

## CHAPTER 18

# BUDGETING

### IN THIS CHAPTER

- The uses of budgeting
- Types of budgets
- Budgeting methods
- Preparing an annual budget
- Working with budgets

### INTRODUCTION

Budgets are an integral part of your business plan and financing proposals. Lenders and investors will not provide financing without reviewing your budgets.

In a well-run business, budgets also guide purchasing, scheduling, marketing and personnel decisions. Note that the operative word here is “guide,” rather than “control.” The budgeting process involves educated guesswork, not absolute accuracy.

Budgets also help you get to know your business inside and out. When preparing budgets, you must look at every aspect of your business. The more knowledgeable you are, the better equipped you’ll be to avoid problems, deal with unexpected calamities, and seize opportunities.

Beyond that, the budgeting process reveals opportunities to reduce costs, improve your products and increase your efficiency. It draws your attention away from the daily routine of doing work and focuses your attention on how the work is actually done.

### THE USES OF BUDGETING

The primary purpose of budgeting is to allocate resources wisely, based on an informed estimate of revenue and expenses. A good budget prevents your business from

spending more than it earns, but it also prevents you from sitting on cash that you could be using to grow. Whether your goal is to expand into a new market or upgrade your office equipment, the decision-making process should always start with budgeting.

### Identifying Variances

It’s often said that financial statement analysis doesn’t give answers, it raises questions. The same is true when comparing budgeted costs to actual costs. Suppose your budgeted labor costs were \$140,000, but the actual figure was \$152,000. That would leave you with a variance of \$12,000 and an obvious question: “Why did we go over budget?”

Maybe a special order came in and you had to add workers to get it out on time. Or maybe labor costs were higher because you introduced a new process. Whatever the case, this knowledge can help you improve your planning process.

Analyzing variances can also allow you to assess the performance of departments or employees. This is called **responsibility accounting**. When you associate business costs and activities with the employees or departments responsible for them, you can pinpoint unproductive behavior and help employees to improve. However, you should



*The primary purpose of budgeting is to allocate resources wisely.*

always explore variances thoroughly before fixing blame and conduct performance evaluations in a positive manner. Punishment might motivate your employees temporarily, but the possibility of a reward is better in the long run.

## Benchmarking

Benchmarking means comparing your business's performance, plans or processes with those of other firms in your industry. It's an excellent way of charting your progress toward your business goals. It's also a way to figure out which areas of your business are performing best and which need to be improved or eliminated.

## Encouraging Good Behavior

Budgets can make employees aware of your business goals and establish responsibility for those goals. Suppose you promised your salespeople a bonus if sales exceed the budgeted amount. If you set the target too low, your staff will believe they can easily meet it and will have little incentive to work hard. If the target is too high, they may decide it's impossible and give up without trying. A good budget aims for ambitious but achievable profit goals. Tying employee rewards to these goals can be a powerful incentive not just to work harder, but also to buy in to the budgeting process.

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If anyone had asked me and Chloe if we budgeted last year, we would've said yes. And we wouldn't have been wrong, exactly. We did look at what was coming in and what was going out, and we tried to make sensible plans around it.

But it didn't work out very well. Things usually didn't turn out as we expected, so we didn't put much faith in the process. And naturally, we didn't make a lot of time for it, especially when we were getting slammed by a big job. Why would we? It didn't seem like a priority. It's only now that

we understand that we got lousy results because we were creating lousy budgets.

Like most worthwhile things—including cooking—you only get out what you're willing to put in. And we weren't willing to put in very much at first.

*Peek's Creek Catering was founded by Chloe Erhenberg and Jason Spears just over a year ago. They specialize in "Epicurean adventures"—meals prepared in a variety of ethnic styles, using organic and sustainably harvested ingredients. Their best-selling dishes are Pan-Asian feasts combining plates of curries, barbecued satay, vegetable tempura and steamed dumplings. They prepare these dishes with a unique flair, incorporating their favorite influences from French and Cajun cuisine.*

*Chloe and Jason lease a commercial space from another local business, Louisa's Jams, which owns a large combined kitchen and warehouse facility near the Artist's District.*

*Fortunately, this arrangement also gives them access to the accounting expertise of Louisa's daughter, Anne.*

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## What Makes a Good Budgeting System?

- **Employee involvement.** Budgets that come from the top, with no input from employees, are likely to meet resistance and to be inaccurate. An inclusive process increases acceptance and benefits from the expertise and day-to-day experience of your employees.
- **Relevance.** A budget should fit the needs of your business and be no more complicated than necessary. Anything that's vital to business operations should be included. A single budget may be adequate during startup, but as you grow, you will probably need to create individual budgets for crucial areas like marketing and sales.



*A good budget aims for ambitious but achievable profit goals.*

- **Regularity.** Employees get frustrated when they put lots of time and energy into the budgeting process, only to see the completed budget gather dust on a shelf. Also, failing to budget consistently makes it much harder to evaluate budgeted and actual cash flows.
- **Consistency.** Ideally, your budgets should use standard forms and terminology and follow standard practices. This will make it easier for outside users—such as lenders—to understand and evaluate them. Using budgeting software will help to ensure that you follow best practices.
- **Documenting assumptions.** Budgeting involves making assumptions about the future. Your budget documents these assumptions and explains them to your employees, your banker and other partners.
- **Ease of use.** Budgeting should entail a minimum of disruption to everyday business processes. Otherwise, employees may see it as an obstacle to getting more important work done. Budgeting software can simplify this process.
- **Flexibility.** Budgets for small businesses can't be carved in stone; they need to adapt to changing conditions, both good and bad. A new opportunity might require an increase in the budget, while a downturn in sales may require cuts. Good budgeters understand the art of compromise. They also know that they will inevitably get some details wrong. When that happens, they learn from the mistake, adjust the budget as needed, and keep moving forward.

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Last winter, Chloe and I were totally overwhelmed with jobs. In terms of orders, it was our best season ever. But for some crazy reason, it seemed like we weren't making any money. It wasn't just our

imagination, either. We looked over our income statement and cash flow with Anne, and we could see that we'd lost \$700 in November and almost \$1,000 in December.

It was so weird. I mean, we knew we'd done much more business in December than November. So how on earth could that translate into bigger losses?

*To answer that question, Anne suggested that they review their pricing and budgeting procedures. It turned out that when Peek's Creek Catering bid for a job, they consistently underestimated their prep and cleanup time. Usually, Chloe simply added a few extra hours to arrive at a total number of billable hours. Then, she'd calculate the total cost of the food and combine the amounts to arrive at a flat fee.*

*Peek's Creek Catering bought most of their ingredients from local farmers and butchers, and they often negotiated bulk rates. But if they needed special cuts of meat or seafood, they had to order in advance and pay more. And sometimes, they'd end up rushing to the local gourmet food store to get supplies they'd forgotten or run out of. Chloe rarely incorporated these costs into her estimates.*

*Unfortunately, costs like these tended to come up a lot more often when business was good. The busier Peek's Creek Catering got, the more forethought and organization went out the window.*

*Anne asked Chloe and Jason how they incorporated overhead into their bids.*

*"Overhead? You mean like rent and stuff?"*

*"Yeah. How do you allocate those costs in your bids?"*

*"We figure that just comes out of our hourly fee," Chloe said. "We don't make any special provisions to cover things like that. It seems too complicated and messy."*

*Anne rubbed her forehead and poured herself another cup of coffee. "We're in for a long morning," she thought.*

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## TYPES OF BUDGETS

### Master Budget

The master budget contains all the budgets prepared by various departments in your business. These budgets fall into two basic categories:

- **Operating budgets** include sales forecasts, cost of goods sold and operating expenses.
- **Financial budgets** include cash budgets, capital expenditure budgets, and projected financial statements.

### Sales Forecast

Earlier, you determined a pricing strategy. Now, you need to estimate how many units you can sell at that price. This estimate is typically based on a combination of your recent sales history and an ambitious but attainable estimate of future sales.

Gathering sales data may be a simple matter of reviewing your records, but it can be complicated to look at data by product or product line unless you've designed your recordkeeping system to give you this information.

An alternative method is to multiply your total sales by your product mix ratio. For example, suppose you estimate that 65 percent of your sales normally come from your first product line, 20 percent from a second line, and 15 percent from a third. These percentages provide a rough estimate of sales history by product. You should use percentages of sales dollars to do this. You can also use an industry average; we discussed sources of these averages previously.

When forecasting sales, pay close attention to past trends in the industry and your business. You may relate a past trend to what was happening in your marketplace and learn something valuable for the future. If you find a trend that you don't expect to be repeated, you shouldn't use it.

If your product is seasonal, your forecasts should reflect this. Knowing your product's position in its life cycle is also very helpful when forecasting sales. If you're introducing a totally new product, you'll have to make an educated guess based on a similar product in a similar market.

### Cost of Goods Sold Budget

Cost of goods sold reflects the cost to your business of the products it sells. It includes the following elements:

- **Direct labor** is the total cost of the direct labor hours required to produce a desired number of products. If you plan to make 500 bookshelves next year, and each shelf requires three hours of direct labor, and the average hourly cost of that labor is \$10, then your budget forecast for direct labor would be  $(500 \times 3) \times \$10$ , or \$15,000.
- **Direct materials** are the inputs that must be purchased, over a specific period, to meet your production goals. Although the basic calculation is *cost of direct materials per unit x units to be produced*, it's complicated by the need to take inventory levels into account. Normally, some amount of direct materials will come from your beginning inventory (e.g., your last quarter's ending inventory). And you will also want to have inventory on hand at the end of the production cycle, so that it will be ready for the next cycle. Therefore, the calculation becomes: *(cost of direct materials per unit x units to be produced) + cost of direct materials in desired ending inventory - cost of direct materials in beginning inventory*.
- **Overhead** is the indirect cost of producing goods. It includes fixed costs like rent and variable costs like electricity. Variable overhead is multiplied by the total number of units to be produced, and fixed overhead is added to that total. (Again, fixed costs

*When forecasting sales, pay close attention to past trends in the industry and your business.*

remain the same no matter how much you sell, while variable costs change with sales volume.)

When calculating the cost of direct materials, retailers and wholesalers should check supplier catalogs or recent invoices for per-unit cost information. Alternatively, you can contact your suppliers and ask for quotes. The per-unit cost should be reduced to reflect any cash or quantity discounts, and increased by freight charges. In short, use the net amount you expect to pay.

### Operating Expenses Budget

This budget estimates the total costs incurred through running your business, such as salaries, wages, utilities, rent, fuel, insurance, fees for outside services, and depreciation. Usually, the budget breaks these costs down by category and by whether they are fixed or variable.

If you're already up and running, much of this information will come from your financial statements. Otherwise, you'll have to make a thorough list of fixed and variable operating expenses and estimate their total cost over the budget period.

### Cash Budget

This budget shows expected cash inflows and outflows, and is often called **cash flow projections**. This is a crucial management tool that enables you to anticipate and avoid cash shortages, while also helping you to put cash surpluses to work.

Obviously, predicting cash flow is not an exact science. However, looking at past data makes it much more than mere guesswork. For example, if you know that your sales are higher in summer and lower in winter, that knowledge will help you to predict seasonal sales levels and—if necessary—to identify borrowing needs. The more consistently you complete a cash budget, the more accurate your future predictions will be. Smart entrepreneurs prepare monthly cash budgets

so they can analyze variances between budgeted and actual amounts, and make improvements as needed. We will discuss the process of completing a cash budget in Chapter 19 *Cash Flow Management*.

### Capital Expenditures Budget

This budget details the planned acquisition of capital assets such as land, buildings and major equipment. Forecasting the costs associated with these long-term assets helps you determine whether acquisition is feasible. The major issue is whether your business will earn enough revenues to cover planned capital expenditures as well as other expenses. If not, you will either need to seek debt or equity financing, find a less expensive asset, or postpone the acquisition altogether.

### Projected Financial Statements

These include a projected income statement, balance sheet, and cash flow statement. These are prepared in the same way as current financial statements; the only difference is that they use the forecasted numbers from your budgets. Together, they show the estimated net income for the budget period.

## BUDGETING METHODS

There are two basic approaches to budgeting:

- **Static budgets** are prepared for a fixed period, during which they do not change. The main benefit of this approach is that it makes it easier to analyze variances. At the end of the budget period, it's very easy to compare budgeted with actual results. On the negative side, a static budget can easily become outdated because it doesn't reflect new threats, challenges and opportunities. This makes it less useful as a planning tool.

- **Flexible budgets** are rolling budgets that typically look ahead for one year. The main advantage of this method is its flexibility and responsiveness to changing conditions. However, getting good results requires more managerial attention than static budgeting, which may make it unfeasible for some businesses.



## Historical Data

In most cases, your previous year's sales figures provide the best basis for forecasting future sales. By looking at your past performance, and weighing it against current opportunities and threats—e.g., new competitors or an economic downturn—you should be able to develop realistic sales and profit targets.

Having done so, it becomes possible to forecast costs, production and so forth. For example, business expenses can be expressed as a percentage of sales. By looking at these percentages, you can estimate the amount you will have to spend to generate a targeted level of sales: If expenses normally account for about 25 percent of sales, it's logical to assume that this ratio will hold true in the future, provided nothing else has changed.

If you're a startup, you won't have sales figures. Instead, you will have to base your sales and profit goals on a realistic assessment of your target market and the sales patterns of similar businesses in your area. You may also be able to find useful industry data for small firms in your sector.

## Financial Ratios

Financial ratios provide a method of checking your budgets against reality. For example, you might first use the gross profit margin ratio to check whether your budgeted activities will generate enough revenue to cover expenses and earn a profit. If it will, you might then check whether

the level of profit predicted is realistic for a business like yours.

## Industry Ratios

Like financial ratios, industry ratios provide a reality check. Are your predictions in line with what other businesses in your industry have achieved? If they're well below the industry average, you might consider whether you're being too conservative in your estimates. If they're well above the average, they may be too optimistic.

As an example, you might base your marketing budget on industry ratios. If marketing typically accounts for 9 percent of expenses for a company like yours, and you've only budgeted 3 percent for marketing, you can consider whether to increase the number to be in line with industry standards.

## PREPARING AN ANNUAL BUDGET

To see how the previous elements fit together, let's go through the process of creating a simplified annual budget for a small manufacturing business.

Pat, the owner of Pat's Machine Shop, needs to develop a cash flow projection for her business. She starts with her first-quarter sales forecast, because all other budgets are driven by forecasted sales.

## Sales Forecast

The sales forecast tells Pat how many units she must make to meet her projected market demand. From there, she can use this information to calculate how much she must spend to make them; this includes buying raw materials, paying workers and covering overhead costs. Once Pat has these numbers, she can forecast her cash flow.

Pat doesn't want to be too optimistic when forecasting sales; she usually prefers to overestimate expenses and understate revenues. But she knows that overly

## Pat's Machine Shop: First-Quarter Sales Forecast

	January	February	March	Total
<b>PRODUCT 1</b>				
Units sold	30	40	50	120
Price per unit	\$300	\$300	\$300	\$300
<b>TOTAL</b>	<b>\$9,000</b>	<b>\$12,000</b>	<b>\$15,000</b>	<b>\$36,000</b>
<b>PRODUCT 2</b>				
Units sold	70	70	80	220
Price per unit	\$500	\$500	\$500	\$500
<b>TOTAL</b>	<b>\$35,000</b>	<b>\$35,000</b>	<b>\$40,000</b>	<b>\$110,000</b>
<b>PRODUCT 3</b>				
Units sold	2	2	2	6
Price per unit	\$3,000	\$3,000	\$3,000	\$3,000
<b>TOTAL</b>	<b>\$6,000</b>	<b>\$6,000</b>	<b>\$6,000</b>	<b>\$18,000</b>
<b>TOTAL SALES</b>	<b>\$50,000</b>	<b>\$53,000</b>	<b>\$61,000</b>	<b>\$164,000</b>

conservative sales forecasts can cause problems, too. For example, they might lead her to order too little inventory or hire too few workers.

Pat sells on a cash basis, meaning that she accepts cash or checks only. If this were not the case, Pat would have to factor in the discount rate she paid to the bank on her credit card sales. Then, she would add the actual cash she received each month from accounts receivable, instead of the sales amount. As you can see, Pat's sales forecast is very simple. Yours is likely to be more complicated.

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Anne didn't have to talk to us for very long to figure out that we really didn't have any sort of formal budgeting system in place. To the extent that we had one at all, it was pretty random. The numbers were sloppy, and there wasn't much consistency. At one point, I apologized for not having finished more budgets, and Anne told me it was just as well I hadn't wasted my time on a flawed process. Budgets aren't magic, she told us. If you don't know what you're doing, a budget is probably not going to help you.

*Chloe and Jason were starting to feel very discouraged. But Anne pointed out that they had lots of business, high visibility in the area and great online reviews. With proper budgeting and pricing, they could easily be profitable.*

Anne gathered the following information about Peek's Creek Catering:

- *Their business is strongly seasonal. They generate 65 percent of their total revenue during the peak holiday season between November and December. Most of the remainder was earned in June and July, when marriages were common and many people entertained at their summer houses in the Hudson Valley.*
- *When catering for 20 or more people, they hired a helper at \$15 per hour.*
- *Roughly 25 percent of their food costs came from last-minute trips to the gourmet shop.*
- *For the past three seasons, they had underestimated projected sales by at least 40 percent. This explained their last-minute shopping for supplies and their feeling of never having enough time to plan for personnel needs or supplies.*
- *Over the same period, they had overestimated their projected sales for January and February by at least 30 percent. They also failed to account for the higher cost of produce during these months, and*

*for the higher utility costs for heating their space.*

*In total, Anne found that Peek's Creek Catering had been underestimating their costs by as much as 15 percent.*

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## Cost of Goods Sold Budget

As we noted earlier, manufacturers incur three costs for the units they produce: **direct materials**, **direct labor** and **overhead**. There are many ways to incorporate these costs into the cost of goods sold budget. In the simplified example below, Pat's Machine Shop has included only direct materials. Labor and overhead costs have been forecast separately and are included in the operating expenses budget.

This simple presentation doesn't follow the accounting technique known as "full absorption costing," which includes all three manufacturing costs in the cost per unit. But Pat is using these budgets internally, so the simpler version works for her purposes.

Manufacturers normally have three types of inventory: **raw materials**, **work in process** and **finished goods**. Pat has chosen to ignore this, because her jobs are relatively short and the amount of work in process is never very large. If her costs were tied up in work in process for a long time, this would affect her cash flow projections and her cost of goods sold budget would reflect this.

Note that Pat assumes her expenses will be on a cash basis, which means she will not receive credit from her suppliers.

## Operating Expenses Budget

Pat's next step is to budget her operating expenses. Again, she assumes her expenses will be on a cash basis; she will not have accounts payable or other accrual expenses.

Pat has divided her costs into labor and non-labor, but you can use any categories that make sense for your business.

It's often helpful to have additional schedules supporting the amounts listed in this budget. For example, Pat might have a schedule giving the details of occupancy costs.

## Cash Flow Projections

When combined, the sales forecast, cost of goods sold budget and operating expenses budget lead to the cash flow projections.

As a result of this cash flow projection, Pat knows that her initial cash position must be at least \$6,575 to cover her anticipated first-quarter cash shortfall.

Pat would complete her annual budget by projecting quarters 2, 3 and 4, and then combining all four quarters.

## Projected Financial Statements

The projected income statement, balance sheet and cash flow statement are prepared as previously described, and are not included as examples here.

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*A perfect example of Peekskill Catering's difficulties was a Thanksgiving dinner they catered for a party of 12. When Chloe wrote up the invoice for the event, she estimated her costs as follows:*

- 10 hours of work time @ \$20 per hour
- \$250 in food costs
- \$350 for wine and other beverages

*When Anne worked with her, reviewing receipts and overhead expenses, they found that her actual costs were:*

- 20 hours of work time (3 hours of research, menu planning and client management; 10 hours of prep and shopping; 7 hours of cooking and cleanup)



### Pat's Machine Shop: Cost of Goods Sold Budget

	January	February	March	Total
<b>PRODUCT 1</b>				
Units sold	30	40	50	120
Price per unit	\$45	\$45	\$45	\$45
<b>TOTAL</b>	<b>\$1,350</b>	<b>\$1,800</b>	<b>\$2,250</b>	<b>\$5,400</b>
<b>PRODUCT 2</b>				
Units sold	70	70	80	220
Price per unit	\$150	\$150	\$150	\$150
<b>TOTAL</b>	<b>\$10,500</b>	<b>\$10,500</b>	<b>\$12,000</b>	<b>\$33,000</b>
<b>PRODUCT 3</b>				
Units sold	2	2	2	6
Price per unit	\$300	\$300	\$300	\$300
<b>TOTAL</b>	<b>\$600</b>	<b>\$600</b>	<b>\$600</b>	<b>\$1,800</b>
<b>TOTAL COST</b>	<b>\$12,450</b>	<b>\$12,900</b>	<b>\$14,850</b>	<b>\$40,200</b>

### Pat's Machine Shop: Operating Expenses Budget

	January	February	March	Total
<b>LABOR</b>				
Salaries and wages	\$30,000	\$30,000	\$30,000	\$90,000
Payroll taxes and benefits	\$8,695	\$8,695	\$8,695	\$26,085
<b>TOTAL LABOR</b>	<b>\$38,695</b>	<b>\$38,695</b>	<b>\$38,695</b>	<b>\$116,085</b>
<b>NON-LABOR</b>				
Occupancy costs	\$3,355	\$3,480	\$3,355	\$10,190
Outside services	\$650	\$650	\$650	\$1,950
Insurance	\$200	—	—	\$200
Advertising	\$300	\$1,050	\$300	\$1,650
Miscellaneous	\$100	\$100	\$100	\$300
<b>TOTAL NON-LABOR</b>	<b>\$4,605</b>	<b>\$5,280</b>	<b>\$4,405</b>	<b>\$14,290</b>

### Pat's Machine Shop: First-Quarter Cash Flow Projection

	January	February	March	Total
Total Product/Service Sales	\$50,000	\$53,000	\$61,000	\$164,000
Total Product/Service CGS	12,450	12,900	14,850	40,200
Total Labor Expense	38,695	38,695	38,695	116,085
Total Non-Labor Expense	4,605	5,280	4,405	14,290
<b>NET CASH FLOW</b>	<b>-\$5,750</b>	<b>-\$3,875</b>	<b>3,050</b>	<b>-6,575</b>

- \$288 in food costs, including special orders and last-minute runs to the gourmet store
- \$350 for wine and beverages
- \$40 in overhead expenses (including rent, kitchen supplies, utilities, gas, insurance, and taxes), calculated as a percentage of the number of hours spent in the kitchen

Anne broke it all down for us, and much as we wanted to, we couldn't argue with the numbers. We were wasting an unbelievable lot of money and time, especially on bigger jobs. The whole time we'd been thinking we were undercharging our clients. And yeah, to an extent we were. But that mainly had to do with overhead. Most of the expenses that sucked up our profits were totally avoidable. That was great news, because we'd been wondering how we'd raise prices enough to start turning a profit without chasing away all our customers. Anne's cost breakdown showed us that our price wasn't that big of a problem; it just needed a little tweaking here and there. The main thing was for us to stop being so disorganized and wasteful.

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*The more detail your budgets have, the more feedback you'll get.*

## WORKING WITH BUDGETS

You can use budgets to prepare **performance reports** that compare budgeted amounts to actual results. In many cases, performance reports for the business as a whole are sufficient. However, if your business is organized by product line or by department (e.g., sales, production, and marketing)—or if you have more than one location—you should prepare multiple reports. The more detail you have, the more feedback you'll get.

When complex organizations prepare performance reports, they usually start at the bottom of the business and work up. Each report rolls into another report until you get to the report that shows the business as a whole.

Let's assume that Pat has organized her sales staff into regional offices. The salespeople in each region report to a regional director, who reports in turn to the marketing manager at the main office. Pat prepares monthly performance reports by region and in total.

The reports for January include the following:

### Sales Performance Report for January

Total Sales	Budget	Actual	Variance (Over/Under)
Region 1	\$10,000	\$12,000	\$2,000
Region 2	\$25,000	\$24,000	(\$1,000)
Region 3	\$15,000	\$16,500	\$1,500
<b>Total Sales</b>	<b>\$50,000</b>	<b>\$52,500</b>	<b>\$2,500</b>

### Sales Performance Report for January

Region 2	Budget	Actual	Variance (Over/Under)
Salesperson 1	\$15,000	\$12,000	(\$3,000)
Salesperson 2	\$10,000	\$12,000	\$2,000
<b>Total Sales</b>	<b>\$25,000</b>	<b>\$24,000</b>	<b>(\$1,000)</b>

Notice that the budgeted and actual amounts in the Region 2 report match the figures listed in the *Total Sales* report above.

Allocation of costs that are common to all levels of the business can cause difficulties. For example, if Pat prepares performance reports by department, how should she handle the cost of the copy machine, the receptionist, or the other things all the departments use?

These costs can either be listed in a single performance report or allocated to various departments. If Pat doesn't allocate them and excludes them from all performance reports, no one will be checking these costs to see if they're in line with the budget.

Again, it's important to investigate the cause of variances before jumping to

## Pat's Machine Shop: Performance Report for January

Region 2	January Budget	January Actual	Variance (Over / Under)
<b>COST OF GOODS SOLD</b>			
<b>Product 1</b>			
Units Sold	30	42	
Cost per Unit	\$45	\$40	
<b>Total Cost</b>	<b>\$1,350</b>	<b>\$1,680</b>	<b>\$330</b>
<b>Product 2</b>			
Units Sold	70	65	
Cost per Unit	\$150	\$157	
<b>Total Cost</b>	<b>\$10,500</b>	<b>\$10,205</b>	<b>(\$295)</b>
<b>OPERATING EXPENSES</b>			
<b>Labor</b>			
Salaries & Wages	\$30,000	\$32,000	\$2,000

conclusions. It's easy to assume that all expenses over budget are bad and all savings under budget are good. However, "bad" and "good" are determined by how well you're meeting your business objectives, as the above example shows.

At first glance, you might think something is wrong with Product 1, because January expenses were higher than budgeted. But notice that this excess occurred because Pat sold more units than she expected. In fact, Pat managed to *lower* her per-unit costs.

Is this a good thing? It depends on Pat's business objectives. Suppose her unit cost decreased because the purchasing manager bought lower-quality parts. If Pat's mission is to produce high-quality products, that could be a problem. But if her goal is to be the discount machine shop in the area, a lower cost is likely to be positive.

Often, variances are interconnected. Pat's report shows that in January, salaries and wages cost \$2,000 more than she budgeted. Why did this happen? Maybe using lower-quality parts caused serious problems that Pat's employees had to work overtime to fix, and their overtime pay wasn't anticipated in the budget. Or maybe Pat got an unexpected custom or rush job that required overtime hours.

This is a good point at which to consider the difference between productive and destructive expenses. Although it's common to think of expenses in a strictly negative sense, expenses that generate income are generally positive. If you had an unforeseen opportunity to make \$60 for every \$20 you spent, you'd probably feel good about it. If a profitable opportunity comes along, it may not make sense to fret about exceeding your budgeted numbers!

By contrast, unforeseen expenses resulting from the use of low-quality parts are destructive; they use up your resources without earning anything in return. When you look at variances, this is usually a good distinction to make.

As you can see, preparing a performance report is easy; figuring out what the report is telling you is much more challenging.

It usually isn't possible to evaluate every variance. Some businesses investigate all variances above a certain dollar amount, while others look at the relative size of the variance rather than the absolute dollar amount. A variance of more than 5 percent from budgeted dollars might be investigated, while a variance of only 0.5 percent might not be.

*Expenses that generate income are generally positive.*

*Variances that appear as patterns should always be examined, regardless of size.*

The problem is that some variances are caused by more than one phenomenon, so a small variance might be masking larger variances that balance each other out. Variances that appear as patterns should always be examined, regardless of size.

It's common to focus on costs that are higher than budgeted. But you also can learn a great deal when costs are under budget. In some cases, you can even use this information to improve your processes and products.

## Zero-Based Budgeting

Traditionally, budgets for existing businesses are based on past performance. If you spent \$1,000 on a given expense last year, you might assume that this cost will increase by 10 percent in the coming year.

**Zero-based budgeting** foregoes this process in favor of assessing every budget item in light of your mission, goals, objectives, resources, alternative options and current market conditions. As a simple example, rather than simply assuming your brochure printing costs will increase by 10 percent next year, zero-based budgeting might look at the savings achievable by creating PDF brochures for download. If digital brochures cost 70 percent less than print brochures, and will deliver the same or better results, then they're clearly a better option.

The aim of zero-based budgeting is to get away from business as usual and identify better options as they arise. Although it's more time consuming and complicated, it can pay for itself by reducing waste and inefficiency, increasing profitability, encouraging creative problem-solving, challenging groupthink, and building a culture of creative cost management.

## Performance Measures

Many companies utilize performance measures in addition to their master budgets. These measures focus attention on actions that drive operations. Often, these

data are not included in the accounting system; new procedures must be established to collect them. Machine downtime, customer orders received by day, number of product defects found, and work-in-process time might be tracked so that developing trends can be analyzed.

This helps you to evaluate your progress toward your objectives. Although objectives must be measurable, it doesn't always make sense to measure them in terms of dollars and cents. You can use whatever performance measures are meaningful to your business.

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*After a few meetings with Anne, Chloe and Jason adjusted their sales forecasts for the coming season, taking into account sales for the preceding three seasons. They calculated their total overhead expenses and budgeted them for each month of the next year's operations. Overhead increased during peak winter months when they had higher electric and gas costs.*

*They decided to allocate their overhead expenses to catering jobs based on a seven-month year of operations. They had so few jobs during the remaining five months that the business had to be able to generate its total annual income during peak months.*

*With better sales projections for the coming season, Peek's Creek Catering would be able to order the correct amount of supplies ahead of time. They could buy more supplies at lower bulk rates and make fewer trips to the pricey gourmet food shop. Because a certain amount of last-minute purchases were inevitable, they added a fixed percentage to their total supply costs to cover these expenses.*

*They also budgeted for kitchen supply needs like bowls, knives and aprons; hourly wages for kitchen and serving personnel; health coverage and insurance; and gas and maintenance for their truck.*

When Anne first started telling us about all the stuff we had to do, our heads were swimming. Chloe joked that maybe we should get out of catering and just go into accounting, since it seemed like that was all we'd have time for anymore. That's funny now, but at the time, it honestly did start to feel like we'd have to cook on the side in between budgeting. Maybe if we just ran a hot dog cart that would be no big deal, but given how much we loved to cook, we couldn't help questioning whether it was really worth it. It was like, if that's what it takes to run a business, then maybe we're in over our heads.

But as we got more familiar with the process, it was a lot less scary and took a lot less of our time. Anne created a simple spreadsheet for us, and once we got the hang of it, we had no trouble tracking costs and forecasting sales. She also helped us create a project management template—it was kind of like a glorified shopping list for each job, only with lots of bells and whistles that helped us to stay on schedule and under budget.

We worried that we'd have less time to do what we love, but of course we were wrong about that like we were wrong about budgets in general. What really happened was, we stopped running up and down the Hudson Valley like crazy people, having to hit 10 different stores because we hadn't planned ahead.

That gave us a lot more time for cooking, but it also gave us a lot more time to unwind and relax when work was done. So the way I see it, budgeting isn't just about

your business. It's also about your personal time and your quality of life. Ours has gotten a lot better, thanks to Anne.

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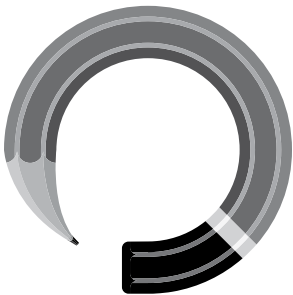
### Flexible Budgeting

A flexible budget includes a range of activity levels. For example, you might prepare the master budget three times, assuming sales of 50,000, 60,000 and 70,000 units.

Let's say Pat budgeted for sales of 2,800 units in March, but actual March sales totaled 3,200. Based on what we've seen so far, we'd expect Pat's actual cost of goods sold and labor to be higher than her budgeted cost. In fact, we'd expect a positive variance for *all* of Pat's variable expenses, because these costs typically rise with the amount of units sold.

The question then becomes: Is the actual cost greater than the budgeted cost by the amount you would expect? Flexible budgets can help answer this question, because they recast the original budget using actual sales volume as a base.

Next, we must compare the flexible budget to our actual results, so as to eliminate the overall change in sales volume from the variance analysis. It then becomes clear what happened to variable expenses, given the sales volume achieved.



Part of the January performance report for Pat's could be redone like this:

Region 2	January Budget	Flexible Budget	January Actual	Variance Over (Under)
COST OF GOODS SOLD				
Product 1				
Units Sold	30	42	42	
Price per Unit	\$45	\$45	\$40	
Total Sales	\$1,350	\$1,890	\$1,680	(\$210)
OPERATING EXPENSES				
Labor				
Salaries & Wages	\$30,000	\$30,000	\$32,000	\$2,000



## NxLevel® TECH TIP

BUSINESS RESOURCES AND THE WEB

### Budgeting and Benchmarking Tools

The following online tools can help you with budgeting, forecasting and benchmarking:

- **Mint** is a popular personal budgeting app that also has powerful small-business capabilities and functions. If you're new to budgeting, this is a good place to start. [www.mint.com](http://www.mint.com)
- **Deloitte** offers an interactive benchmarking tool that allows you to filter your search by industry, region and company size. You can also take a business survey and see how your business stacks up against Deloitte's global survey results. [www.planbudgetforecast.com/benchmark-tool](http://www.planbudgetforecast.com/benchmark-tool)
- **PlanGuru** is versatile business budgeting and forecasting software that focuses on the needs of entrepreneurial businesses. [www.planguru.com](http://www.planguru.com)

For Pat's—as for most businesses—cost of goods sold is a variable expense: It changes with sales volume. Here, the original budget is redone so that budgeted units sold match actual units sold. Actual sales volume is multiplied by budgeted cost per unit. This focuses on cost of goods rather than volume. The original performance report showed a variance of \$330 over budget, which is to be expected because sales volume was higher. But the flexible budget shows a variance of \$210 under budget. This means that given her sales volume, Pat had a lower cost of goods sold overall.

Notice that the original budgeted amount and the flexible budget for salaries and wages did not change. Pat pays her employees a salary plus overtime pay. Unless overtime occurs, this expense is fixed; it does not change with changes in sales volume. Thus, assuming no overtime pay, this expense is budgeted at \$30,000 no matter what level of sales is anticipated or achieved.

### Continuous Budgets

Continuous budgets are rolling budgets that typically look ahead for one year; as each month ends, a new month is added to create a budget for the next 12 months. However, some businesses prefer to have a quarterly continuous budget.

### CONCLUSION

If you've just finished reading this chapter for the first time, you're probably convinced that the budget process is impossibly difficult, confusing and time-consuming.

It's an understandable reaction. However, the benefits of budgeting infinitely outweigh the difficulty of learning how to do it. Without a budget, you don't have any benchmarks and no way to see if you are doing better or worse than expected. That's no way to run a business!

Once you've done a couple of budgets, you'll find that the process goes much more easily and quickly. You'll also find that the things you learn from budgeting are essential to maintaining smooth and profitable day-to-day operations.