1,500 (a job that's all labor), the gross profit is  $\$500 \div 40$ , or \$12.50 per hour. A larger job, in which we put in 500 of our own hours but gross \$25,000, would give us \$50 of gross profit per production hour ( $\$25,000 \div 500$ ).

Knowing this, I've learned to price jobs more strategically, and to use our time carefully. For instance, I've learned to raise our markup considerably on small jobs that are

labor-intensive, because we found we were making little money per hour on those.

The lesson here is that a straight percentage markup for all jobs doesn't work. We've found that on jobs that demanded a lot of our own time, particularly in areas other than framing or finish carpentry, we tended to make little per production hour, and needed higher markups. On jobs where we subbed

out a lot, we could use smaller markups and make the same profit. That's why we've gone from doing just about everything ourselves to doing mainly framing and finish work — the carpentry tasks we're really good at. Subs do most everything else.

This ratio also provides a clear basis for comparing different types and sizes of jobs. It tells me in clear numbers what I knew only instinctively before: that we made little profit on smaller jobs. Now, when I price those with a much higher profit margin, I know I'm doing it for solid business reasons, not just to avoid what seems like a hassle.

**Gross profit per sales hour.** I also figure gross profit per sales hour: a job's gross profit divided by the amount of time I spend pitching it, from first call to signed contract. This tells me where my sales hours are most profitably spent, which is (not surprisingly) larger jobs.

This has also made me fairly gunshy about design/build jobs when I have to sell the design to get the job. I've found that to hit my profit target on design work, I need to charge close to what architects do. But I don't feel comfortable doing this, because I'm not a trained designer. So I've started to pass the design on to a designer or architect to come up with the specs.

I rarely use profit-per-sales-hour figures to actually help me set prices, however. That would be attaching too much importance to these hours, which are relatively few. It's mostly a qualifying tool. It gives me the strength to say no.

**Warranty hours per project.** This tells me which types of projects produce the most warranty work. If one type stands out, I can look closer to see if it's a matter of our abilities there, or an inherent part of the job. Depending on what I find, I might fix something we're doing wrong, raise prices for that

## Getting Started On Your Numbers

The realistic strategy to developing your own bookkeeping system is to keep it simple enough that you actually use it. If you don't job cost or track overhead at all now, you might start by tracking just three job cost categories (labor, materials, and subcontractors) for each job and see how your actual expenses compare to budgeted expenses in those areas. At the same time, budget and track all overhead as one category, doing budget comparisons once a month.

If even this pared-down

approach proves too much, then just track production expenses and overhead. Once you get comfortable with this, you can refine the system, breaking production and overhead into their various components for estimating, job-costing, and planning. The key is to set goals you can actually meet, or you'll keep slipping up. In other words, as Skeeter Coleman, songwriter turned remodeler, once told me, eat the elephant bite by bite and eventually it's gone.

—P.E.

type of job, or tend to avoid it when possible.

### **Getting Crunched By Your Own Numbers**

You run risks crunching your own numbers, and some of them are deadly.

**The cash-basis trap.** When you don't adequately account for upcoming expenses, it's easy to spend money that you'll desperately need later. This is a common mistake when you use, as I did until recently, a single-entry, cash-basis system of accounting. In that system, the general ledger, like your checkbook, tallies only monies actually received or paid out. Accounts receivable and payable are kept in separate ledgers, divorced from the rest of the books.

Unfortunately, having your accrued receipts and payments separated from your main books makes it easy to think that you're doing well just because you have money in the bank, or that you're doing poorly because your balance is low. (The former is not necessarily true, whereas the latter usually is.) In reality, a business's health is tied as much, if not more, to accrued sales and expenditures as to those already realized.

To avoid this cash-basis trap, I recently switched to double-entry, accrual accounting. This not only provides an automatic check on your entries (the "double-entry" aspect), but integrates accrued incomes and expenses into the general ledger. This lets me see what's

down the road, rather than just in the rear-view mirror.

**The learning curve.** I have had to learn by doing. This is a slow, inefficient process, which sometimes produces mistakes.

**The discipline thing.** Because I'm slow, I have on occasion let the bookkeeping slide. This means I may not spot problems, such as an unusual but avoidable cost overrun, soon enough to mitigate them. Such lack of foresight and basic financial data has sunk many a small contractor.

### **Be Nimble, Be Quick**

Despite these drawbacks, I feel doing my own books has greatly improved my ability to control my business. Being right on top of the numbers means I can spot financial trouble early in a job, and react to it quickly enough to save the profit. And I have gained important insights into the financial dynamics of my business — from big things like realizing we had to sub more things out, to little things like discovering one way of hanging joists was faster than another.

It may be possible to get this sort of perspective and quick-response time with the help of a skilled bookkeeper and a sharp accountant who truly understands a contractor's unique needs. But I find doing it myself more rewarding. ■

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