

LEARNING MADE EASY



2nd Edition

Cost Accounting

for
dummies[®]
A Wiley Brand



Get to know the cost accounting fundamentals

Learn the difference between fixed and variable overhead

Get a grip on the most valuable field of accounting

Ken Boyd

Accounting expert, writer, speaker, and struggling guitar player



Cost Accounting

2nd Edition

by Ken Boyd

for
dummies[®]
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Cost Accounting For Dummies® 2nd Edition

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Introduction

The world needs accountants. People who know how to do accounting make the business world go round. Accountants analyze and report on every aspect of a business.

Cost accounting can be the most difficult accounting topic to grasp. This area has a unique language — a set of terms that differ quite a bit from other areas of accounting. Students and business owners may find cost accounting more challenging than other areas of accounting.

I wrote *Cost Accounting For Dummies* because your ability to understand this material has a huge payoff. Every business can be improved using cost accounting. The concepts help you to lower costs and increase profits. I'm passionate about helping you learn more about these critical topics.

About This Book

Some cost accounting books overwhelm you with dozens of complex topics. Not *Cost Accounting For Dummies*. Here, I focus on the really important topics that are used the most often. Accounting knowledge is meaningful when you can use it to solve a problem.

As a friend of mine once said, "It's hard to drink out of a fire hose," so I present the material in this book in an easy-to-read reference format. The book is logically divided into parts. Each part contains several chapters that are divided into readable "chunks" or sections. This system avoids blasting you with information. Instead, topics are introduced at a steady (but not overwhelming) rate, with concepts building on one another, making the reading (and understanding) easier.

The great thing about the book is that you decide where to start and what to read. It's a reference book. You can locate a topic in the table of contents or the index, read about it, and move on. Accountants love organization (most accountants place their pencils in order from shortest to longest). This book is organized to be a quick reference.

Foolish Assumptions

I had to make some assumptions about you, the reader. As I wrote the book, here's what I assumed:

- » You're someone who needs an easy-to-read overview of cost accounting. Also, you want to investigate the topics that are used the most often to solve problems. You may be reading this book while taking a cost accounting course, but a business owner who needs more cost accounting knowledge should also find value in reading it.
- » You're able to follow basic arithmetic and algebra. Many items you need to calculate appear in the form of equations. Accountants love to create an x or y variable and then solve for that variable, using an equation.
- » You have a beginner's-level knowledge of how a business works. You understand that sales less expenses equals profit. You're aware that a business needs to have capital (cash, equipment, and so forth) to operate.
- » You're willing to read, pause, and assess what you've read. Learning cost accounting takes some effort. It's not the sort of thing you can rush through. Whereas the text makes it easy to find information, it takes some effort to understand what you read. After you get it, you can use cost accounting to improve your business for years to come.

Icons Used in This Book

To make this book easier to read and simpler to use, I include some icons that can help you find and fathom key ideas and information.



TIP

This icon appears whenever an idea or item can help reinforce your understanding of a concept. A tip might make it easier to remember a topic.



REMEMBER

Any time you see this icon, you know the information that follows is so important that it's worth reading more than once.



WARNING

This icon flags information that's a big concern. Warnings critical to your business are tagged with this type of icon.



This icon appears next to information that's interesting but not essential. Don't be afraid to skip these paragraphs. But come back at a later date and check them out. They'll be waiting for you.

Beyond the Book

In addition to the abundance of information and guidance related to cost accounting that we provide in this book, you get access to even more help and information online at *Dummies.com*. Check out this book's online Cheat Sheet. Just go to *www.dummies.com* and search for "Cost Accounting For Dummies Cheat Sheet."

Where to Go from Here

This book is organized so that you can go wherever you want to find complete information. Want to know about product pricing, for example? Head to Chapter 12. If you've taken an accounting course or two, start at Chapter 3 with cost-volume-profit. You can use the table of contents to find broad categories of information or use the index to look up more specific topics.

If you're not sure where you want to go, you may want to start with Part 1. It gives you all the basic info you need to understand cost accounting and points to places where you can find more detailed information.

1

Understanding the Fundamentals of Costs

IN THIS PART . . .

So you're ready to learn all there is to know about cost accounting. You've come to the right place! Part 1 introduces cost accounting terms as well as some basic methods of analysis.

You compare cost accounting to other accounting methods and learn four important cost terms: direct costs, indirect costs, fixed costs, and variable costs.

You also find out about product and period costs, cost-volume-profit (CVP) analysis, and job costing. Process costing and the flow of manufacturing is also looked at.

- » Understanding accounting methods
- » Comparing cost accounting systems
- » Controlling your costs
- » Applying a price to your product
- » Mulling over quality issues

Chapter **1**

So You Want to Know about Cost Accounting

In a nutshell, *cost accounting* is the process of analyzing and planning what it costs to produce or supply a product or service. The analysis helps reduce costs — and possibly eliminate them. Lower costs, of course, allow for increased profits.

Business folks use cost accounting to determine the profitability of a product. The rule is simple: The price should cover the product cost and generate a profit. Competition may dictate the price charged for a product. In other instances, a profit is added to a product cost to create a unique price.

This chapter introduces cost accounting and how to compare and contrast cost accounting with other accounting methods. The chapter also explains how cost accounting can help you improve your business, such as by using pricing, budgeting, and other tools that can help you become more profitable.

Comparing Accounting Methods

Accounting is the process of recording, reporting, and analyzing business transactions. It's the written record of a business. *Cost accounting* is the process of capturing all the costs of "production," whether a business manufactures products, delivers services, or sells retail items. Cost accounting is used for all types of businesses.

Often, cost accounting overlaps with other types of accounting, such as financial accounting and management accounting. If you have some knowledge about these other areas of accounting, that background can help you understand cost accounting. If not, no big deal. This section helps clarify what cost accounting is, how it's used, and how these accounting methods relate.

Financial accounting is a reporting process. An accountant reports on the financial position of a firm and the firm's performance by creating financial statements. The statements are mainly used by external (outside) parties to show how the company is doing. External parties include *shareholders*, *creditors*, and *regulators*.

The external parties may not have an accounting background, so there are many rules of the road (and they are very specific) for creating financial statements. The rules exist so that each set of financial statements is standardized. If all companies follow the same set of rules to create financial statements, the information is usually comparable.

Financial accounting looks backward. It's *retrospective*. The accountant is creating financial statements for transactions that have already happened. So unlike cost accounting, financial accounting doesn't provide any planning or forecasting.

Your external users want financial statements on a periodic basis. Companies typically issue financial statements on a bi-annual, or annual basis. External users want to know how you're doing — for a variety of reasons.

Considering your shareholders

If you own a business, *shareholders* own shares of your company in the form of common stock. That also means that shareholders own *equity* in your business. You may pay them a share of company earnings as a *dividend*, or retain the earnings for use or investment in your business.

Shareholders are interested in seeing the value of the business increase. As your sales and earnings grow, your company is seen as more valuable. A shareholder reviews your financial statements to see if sales and earnings are increasing. If they are, your shareholder is happy — they may even buy more of your common stock.

As sales and earnings grow, other investors may be willing to pay a higher price for your common stock. An existing shareholder might then sell their investment in common stock for a gain.

Mulling over creditors

Creditors are lenders. They lend your company money so you can purchase assets, which help your business operate. Assets are defined as items you use to make money in your business, like machinery and equipment. You sign a loan agreement with a lender, and that agreement states the interest rate for the loan and when the loan payments are due. You pay *interest* on the loan and also repay the original amount borrowed — the *principal* amount.

Instead of a bank loan, you can issue debt directly to the public by selling *bonds*. The bond certificate states the terms of the bond. That document lists the interest rate and the *maturity date*. The bond investor is repaid on the maturity date.

A creditor is interested in your ability to pay the interest and repay the loan. Like a shareholder, a creditor wants to see a company that generates earnings and an increasing level of sales. If you create earnings, you eventually collect more cash than you spend. That additional cash pays the principal and interest on the loan.

Addressing concerns of regulators

Nearly every business falls under some sort of regulation. *Regulators* protect the public by enforcing laws and regulations. Part of that process involves reviewing your financial statements.

In addition to the “standard” set of financial reports (covered later in the book), regulators may require extra information from you. This specialized reporting is required to address a specific regulation or law. For example, if you’re a food manufacturer, the Food and Drug Administration (FDA) requires you to disclose food ingredients on a food label. That’s a form of specialized reporting for a regulator.

Using management accounting

Management accounting is the process of creating accurate and timely reports for managers. Managers use the reports to make decisions. There are many theories and accepted practices in management accounting for developing reports. Ultimately, management accounting uses the “whatever works” method to create reports. Any report that provides the best possible information to solve a problem is a good one.

Management accounting is an internal reporting process. The information you create isn't shared with the outside world. So you can put together any type of report that's helpful to you.



TIP

As an accountant, you may be in a situation in which management asks you to create lots of reports but doesn't *use* them all. Ask management how a report you're asked to create will be used. The manager might conclude that the report really isn't necessary — which saves you time and energy.

Financial accounting looks backward. You report on past events. Management accounting is *forward-looking*. It's *prospective*. You're using the reports to make decisions about the future. For example, a decision whether to manufacture a product component or buy it from someone else is a typical management decision based on management accounting.



TIP

Every manager has a preferred set of management reports, the ones they consider the most useful. I had a conversation with the retired chief financial officer (CFO) of a worldwide defense contractor. Engineers, including all senior management, dominated the company. The former CFO told me that he was successful because he figured out which financial management reports the engineers wanted. In fact, that set of reports was standardized and used in every senior management meeting.

Fitting in cost accounting

Cost accounting is closer to management accounting than financial accounting. Cost accountants gather information to make decisions about the *future*. Also, cost reports are considered to be internal reports. Both of those traits apply to management accounting.

You see overlap between cost and management accounting. A good example is special orders. A *special order* is an order you take on when you have excess production capacity. A customer approaches you about producing an “extra” order — an order you weren't expecting. You need to decide what price you will accept for the special order.

Management accounting instructs you to consider only the cost and revenues that *change*, based on your decision, called *differential* costs and revenues. That makes sense, because the method is forward-looking. Old, unchanging stuff generally doesn't count.

Your price for the special order depends on the costs. Reports you generate about costs help you make the decision to accept or reject the special order. If you're producing cost reporting, that sounds like cost accounting to me. So you see how cost and management accounting can overlap. There's more on special orders later.

Cost accounting sometimes uses historical information to start the analytical process. For example, when you plan your costs for next year, you take a look at spending in past years. Spending in prior year provides a starting point for planning costs — a baseline. The baseline is adjusted for all the foreseeable changes that might occur in the New Year. That helps you decide whether your budgeted costs should be higher or lower.

Using Cost Accounting to Your Advantage

Cost accounting runs through your entire business process. To begin, you decide whether the cost of obtaining the information is worth the benefit you receive from it. If you decide that it is, you use cost accounting to analyze your costs, make decisions, and look for cost reductions in your business.

Starting with cost-benefit analysis

The cost of obtaining information should be lower than the benefit you receive from your analysis. The cost includes labor hours and technology costs. For example, you need someone to search for the information. You also may need to create new cost reports in using your technology. The benefit of performing the analysis is the cost savings you're able to implement.

Say you manufacture dining room tables; you make five different models of tables. At one point in production, your staff sands the wooden tabletops by hand.

Until now, you haven't calculated the time required to sand each type of table. You take the total labor costs for sanding and trace them to each table, regardless of the model. Maybe you should do a cost analysis and assign the sanding cost to each table model.

You incur some costs to do the analysis. Someone on your staff will go through the employee time cards (used for payroll). The workers record the time they spend on all tasks, including sanding. They also record the table models they worked on during production. Your accountant can compute the total sanding time per table model, based on the time cards.

Consider what you might gain. You assign the sanding cost more precisely. As a result, each table model's total cost is more accurate. Because your profit is the sale price less the total costs, the updated cost allows you to calculate a more precise profit. Sounds like the cost of the analysis might be worth it, especially if the competition is high in your furniture-making industry.

Planning your work: Budgeting

Cost accounting plays a role in your budgeting process. You might think of budgeting as just forecasting sales and planning expenses. If you own a flower shop, you budget by forecasting sales of each type of flower or arrangement. You also plan expenses, such as utility costs for the shop and your lease payment.

Your work with cost accounting takes budgeting to a new level of detail. Until now, you looked at costs by *type* (utilities, lease expense). Now, you analyze cost by type and by *product* (for example, those roses need to be kept in a cooler, which requires electricity). Based on the product's costs and sale price, you can compute a profit.

So start off with an analysis of each product's cost, price, and profit. Build on that information. You could then put together a budget for each department. Finish up by combining all your smaller budgets into a company-wide budget. That company-wide budget will give you all the company's costs by type and your revenue total. You build your company-wide budget based on cost accounting by product.

By starting your budget at the product level, your budget is a lot more specific. When you compare your actual results to your budget, you'll see the differences in more detail. The detail lets you make more precise changes in your business going forward.

Controlling your costs

Cost accounting helps you stay on top of your costs — and make changes along the way. You should analyze costs frequently. Most companies perform this analysis on at least a monthly basis . . . and sometimes weekly or even daily. The more specific you make your analysis, the better. As always, the benefits you gain from your analysis should outweigh the costs.

If you analyze costs frequently, you find areas where you can reduce costs immediately. There's nothing worse than discovering a problem after it's too late to fix, so don't create a budget and shove it in a drawer. Review your actual results, and compare those results to your budget. If you find large differences, dig deeper. Consider reviewing more detail to find out what caused the difference.

Here are some tools you can use to control costs. Each tool is explained in detail in this book:

» **Cost-volume profit (CVP) analysis:** CVP is a simple tool to analyze costs, sale price, and units sold. There's a user-friendly formula — the kind of tool you

can play around with on a notepad or spreadsheet. Check out Chapter 3 for more on CVP.

- » **Variance analysis:** A *variance* is the difference between your planned costs and actual costs. A large variance is a red flag — a number that gets your attention. You investigate variances to find ways to reduce your costs. Chapter 7 tells you more.
- » **Activity-based costing (ABC):** This analysis allows you to assign costs using the activities put into making your product or service. ABC assigns costs to products based on levels of activity: labor hours incurred, machine hours used, and so forth. See Chapter 5 for an in-depth look.
- » **Support costs:** Nearly every business incurs *support costs*. These are areas of your business that support your production and sales efforts. Accounting and legal costs are good examples of support costs.
- » **Joint costing:** Your business may use the same process to produce several different products. This situation is called *joint production*. The products will share common costs of this production, or *joint costs*. Now, it's likely that each product has its own unique costs *after* joint production; however, you need a tool to allocate the joint costs when the products are produced together.

Setting a price

After you've nailed down your product's full cost (all costs, both fixed and variable), you can price your product effectively. The difference between your price and full product cost is your profit (see Chapter 12).

Pricing and competition

Consider how pricing comes into play. Your product's price may be limited, based on competition. Say you sell baseball gloves. To compete and maintain your current level of sales, you can't price your glove any higher than \$100.

To meet your profit goal, you start at the top and work your way down. The top is your \$100 price; you can't go any higher without losing sales. Your profit is sale price less cost. The only way to increase your profit is to lower your costs.

Increasing a price

Assume that you make a product that's unique. You don't have many competitors. As a result, customers are willing to pay more because they can't get the same product somewhere else.

To meet your profit goal, you start at the bottom and work your way up. You compute your full costs first. Then you calculate a sale price, based on your profit goal. You have the ability to push the top (the price) higher because you believe that customers are willing to pay a higher price.

Changing prices after more analysis

In the section “Controlling your costs,” you see a list of tools to analyze costs. You use the tools to assign costs to your products more precisely. When you change the costs assigned, you can consider changing the product’s price. That’s because a change in the product’s cost changes the level of profit.

For an example, let’s say that you sell hiking boots. In planning, you budget a sale price of \$80 per pair. During the year, you start performing cost analysis. You determine that \$5 more in machine production cost should be assigned to each pair of hiking boots.

That \$5 increase in cost lowers your profit. So you have a few choices to make to maintain the same level of profit. You could decide to raise your price. If you face heavy competition, a higher price may hurt your sales. The other choice is to find ways to lower other costs.

Keep in mind that pricing your product isn’t a one-time event. As you analyze costs, you may need to adjust prices more than once during the year.

Improving going forward

Successful businesses constantly make improvements. This approach is the only way companies can survive and thrive over the long term. That’s because competitors eventually take business away from you if you’re not willing to change.

One type of improvement is analyzing your business to lower costs. You can lower your costs in several ways. Maybe you remove an activity that isn’t necessary. When you eliminate the activity, you get rid of the related costs. Here are some other possible improvements.

Using the accrual method of accounting

You decide to use the accrual method of accounting. This method matches your revenue with the expenses you incur to generate the revenue. Using this method, rather than the cash basis of accounting, gives you a more realistic picture of your profitability.