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MBA

Basics

- ♦ **Quick and easy ways** to understand MBA topics like accounting, economics, marketing, and finance
- ♦ **Idiot-proof steps** for demystifying MBA jargon
- ♦ **Down-to-earth advice** on using your MBA knowledge to boost your career

Tom Gorman



THE
**COMPLETE
IDIOT'S**
GUIDE[®] TO

MBA Basics

by Tom Gorman

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Foreword

Some people think that having an MBA is a good thing. Others think that it is a waste of time. For me, the answer is simple. To succeed in business and not understand basic business principles is like living in France and not speaking French. Can you pull it off? Sure. Will it be full of unnecessary risks and upsets? Almost definitely. Learn French if you plan to live in France. Learn business principles if you plan to succeed in business.

I started out as an engineer who had some aptitude in business and sales. Sure, I could analyze a problem and come to a solution. That's what engineers do. But when I began running my own businesses, I quickly realized that I did not understand the rules of the business game.

My guess is that you are in a similar situation or you would not be looking at this book. You've probably bumped your head against "internal rate of return," "opportunity cost," the "five Ps of marketing," "strategic and tactical planning," and other terms you hear mentioned in the office or the business reports on the news. The more you understand those terms (and the principles behind them) the more you will be able to succeed in business—whether as a successful business owner, a skilled manager, or a savvy employee.

Read this book if you are ready to learn the rules required to play the game. Tom Gorman covers the most important MBA "secrets" and shows that they are really not so secret after all. He starts with managing yourself and others, explains the movement of money and the economy, and explains the importance of marketing and strategic planning. You could spend \$25,000 and two years of your life learning this information.

Because you've chosen to increase and improve your business knowledge, my hat is off to you. You know that you need more business education and you are taking the steps to improve your mind and your chances of business success. A business that does not grow eventually withers away. This is also true for people. Good luck with your business ventures.

—Ed Paulson

President, Technology and Communications, Inc.
Author of *The Complete Idiot's Guide to Starting Your Own Business*

Introduction

M-B-A. These three letters spell success in business, and for good reason. Now, in reality, just having a Master of Business Administration degree does not make anyone a master of business administration. That takes years of on-the-job experience. But the course of study that leads to an MBA prepares you extremely well for a business career.

How? By giving you several things that (until now) have been hard to get elsewhere.

First, an MBA gives you the key principles of how to manage a business. A business can be managed either by the “seat of the pants” or professionally, and business school teaches you the professional way. Professional management calls for setting goals that motivate people, allocating resources to activities that move the company toward those goals, monitoring progress, and making any necessary adjustments. These principles, and others taught in an MBA program, usually lead to success.

Second, an MBA gives you exposure (at least classroom exposure) to the departments—the functions—that you’ll find in most businesses. These include management and operations, finance and accounting, and sales and marketing. You learn about the roles these functions play in a business and how to get these areas to work together. All of this prepares you to deal effectively with the various people working in a company.

Third, an MBA program gives you sophisticated ways of approaching business problems. It gives you methods, which often involve simple calculations or diagrams, so you can clearly see the parts of the problem, develop potential solutions, choose the best course of action, and present your case to others in a winning way.

Finally, MBAs know the language of business. Like any profession, business has its own lingo and special terms. While at times some MBAs seem to get a kick out of throwing these words around for the heck of it (or to confuse the uninitiated), the fact is that most management, financial, and marketing terms refer to important business concepts. If you understand the words, you understand the concepts. If you understand the concepts, you can apply them in your business.

The Complete Idiot’s Guide to MBA Basics will give you all of these advantages—an overview of business, an understanding of the various functions, a set of analytical tools, and knowledge of the language of business (plus a very useful glossary of business terms)—just like an MBA program would.

Well, it’s not exactly the same thing. For one thing, this book costs a tiny fraction of the price of even one course at a business school. For another, it cuts right to the core of each item it covers. In the tradition of *The Complete Idiot’s Guide* series, this book makes the material clear and applies it to the kinds of situations that you’ll run into on the job. It

also leaves out what you don't need: the heavy detail that most MBAs either forget or never use.

This book amounts to a "mini-MBA" and it will prepare you to manage a business of any size.

Any size? Even a small or medium-size business? Yes!

Even if your business never grows into a mammoth corporation, it will run much more smoothly and be far more competitive if you manage your resources well; understand budgeting, finance, and accounting; and perhaps most important, use sophisticated sales and marketing techniques.

On the other hand, if you work for a large company, the knowledge and skills that you'll get from this book will prepare you to compete and succeed. In fact, a management position in a large company typically demands an understanding of these business concepts.

Having earned my MBA almost 20 years ago at New York University, I have benefited as a corporate manager, as a small businessman, and as a citizen. Most of all, the broad business knowledge, the grounding in finance and marketing, and the decision-making tools I gained in B-school have enabled me to be comfortable and effective in any business situation. That's the major benefit I want you to get from this book.

Here's the approach I'll take:

Part 1, "The Manager's Toolbox," shows you ways of managing people as well as several methods of business problem-solving and decision-making.

Part 2, "How It All Operates," covers the workings of both economics and operations, revealing the underlying principles that determine how a country or a company wins or loses the money game. In this part, you will learn the information you'll need to understand what goes on beneath the surface when money changes hands.

Part 3, "All About Money," takes you into the world of accounting and finance, showing how a company keeps track of sales, expenses, and profits and how it makes budgeting and investment decisions. This part also explains how to raise money to finance growth.

Part 4, "To Market, to Market, to Sell and Sell Big," shows how companies learn about their customers' needs, develop products and services to meet those needs, and use marketing strategy to focus on the customer and outsell the competition.

Part 5, "Steering the Business Into the Future," deals with strategic planning, which is the major tool for managing longer-term aspects of the business, and with ways to increase productivity, improve quality and keep the business legal and ethical. This part of the book also covers the essentials of career management in today's environment.

Extras

In addition to the text, throughout the book you'll find the following signposts that highlight information I want to be sure you catch.



Case in Point

These boxes provide real-life examples that illustrate and expand on the material.



MBA Alert

These sidebars give you examples of how to deal with problems you'll face on the job.



MBA Lingo

These sidebars give you definitions of words and business concepts that might not be familiar to you.



MBA Mastery

These sidebars provide hints about how to boost your—and your company's—performance to higher levels with insider tips and lessons from the current best practices in business.

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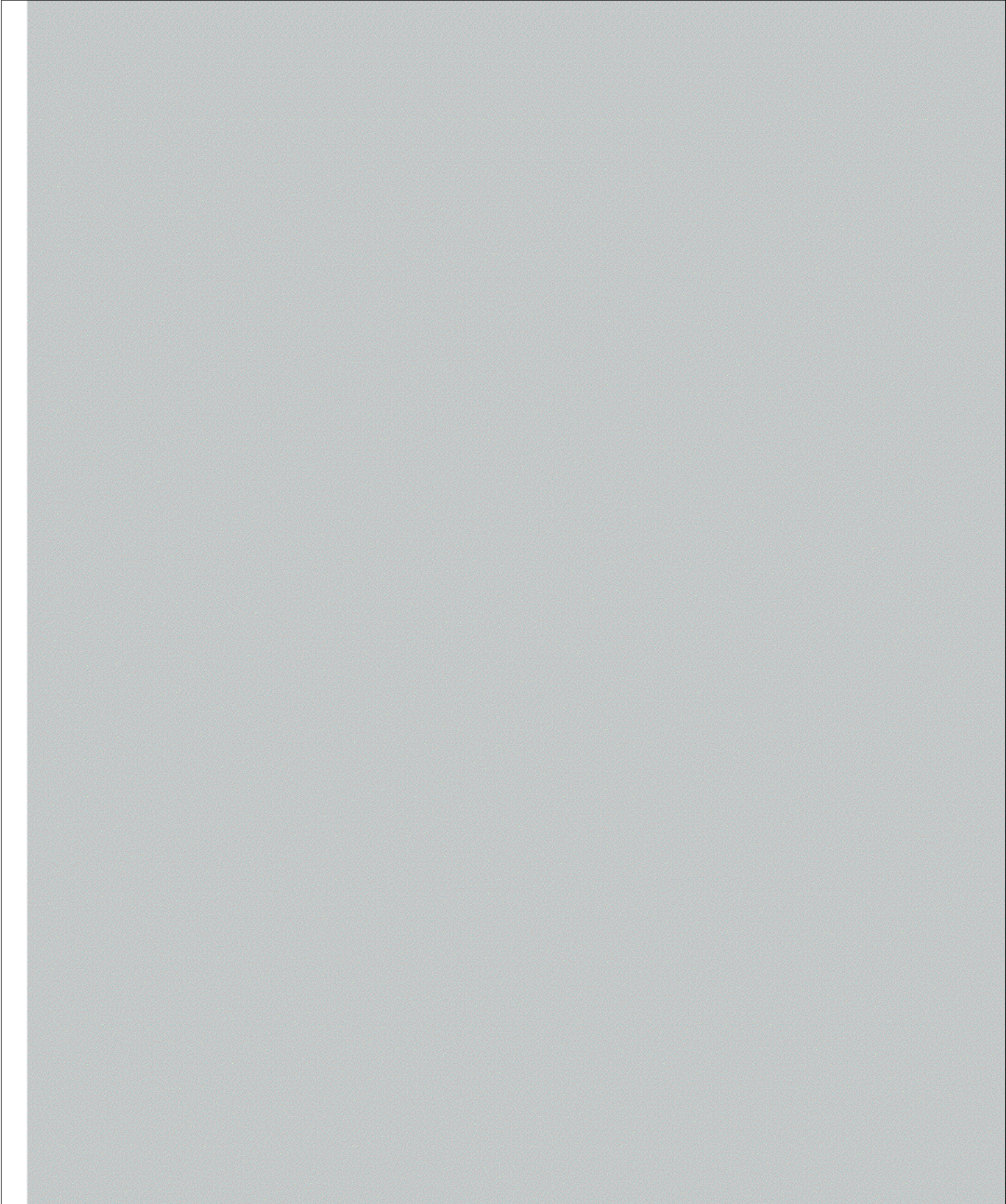
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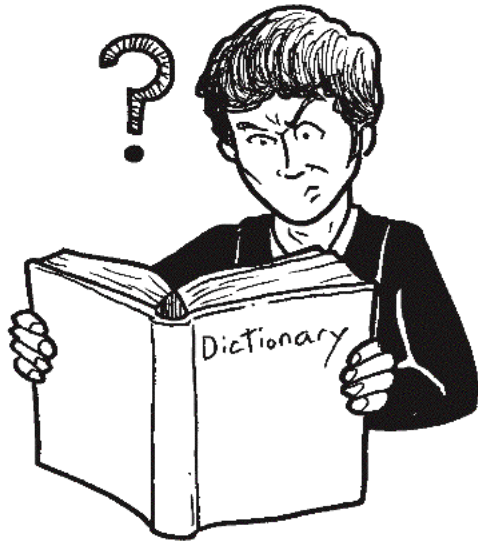
The Manager's Toolbox

Whether you're a management trainee or a seasoned executive, you'll do your job better if you understand the tools of management and the workplace in which they're used.

Since management is the art and science of getting things done through others, in this part you'll examine the basics of supervising people, the seven skills no manager should be without, and the goals of a business.







Chapter 1

The Meaning of Management

In This Chapter

- A (very) brief history of management
- A manager's responsibility and role
- The "Big Five" principles every manager must know

Imagine an army with no general, a team with no coach, or a nation with no government. How could the army beat the enemy? How could the team win games? How could the nation avoid complete anarchy?

They couldn't. And an organization can't succeed without a manager. In fact, any sizable organization needs a lot more than one manager. Managers make sure that an organization stays, well...organized. Organizing and directing the work of others is the work of the manager. People need organization and direction if they are to work effectively and managers provide that.

Management is generally defined as the art and science of getting things done through others. This definition emphasizes that a *manager* plans and guides the work of other people. Some (cynical) individuals think that this means managers don't have any work to do themselves. As you'll learn in this book (if you don't already know it), managers have an awful lot of work to do.



MBA Lingo

Management is the art and science of getting things done through others, generally by organizing and directing their activities on the job. A *manager* is therefore someone who defines, plans, guides, assists, and assesses the work of others, usually people for whom the manager is responsible in an organization.

All of this organizing and directing the work of others is known as administration. In a business it is called business administration. (In a hospital, it is called health care administration. In a government agency, it is called public administration.) Thus, *business administration* means managing a business, and an *MBA*—*master of business administration*—degree prepares a person to manage a business. In an MBA program, which is a graduate school program, you learn about the structure, parts, and purpose of a business, and about the tools you need in order to manage the business. These tools include budgets and financial statements as well as methods of analyzing business decisions.

This chapter will introduce you to management by touching on the development and role of management and by covering the key principles of managing any business.



MBA Lingo

Business administration means organizing and directing the activities of a business. An *MBA*, or Master of Business Administration degree, is a post-undergraduate degree from a college or university with a graduate program that teaches people how to manage a business. Essentially, the program covers the structure and purpose of a business and its various functions, and the tools needed to manage these functions—just as this book does.

What Makes a Good Manager?

As in politics or sports, some people seem more naturally suited to being managers than others. In our society people often believe that men and women with a certain personality or appearance are best qualified to be managers. However, it doesn't often work that way. Management isn't about personality or appearance. I've known many managers with the so-called right image who were "empty suits."

It takes dedication to avoid being an "empty suit" or someone who enjoys being a manager but shirks the actual work of managing. And it *is* work. A manager must think ahead several moves; planning is central to good management. A manager must deal skillfully with people, giving positive feedback for solid performance, helping those with performance problems, and, occasionally, terminating those who cannot improve their performance. Managers must keep financial considerations, as well as customer service, front and center because a business exists to make money by serving a customer need.

Nonetheless, despite these "musts" some managers try to avoid stepping up to the real work of managing. There are managers who fail to plan realistically, who don't develop their interpersonal skills, and who lose sight of financial considerations and customer needs. Such managers not only make it tough for their employees, superiors, and customers, they also give the entire discipline of management a bad name and give people the idea that a manager is someone "paid to do nothing" or who "watches while we work." Managers who are worthy of the name take their responsibilities and roles seriously.

A manager has an area of responsibility, that is, an activity or a function that he or she is responsible for running. A financial manager is responsible for some area of finance. In Sales, an account manager is responsible for a set of accounts. A departmental manager or branch manager is responsible for a specific department or branch.

A manager's role is to run his or her function properly. It may be as large as the entire company, as is the case for the CEO (chief executive officer). It may be as small as the mail room. Whatever the area of responsibility, a manager must usually get things done through other people, a subject we take up in later chapters.

In reality, management represents the sum of a set of tasks. Being a manager comes down to doing these tasks well and consistently. Before we look at these tasks, let's view the role of the manager in historical context.

The Professional Manager

How can "being the boss" be a profession? A profession has its own principles, tasks, and standards, and it requires a course of study. (Think of the traditional professions: medicine, law, engineering, architecture, and accounting.) Does management share any of these characteristics?

The answer is "yes," and it has been for most of this century. When factories became large and complex enough to demand skills beyond those of a simple owner-boss, management grew out of economics and engineering to become a distinct discipline.

The need to apply concepts from economics and engineering became apparent as businesses grew beyond relatively small, simple craft operations and farms into larger, more complex operations capable of higher production.

Economics enabled managers to analyze ways to drive costs down and produce the most money. Engineering helped managers think of ways to best handle the physical (as opposed to financial) aspects of production. These include decisions regarding the layout of the factory, methods for dividing job functions, and ways to handle and distribute finished products.

The need for professional management arose when larger factories and the new machines of the Industrial Revolution were adopted. A mere "boss" in the sense of someone who basically just told others what to do was not equal to the demands of managing such operations. Therefore, the professional manager stepped up to the task.

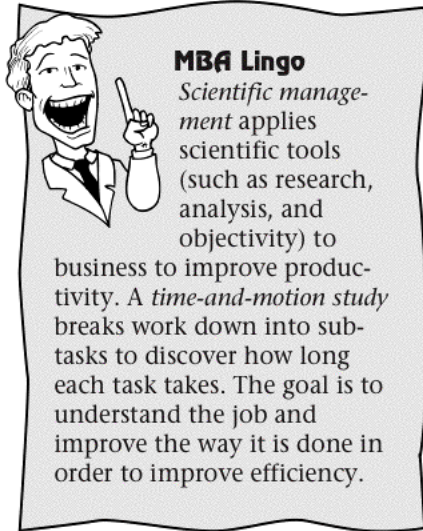
In the early 1900s, the professional status of management got a big boost from the concept of *scientific management*. Frederick Taylor was "The Father of

MBA Lingo

The *Industrial Revolution* was a period of rapid, major improvement in business productivity in the economies of certain nations as they adopted power-driven machinery. This development began in England in the late 1700s and, during the following century, spread to other major European nations, North America, and beyond.

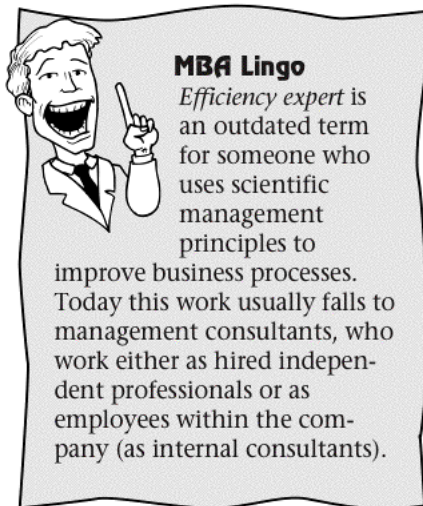


Scientific Management." (It's on his gravestone.) Taylor believed that managers could improve the productivity of factory workers if they understood workers' tasks and then properly planned each task for each worker.



"Taylorism," as scientific management came to be called, led to legions of *efficiency experts* doing *time-and-motion studies* in organizations. These studies led to the redesign of factory work. Some experts credit Taylorism with helping the U.S. win the Allied victory in World War II. U.S. factories were able to quickly gear up production of arms, ammunition, vehicles, airplanes, uniforms, equipment, and other materials needed for the war effort, and to establish and maintain high levels of quality while doing so. This was largely thanks to modern management methods, many of which were either introduced by Taylor or others who extended his work.

The professional standing of management was enhanced when management associations and business education flourished in the first half of the 1900s. Of course, graduate schools offering MBA degrees also boosted management as a profession.



Today, the quest for better management practices continues with as much intensity as ever—with more intensity than in many eras in fact. Business now occurs on a more international scale than in the past, so competition is tougher than ever. Customers around the world become more sophisticated and demanding with each passing year. Technology creates (and destroys) companies and even entire industries more quickly than ever. So managers face challenges as great or greater than they did in any other time.

You may have heard that companies on cost-cutting sprees have gotten rid of many managers. You may read stories about economic uncertainty, rapid change, and new technological demands making life tough for managers. There is some truth to these stories. However, three facts remain unchanged:

- Business will always need managers because no business can manage itself.
- Economic and competitive conditions will always present challenges (a business must always do better no matter how well it's doing).
- Those who understand the job of the professional manager and dedicate themselves to doing it well will always have a business to manage and will be prepared to deal with the challenges.



Case in Point

Professional management principles made the U.S. auto industry a productivity machine. Ford Motor Company's assembly line, in which a car moves along a conveyor belt so workers can perform individual tasks in a certain sequence, grew directly out of scientific management.

The professional manager, like any other professional, understands certain principles, performs certain tasks, and upholds certain standards. These elements are what makes a manager a professional.

The Five Business Principles Every Manager Must Know

The following five concepts are the reasons a business exists and the reasons it needs managers:

- Value for customers
- Organization
- Competitive advantage
- Control
- Profitability

I'll describe each concept in more detail over the following pages.

Value: What Customers Pay For

A business exists to create value of some kind. It takes raw materials or activities and increases their value in some way, transforming them into products or services that customers will buy. Value is what customers pay for. Customers buy things that they value.

For example, McDonald's creates value by setting up places where people can eat inexpensively away from home. The company builds restaurants, hires cooks and counter-people, buys food, and prepares meals. The customers value the convenience of location (you don't have to go home to eat), the speed of service (it's not called "fast food" for nothing), and the tastiness of the meals (most people like hamburgers, chicken, soft drinks, and fries).

A business—and its managers—must create value for customers. This can be done in almost limitless ways because human desires are limitless. But a single business cannot serve limitless desires. Instead, it must create a specific kind of value in a specific way. In other words, management must decide what the business will do, and then organize itself accordingly.

Let's Get Organized

An organization must be...well, organized! It must have goals and the resources (human, material, and financial) to meet those goals. It must keep track of what it does and how well it does it. Each department has to perform its function properly. Employees must be assigned specific tasks that move the outfit toward its goals.

Management is responsible for keeping the company organized. As you'll see in Chapter 4, "Managing People Effectively," this mostly involves getting things done through others—the employees. However, other resources of the business, such as equipment, floor space, and money, must also be organized.

Managers achieve organization by means of *structure*. The overall structure can be represented in an organization chart like the one you'll see in Chapter 3, "Anatomy of a Business." But managers have other structures for achieving organization. For example, the company's financial structure organizes the way it handles money. The sales force can be divided into sales teams by geography, by products represented, or both.

Companies achieve organization in various ways. Some take a highly structured, almost military approach, with strict hierarchies, sharply defined duties, and formal protocol.

Other outfits take a more informal approach, which allows people greater leeway and creates a more unstructured environment.

The nature of the business can determine how structured or unstructured a company will be. For example, smaller firms (those with fewer than 50 employees) tend to be less structured than large ones. Companies in heavy manufacturing are usually more structured than those in creative fields, such as advertising or entertainment.

Regardless of how tightly or loosely structured a company is, managers must keep it organized. Even a highly structured company will become disorganized if management fails to manage properly. And even a very loosely structured company will be organized as long as management does its job.



Competitive Advantage: The Winner's Edge

To succeed in a particular market, a company must do something better than other companies in that business. Doing something better creates a *competitive advantage*. That “something” may be only one aspect of the product or service, as long as customers value it highly. For example, a company can gain a competitive advantage by offering the widest selection of products. Or rock-bottom prices. Or high quality. Or great service. But it can't do all of those things.

Managers decide what basis the company will compete on, and they must be quite clear about this. For example, despite advertising claims, no company can really provide both the highest quality and the lowest price, at least not for long. (It can offer the highest quality in a certain price range, but not at the lowest price.) So management must decide whether it wants to compete on quality or on price. Or on service. Or on convenience of location. Then it has to manage the company so that it does compete on that basis by delivering that advantage to customers.

By this I mean that a company must consistently present a certain advantage to its customers. John's Bargain Stores does not pretend to be Bergdorf Goodman, and vice-versa. John's competes on price and pulls in bargain-hunters. Bergdorf's competes on quality and service and attracts customers motivated by those considerations, rather than price concerns. If John's displayed designer clothing and \$400 fountain pens, customers would laugh. If Bergdorf's carried no-name clothing and Bic pens, customers would turn up their noses.

Customers who can afford high quality will buy from the high-quality company; those who want low prices will buy from the low-price company. Customers can figure this out. But sometimes managers cannot.

MBA Lingo

Competitive advantage refers to the elements in a company that enable it to succeed in the marketplace. As the name implies, it is whatever gives the company an advantage over the competition. This may be low costs that the company can achieve through manufacturing efficiency. It might be wide selection, or high quality, or fabulous service. Whatever it is it will probably soon be matched by one or more competitors, because most developments in a business can be quickly copied. For this reason many companies seek elements that will give the sustainable or long-term competitive advantage.





Case in Point

In the late 1970s, the Cadillac division of General Motors introduced a relatively low-priced, “sporty” Cadillac called the Cimarron. The product failed miserably. Why? Because it departed from what had always been Cadillac’s competitive advantage: big, plush, luxury cars with status-symbol appeal. This is a good example of a company that temporarily forgot the source of its competitive advantage.

Control Means Never Having to Say You Lost It

After management decides how to create value, organize the business, and establish a competitive advantage, it must control the outfit. This does not mean ruling with an iron fist (although some managers believe it does). Rather, it means that everyone must know the company’s goals and be assigned tasks that will move everyone toward those goals.

Controls ensure that the right manager knows what’s going on at all times. These controls are based mostly on information. For example, every company needs financial controls. Managers have budgets so they can control their department’s spending. They receive regular information about the amount their department has spent and what it was spent on. Financial controls ensure that the company spends what it needs to spend—no more, no less—to do business and meet its goals.

A business is made up of many processes, so “process control” is something you may hear about. A manufacturing process, a hiring process, and a purchasing process all require controls. In these examples the controls ensure, respectively, that product quality is maintained, that the right people are hired at the right time, and that the right materials are purchased at a reasonable price.

Controls, and the information that supports them, enable managers to manage.



MBA Lingo

A company may go *bankrupt* when it is continually unable to pay its bills for an extended time. After a company declares bankruptcy, it goes through a legal process either to reorganize itself so it can become profitable or to close down completely.

Profitability: You Gotta Have It

A business is set up to make money. As you will see in Part 3, “All About Money,” the money a business earns can be measured in various ways. But no matter how it is measured, a business has to make money—earn a profit—on its operations.

If, during a certain period of time, a business takes in more money for its products than it spends making those products, it makes a profit for that period. If not, it has a loss for the period. Losses cannot continue for long or the company will go *bankrupt*.

The most basic goal of management is to make money for the business owners. Regardless of how well they do anything else, managers who lose money for the owners will not keep their jobs for long. Whatever else a business does, its overall goal must be profitability.

Remember The Big Five

Remember the five concepts summarized in this chapter. Think of them as “The Big Five” because they underlie everything a manager does. That is, all the activities of management have one collective aim: to make these concepts real for the company and its customers. To do this, managers must:

- Help the company create value for customers.
- Keep the company organized.
- Help the company achieve a competitive advantage in the marketplace.
- Exercise control over the business and its operations.
- Ensure that the firm earns a profit.

As you probably know, managers vary widely in their ability to do these things. The most successful managers can do at least some of them most of the time. The few managers who can be called great can do all of them consistently. They do this by applying the knowledge, skills, and tools that you will get from this book.

The Least You Need to Know

- Managers must monitor “The Big Five” business principles: value for customers, organization, competitive advantage, control, and profitability.
- A business—and its managers—must create a specific value for customers.
- Management is responsible for keeping the company organized.
- Managers decide what basis the company will compete on.
- Managers are responsible for control. They must know the company’s goals and assign tasks that will move everyone toward those goals.
- The most basic goal of management is to make money for the business owners.

Chapter 2



The Seven Skills of Management

In This Chapter

- The importance of proper planning
- How to develop your decision-making skills
- The secrets of effective delegation
- How to communicate with your employees effectively

Management skills and tasks all have one purpose: to help you get things done through others. Management theories and fads come and go. Most of the theories (and even some of the fads) have something useful to say about management. But the skills and tasks we examine in this chapter have always been, and always will be, essential to managing others. They are how a manager should spend his or her time.

The seven main skills and tasks of management are:

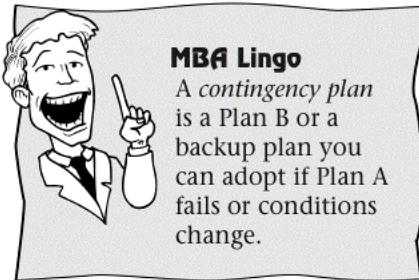
- Planning
- Goal-setting
- Decision-making
- Delegation

- Support
- Communication
- Controlling to plan

In this chapter I'll show you how to use each of these skills to get things done.

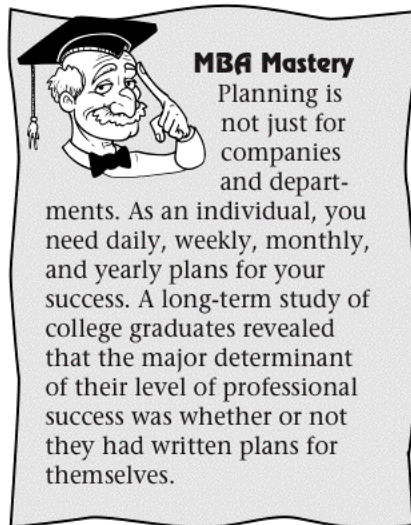
Proper Planning Prevents Poor Performance

The Five-P Rule—Proper Planning Prevents Poor Performance—represents the starting point in management. A manager must have a plan. The pervasive need for planning underlies the many kinds of plans you'll find in large outfits: strategic plans, financial plans, marketing plans, and production plans, to name a few. (I'll talk about these plans in more detail in later chapters.)



The need for planning is equally important, although more often ignored, at smaller companies. The lack of a plan leads to reactive, “seat of the pants” management, which you find more often in small firms.

A plan must be in writing. At times you may hear someone say, “I have a plan. It’s right here in my head,” as they tap their noggin with a forefinger. They don’t have a plan. They have an idea. An idea can be in one’s head. A plan must be on paper.



Planning incorporates many of the other six managerial tasks discussed later in this chapter. Goal-setting and decision-making are integral to planning. A plan must consider delegation—who will do what—and, of course, a plan must be communicated to others. Controlling to plan, which is follow-up to monitor progress, assumes that you have a plan in the first place.

There are various plans in business, but they all share the goal of creating order and discipline. A plan does this by enabling you to bring the future into the present. This lets you imagine a certain future and then take steps to create that future. Those who dislike planning often cite the unpredictability of the future as the reason for not planning. Yet despite the murkiness of the future, planning—thinking about the future, getting resources in place, making certain moves, and developing *contingency plans*—has proven its worth.

Most plans also share these elements:

- A goal and a measure of the distance from the goal
- An assessment of the environment
- An assessment of the company's strengths and weaknesses
- An assessment of existing and needed resources
- A series of tasks that will move the company toward the goal
- A mechanism for measuring progress

I'll show you these steps in detail in Chapter 22, "Charting a Course With Strategic Planning," which concerns strategic planning (that is, planning for the entire company). At this point, you need only understand that planning—on paper—is essential to progress.

Goal-Setting: Where To?

I've always liked the saying, "Ready! Fire! Aim!" which humorously describes so many business situations where things go wrong. You have to have an aim, an objective, or a goal, before you act. Equally important, it has to be the right goal.

Goals can be stated in a variety of ways:

- *Business goal:* To be the world's largest exporter of automobiles to Canada by the year 2003.
- *Financial goal:* To increase our net profit to 8 percent of sales next year.
- *Marketing goal:* To increase our share of the soft-drink market by one percentage point in each of the next three years.
- *Individual goal:* To be head of the marketing department within five years.

Each of these examples exhibits the three characteristics of a good goal. Each one is:

- Specific
- Measurable
- Time-limited

A *specific* goal goes beyond shooting to be "the biggest," "the best," "the highest quality," or some other nice-sounding adjective. It is sharper and expressed more precisely. Even the size-related goal—to be "the largest exporter of autos to Canada"—is specific (and measurable).

A goal must be *measurable* so you can know whether or not you achieved it. Whenever possible, devise goals expressed in numbers; that is, in dollars, percentages, or a numerical increase or decrease. (Some goals cannot be measured numerically but they can still be clear, as in the case of "to be head of the marketing department.")

A *time-limited* goal has a deadline. Personally, I don't consider a goal to be a goal unless it has a deadline. A deadline motivates those who must reach the goal. It creates urgency and energy. Deadlines are also important because most plans specify that certain tasks must be completed by a certain date in order to reach the goal. These interim deadlines, often called *milestones*, help you measure progress toward the goal well before the final deadline.

These three characteristics add up to the one characteristic that any useful goal must have—clarity. The “Ready! Fire! Aim!” approach comes from having a fuzzy goal as often as it does from having no goal.



Case in Point

Harold Geneen, the former chief executive officer of ITT Corporation, once said, “More than one objectives is no objective.” He was calling for clarity in goal-setting.

Too many goals create ambiguity and confusion in a company. People tend to lose focus or, worse, start warring with one another. For example, if the goals are to increase sales and cut costs, the sales department will fight for bigger advertising budgets, more money for travel and entertainment of clients, and perhaps expansion of the business. However, the accounting and production people will be trying to limit expenditures and expansion. This puts people at loggerheads. If you set multiple goals, either have people jointly responsible for them or be very clear about which is more important, if there is ever a conflict between the goals.



MBA Mastery

A manager has to keep his or her people aware of company goals.

This means breaking big goals into smaller ones that 1) relate to the employee's day-to-day job, and 2) can be completed in a relatively short time. To motivate your people, give them tasks related to the overall goal and short-term deadlines for completing them.

Goals should be the right size—meaning big enough to inspire people, but small enough to be achievable. Tiny goals won't inspire anyone, but big goals capture the imagination. Big goals create a sense of mission, and a sense of mission creates motivation. Motivation calls forth people's energy and commitment.

Keep in mind, though, that even large goals must be basically achievable or employees will see them as manipulative or just plain silly. A company that sets unattainable goals sets itself up for failure.

The right size goal will depend on your business. For a fast-growing company in a new industry it might make sense to try to grow sales volume at 25 or even 50 percent a year. For a company in a mature industry, growth at perhaps the rate of the industry's growth plus a few percentage points might

make sense. One way to target ambitious goals for sales and profit growth is to pick a solid competitor and try to match or exceed their growth rate.

Be aware, however, that no goal can be permanent. In the 1970s, Citibank, an aggressive New York bank, targeted growth of fifteen percent a year. At that rate the giant bank would have doubled in size every 5 years and in 15 years would have had every deposit in New York City. So the goal was impossible to sustain for more than a few years, but did serve the bank well during that time.

A Professional Decision-Making Process

You've probably heard managers referred to as "decision-makers." A good manager is exactly that. There are, however, managers who dislike decision-making, which is sad since it's a key part of their job.

Most managers who "pass the buck" are afraid of being wrong. They see any mistake as major failure. Usually they are by nature either conservative (or spineless, if you prefer), or they work for superiors who can't tolerate failure.

However, some people simply don't know how to go about making a good decision. They lack a framework for decision-making. So here is a six-step process for making business decisions (and personal ones, for that matter) in a rational way:

1. *Define the problem.* Most decisions relate to a problem or can be framed as a problem. This means that making the right decision depends on first defining the problem correctly. If your sales are falling, the problem could be low quality, high prices, poor performance by the sales force, or new competition. Each problem would call for a different solution. So start by asking: "What's the problem?" This may require exploration.
2. *Gather information.* Good business decisions are based on good information. Once you define the problem, gather all relevant facts. This often requires research, such as studying competitors, talking with suppliers, searching an electronic database, or hiring a consultant to dig up facts. However you go about it, get the facts.
3. *Analyze the information.* Having information is not enough, because different people can draw different conclusions from the same facts. Therefore, you may need to apply analytical

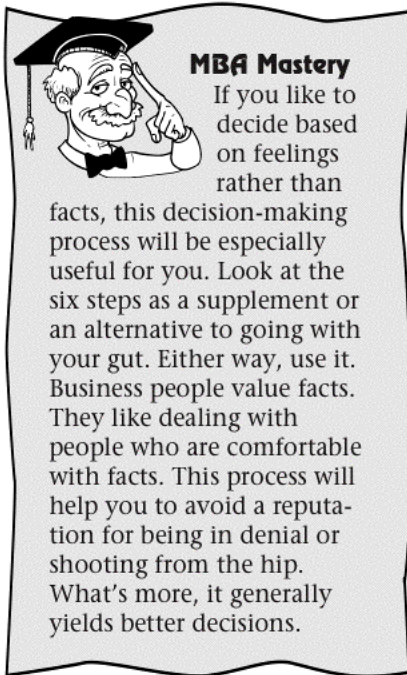
MBA Lingo

A *decision-support system* is a formal means of helping people make decisions. Usually these systems, which are often computerized, help in the analysis phase of the process. A decision-support system may consist of guidelines in a policy manual (for example, for employee discipline cases) or checklists (such as the ones bank employees use when making lending decisions) or computerized models that help forecast future business conditions. As the name indicates, these systems support, rather than replace, the decision-maker.



tools to the facts. These tools, formal ways of analyzing information, often involve making calculations or setting up charts showing the connections between facts. You may even have a *decision-support system*. However you go about it, analysis helps you understand the facts and what they mean.

4. *Develop options.* When you have a decision to make, you need to have choices. For example, to increase sales in the face of new competition, you could improve quality or cut prices. You could hire more salespeople or pay your current salespeople differently. Options like these give you a basis of comparison—and a choice. With options to choose from, you have a better chance of finding a real solution instead of doing what seemed like a good idea at the time. There may be instances in which you have only one option, but they should be rare if you openly consider all possible solutions.
5. *Choose and use the best option.* Now comes the moment of truth. You must decide. If you followed the first four steps, you will probably make a good decision. But be sure that you do make a decision. Avoid “analysis paralysis”—that is, analyzing a problem forever instead of acting. Decision-makers make decisions.



6. *Monitor the outcome.* You usually cannot just make a decision and then forget about it (much as you might like to). Generally, the only way to know whether your decision solved the problem is to follow up afterward. If your solution worked, great. If not, you may need to take corrective action, try another option, or even reexamine the problem to make sure you defined it correctly, got all the facts, and analyzed them properly.

With experience, this six-step process can become second nature. For small decisions you need not launch a major fact-finding effort. You may need to make one phone call. Nor will you always need a long list of options. Two may be enough. But even when you're making day-to-day decisions in a fast-paced environment, this process will help you. And major decisions always require information, analysis, and clear thinking about options.

In various forms, this framework for decision-making has stood the test of time. The process promotes rational business decisions that can be explained to others. (Meaning that even if you mess up, you'll at least be able to tell your boss what you were thinking at the time.)

Delegate All You Can

Delegation is the act of assigning tasks to subordinates for them to perform. This is actually how a manager gets things done through others. The assignment may be verbal or written, long- or short-term, phrased as a request (usually) or as an order (less often). Assigning tasks to others and ensuring that they perform them properly is essential to any manager's job.

Effective delegation goes well beyond merely telling people what to do. Good delegation calls for knowledge of the underlying principles: responsibility, accountability, and authority.

Responsibility means that every manager and employee has a specific function or activity to perform as their job. This is called their *area of responsibility*. The CEO is ultimately responsible for the entire company. He or she has a BIG area of responsibility. But the CEO delegates the actual work to everyone else in the company through the *chain-of-command*.

The principle of responsibility implies that a manager must respect the chain of command by delegating work only to people in her area and by not going over the head of the manager above or below her.

Accountability ensures that everyone in the organization answers to someone else. Everyone is held accountable for performing their responsibilities. The CEO is accountable to the board of directors (who, again, represent the business owners) and everyone else in the organization reports, directly or indirectly, to the CEO.

Authority means that someone has been empowered to do a job. If you have a budget, you have budgetary authority. If you can hire someone, you have hiring authority.

Essentially your responsibility is what you usually think of as your job. You are held accountable for doing your job by the manager above you. The organization, through the manager above you, gives you the authority necessary to do your job.

Ignoring these principles causes real trouble:

- When managers ignore the chain of command—when Bob, who manages Sue, goes over

MBA Lingo

The *chain-of-command* refers to the system by which directives come from above and are transmitted downward in an orderly manner through layers of management. *Delegation* means passing responsibility for performing a task along to a subordinate, that is, to someone who reports to you, the manager. An *area of responsibility* refers to the scope of someone's job. This generally includes a set of functions (such as matters relating to finance or marketing), tasks (such as preparing budgets or advertising programs), goals (such as accuracy and timeliness or increased sales), and subordinates, if people report to you.





MBA Lingo

Responsibility refers to the work that a member of an organization is supposed to do and the standards for

that work to be considered properly accomplished.

Authority is the power to do something. The company gives the president of the company the power to run the organization and he or she shares out that power to other managers lower in the organization.

Accountability refers to the fact that people with certain responsibilities are held to account for performing them. Their superior will make certain that these responsibilities are properly handled.



MBA Mastery

Effective delegation comes naturally to very

few managers. It is a skill most of us must learn. As with most of the skills in this chapter, you can learn a lot by watching good role models. Delegating is easily observed. When you find people who are good at it, watch closely. Imitate them. Ask them for pointers.

Sue's head and tells Leo, who reports to Sue—what do to, Bob undermines Sue's authority.

- If Mary holds Jim accountable for expenses on a project when she did not give him authority over that spending, she's treating Jim unfairly.
- When someone is given two managers to report to, when someone is not given clear job responsibilities, or when a manager leaves the company and no one tells his people who they now report to, the outfit can't run properly.

Sadly, anyone who has been in business for several years has seen most of these things occur. Truly good delegation—orderly, sensible, consistent delegation—requires effort.

Everyone should have clear job responsibilities, be held accountable for them, and have enough authority to carry them out. Everyone should report to one, and only one, superior. Everyone should understand and respect the chain of command. When someone in the chain leaves, people should be informed about what happens next.

Here are proven guidelines for effective delegation:

- Carefully consider the task and its deadline and importance. Weigh the employee's strengths and weaknesses. Try to give your people a mix of assignments so they can capitalize on their strengths and overcome their weaknesses.
- When you give someone an assignment, be very clear about the results you expect and when you expect them. Clarify the assignment in a memo. If you give the assignment verbally, be sure to double-check that the employee understands your expectations.
- To the extent possible, let the person who is doing the work decide how to do it.
- Understand that even though someone may not do a job exactly as you would, it can still be done to a high standard. If the work is not up to your standards, have the employee do it correctly rather than correct it for him. That way he'll learn your standards.

- Delegate all of the responsibilities that you can and delegate them to the lowest level of employee who can accomplish them. Don't withhold responsibility *or* authority from your people.
- Understand that you are delegating the work and the authority needed to get it done, but you cannot actually delegate your accountability. If something goes wrong, you as the manager of that area are ultimately accountable. Blaming your subordinates is extremely bad form.

Support Your People

A manager's work doesn't end with effective delegation. In fact, the toughest work lies ahead. A big part of getting things done through others is supporting those others.

Why is support necessary? What kind works best?

Employees need support because barriers usually stand between them and the desired result. These barriers exist inside the company in the form of bureaucracy and limited resources, and outside the company in the form of competition and customer resistance.

Employees also need support because they're human. They need correction, pointers, encouragement, and humor, particularly when the going gets tough; for example, on a big push to meet a tight deadline or during a series of layoffs.

The best way to support your employees is to remove barriers to their success and to act as a good coach. Here are some ways to do that:

- Be an effective advocate for your employees with your superiors and the rest of the company. Lobby for their interests. Be loyal to them. Try as hard as you can to get them the resources—the equipment, staffing, money, and time—they need to do their jobs well.
- Take your employees' concerns and complaints seriously. The “stop whining” approach will get you only so far, and it can backfire horribly when employees have legitimate concerns.
- If your employees need correction, do it in private. When they deserve praise, give it in public.
- Keep your employees aware of how their efforts support the company's goals and benefit the entire outfit.

MBA Alert

Ignoring employee complaints can create financial and legal exposure for your firm. A manager I know ignored complaints from a worker, who claimed she had wrist problems from doing a heavy amount of word processing. The outfit wound up paying for the woman's wrist surgery and time off, plus compensatory damages to keep her from pursuing the matter in court.



- Help your employees develop and advance. Most people want increased responsibilities and advancement and a chance to gain new skills. I've found this to be true even of employees who pretend otherwise. Give everyone ample opportunity to prove themselves—and allow for failures now and then.
- Don't play favorites. This should go without saying, but you are human and you are going to like some employees more than others. If you don't treat people with equal fairness, you will create serious morale problems.

I've seen many managers try what I call "wave-of-the-hand" management. They act as if they can merely assign a job with a wave of the hand and it will magically get done. Often these managers seem shocked or upset when it doesn't work out that way.

Think of management as a contact sport, which brings us to the next task.

Communication: Important Beyond Words

Communication skills consistently top of the list of desired qualities in a manager. This includes written and oral communication. Business demands that you communicate clearly, accurately, honestly, and persuasively. Several techniques encourage effective communication in business. (Here, I'm going to focus on oral communication. See my previous book, *The Complete Idiot's Almanac of Business Letters and Memos*, for more information on written communication.)

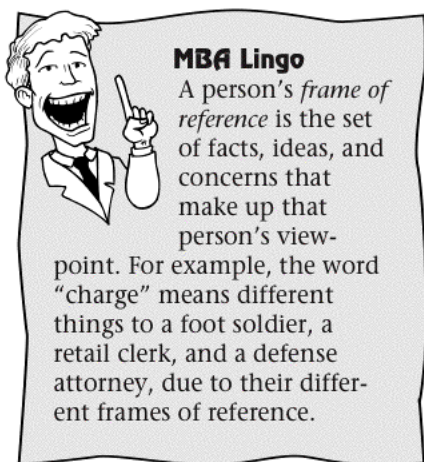
Listening skills are the starting point in good communication. So few people are used to someone who actually listens to them, with full attention and without interrupting, that the technique can be downright disarming. It's tempting, even natural, to use the time when someone is talking to think about your response or whether you agree.

Instead, try to listen with the goal of understanding the other person. Over time, that understanding forms a bond between two people. Not listening undermines that bond.

People know whether or not someone is really listening to them. (You do, don't you?)

Whether you are talking or listening, be aware that the message sent may not be the one received. That's because each of us has his or her own *frame of reference* through which we filter what we say and hear.

In American culture, business people generally get the best results by speaking directly, rather than indirectly, and in concrete, rather than abstract, language. That way your message has the best chance of fitting your listener's frame of reference. In some other cultures, however, people tend to be less direct and less informal than in the United States. Being too direct or informal on the job can alienate people. With business becoming more international with each



passing year, every manager must be acutely aware of cultural differences and to allow for them when communicating.

However, it pays to be precise when managing others so that they know what you expect. Here are some examples of both vague and precise language for some common business situations. The statements are from a manager to a subordinate, and in general the more precise ones will get better results.

Too Vague

"I'd like you to complete this project quickly."

"Please get in touch with somebody about that."

"I can't talk now. Please catch me later."

"You've been arriving late to meetings a lot recently."

"I believe your performance is dropping off."

"You've been doing good work lately."

More Precise

"I'd like you to complete this project by noon this Friday."

"Please call Jim in Marketing about those missing pages."

"I'm sorry I'm too busy to talk now. Please call back after four, or tomorrow morning."

"I've noticed that you arrived late to our last three staff meetings. Is anything wrong?"

"Your analysis of our markets left out some key points, and you seemed poorly prepared for last Tuesday's meeting."

"Thanks for your good work on the Acme project and for staying late last Monday."

Much of the on-the-job communication between managers and subordinates aims to guide and assist the subordinate in getting her tasks accomplished on time and up to standards. Vague, imprecise language leaves room for misunderstanding regarding what is expected and when it is expected. However, being a manager and speaking precisely does not mean that you should issue orders or "boss people around." The best communicators view their subordinates and, for that matter their superiors, as colleagues focused on the same thing: getting the job done well.

Finally, be sure to share information with your employees to the greatest extent possible. Most employees resent it when they're not "in the loop." While you cannot usually tell every employee everything you know, and cannot compromise others' privacy, you should keep your people informed about anything that directly affects them.

MBA Mastery

Cultivate an objective attitude toward people on the job.

Think of them as you would fellow players on a team. The key is to work well together on your common goals. If you become friends, great. But it's more important to respect one another and work well together. Of course, truly thorny performance problems do arise. I discuss ways to address them in Chapter 4.



Don't practice "mushroom management," which says, "keep them in the dark and feed them fertilizer."

Controlling to Plan

There's a wonderful saying in business: "Plan your work and work your plan." In other words, have a plan and use it. This is more formally known as *controlling to plan*, which means managing your resources—your people, time, equipment, and money—as planned in order to reach the goal. A good plan will help you every step of the way toward a goal.

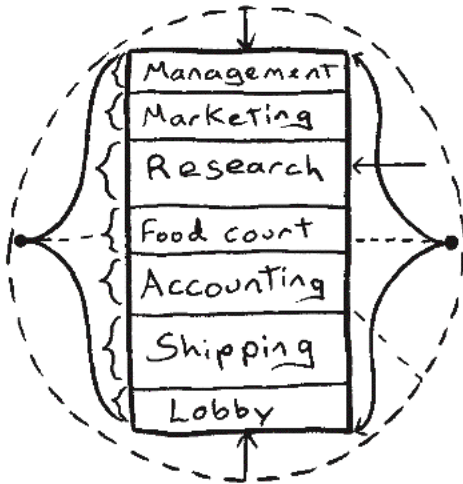
A plan is not a document to write and then throw into your drawer and forget. It's a road map, to be consulted as you move forward. Sometimes you'll need to change what you're doing or speed things up in order to keep to the plan. Other times you may find that the plan, rather than your activities, needs to be adjusted. That's fine. But to adjust your plan, you have to have a plan—and refer to it regularly.

Over time, success in business, as in any endeavor, comes from diligent, daily execution of the basics. In management "the basics" are the six managerial tasks of planning, goal-setting, decision-making, delegating, supporting, communicating, and controlling to plan. Master these and you will be a master of business administration.

The Least You Need to Know

- Management begins with planning and goal-setting and ends with controlling to plan. You must have a goal and a plan for reaching it, and use the plan to move toward the goal.
- Try to use a process for decision-making, rather than operating by the seat of your pants. Start by defining the problem, then gather related facts, analyze them properly, develop alternative courses of action, and choose the best one. Then follow up to see if it was the best choice.
- Good delegation is the only way to get things done through others. Pick the right person for a task, then let them do the job. Delegate all that you can and delegate it to the lowest level at which it will be properly done.
- Support your employees in the organization and remove barriers to their success.

Chapter 3



Anatomy of a Business

In This Chapter

- The major divisions of a business
- How finance and accounting control and track money
- How marketing and sales sell products and services
- The growing role of management information systems
- How support functions serve the rest of the business
- Understanding the org chart and company hierarchy

What is the purpose of a business? Stated in the most basic possible way, a business sells a product (anything from widgets to pizza pies to automobiles) or delivers a service (sending packages, giving massages, or catering parties) and—if things are working properly—makes a profit. All businesses use some combination of labor, equipment, and materials to produce products or services.

A business of any substantial size has to be divided into departments, each with its own job to do. For example, one department may oversee the company finances, another may handle marketing, and still another may head sales. The job of the *manager* is to run his or her department so that it makes its contribution to the entire company. This chapter



MBA Lingo

The *finance department* is responsible for controlling the funds that come into and go out of a company. The tools for control include financial and investment plans, sales and expense budgets, records supplied by the accounting department, and procedures regarding who can sign and cash checks for the company. Finance includes the treasury department, which works with the company's banks to control the actual cash.



MBA Lingo

A *budget* is a set of estimates for sales or expenses, or both, for a specific period of time. These estimates represent limits or targets, and are thus key financial controls. In most businesses, every department has its own budget. Within those departments, individual projects may have budgets. One of a manager's main responsibilities is *making budget*, that is, hitting her sales targets or keeping expenditures for her department or project within budget.

will introduce you to the different parts of a business and the role managers play in running them. In this chapter you'll also examine some basic principles that apply to every business.

Note that in this chapter I will be dealing with businesses large enough to warrant having different functions and departments. This includes many small businesses, some with as few as 10 or 20 employees right up to those with 50 to 100 (still considered small businesses by most banks and larger companies) and on up to giant enterprises.

The Parts of a Business

Numerous activities must take place for a company to successfully create, sell, and profit from its products or services, and each activity is handled by a specific department. Each department has to be well managed for the company to succeed. In most large companies, the major departments are:

- Finance
- Accounting
- Operations
- Marketing
- Sales
- Management information systems
- Support functions

Let's take a closer look at each of these departments and what they do.

Finance Controls the Money

A business generates a flow of money. Money flows into, out of, and through each department in the company. The *finance* department (or, more simply, *finance*) makes sure that the company has the money it needs in order to operate. This includes the money to buy or lease property (such as office space) and equipment, purchase raw materials, and pay employees. Finance also ensures that the company continually has good investment opportunities and the money to pursue them.

Finance helps the other departments in the company do their *budgets* and consolidates them into one company budget. Finance works with senior management to set the company's sales and profit goals for the following year and designs controls to keep the firm's finances in order.

In a large company, finance includes the treasury function, which manages the company's cash and deals with banks. Many of the people in finance and the Treasury are financial analysts, professionals who deal in budgets and investments and generate financial reports for the managers of other departments.

Accounting Counts the Money

The *accounting* department works closely with finance, mainly by tracking the flow of money the company generates. For example, within accounting you'll find an *accounts receivable* department that tracks the money that the company is owed and paid. *Accounts payable* tracks expenditures and authorizes checks to be cut so the company can pay its bills to suppliers. The *payroll* department ensures that employees get paid.

Accounting also usually includes the *credit* department, which decides how much *credit* (also called *trade credit*) the company will extend to a customer. If you've ever groaned over a Visa bill, you are already familiar with the concept of credit. Customers (which may include other companies) with good payment records can buy thousands or even hundreds of thousands of dollars worth of goods on credit, meaning they are given an extended amount of time in which to pay the bill. This is done in most businesses that sell expensive goods (say, pricey automobiles) or services (extensive consulting work) because it makes it easy for customers to buy, and thus easier for the company to make sales.

Customers or companies that do not have good payment records must buy *COD*, meaning cash on delivery.

Finally, accounting includes the *tax* department, which calculates the company's taxes and manages the timing of its federal, state, local, and foreign tax payments.

MBA Lingo

The *accounting* department keeps the company's financial records, by tracking sales, expenses and receipts, and disbursements of cash. Accounting also calculates the taxes that the company owes. The *accounts receivable* department tracks money that is owed to the company for sales made on credit. The *accounts payable* department makes sure that the company pays its bills to suppliers. The *payroll* department tracks employee's wages and salaries.



MBA Lingo

A company may extend *credit* (or *trade credit*) to a customer with a good payment record, which allows the customer a certain extended period of time—usually 30 days—to pay the bill. Customers who are denied credit usually must pay *COD* (cash on delivery). Credit decisions are made by the company's credit department.





MBA Lingo

In a very large company, the *tax* department calculates the company's federal, state and local taxes, as well as taxes on any foreign operations and works to find ways of minimizing the company's taxes. The complexities of tax law, especially the complexity added by foreign operations, demand that the company have specialists devoted to this work. For smaller company's this department isn't necessary.

The accounting department is staffed mainly by accountants, logically enough. Accountants are trained in accounting practices and accounting and tax law. Since the practices and regulations are complex and change often, and because substantial amounts of money are at stake, these professionals spend a lot of time keeping up to date on practices and regulations. In most accounting departments, accountants are dedicated to a certain area, such as accounts receivable, accounts payable, tax and so on, and can move among these jobs to enrich their careers. Finally, a company's accountants work with any outside accounting firms that the company uses. (I talk about the accounting function in more detail in Part 3, "All About Money.")

Operations Makes What the Company Sells

In a manufacturing company (one that produces goods, such as widgets, rather than one that sells services, such as massages), *operations* includes the factory where the company makes its products. It also includes departments such as *shipping and receiving*, where the company ships products to its customers and receives materials from its suppliers. The *purchasing* department buys the company's materials and supplies. Operations is often called the *production* function.

In a service organization (one that sells services, such as a bank or a brokerage firm), operations includes the employees who serve the customers and the places where they work. For example, in a bank, operations would include the branch locations.

Operations also includes *back-office* functions in a service organization; that is, activities that the customers don't see but that relate to customer transactions. Let's take the bank example again. You may have no idea what happens when you write someone a check. In fact, once the bank gets it, that check travels through a series of steps before it is eventually deposited into someone else's account and deducted from yours. Those check-processing functions would be an example of a back office function.



MBA Lingo

A *manufacturing company* produces a product from raw materials or parts and components made by another manufacturer, or both, and sells it. A *service organization* delivers a service such as meals (restaurants), insurance and banking services (financial services), haircuts or massages (personal services), transportation (bus lines and trucking companies), or hotel accommodations (hospitality services), among many others. In any company, the term *operations* refers to the area that actually creates and delivers the product or service.

The managers and employees in operations are directly responsible for employee productivity (how many widgets an employee can make in an hour), cost control (how much it costs to assemble a widget), and quality (assuring the correct form and function of the finished widget).

In most companies, people who work in operations are those who do what most of us think of as the actual work of the company. In a manufacturing outfit, they are the production workers and their managers. In a service firm they usually work directly with customers to deliver the service. Most people in operations are hourly employees as opposed to salaried managers.

I'll discuss operations in more detail in Part 2, "How It All Operates."

Marketing Sells to Groups

It's useful to think of marketing as selling to groups of people or businesses (as opposed to selling, which is done one-on-one). The *marketing* department works to get the story of the company's products and services out to customers and potential customers, known as *prospects*. Marketing does this through advertising, promotions, direct mail, special events, and other ways of creating awareness (I'll cover these terms in more detail in Part 3). Marketing's key job is to help the salespeople sell.

The marketing function often includes *market research*, which studies customers and prospects to learn about their needs, motivations, and buying behavior (for example, the age and educational level of the average widget buyer). Marketing can also include *product development*, which devises new ways of serving customer needs (for example, a faster, more powerful widget), and *public relations* (or *corporate communications*), which prepares written material on the company and its products.

MBA Lingo

Back-office functions in a service organization are those operations that a customer doesn't see but that are integral to creating and delivering the service.



MBA Lingo

The *marketing* department prepares strategies, plans, programs and messages that get the word of a company's products and services—and the benefits they deliver—out to customers and potential customers. *Prospects* are potential customer of a company.



MBA Lingo

Market research conducts surveys among a company's customers and prospects to learn about their attitudes and buying behavior. *Product development* conceives, plans, designs and develops new products and services for the company to sell. In firms that sell complex products, such as chemicals or medical instruments, R&D has scientists and engineer who work on new products.





Case in Point

As with Finance, a number of companies are famous for their marketing departments. Procter & Gamble, the maker of major brands such as Tide™ detergent, Crisco™ shortening, Comet™ cleanser, and Zest™ soap, is legendary for its marketing capabilities. In fact, P&G is the single largest advertiser in the United States, with expenditures of some \$2.5 billion a year.

People in marketing either are specialists in a certain area within marketing or are marketing generalists. Specialists tend to work in market research, product development, public relations, direct mail, telemarketing, or writing product literature or other company literature. Specialists typically work for large companies with large marketing departments. Generalists tend to do a bit of everything (but generally not with the sophistication of a specialist in the area) and can work for either large or small companies.

In today's competitive environment, marketing can make or break a company. A firm can have a wonderful product, but unless it spreads the word, gets shelf space, prices its products properly, and induces customers to buy, the company won't generate sales and profits.



MBA Lingo

The *sales* department includes the men and women who sell the company's products or services. Salespeople may sell to individuals, to businesses, and/or to accounts. An *account* is a customer, usually a business, that repeatedly buys from the company. In most companies, a *national account* is a major account with a nationwide business. For example, Sears is a national account for the power-tool maker Black & Decker.

Sales Brings in the Money

The *sales* department includes the men and women who sell the company's products or services. Salespeople may work on the telephone, in person, or both. They may sell to distributors or retailers who re-sell the product. They may sell directly to customers. They may sell to individuals or to businesses, to one-time buyers or to *national accounts* (a major account with a nationwide business). However, wherever, and whatever they sell, salespeople sell.

In most companies, the sales force is the most critical part of the business. Salespeople persuade customers to actually pull out their wallets and checkbooks and pay for a product or service, which is not an easy thing to do.

In many companies, the sales function includes *customer service*, which works with customers after the sale is made. Customer service ensures that customers are truly satisfied with what they've bought, and helps with any problems that arise after the sale.

Many companies think of themselves as sales-driven. These outfits have a sales force that aggressively presents products to customers, does all it can to please customers, and thinks creatively and competitively about ways to make every potential sale. For all its technology, IBM has always been famous for its sales force, which views selling for IBM as a mission.

Sales departments are staffed mostly by salespeople, people who work to find new prospects and to turn prospects into customers by selling them a product or service of the company. Customer service personnel usually work on the phone with customers and may be headed for sales jobs or use the experience to move into marketing.

I'll discuss sales in more detail in Part 4, "To Market, to Market, to Sell and Sell Big."

MBA Lingo

After a sale is made *customer service* works with the company's customers to maintain a link between the company and the customer and to answer customer questions, resolve complaints and, for some products, provide instructions for proper use of the product.



Management Information Keeps Everyone Informed

The *management information systems* function, or *MIS*, runs the company's computer systems. Computers have become so essential to running a business that the importance of this department has increased more than that of any other in the past 20 years. No longer does senior management view MIS, which used to be called *data processing*, as a backwater remote from the company's "real business." MIS is now integral to most businesses, especially large service businesses.

MIS deals with the purchase, programming, maintenance, and security of the company's computers. Recently, companies have focused on using information for competitive advantage, as opposed to just tracking things. (Competitive advantage was covered in detail in Chapter 1, "The Meaning of Management.") As the value of information has increased, so has the value, and status, of MIS.

For example, for years the airlines issued tickets to their customers and tracked where the flights originated and ended. They also knew the mileage between those two points. However, in 1979 American Airlines introduced Frequent Flyer Miles. This program, the first of its kind, used the power of computerized record-keeping—data

MBA Lingo

The *management information systems*, or *MIS*, function defines the company's requirements for computers, software and related items, purchases, installs, programs, and maintains them, and uses the system to provide reports to managers throughout the company.



processing—to turn some very dull information into a very exciting marketing tool. This tool gave American Airlines an advantage over competitors for several years (that is, until they all copied it).

Management information systems is mainly staffed by computer systems analysts and designers and software programmers. Systems analysts work to define and meet the company's hardware needs while programmers work on the software needs. Programmers usually specialize in one or a few programming languages.



MBA Lingo

Support functions basically support all of the other departments that are making something, selling something, or dealing with money. One support function is the *legal department* (also known as *house counsel*), which consists of attorneys employed by the company to handle its legal affairs.

Support Functions Do the Rest

Any other area of a company not already discussed can be called a *support function*. The key support functions in a large company include:

- Human resources
- Legal department
- Investor relations
- Facilities management

The *legal* department, staffed mostly by attorneys, ensures that the company remains in compliance with laws and government regulations. Legal, as it is usually called, also deals with lawsuits, whether they are brought by the company or against the company. The legal department is also known as *house counsel* (as opposed to *outside counsel*, which refers to an independent law firm). Most large companies will use independent counsel for more complex legal situations.

Human resources (usually referred to as HR) works with managers in other departments to attract, hire, retain, and train employees. Because this department works closely with managers throughout the company, you'll examine human resources in detail in Chapter 4, "Managing People Effectively."

Investor relations will in many companies be part of Marketing or corporate communications or report directly to senior management. Investor relations communicates with the company's shareholders, the owners of the company, and organizes the annual meeting of shareholders.



MBA Lingo

The *human resources* department (also known as HR) works with the managers of other departments to attract, hire, retain, and train employees and to ensure that the company is in compliance with government employment regulations. Human resources also sees the employee benefit programs are in place.

Facilities management (or the *Facilities* department) may be part of operations, particularly in a service company. Facilities deals with real estate matters and the maintenance and upkeep of the company's buildings. For example, facilities maintains the heating, air conditioning, and other systems in buildings. Related functions which may be part of facilities include telecommunications, which runs the telephone system, and security, which prevents crime on the company's premises.

Putting It All Together: The Org Chart

The following chart, an organization chart or *org chart*, shows how the departments I've just discussed would be organized in many companies.

As you can see, every department ultimately reports to the chief executive officer (CEO), usually the chairman of the board or the president. In many companies the titles of CEO and chairman of the board are both held by one person, who has ultimate responsibility for the company, whereas the president and chief operating officer (COO) oversee day-to-day actual operations.

Unless the chief executive officer owns the company, he or she reports to the owners, who are usually represented by the board of directors. The board oversees the operations and financial performance of the company and guards the interests of the shareholders.

Note that each division is run by managers, who in turn report to vice presidents, who in turn report to the president and chief operating officer (COO). This organization chart is representative because *reporting lines* in companies follow fairly standard patterns.

MBA Lingo

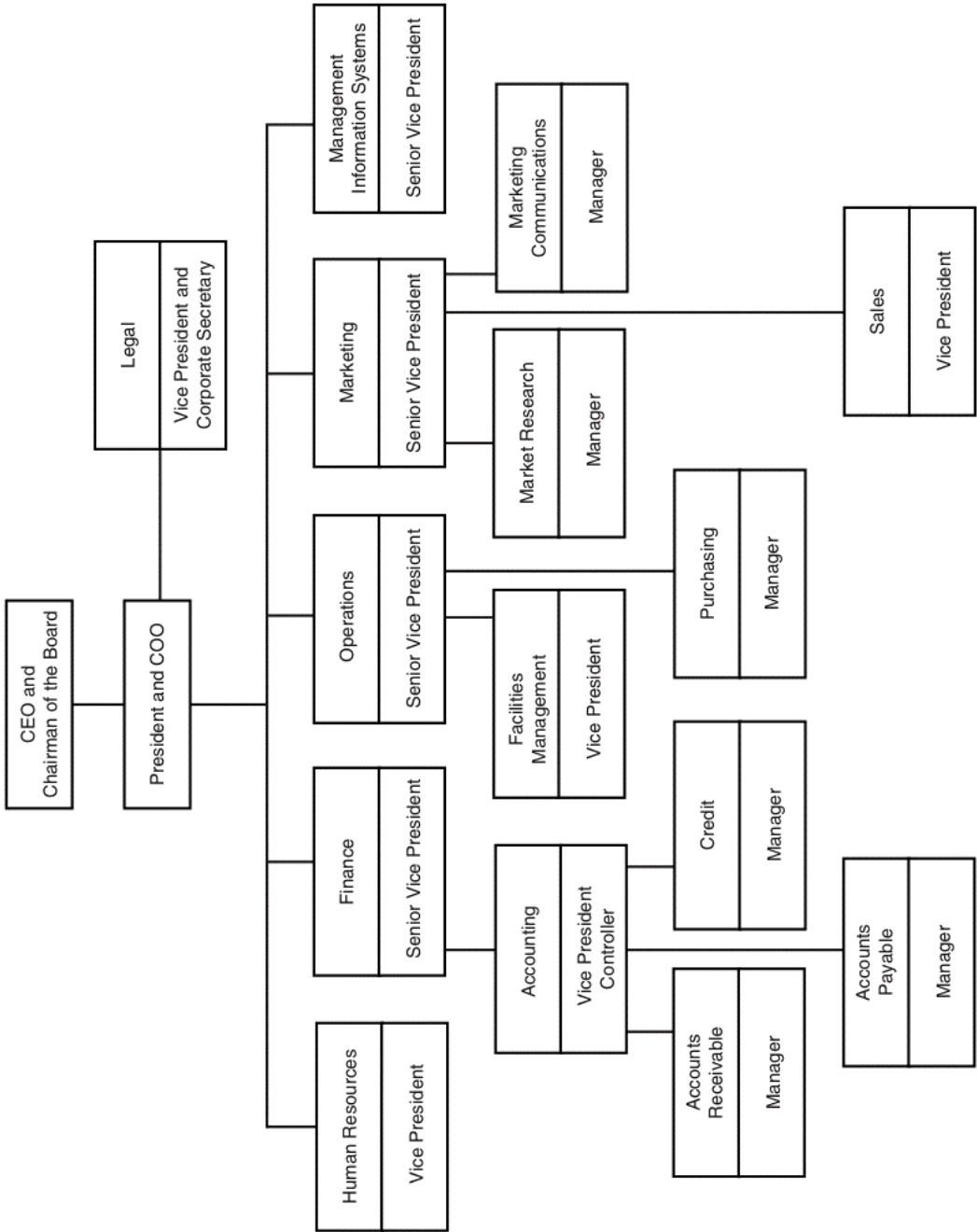
An *organization chart* (commonly called an "org chart") is a diagram that shows the major departments of a company or other organization and the relationship between the departments.



MBA Lingo

Reporting lines refer to the relationships among employees and their managers, and among managers and more senior managers. A *direct line* links a manager with his or her immediate, primary boss. In some outfits a *dotted line* in the org chart indicates a secondary, less formal reporting arrangement in addition to the primary one. For example, Accounting could report directly to the chief executive officer (CEO) but have a dotted line to the chief financial officer (CFO).





Organizational chart (or “org chart”) for a large company.

What About Small Companies?

You will find the departments I've described above in some form in most large companies. While small companies may not have specific departments devoted to each activity, those activities are still performed in small companies.

Every company, large and small, has to prepare budgets, keep financial records, pay taxes, and finance growth. Every company must have a product or service and market and sell it. Every company—except a one- or two-person shop—has to attract and hire good employees, whether or not it has a human resources department.

Small or new companies may do without certain (or most) of the departments discussed earlier, but as a company grows, once the need for a function becomes strong enough, it should be formalized. In practice, a company may eventually become large enough to warrant putting a person in charge of a specific activity (say, marketing or sales) and, later, starting an actual department to handle that activity..

MBA Lingo

For our purposes, a *large company* is one with \$100 million or more in annual sales. Outfits with less than \$100 million but more than \$5–10 million are *middle market* companies; those under \$5–10 million are *small businesses*. This classification system is also used by many banks.



The Least You Need to Know

- Each part of a business has a specific function to perform. It is the manager's job to make sure that it performs that function well.
- Finance and accounting control and count the money.
- Operations makes and delivers the products or services.
- Marketing and sales do the selling that brings in the money.
- The MIS function, management information systems, has become extremely important in most organizations. This reflects the fact that computer-generated information is now a key resource in most industries.
- The organizational chart, or org chart, reflects the company structure.



Chapter 4

Managing People Effectively

In This Chapter

- The role of human resources
- Handling job interviews with potential employees
- Hiring and firing employees
- Dealing with difficult employees
- Promoting employee growth and job satisfaction

In Chapter 2, “The Seven Skills of Management,” I told you that supporting people is a key task in management. The human resources function, or HR, supports all managers and employees in a company. HR professionals take care of the “Big Picture” aspects of managing people—such as hiring and terminating people, setting policies and pay scales, and ensuring company compliance with employment regulations—as opposed to the day-to-day tasks involved in getting things done through others.

Human resources used to be called the personnel department in most companies and still is in some. However, the term *human resources* reflects a new role and new consciousness of the department. Today issues such as ensuring employee growth and development, managing a diverse workforce, interfacing with health insurance firms and training employees so that the company remains flexible have placed new demands on the HR function. It's not just about keeping attendance anymore.

In this chapter I'll explain how human resources does its job and how HR can help you do your job. If your company is too small to have an HR department, this chapter will brief you about the “Big Picture” issues that every manager must understand.

What Does Human Resources Do?

HR helps managers to hire, orient, and train employees and establishes guidelines for employee compensation, performance appraisals, and disciplinary action. HR also helps a company comply with laws regarding employment discrimination and workplace safety. In companies with *unionized workers*, HR helps managers deal with the union's work rules.

In general, human resources carries out the administrative functions that a large staff requires. The major HR activities include:

- Recruitment
- Compensation analysis
- Benefits administration
- Training and development
- General employee administration

Let's cover each of these briefly.

Recruiters work to develop a pool of candidates to fill open positions in the company. To do this, they place ads in newspapers, work with employment agencies, and visit college campuses. They also screen candidates before they're sent to the hiring manager.

Before the company offers a job to a candidate, recruiters may check references and, if required, police and legal records. (And, yes, HR is where those maddening individuals read and file—or throw out—all those resumes from people who want a job at the company.)

Compensation analysts define the job functions and job qualifications in a company and write *job descriptions* for each position in the company. (A job description is an official definition of the responsibilities of a position.) They then decide what level of *compensation*, that is, wages or salary plus benefits, should go to people in that job. The wage or salary is usually defined as a range, for example, \$16,000–\$27,000.

Compensation analysts also set policies regarding how often someone in the job should be considered for a raise.

Benefits administrators work with suppliers of health, retirement, and other benefit plans to see that employees have and receive benefits.



MBA Lingo

Unionized workers are employees who have banded together to engage in collective, instead of indi-

vidual, bargaining with management. The union negotiates a contract with management that applies to the workers, once the workers approve it.



MBA Lingo

Recruiters are responsible for filling open positions in the company. Most companies have

recruiters on staff in the HR department. Recruiters also work in independent companies set up to fill open positions in their client companies, usually at the executive levels, hence the name executive recruiters.

Training and development professionals bring in outside training firms and develop in-house courses to ensure that all employees are trained for their jobs and prepared for advancement.

General employee administrators handle employee communications, charitable efforts (such as blood drives), and employee grievances. In large companies, they may put out a newsletter or other regular publications. They also set policies regarding things such as smoking, office parties, and compliance with safety regulations.

Although the HR staff is there to answer virtually any question you may have about managing employees, its advice is particularly valuable when you are:

- Hiring new employees
- Dealing with problem employees
- Trying to ensure employee fairness and safety

Let's look at each of these issues in more detail.

Hiring the Right Person for the Job

In a large firm, company policy usually calls for HR to be involved in the hiring process. This is for your convenience and the company's protection, and it saves money.

For example, if you need an employment agency, HR not only knows reliable ones, but can also negotiate the best fees. The same applies to *executive search* firms and help-wanted advertisements. HR also keeps resumes on file (despite what you may have heard about all unwanted resumes being thrown in the "circular file"), and a look through them might uncover a solid candidate still interested in joining the company.

Human resources protects the company by ensuring that it stays within legal and regulatory guidelines governing employment. For example, a company cannot discriminate in hiring on the basis of ethnic background, gender, or age. Companies of a certain size must accommodate the handicapped. The manager of every department cannot be an expert on employment law, so the HR function has this expertise.

MBA Lingo

A *job description* is an official definition of the responsibilities of a position. Every job in a company should have a job description, and every employee should have a copy of his or her job description. As a manager, you need copies of the job descriptions of everyone on your staff.



MBA Lingo

Compensation refers to an employee's pay plus her bonus (if any) plus the value of any benefits, such as company-paid health or life insurance. Total compensation refers to the value of all pay, bonuses, benefits and what are known as perquisites, such as a company car or company-paid club membership.





MBA Lingo

An *employment agency* is a firm that other companies use to fill jobs. An *executive search firm* (or *executive*

recruiter or *headhunter*) identifies, meets, and screens potential candidates whether or not they are seeking a new job. When a position becomes available, the recruiter may then recommend a candidate.



MBA Mastery

Avoid a tug-of-war over help-wanted ad copy and resume-forwarding policy by asking for HR's input and taking it seriously. But as the hiring manager, you should have the input and information you need in order to feel involved and comfortable.



MBA Mastery

My best advice on hiring: Get strength in numbers. *Always* interview more than one candidate for a job and *always* have more than one person in your shop interview the candidates.

Advertising the Position

You will usually need approval from your superior to hire a new person, or even to replace someone who has left. When you have that approval, review the job description with HR and ask them to explain the company's hiring process if you're not familiar with it.

If possible, review the copy for any help-wanted advertising that HR intends to place. Alert HR to special venues where ads might attract appropriate candidates; for example, industry magazines and newsletters and sites on the World Wide Web.

When resumes arrive, HR will usually screen them. Some HR departments screen out obviously unqualified applicants, but I ask HR to forward all resumes to me. First, I want to see "what's out there" and judge the effectiveness of the agency or the ad. Second, someone who may appear unqualified for the position to HR may for some reason interest me.

Interviewing Candidates

Interviewing job applicants calls for more preparation and effort than many managers devote to the process. Many job interviews are almost perfunctory, with the real agenda of assessing "chemistry." Unfortunately, chemistry alone is not a good indicator of how well a candidate can actually do the job.

Some HR departments offer training in interviewing. All of them can provide guidelines and advice and perform an initial interview. If there is more than one interviewer beyond HR and you, HR can act as host to the candidate and coordinate the schedule. It is a good idea to have someone beyond you and HR interview the candidate. This could be your superior or a seasoned individual who reports to you. The viewpoint of another person can give you valuable insights regarding the candidate.

Before the interview, prepare questions in writing and be sure to get answers to them. After greeting the applicant and putting her at ease, gear your questions to the two major issues: *Can* this person do the job? *Will* this person do the job?

To get at the first issue—can she do the job?—ask questions related to the candidate's education, work experience, and (key point) past performance. Ask for specifics about her role and her accomplishments at past employers.

The second issue—will she do the job?—relates more to the candidate's character, motivation, and genuine interests. Probe deeply about what she liked and disliked about past positions and why she moved on. What seems to excite her? How does she see herself and others? How fully does she answer your questions? When you probe in a certain area, does she change the subject?

Finally, be aware that there are questions you cannot legally ask a job candidate. These include questions about health, religious and ethnic background, marital status, family plans, and age. Your HR department can give you a better picture of what you can and can't legally ask. Rule of thumb: Don't ask any question that does not directly relate to the candidate's ability to do the job.

Checking References

If you interview an especially promising candidate, you may want to check references before you extend an offer.

Check references yourself, if possible. Otherwise, be sure HR does. If you check them, tell the person you've been referred to that this is an extremely important hire and that you need an honest perspective on the candidate to ensure that this will be a good marriage all around. It's not easy to get objective answers, but try. Many companies are wary about being sued by former employees if they give out negative information. Some will only verify that the person was employed there. However, you should still try to get an objective, useful reference from a former boss. A reference check will give you more data on which to base your hiring decision.

MBA Mastery

When you ask a question, be quiet and wait for the answer.

Don't attempt to answer the question for the candidate or "lead" the candidate to make a particular response. If the answer is incomplete, wait for more. If you don't get more, prompt with a phrase like, "Can you be more specific?" or "In what sense?" or "Why is that?" The human tendency may be to let the interviewee "off the hook." Don't.



MBA Alert

A lukewarm or poor reference

should raise a red flag, but not necessarily end the candidate's chances. Personal animosity can fuel a poor reference, so ask for specific details about the employee's performance. If the specifics sound believable, beware. If instead you get vague negatives or descriptions of personality traits rather than specific behaviors, the review may be "just personal."



Extending the Offer



After you've interviewed what you consider to be enough candidates (I like to see five to eight for a professional position), you'll be ready to extend an offer.

Company protocol usually dictates how an offer is extended. Some outfits believe the offer should come from HR, while others believe the hiring manager should extend it. The latter may be warmer, but the former provides "distance" between the hiring managers and the candidate if negotiations ensue. If HR can act as a buffer, why not let them? Whoever does it, generally an offer is extended by phone and followed up with a verifying letter.

Sometimes, new senior employees are asked to sign an *employment contract*. If you are ever required to sign one, review it carefully or, better yet, have an attorney review it before you sign.

Getting New Employees Oriented

After the candidate becomes an employee, HR provides materials that help him understand company policy, structure, benefits, and ethics. These materials include policy manuals, benefits handbooks, and so on. HR may also have worthwhile videos on the company.

Part of your responsibility as a manager is to develop your employees. This includes arranging for the training they need as well as any they might request that is both relevant to their job and in the budget. If you have people reporting to you, you should have some money (even if it's just \$500–\$1,000 a year) budgeted for training. Or your area may have a share of a larger departmental or central HR budget for training and development.

Large companies often have tuition-reimbursement programs, which pay back the money an employee spends on tuition for approved courses. Employees interested in furthering their education should be encouraged to do so. Tuition-reimbursement plans help companies retain good employees.

Whenever any employee expresses a need for training, consult HR about it. HR may be able to put together a class or seminar on a subject when demand exists. Popular areas for training include software, communication skills, and, yes, management skills and issues.

Dealing With Problem Employees

In my career, I've received the most help from HR in trying to straighten out problem employees and in those cases when firing them became necessary. My superiors were

often helpful, but just as often they either distanced themselves from the situation or, in some cases, made it worse.

No one, and I mean no one, likes dealing with a problem employee, one who is performing poorly, slacking off, displaying personality problems, or undermining the outfit. Because no one enjoys the task, many managers try to “work around” problem employees, rather than deal with them. As a manager, you owe it to your organization and to your good employees to hold problem employees accountable and, when necessary, fire them.

I’m defining a problem employee as one who is not performing or is disruptive, but who you cannot or should not fire immediately. Few offenses warrant immediate firing. Most large companies limit these offenses to proven or admitted dishonesty (beyond stealing pencils), threatening language, violent behavior, on-the-job drinking or drug use, and gross *insubordination* (refusal to follow a reasonable request from a superior).

At most large companies and some small ones, virtually all other offenses (often, poor attendance, poor job performance, or poor attitude) requires a formal termination process to give the employee time to improve. Note, however, that in most companies the first 90 days are officially considered a probationary period during which the employee can be terminated immediately.

Large companies require managers to build a case before terminating a problem employee, partly out of fairness and partly because no company wants a wrongful termination suit on its hands. The HR department assists the manager during this termination process, while also giving an ear to the problem employee.

The termination process is geared to give the employee an opportunity to improve his performance or else be terminated. Typically an employee receives written notice of his failure to perform up to the requirements of the job. The notice mentions the specific areas in which his performance falls short, such as attendance or the quality of his work, and specific goals that the employee must achieve, such as perfect attendance or only two defects per one hundred pieces of product.

It also usually mentions a time frame, usually 30, 35, or 60 days, during which that improvement must be achieved and maintained. The notice is usually also

MBA Lingo

Insubordination is an employee’s direct refusal to follow a reasonable, direct, job-related request from his superior. Repeated or vigorous refusal amounts to gross insubordination.



MBA Lingo

Wrongful termination is firing someone based on their age, gender, race, or religion. Another example would be firing a woman because she became pregnant or firing someone because they got a divorce. These are not legal because there are laws against discriminating against workers on that basis. Valid reasons for terminating an employ are those relating to job performance.



worded so that improvement must “be maintained thereafter” so that the employee does not improve temporarily just to keep his job, and then fall off again.

Some problem employees do pull themselves together, but that’s not the way to bet. Many simply refuse to change their behavior even after a couple of verbal warnings. By the time problem employees are given a formal written warning and are placed on probation, they are, in my experience, usually on the way out.



Case in Point

Some firms drag out the termination process unnecessarily. I’ve seen two cases in which employees (one mine, one another manager’s) with disordered personalities were kept on the job for months because the managers were not permitted to terminate. One of these employees ultimately had to be escorted from the building by security after “losing it.” Lobby hard for termination in such situations.

HR can provide good advice on the legal and procedural aspects of termination. For example, when you write someone up, HR will help you focus on behavioral issues rather than personality conflicts. HR can also help you deal with the emotional dimensions of the situation, both yours and the employee’s.

The best way to avoid problem employees is to hire carefully and do regular performance appraisals.

Take Performance Appraisals Seriously

Most companies have (and every company should have) a policy stating that a manager must give each employee a formal, annual, written performance appraisal. Sometimes, despite policy, not all managers follow through. But every manager should, because first, employees deserve a periodic written record of where they stand, and second, appraisals document the employee’s performance for subsequent managers of that employee.

Some managers are uncomfortable doing performance appraisals. They’d rather do something else, or they hate delivering bad news.

The HR department (and your superior) will have the necessary forms and advice on how to go about writing and administering performance appraisals.

Sample Performance Appraisal

	Rating				
	Outstanding	Very Good	Good	Fair	Unacceptable
1. Attendance	☐	☐	☐	☐	☐
2. Quality of work	☐	☐	☐	☐	☐
Works to highest standards	☐	☐	☐	☐	☐
Controls defects	☐	☐	☐	☐	☐
Minimizes returns	☐	☐	☐	☐	☐
3. Timeliness of work	☐	☐	☐	☐	☐
Sets reasonable deadlines	☐	☐	☐	☐	☐
Meets or exceeds deadlines	☐	☐	☐	☐	☐
Will meet tight deadlines	☐	☐	☐	☐	☐
4. Communication skills	☐	☐	☐	☐	☐
Contributes useful ideas	☐	☐	☐	☐	☐
Presents ideas clearly	☐	☐	☐	☐	☐
Listens to others	☐	☐	☐	☐	☐
5. Works well with others	☐	☐	☐	☐	☐
Assists others on the job	☐	☐	☐	☐	☐
Places team goals first	☐	☐	☐	☐	☐
Develops others' skills	☐	☐	☐	☐	☐
6. Regularly improves job skills	☐	☐	☐	☐	☐
Attends company training	☐	☐	☐	☐	☐
Demonstrates improvement	☐	☐	☐	☐	☐
7. Initiative	☐	☐	☐	☐	☐
Requires minimal direction	☐	☐	☐	☐	☐
Anticipates and warns of problems	☐	☐	☐	☐	☐
Solves problems proactively	☐	☐	☐	☐	☐

The most common mistakes (aside from not doing appraisals or not doing them regularly) is rating people too highly given their actual performance and not giving them a clear program for improving their weaknesses. I'm not encouraging negative performance appraisals, but balanced ones. I have seen perfect employees—exactly two in 20 years. Most of us (myself included) have strengths *and* weaknesses and you must document both in the appraisal.



Case in Point

A survey several years ago revealed that in the average company, over 50 percent of employees rate their job performance in the top 10 percent of the outfit's employees. This is a practical, as well as a mathematical, impossibility. Quite possibly, overly positive performance appraisals contribute to this situation.

If you have a poorly performing employee due for his annual appraisal, use it as an opportunity to document the poor performance and give him an action plan and 30 to 60 days to improve.

When It's Time to Go: Firing an Employee

Sadly, you will probably eventually encounter a problem employee who cannot or will not improve. Once an employee has been given a real chance to improve and has failed, he should be terminated quickly. (Of course, you will have input from HR as well as your superior before you actually terminate an employee.) The following are general guidelines that I have found useful:



MBA Lingo

Severance pay is a final payment made by the company to an employee who is being terminated or laid off. The company makes this payment partly out of fairness to the employee, to "tide him over" during the period of unemployment presumably ahead and partly to assuage any hard feelings the employee may have.

- Meet with the employee in a conference room or an office other than yours or his.
- Give the person formal, verbal notice of termination and a brief, blandly worded letter that states that "the company will no longer require your services."
- Don't apologize. You can say you're "sorry that things did not work out" if you like. You can wish them well in their future endeavors. But it is not your place to make a true apology.
- Deliver the news yourself, but have someone from HR at the termination. That way you have a witness to this final conversation (or confrontation), as well as someone to back you up.
- Ask the terminated employee to leave company property when the conversation is through. If you prefer, you may give the employee until the end of the day, but the sooner they leave, the better.

It may seem harsh to tell someone to take his belongings and leave the premises. However, there are good reasons for this approach. If left to his own devices after termination,

he may create a scene or even damage or steal company property. The only conceivable reason to let someone who's been fired stick around is to be polite. If the employee warrants that courtesy, fine. But beware that it can backfire.

Don't be shocked if the employee threatens you with a lawsuit. When I hear that, I say, "You have to proceed in the way that's best for you," and nothing else. Many companies forestall legal action by providing (often absurdly generous) *severance pay* to terminated employees. Senior managers may receive this as part of their employment contract. But by no means does every fired employee get severance pay.

When severance pay is given to a fired employee, it's usually when he signs a letter agreeing not to sue and accepting the payment as full settlement. Often these employees are "allowed to resign" instead of being fired.

Ensuring Fairness and Employee Safety

HR usually oversees efforts to ensure fairness to employees and company compliance with health and safety regulations. For example, in terms of fairness during employee layoffs, HR is usually involved in arranging severance pay and, for managerial and professional employees, *outplacement*. No one enjoys laying off employees, but there are better and worse ways of handling it. HR can help with this difficult task.

In terms of health and safety, HR understands the impact of legislation in the workplace and can help the company comply. For example, HR will make sure the office is in compliance with the Occupational Safety and Health Act (OSHA), the most far-reaching U.S. legislation on workplace safety. More recently, the Employees with Disabilities Act requires workplaces to be accessible by people with handicaps. Affirmative-action programs and anti-discrimination legislation are other key areas in which HR helps managers stay on track.

Other efforts that human resources undertakes in this area include:

- Handling employee grievances
- Referring employees to assistance programs
- Running the job-posting system
- Advising management on promotions, raises, and career paths

Let's examine each of these in turn.

MBA Lingo

Outplacement refers to services provided by consulting firms (known, naturally, as outplacement firms) to help laid-off or terminated employees make the transition to a new employer or to their own business. These services include counseling, assistance with resumes and job searches, office space, and personality tests to promote self-insight.



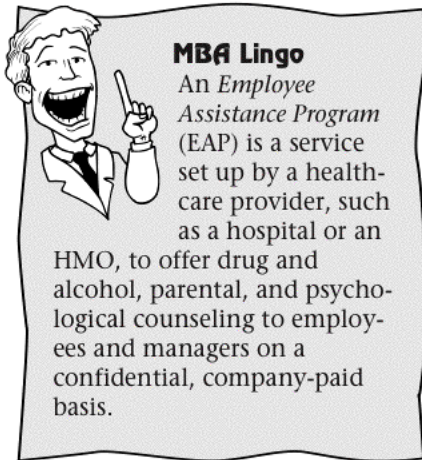
Employee Grievances

HR usually handles employee grievances—complaints by an employee who feels unfairly treated by management—and employee accusations of sexual harassment or racial, gender, or religious discrimination. Usually, HR has procedures for handling these situations and, when possible, resolving them.

Employee Assistance Programs

If the company has an employee assistance program (EAP), HR usually sets it up and tells employees how to use it.

If you have an employee that you suspect may have a drug or alcohol problem, especially one that is affecting his work, discuss the matter confidentially with an HR professional in your company. You should certainly do so if you know the employee has been under the influence while on the job.



Job Postings

Most large companies have a job-posting system, a list of currently open positions within the company and a procedure for applying for the openings. Many companies prefer to fill jobs internally because the candidates are known quantities. These companies often require that the job be posted for some period, usually two to four weeks, before efforts to fill it from outside can begin.

If your outfit has a job-posting system, be sure you understand how it works. (You may use it yourself some time to find a better position.)

Promotions, Raises, and Career Advancement

As a manager, you play the major role in the promotions and raises of your employees, just as your superior does in yours. However, HR administers the system in which raises and promotions occur. The better you understand that system, the more you can help yourself and others who deserve increased salaries and responsibilities.

Here's an example of what I mean. In one large company I worked for, I had an excellent marketing coordinator reporting to me. When raise time rolled around, she was not eligible for one because she was already at the top of her salary range. Given the quality and amount of her work, I believed (and she believed) that she deserved a raise.

When we sat down and analyzed what she was actually doing, we realized that she was performing some of the duties of a marketing manager, the job above her, rather than a marketing coordinator. However, she was not yet ready to be promoted to marketing manager.

The solution?

I worked with a compensation analyst in HR to create a job description for a new position between marketing coordinator and marketing manager—marketing associate. I made sure this position had a higher salary range than the marketing coordinator position. I promoted her to marketing associate, gave her a raise, and was able to reward (and retain) a good employee.

A career path is a series of moves, usually but not always toward positions with increasing responsibility, which represent career progress. A company's HR department develops career paths within the outfit. This can include everything from providing informal advice about advancement within the company to structuring formal management training and *job-rotation* programs.

In the broadest sense, a career path is whatever path your career takes. It may be a straight line leading upward in a single company or a zigzag across companies or even careers. As you'll see in Chapter 26, "Career Management in a Changing World," careers in a single company tend to be shorter than they used to be, so each of us is ultimately responsible for our own career path and planning.

MBA Lingo

Job rotation gives an employee knowledge of all the company's functions by leading the employee through a series of assignments in various departments. Each assignment ranges from several weeks to a few months. Often these programs are part of a formal management training program.



The Least You Need to Know

- The main responsibilities of the human resources function include recruitment, compensation analysis, benefits administration, training and development, and general employee administration.
- Human resources has numerous ways of developing a pool of job candidates. These include visiting schools, working with employment agencies, and placing help-wanted ads.
- HR can advise you on interviewing and hiring job candidates. HR can also help in hiring by checking references and extending the offer.
- Everyone in a company should have a written job description that accurately reflects their responsibilities and is related to their compensation.

Part 1 ➤ *The Manager's Toolbox*

- HR can help you deal with problem employees. Because most companies fear wrongful termination suits, problem employees often require delicate handling. Know your firm's procedures for these situations and work closely with HR to resolve them quickly.
- Every employee (and manager) in a company should receive a formal, written performance appraisal at least once a year. These should seriously assess the employee's strengths and weakness, and set forth a program for improvement.



Chapter 5

Managing Yourself on the Job

In This Chapter

- Useful tips on managing your time and getting organized
- How to prepare and deliver a great presentation
- Conducting efficient meetings

In addition to managing people and money and processes, managers have to manage themselves. Regardless of how much you know about the technical aspects of your job, how you manage yourself will largely determine your progress and earnings.

Self-management means setting the right priorities for yourself, using your time wisely, and presenting yourself in the best way on the job. It means conducting phone conversations, presentations, and meetings so that you get things done and leave everyone feeling that it was time well spent.

Everyone in an organization wants to be promoted. But really, you promote yourself by handling everything you do in a professional manner. This chapter covers important on-the-job skills that are not covered in most MBA programs.

Beyond Job Knowledge

Knowing your job is essential. If you are a financial analyst, accountant, market researcher, salesperson, or operating manager, you must be the best you can be. But to

excel, you must have some other skills that lie outside your area of technical expertise. These skills go across job categories and involve daily tasks that come up in the course of working in virtually every large organization (and most small ones).

The most important of these skills are:

- Managing your time
- Staying organized
- Using the telephone properly
- Conducting presentations
- Conducting meetings

No matter what your actual job is, being able to do these things well will only help you perform it better.

Time Is Not on Your Side

Everyone who is employed is busy. But not all of us are productive. The only way to be both busy and productive is to work on the right things, in the right way, for the right amount of time. The only way to do that is to plan.

If you are not already doing so, get used to the idea of planning your time. This doesn't mean just writing things to do in your planner. It means carefully considering the tasks you agree to take on and the resources, including the time and other people's time that you will need to complete them—and their importance.

When you agree to take on a task, any task, you must ask yourself how important it is and how important it is that you or your people perform it. In today's typically understaffed outfit, you simply must be protective of your time and your people's time. The best test will include questions such as:

- Will doing this create revenue? If so, how much and when?
- Will doing this reduce costs? If so, how much and when?
- Does this relate to my goals as stated by my boss or the goals of the department as stated in our plan? If not, how does this fit?
- What will happen if this does not get done? What threat will materialize or what opportunity will be lost?
- What will *not* get done if I or my people take on this responsibility?

That last question is key: In downsizing, most senior managers are much better at getting rid of workers than they are at getting rid of work. The usual procedure is to simply reassign more work to the remaining workers. This can undermine employee morale,

customer service, and eventually the company itself. In a downsizing firm, not doing the less important things is as crucial as doing the more important ones.

It's not easy to refuse to take on work, especially from your boss, but it pays to let her know how much you and your people are doing, and to warn of what projects might fall through the cracks if the new task is assumed.

If you still get stuck with an unimportant task, at least you can assign it lower priority. If you and your people get the most important tasks done, you will be OK.

Quick Time Management

Time management revolves around planning. So plan your work and work your plan.

It's best to start with your long-term goals, because you must spend your time on the most important things, and the most important things are activities that move you toward your long-term goals. You should also specify intermediate and shorter-term goals.

So start with your business goals for the year (or even the next two, three, or five years) and then come up with interim goals, for the quarters and months of the year. Then specify the weekly and daily tasks you must accomplish in order to reach those goals. You should also specify weekly and daily goals.

For most of us, working the plan is more difficult than planning the work. That's because so many urgent things seem to take priority over what we have planned. As one wise observer put it, "The urgent things keep us from doing the important things." It is up to you to battle this situation. Get to know the difference between what is important and what is merely urgent. So much of what is presented to us as "urgent" is actually unimportant. Constantly ask yourself, "What happens if this waits?" and then weigh the answer.

MBA Alert

A key concept of time management is to get the most important things done first. If you accomplish the insignificant at the expense of the essential, you will not be around long—even if you did it at your boss's direction.



MBA Mastery

One key to solving the time crunch we all face may be learning respect for one another's time. If you don't impose on others' time, if you plan properly and don't make your problems other people's emergencies, if you work at a proper pace, and if you only make the commitments you can keep, then you can ask them to do the same.





Case in Point

The great French general Napoleon Bonaparte reportedly would ignore requests from the generals below him for 30 days. If the request continued after that point, he considered it important.

Admittedly, Napoleon's day was not a "real-time" age, and lacked phone, e-mail, and fax. However, ignoring low-priority requests and hoping they go away can work. I've used this effectively on bosses who get random ideas that create work for others but little value. It is not a tactic to use often, or on everyone—only requests that waste time.

Now Where Did I Put That?

Aside from too little time, most managers face too much paper. You may be old enough to remember the term "paperless office." This was supposed to be a big benefit of the personal computer. What a laugh!

The personal computer and, worse yet, the printer have enabled us to generate more paper than ever before. (E-mail might be contributing, but I doubt it.) A lot of this paper is going to wind up in your office and it will turn your office into a dumping ground if you let it.

What can you do? Stay organized. But how?

First, you need a filing system. If you don't know how to set one up, follow these suggestions. (You could also check out my other book, *The Complete Idiot's Almanac of Business Letters and Memos*.)

Basically, you need the right-sized files for various topics. By various topics, I mean those that you must deal with due to your job function: customer and prospect files, project files, personnel files, and whatever else you deal with on a daily basis.

Your choice of topic will affect the size of the file. You want the topic to be narrow enough to be useful in identifying the material, but not too narrow. If it's too narrow, you'll wind up with hundreds of thin files with very little in them. If the topic is too broad, you'll have fewer files, but they will be far too thick.

Here's an example of what I mean. If you're a salesperson who sells just a few products to a small number of customers, you might maintain a single file for all prospects. If you have multiple product lines and a large customer base, you may want to have files labeled "Prospects—Copiers," "Prospects—Office Furniture," and so on. Of course, any file that gets too thick can be subdivided.

Once you have files, you have to use them. That means that you must return papers to them after you are through with them and return the file to its proper place. This sounds simple, but if you are not naturally organized (and don't have an assistant to keep you organized), things can quickly fall into chaos unless you consciously set aside time each day for organizing your office.

Here are several other tricks that can help you win the paperwork battle:

- Try to touch each piece of paper only once as you sort through your incoming mail and memos: Trash it, refer it, answer it, or file it—right then and there. This is the TRAF system of Stephanie Winston, author of *The Organized Executive*.
- If possible, write your reply or a referral to someone else right on the memo. Don't create unnecessary paperwork.
- Don't open junk mail unless you might actually respond to the offer.
- Fill forms out promptly if they need filling out. If you don't have all the information you need, fill out what you can and then you'll know what you need.
- Don't keep a lot of copies of reports of other documents in your office. Put extras in a storage room or keep one copy for others to copy if they need it.
- If you like to save newspaper or magazine articles, clip them and put them into files. Don't let periodicals pile up.

Phone Power

The simple telephone is still the major communication tool in business—if you use it right. Here's how to get the most out of yours.

MBA Mastery

You might consider a method of using three types of files, even for one topic. You can have "working files" for the projects you work on day to day. These you keep close at hand and carry to meetings. Then you can have "historical files" in your file drawer. These hold information that you may have to refer to but don't want in your working file. Finally, you can have "archives" for material that you may conceivably need in the future; for instance, for tax purposes or legal reasons. Archives can be stored outside your office or even at another site.



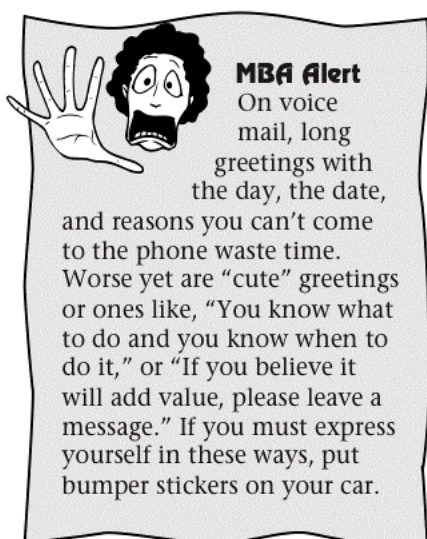
MBA Alert

You don't have to be a "neat freak," but many executives look askance at those with sloppy offices. In general, a reputation for being disorganized can hurt you, and it certainly won't help you.



Incoming Calls

Answer by saying hello and identifying yourself. If company policy requires you to mention your department or company name, add that, too. You should not answer by saying "Yes?" or, unless it's customary in your outfit, only your last name. Both sound too curt.



Unless you are in customer service or a similar function, if your phone rings all day long and you answer it every time, you're not going to get your real job done. In this case, let voice mail answer for you for most of the morning and afternoon, and return the calls in the late morning or afternoon.

Keep your voice mail greeting short. A simple, "Hello, this is Tom Gorman. Please leave a message, and I'll get back to you shortly," has worked for me for years. Similarly, you should keep your messages as short as possible. And do everyone a favor by always leaving the number where you can be reached and leaving it slowly. Many people check their voice mail from outside their office where they may not have your number with them.

Finally, it's considered courteous to return calls the same day. If they came in late in the day, say, after 4 p.m., you can often let it slide into the next day.

Outgoing Calls

When you have to call someone, call them. Millions of people walk around all day saying, "Gee, I have to call this guy." What's stopping them? Don't procrastinate. When you know you need to talk with someone, especially if you need something from him, ask as soon as you can. Otherwise, he may be in a time crunch, or out of town, or no longer with the company, or whatever.

I've found it useful to set aside a certain time of day to make outgoing calls and to return calls. It's also a good idea to keep calls short. Pass a few pleasantries, get down to business, and get off and onto the next call. It is very easy to chew up 20 or 30 minutes on gossipy chatter, but it's not very productive.

Here are some other general hints:

- Save time and money (since directory assistance now charges) by keeping your telephone list up to date.
- Speak into the phone at a moderate volume. With today's equipment, there's no need to shout into the phone on a long-distance call.

- Unless you are interested, get rid of telemarketers and job seekers politely, but quickly.
- If the switchboard keeps directing the wrong type of incoming call to the company to your phone, speak with the operators and tell them where those calls should go.

Powerful Presentations

In a large organization, the opportunity to make a presentation can represent an opportunity to help or hurt your reputation. People who make good presentations get to make more presentations. Those who don't "present well" often are not asked to present anything again.

Speaking before groups ranks among the most anxiety-producing events in adult life. That's because everyone knows that something is at stake: You are either going to knock 'em dead or go down in flames. (In reality, most presentations fall somewhere in between, but that's not how you feel beforehand.) So there are three things you must do: prepare, prepare, and prepare.

MBA Mastery

If you know someone who makes a good living on the telephone, such as a salesperson, agent, or headhunter, try to observe them on the job some time. There is a combination of courtesy and persistence, and a way of pacing the conversation, asking questions, and allowing for silences, that some of these people—and some skilled executives—have mastered. Listen for it, and you'll hear what I mean.



Prepare Your Material

The key thing is to have a point. Or to have two or three points. But if you don't have a point to make, why are you getting up in front of people?

You've probably seen it. A guy talks for 45 minutes. You can hear what he's saying, so that's not the problem. And what he's saying may even make sense at the time. But you walk away saying, "What was his point?" or "Why did he tell us all that?"

Once you have a point or two or three, you're halfway there. (Few people can remember more than three points. In fact, the more points you have, the fewer they'll remember.) Try using this simple formula to structure your presentation around your main points:

1. Introduce yourself and your main point or points.
2. Support your points.
3. Repeat or sum up your points and then close.

Here are the most common mistakes in structuring a presentation:

- Throwing in too many details
- Broadening the topic or getting off the subject



MBA Mastery

Humor can get the audience on your side, but be careful. Not every speaker, including some very good ones, can handle humor. If you have a knowing audience, "in" jokes about shared problems, common enemies (the IRS or a major competitor, for example), or the difficulty in parking can work. Witty observations tend to work better than long stories. Avoid making fun of yourself, anyone else, or the company. Forget off-color or politically incorrect humor. Even if you think it's funny, it's not corporate.

- Failing to support the points with solid evidence
- Not sticking with the structure

The fact is that unless people are exceptionally bright and motivated and take copious notes, they will not remember most of what you've said. The details blow past them, or worse, bore them. If you get off the topic, you are basically wasting everyone's time.

If you have a good structure, stick with it. Don't decide to start ad-libbing, unless there is a good reason and you can handle it. The same goes for humor.

By the way, don't mention that you are tired or sick (unless you must apologize for your voice). Don't offer complaints. Be upbeat and positive.

Visual Aids

Many business presentations call for visual display of information. Depending on the presentation, this can include tables of numbers, financial highlights, organization charts, graphs, and bullet points of information. The right visual aids can enhance your presentation, maintain audience attention, and keep you on track.

The first major rule—and the one most often broken—for visual aids is: Keep them simple. Complex exhibits communicate very little, yet many presenters insist on using them. Audiences refer to these complex exhibits as "eye charts" because they feel as if their eyes are being tested in a doctor's office.

Use simple illustrations, bar charts, pie charts, very brief tables, and no more than five bullets (preferably fewer) on a single exhibit. In this situation, less is definitely more.

The second major rule—and it's broken as often as the first one—is to not use too many exhibits. The mark of an amateur is to try to get through 40 slides in 45 minutes. Figure about two minutes per slide, which would indicate that a 45-minute talk would call for about 20 or so slides.

Two minutes per slide may seem like too long to you, but you should be using the slides as talking points and have something to say about each one. Plus you usually have some introductory comments at the beginning and maybe some questions and answers at the end. It works out.



MBA Mastery

Graphics software, such as Microsoft PowerPoint and Lotus 1-2-3, enables you to create charts—such as bar, pie, and line charts—from data in a spreadsheet. If presentations are an important part of your job, you should learn how to use such software.

Given today's extensive publishing technology, there are a number of ways you can present materials: as handouts, overhead transparencies, slides, or computer-based files.

The following table lists the pros and cons of each type.

Presentation Materials

Material	Pros	Cons
Handouts	Easy to construct. No need for equipment (other than the copier). Audience can make notes on your exhibits. Best for short presentations with fewer than five exhibits.	No visuals up on a screen in front for you to refer to. Some audience members will look ahead to later parts of the presentation.
Overhead transparencies	Easy to construct without training. Can be done in color for relatively low extra cost (if you have a color printer). You can write on the transparency to make a point.	Not considered very spiffy. Transparencies are awkward to handle during the presentation. Need an overhead projector.
35mm slides	Very professional-looking. Handle easily.	Require special equipment to create the film. Film must be sent out to photoshop to be developed.
Computer-based slides	Can be done in color. Very professional-looking. Easy to use during the presentation. Inexpensive to make, once you have the equipment.	Can be expensive. Requires a personal computer, software, and some training. Requires you to bring a laptop computer to the presentation site.

Whatever form of visual aid you use, triple-check your exhibits for accuracy and number them so you'll know they are in the right order. If at all possible, do a "dry run" through the presentation with the exhibits, with one or two people looking on. That's the best way to ensure accuracy.

Prepare Yourself

Prepare yourself by realizing that once you know your material, you have expert power over your audience. You know more about the subject than they do. Also (except for those who want your job), the audience wants you to succeed. They're rooting for you because nobody wants to attend a dull, boring presentation.

Before the presentation:

- Put your notes on index cards for ready reference, but don't plan to read the speech (a sure-fire bore).
- Practice the presentation several times, but don't exhaust yourself.
- Get plenty of rest the night before.
- Dress your best. Arrange your clothing and shine your shoes the night before.
- Plan to arrive at least one-half hour before your scheduled time.

In front of the audience, plan to:

- Project your voice to the back of the room, especially if your voice doesn't carry. If your voice is too soft, get a microphone and use it, but not too close to your mouth.
- Hold your hands comfortably up in front of you. You'll automatically start using them to gesture. Don't stuff them into your pockets and rattle your change around.
- Use a podium if you wish, but I think speakers relate to an audience better without one. Also, you create visual interest if you walk around a bit (but not too much).
- Move your eyes around the room from person to person, alighting on one person at a time. But don't stare.
- If people start annoying side conversations, politely say, "Excuse me," or ask, "Are you with us?" or just be quiet until they realize what's going on.
- Announce that you will take questions at the end of your presentation. In most situations, this works far better than taking them as they occur. Or you can say that you will periodically ask if there are any questions before you move to new material.

Prepare the Room and Equipment

Arrive early and make sure the room is set up properly. Anyone who has done enough presentations can tell you about the time they showed up with 35mm slides and the room was equipped with an overhead projector.

The only way to cope with this is to call the person in charge of the room in advance (if the presentation is on unfamiliar ground, for example, at a hotel) and then still get there early.

Final tip: Be sure there's a glass of water nearby during your presentation, just in case your mouth gets dry.

All About Meetings

Meetings are like the weather: Everyone talks about them, but nobody does anything about them. Most managers feel that they have to spend far too much time in meetings. Actually, what they are saying is that they are spending too much time in unproductive meetings. Truly effective meetings are so rare that people actually comment on them when they occur. Follow these practices, and you will hear the compliments yourself:

- *Invite only those who must attend.* The more people, the more talk, and the less action. So invite only those with a stake in the decision or plan. (If the meeting is just to make a general announcement, that's different; you may need to invite your entire staff or company.)
- *Have both a starting time and a closing time for the meeting.* Mention the closing time in the memo announcing the meeting. During the meeting, you can refer to the closing time to move things along.

Also, make the closing time as soon as possible. If you need an hour or three, by all means schedule that amount of time. But realize that people tend to use the allotted time, whether they need it or not. Shorter is better.

- *Have a written agenda.* You don't necessarily have to distribute it before the meeting, although that may be useful if people have to prepare beforehand. The key thing is to have an agenda and to distribute it at the meeting. It not only inspires confidence in the attendees, but will help you move the meeting along.
- *Chair the meeting (or have someone else chair it).* The person who runs the meeting should have the authority, either by rank or knowledge, to maintain order and efficiency in the meeting.

MBA Alert

Although most people want fewer meetings, there are those who want to be at any meeting where they may have even a remote stake. This is usually a personality issue, so when you know someone like that, invite them. Or don't—and have a good reason ready when they ask, "Why wasn't I invited to...?"

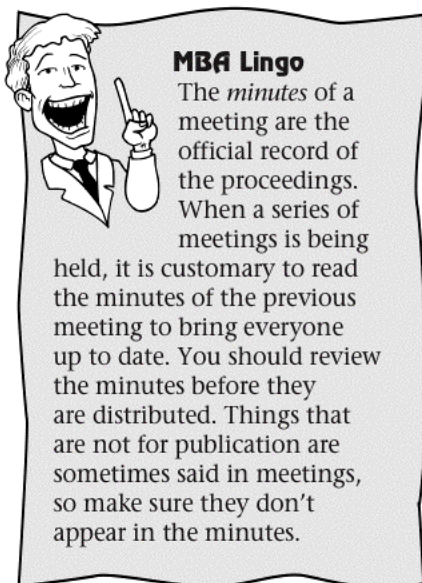


MBA Mastery

Useful phrases when chairing a meeting include: "Are you with us?" or "We can't have stereo conversations" (to people talking among themselves); "We're not going to settle that here today" (to people who can't get off a topic); and "I'm sorry, but Mary has the floor" (to someone interrupting). Don't be afraid to assert your authority as the chairperson. At one time or another, everyone will appreciate the order that results.



- *Ask someone to take notes and compile the minutes of the meeting.* Although nobody enjoys taking notes and writing up the minutes, it creates a record and helps those who did not get to attend. It's a secretary's or administrative assistant's job, so if you have one, great. If not, rotate the task among the eligible candidates, who will usually be junior people.



- *Always try for a clear outcome—a decision or next steps—before closing the meeting.* The problem with so many meetings is that they have no clear conclusion. Bring the meeting to a close with a simple phrase such as, "We're going to have to stop now," and add, "But I just want to recap what we've accomplished this morning." If you don't know or don't remember what was accomplished (or nothing was), ask, "What have we accomplished here this morning?" or "What does the group believe makes sense for our next steps?"

Recapping what was decided or planned and laying out next steps, and particularly who will be responsible for what, is essential. It gets into the minutes and helps move things along.

Some people, particularly those new to organizational life, feel that they are supposed to put on some kind of performance or to somehow "shine" at a meeting. Rather than worry about that, the best thing you can do is prepare for the meeting. You can do this by reading past memos or reports on the topic or through informal conversations.

In the meeting itself, try to do your part to illuminate the issues and find workable solutions to the problems at hand. Often the less you say, the better, as long as what you say is lucid and worthwhile.

The Least You Need to Know

- Time management is the essential skill if you are to be productive and reach your goals. The whole key is to relate your daily activities to your most important goals.
- Use the phone consciously, not mindlessly. Many people in business may know you mainly by the way you come across on the phone. Be courteous and friendly, but businesslike.
- The key step in delivering a presentation is to prepare to the point where you feel completely confident about the material. When you first start doing presentations, you will probably over-prepare, but that will give you confidence in front of the audience.

- Always do the best possible job preparing your visual aids, and try to do a dry run. Arriving early at the presentation site can help you avert disaster.
- Effective meetings call for inviting only those who must attend; having a starting time, closing time, and a written agenda; and chairing the meeting properly.
- Always end a meeting by reviewing what was decided or the next steps and how follow-up will occur.

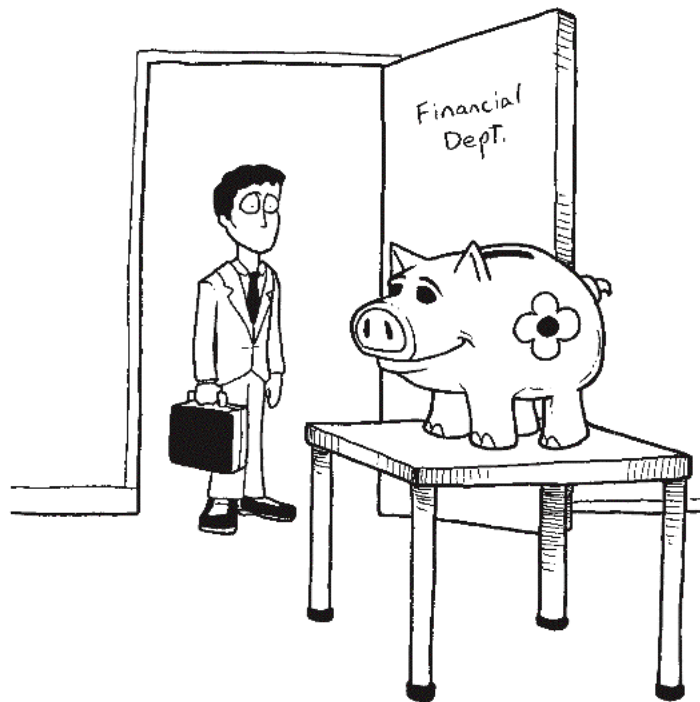
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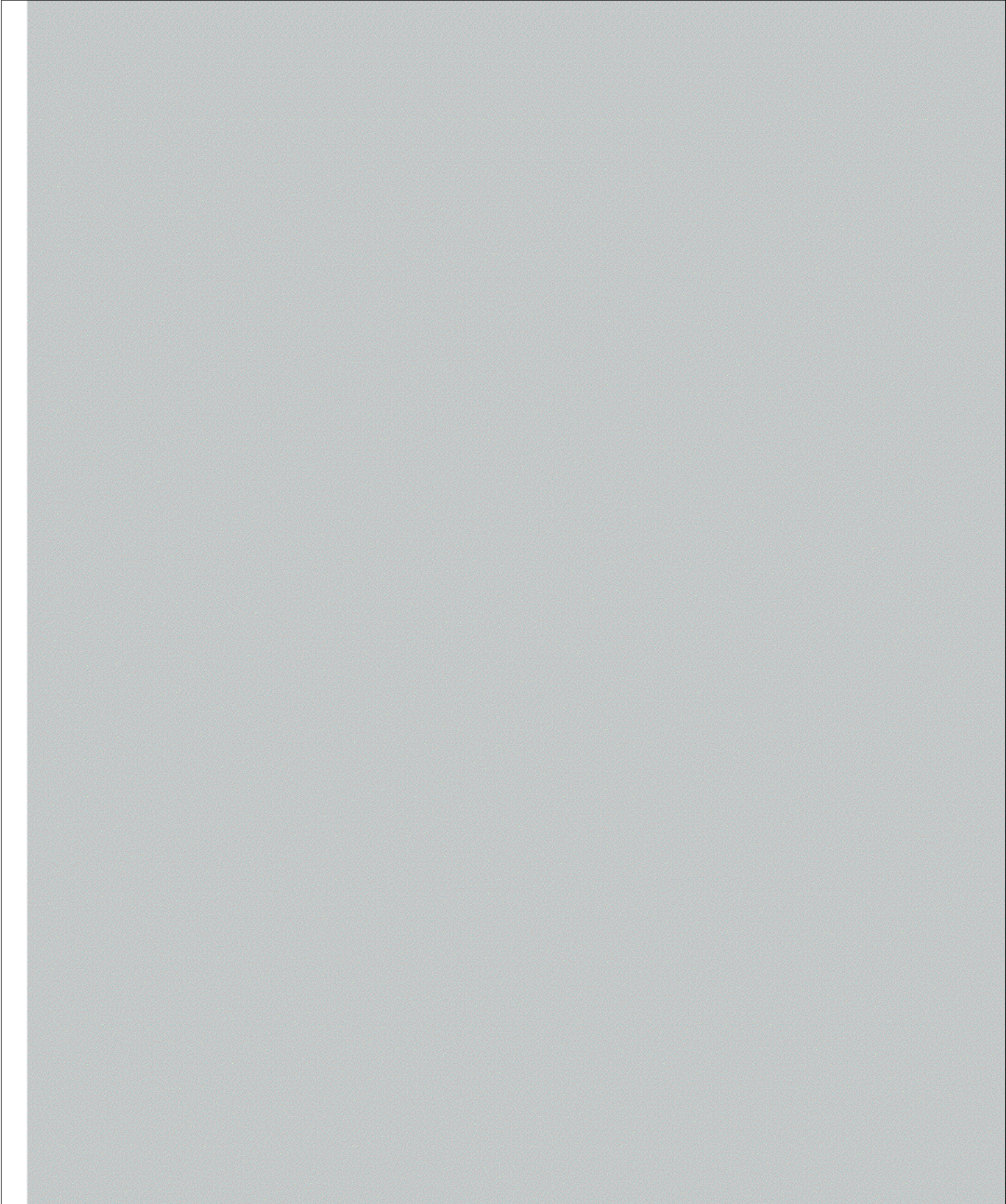
How It All Operates

Let's pull back for a bit and look at the systems at work in business. The largest system of all is an economy. We can talk about the national economy, the international economy, and even the global economy. An economy is basically the sum of all of the business activity of every kind that takes place in an area.

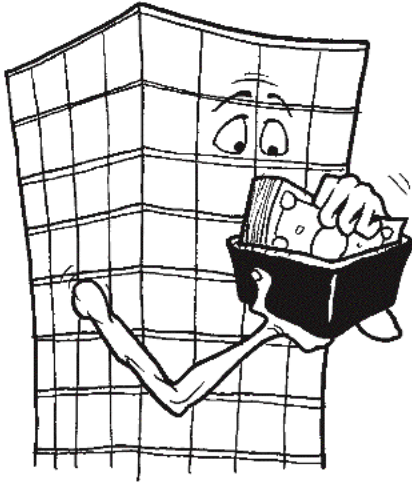
An economy works on certain principles and, since a business functions within an economy, professional managers make a point of knowing how the economy works. They also know what signals to watch for in the economy, signs that business conditions may be getting better or worse. We'll take a look at these signals, and at some basic economic concepts, in this part.

We'll also look at concepts in what is known as operations management. Operations management is the whole broad area of making business decisions. Professional managers, and of course MBAs, know how to apply a variety of analytical tools—methods of analyzing business problems—to arrive at the best possible business decisions. You will learn about these tools and how to use them in this part as well.





Chapter 6



It's the Economy

In This Chapter

- The structure of the economy
- Understanding GNP and GDP
- The causes of recessions and recoveries
- The effects of inflation and unemployment
- The difference between fiscal policy and monetary policy

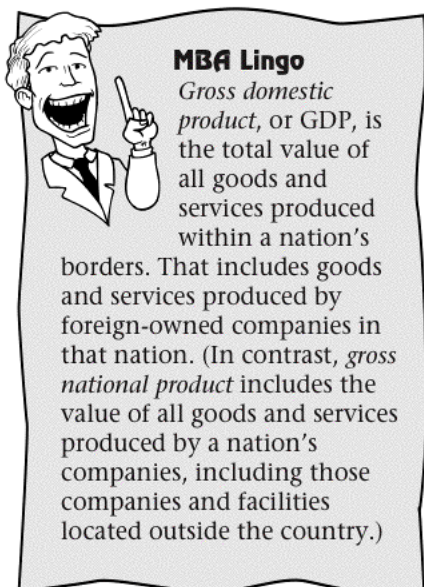
The national economy is the total of all of the financial transactions that go on in the nation. This includes everything: a kid buying candy with the quarter in his sweaty hand, one megacorporation acquiring another in an international transaction, the government opening (or closing) a military base. An *economy* includes every exchange of money that takes place in a city, state, nation, or region.

Business operates in an economy the way a fish swims in water. That's why business people follow the economic news. To be sure, businesses can affect the economy; for example, when some large corporations moved their headquarters out of New York in the 1970s, it hurt the city's economy. However, as we will see, the economy has an even greater affect on business.

This chapter gives you an overview of the economy and a summary of economic concepts you should know. More important, it will help you understand the economic news and the effect the economy has on your business. You may notice that this chapter uses the U.S. economy as a specific example from time to time. Please understand that these economic concepts are universal and apply to all countries.

Our National Economy: As Easy as C + I + G

From the various economic data issued by the government agencies and other institutions, economists have found that certain statistics point to the current or future state of the economy. These data, called *economic indicators* because they indicate the state of the economy, can help you as a business person steer your company through periods of economic change.



Because an economy is the total of all financial transactions in an area, you can measure the size of an area's economy by adding up the transactions. The dollar value of all goods and services produced in a country, for example, is measured by the *gross domestic product*, or GDP. GDP measures the size of a national economy.

Here is the formula for GDP:

$$\text{GDP} = \text{C} + \text{I} + \text{G} + (\text{Ex} - \text{Im})$$

The parts of this formula are simple:

C = total spending by consumers

I = total investment (spending by businesses)

G = total spending by government (federal, state, and local)

(Ex - Im) = net exports (exports minus imports)

The U.S. economy is now over \$7 *trillion*. That means that the United States produces more than \$7,000,000,000,000 worth of goods and services within its borders *every year*. The U.S. economy is the world's largest national economy.

What Happened to Gross National Product?

Economists now discuss the economy in terms of GDP instead of *gross national product*, or GNP. Here's why: GDP refers to all goods and services produced *within* a nation's borders. GNP refers to all goods and services produced *by* a nation, including the overseas production of its companies.

For example, U.S. companies do a lot of production overseas, and foreign companies (especially foreign auto makers) do a lot of production in the United States. The GNP would include the monies generated by these companies, even though they are not generated in the U.S. The GDP tells economists what's actually happening in the U.S.

If you look at the GDP formula, you'll see that if any one component increases, then the total GDP increases. For example:

- If consumer spending grows—if people buy more clothing and cars and homes—then the economy grows.
- If business investment grows—if companies invest in buildings and equipment and hire new workers—then the economy grows.
- If government spending grows—if money is poured into space programs and roads and police officers—then the economy grows.

MBA Lingo

Exports are goods shipped *out of* the country in which they are made to be consumed in another nation. *Imports* are goods shipped into the country that will consume them. The goods were made by the exporting nation. One country's exports are another country's imports. *Net exports* are a nation's total exports minus total imports during a certain period, for example a calendar year. Net imports are a nation's total imports minus its total exports during a period.



By the same token, if any one component of the GDP decreases, then the total GDP decreases.

You'll look at the dynamics of the economy in a bit, but first let's examine exports and imports.

Imports and Exports: Easy Come, Easy Go

When a country exports goods, it sells them to a foreign market; to consumers, businesses, or governments in another country. Those exports bring money into the country, and that increases the GDP. However, when a country imports goods, it buys them from foreign producers. The money spent on imports leaves the economy, and the GDP decreases.

The term *net exports* assumes that exports are greater than imports. If a nation exports, say, \$100 billion dollars' worth of goods and imports \$80 billion, it has net exports of \$20 billion. That amount gets added to the country's GDP.

But if imports are greater than exports, net exports are negative. For example, if that same nation exported \$80 billion of goods and imported \$100 billion, net exports would be $-\$20$ billion. That amount would be subtracted from the GDP and the economy would be that much smaller.

Conceivably, net exports could be zero, with exports equal to imports.

If net exports are positive, the nation has a positive *balance of trade*. If they are negative, the nation has a negative trade balance. Virtually every nation in the world wants its economy to be bigger rather than smaller, and to be growing (we'll see why in a minute). That means that no nation wants a negative trade balance.



Case in Point

A nation's *balance of trade* is calculated for a country in relation to the rest of the world, and in relation to other individual nations. It can even be calculated for a specific industry.

For example, the U.S. usually has a negative balance of trade with the rest of the world. That means the U.S. imports more than it exports.

The U.S. also has a negative balance of trade with Japan. The U.S. imports more from Japan than it exports to Japan. However, the U.S. exports more fruits, grain, and vegetables to Japan than it imports from Japan. So the U.S. has a positive agricultural trade balance with Japan.

Because no nation wants a negative trade balance, some countries try to protect their own markets. This policy, called (logically enough) *protectionism*, uses barriers to keep out imports. These barriers include high *tariffs* (taxes or surcharges on imported goods) and strict rules about what products can be imported.

Despite some nations' attempts at protectionism, *free trade*—trade unencumbered by barriers—has been the dominant trend for most countries for most of this century.

Economists usually favor free trade because it tends to give consumers the greatest choice of products at the lowest prices. That occurs because some nations are better at producing certain products than others.



MBA Lingo

Protectionism refers to government policies designed to restrict imports from coming into the nation. A *tariff*, also called a duty, is a tax on imports as they come into the country. *Free trade* means international trade that is unrestricted by tariffs or other forms of protectionism.

Can Exports Move an Economy?

In most economies, exports and imports are less important in the business cycle than the other three sectors. But there are exceptions.

Suppose a nation that exports a lot of oil experiences a sudden fall-off in foreign demand for its oil. That nation could quickly skid into recession. Similarly, if that nation saw a sudden surge in demand for its oil, it could well move into recovery. (I'll talk more about recession and recovery later in the chapter.)

An economy that depends heavily on exports, particularly a single export, can be quite vulnerable to recession. An economy like that lives and dies by trade policy—and by its major export, whatever it is.

Growth Is Good

What's the importance of economics? Why should anyone care about this stuff? What does it have to do with anyone's job or business?

Plenty!

An economy is a dynamic system for supplying people's wants and needs. Like any dynamic system, it doesn't stand still. It is either growing or contracting.

If the economy is growing, that's good. It's good for two reasons: First, in most economies the population is growing and new people have needs that must be met. If the population gets larger, the economy has to get larger to meet those needs.

Second, even if the population were not growing, people always want and need more goods and services. They want a rising *standard of living*. Only an economy that grows most of the time can give people a rising standard of living.

MBA Lingo

The *standard of living* is the total quality of life supplied by an economy. It includes the availability and quality of jobs, housing, food, education, transportation, sanitation, recreation, and health care in a city, nation, or region.



GDP: It's All Connected

There's an important aspect of the GDP formula that we haven't discussed: The elements are all interconnected.

When the state police buy cars from Ford Motor company, it increases G, government spending. When Ford pays its advertising agency it increases I, investment or business spending. When a copywriter at that ad agency goes out and buys a bottle of French champagne, she increases Im, imports. When her wine merchant has excess inventory of California Chardonnay that he sells to a merchant in Canada, he increases Ex, exports. And so on.

Conversely, if the state closes down an agency, it reduces G. Those ex-workers without paychecks will then decrease their spending; for example, they'll postpone buying a new Ford, thus reducing C. When Ford sees its business decrease, it will cancel factory expansion plans, thus reducing I, investment. And so on.

MBA Lingo

The *business cycle* is the recurring pattern of expansions and contractions in an economy. The expansions are called *recoveries* and the contractions are called *recessions*. Officially, a recession is two consecutive quarters of contraction; that is, GDP growth of less than zero.



In an economy, everything—every activity, transaction, person, and organization—is directly or indirectly connected. So when the economy expands or contracts, everyone is affected. That is why everyone is concerned about the economy's expansions and contractions, or the *business cycle*.

What Goes Up, Must Come Down

The business cycle exists because of fluctuations in demand. (Demand here is just another word for spending.) $C + I + G + (Ex - Im)$ represents total demand. Consumer spending is consumer demand. Business spending is investment demand. Government spending is government demand. Exports represent foreign demand for a country's goods. Imports represent domestic demand for foreign goods.

Fluctuations in demand tend to be unpredictable in both their timing and intensity. Some economists spend their lives trying to predict recessions and recoveries, but as a group their record is fairly poor. The one thing they, and we, do know is that a recession always follows a recovery, and a recovery always follows a recession. We just don't know when and with what strength. The business cycle never stops.

Tracking the Business Cycle

Here's what happens in a typical business cycle. During a recovery, things steam along nicely. Consumers are buying, which means that spending, or demand, is increasing. In the GDP formula, C increases.

To meet this increased demand, industry expands its productive capacity. Businesses lease new space and buy new equipment and hire new workers so they can expand their capacity and increase production. This increases I , investment. During a recovery, most businesses want to "make hay while the sun shines," so they expand vigorously.

As long as consumers keep buying and businesses keep investing, the recovery continues and everything is fine. The business cycle stays on an upswing. GDP growth continues.

Yet, inevitably, consumer demand eventually decreases. This can occur because consumers have finally been satisfied—meaning that we get to a point where enough of us have new cars, clothes, and homes for spending to slow down—or because some event, such as a war, causes consumers to hunker down, cut spending, and start saving.

When this happens, business as a whole simply cannot react swiftly enough. While individual businesses do better or worse at adjusting to a fall-off in demand, as a group they wind up with excess capacity. They have too much productive capacity and too many workers for the new, lower level of demand.

What do they do?

First, they lay off workers. Although that helps companies adjust, it cuts consumer spending further because a laid-off consumer can't spend his pay. He's not getting paid!

Second, business stops expanding its plant and equipment. Why add to capacity when you have excess capacity? So after consumers cut spending, businesses cut spending, and this begins a downswing in the business cycle.

Vicious and Virtuous Cycles

A recession is a great example of what's known as a vicious cycle. Consumers cut spending, businesses lay off workers (who are, of course, also consumers) and reduce investment. This causes consumers to cut spending further, which decreases demand even further, causing businesses to lay off more workers and further cut investment.

In contrast, a recovery is a virtuous cycle. It begins when consumers finally cannot get along with the cars, clothes, and homes they have. They start spending again. Business responds to the increased demand by hiring workers. This puts money in consumers' pockets. Business also invests in new capacity to meet that demand. That gets more money moving in the economy. All of this starts an upswing in the business cycle that lasts until the next fall-off in demand and excess-capacity situation, which ignites the next recession.

Fortunately, recoveries usually last a lot longer on average than recessions. In the 1990s, a fairly mild recession of about two years, from 1991 into 1993, was followed by a strong recovery that began in 1994 and continues as I write. Most of the 1980s were one long recovery.

Even more fortunately, a depression—a collapse in demand, huge excesses of capacity, and widespread unemployment—is very rare. The Great Depression of the 1930s was the only one to occur in the United States and Europe this century, but it had worldwide repercussions.

The Government's Role

I've described the business cycle in terms of consumer and business behavior. But what about the government?

The government can only spend money that it gets from two sources: taxes or borrowing.

Most of the government's spending money comes from taxes on—guess who?—consumers and businesses. During a recession, consumer and business

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As a manager, you should understand how economic cycles can affect your business. For example, if you sell goods or services to consumers, you may get stuck with excess inventory when consumer spending slows because demand fell off and you didn't see it coming.



MBA Lingo

Income equals spending. Because the economy is interconnected, what one person or business spends, another collects as income. Total spending, total income, and GDP are essentially the same thing.



spending, and thus consumer and business *income*, decrease. Since federal (and many state) taxes are based on income, tax receipts also decrease. Similarly, during a recovery, consumer and business spending, and thus income, increase and so do tax receipts.

Now all of this is what happens if the government does nothing to try to affect the business cycle. But in fact the government plays an active role in most modern economies, including ours. Let's spend some time examining that role.

What Does the Government Want?

Essentially, the government wants order in the economy. The government wants a sound currency, low unemployment, and sustained economic growth.

More specifically, the government wants a currency with minimal *inflation* (rapid price increases that erode the value of the dollar). It wants sustained growth, at a long-term average of about 3 percent a year, which is about what's possible without inflation getting out of hand. And it wants low unemployment, as close to 4 percent as possible—it can't go much lower.



MBA Lingo

Inflation in this context refers to rapid price increases that erode the value of currency.

Four percent is generally recognized as the lower limit because some small portion of the work force will always be officially out of work because they are between jobs. Most of the people between jobs have just been fired or laid off and have not yet found another job. Or they were fired or laid off and are still counted as unemployed, although they are not really looking for work and want to take some time off.



MBA Lingo

Economic policy is the means by which the federal government stimulates or reigns in economic growth. There are two kinds of economic policy: *fiscal policy* and *monetary policy*. Fiscal policy is the use of government spending and taxation to affect the economy. (The term *fiscal* refers to budgetary matters.) Monetary policy refers to measures aimed at affecting the amount of money in the economy.

The Inflation-Unemployment Trade-Off

Since the economy is a dynamic system, it can go out of whack. It is often growing too slowly to provide full employment or too fast to keep inflation low. Indeed, that is the traditional trade-off in managing the economy: You either get low inflation and high unemployment or high unemployment and low inflation.

Here's why.

An economy is said to be "overheating" when the increased demand in a recovery pushes up the price of everything. This is inflation, defined as too many dollars (too much demand) chasing too few goods. When demand outstrips capacity, consumers "bid up" the price of goods. Also, businesses know they can charge higher prices when demand is high.

However, the bright side of this is that unemployment is low because businesses have hired all those workers to

handle the new capacity that's been added. So in a recovery, and especially in an "overheated" economy, there are inflationary pressures—but there is also low unemployment.

The economy is said to be "cooling," that is, going into recession, when demand falls. When demand falls, of course, you don't have too many dollars chasing too few goods. Instead you have unsold goods, because demand for them has decreased. So inflationary pressure, that upward pressure on prices, goes away.

The dark side to this is that jobs go away too. Why have workers making things when demand for those things is falling? So there is low inflation—but high unemployment.

So ultimately what the government, and the rest of us, want is a happy medium. We want steady jobs and steady prices. But since an economy is dynamic, it does keep going out of whack. Government economic policy aims to keep it in whack.

Economic Policy

In the U.S., the government plays a big role in the economy because the federal government alone represents over \$1.5 trillion in spending. There's a lot of demand there to be managed. When you add in state and local governments, the total government component amounts to more than one-quarter of the U.S. economy.

However, we're concerned only about the federal government. While states and cities have their economies to manage, only the federal government can affect the whole economy. It does this through *economic policy*.

Fiscal Policy: Taxing and Spending

Since there are two sides to the government budget—taxes and spending—the government has four tools of fiscal policy. It can raise or lower spending and it can raise or lower taxes.

If the government raises spending, it will heat up the economy. Why? Because it will increase G in $C + I + G$. It will increase demand. It will contribute to GDP growth. It is putting money in the accounts of businesses and the pockets of consumers. Using an increase in government spending to ignite a recovery is called *fiscal stimulus*.

Incidentally, this is true whether the government uses money from taxes or borrows the money by issuing debt. If the government spends more than it collects in taxes, it is *deficit spending*. It has been a common practice ever since the British economist Maynard Keynes (say "canes") theorized in the 1920s that governments could help economies out of recessions by deficit spending. Economists who believe in fiscal policy are called Keynesians.

MBA Lingo

An increase in government spending to ignite a recovery is called a *fiscal stimulus* because the increased demand stimulates the other sectors and thus the economy.



If the government sees the economy overheating and inflation heading upward, it can cool things off by doing the opposite. If the government cuts or postpones its spending, it decreases demand and that will ripple through the economy.

Taxes have similar effects. If the government wants to stimulate a lackluster economy, it can cut taxes instead of increasing spending. This leaves more money in the hands of consumers and businesses, and that money tends to get spent. If, on the other hand, taxes are raised, it takes money away from consumers and businesses. This will cool off the economy.



MBA Lingo

Deficit spending occurs when a city, state, or federal government spends more money than it collects in taxes during a given period, such as a year. The term indicates that the government spent money even though it had a budget deficit, that is a shortfall between the amount it spent and the amount collected in taxes. Since the money spent during a deficit doesn't come from taxes, the government must borrow it, which it does by issuing bonds.



MBA Lingo

The *velocity* of money is the number of times the total money supply changes hands, or circulates through an economy. If you divide GDP by the money supply, the number you get is the velocity of money.

Monetary Policy: Money Makes the World Go 'Round

An economy runs on money. The amount of money available therefore plays a role in the size of the economy. Monetary policy enables the government to affect the money supply and therefore the growth rate of the economy.

Economists who believe in monetary policy are called monetarists. They oppose the Keynesians and fiscal policy because they believe the money supply has more affect on economic growth than the federal budget does. The economist Milton Friedman has been a major force in this movement, which favors slow, steady growth in the money supply.

A monetarist looks at GDP through the following formula:

$$\text{GDP} = \text{money supply} \times \text{velocity}$$

GDP here is the same GDP that results from $C + I + G + (Ex - Im)$. But it is determined differently. It is determined by the money supply—the amount of currency in circulation plus deposits in savings and checking accounts—multiplied by its velocity. *Velocity* is the number of times the money supply circulates through (or “turns over” in) the economy. Picture each piece of currency in an economy, including the money in savings and checking accounts at banks. The average number of times the total stock of currency changes hands is velocity.

For simplicity, let's say that the U.S. money supply is \$1 trillion and that the \$1 trillion circulates through the economy seven times a year. Since \$1 trillion times seven is \$7 trillion, GDP would equal \$7 trillion.

There are some complexities with this concept. Velocity can be difficult to measure accurately. Also, velocity can change. For example, some experts believe that aggressive *corporate cash management* (through which companies attempt to slow down the payment of bills and speed up the collection of debts) has increased the velocity of money in the past 30 years.

The Role of the Fed

The Federal Reserve, or “the Fed,” controls the U.S. money supply. The Federal Reserve System is the U.S. central bank. Think of a nation’s central bank as a “bank for banks.” The Fed replaces old currency with new currency, guarantees bank deposits, and governs the banking system.

The Fed affects the economy in three major ways:

- By moving interest rates
- By selling and buying government securities
- By talking about the economy

Let’s take a closer look at each of these.

MBA Lingo

Interest rates are simply prices that borrowers pay for money in different circumstances.

Although money is always the same (a thousand dollars is a thousand dollars), its price, that is, the interest rate, depends on who’s borrowing the money. The greater the risk that the borrower will not be able to repay the money, the higher the interest rate.



Moving Rates to Get Things Moving

Since *interest rates* are “the price of money,” the Fed can stimulate a sluggish economy by lowering interest rates. If interest rates decrease, that makes for easier credit. The lower the rate, the easier it is to get the loan. Consumers and businesses see the low rates and take out loans, start spending, increase demand, and start an upswing.

On the other hand, the Fed can raise interest rates in order to cool off an overheating economy. If the Fed sees inflation moving up, it is very likely to do this. (As the guardians of the currency, central bankers *hate* inflation.) When the Fed moves rates upward, money becomes more expensive, so spending slows and demand decreases.

Because it hates inflation, the Fed likes to raise rates at the first sign of it. Thus the Fed is often accused of “removing the punch bowl when the party gets going.” In a way, though, that’s its job.

The Fed also sets the rate for short-term loans that banks make to one another (the *federal funds* rate) and the rate at which the Fed makes loans to banks (the *discount* rate). Although these are the only rates that the Fed directly controls, they tend to drive other *interest rates*.

Buy! Sell!

The Fed also controls sales and purchases of *government securities* (government debt), and can use this to affect the money supply.

When the Fed wants to cool the economy, it sells securities and that takes money out of circulation. Think about it: If businesses and consumers buy government bonds, they

have the bonds and the government has their money. Less money is in circulation, so there will be less spending, less economic growth, and a cooler economy.



MBA Lingo

The *federal funds rate* (commonly called the fed funds rate) is the interest rate that banks charge one another on

overnight loans. The *discount rate* is the interest rate that the Federal Reserve charges to member banks on loans secured by government securities and other securities that the Fed will accept as security.

When the Fed wants to heat up the economy, it buys government securities. This puts money back into the hands of businesses and consumers and thus back into circulation. Money in circulation means more spending and an economy on the upswing.

Although people watch interest closely, purchases and sales of securities are even more important to the Fed in managing the money supply. These sales are done at the direction of the Federal Open Market Committee by the Securities Department at the Federal Reserve Bank of New York. (That bank, by the way, is one of 12 Federal Reserve Banks that oversee the U.S. banking system.)

When the Fed Talks...

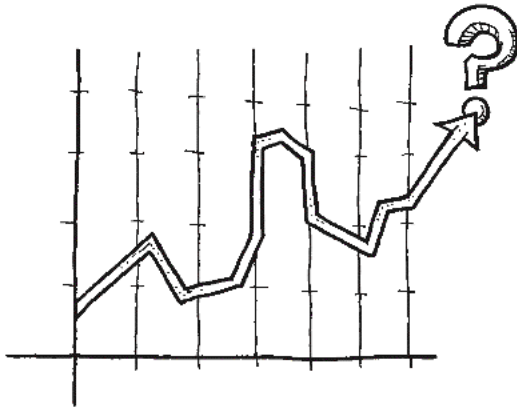
The Fed, or more accurately, the chairman of the Federal Reserve, also talks to the business community. Indeed, the business community is so focused on the pronouncements of current Fed Chairman Alan Greenspan that people joke about it. You'll often hear things like, "If Alan Greenspan sneezes, the economy catches cold," and so on.

This talking function of the Fed is called "moral suasion." The Fed, in other words, directs statements at banks, consumers, and businesses to get them to "do the right thing" with regard to the economy.

The Least You Need to Know

- The economy is the environment, the climate, in which business operates.
- In a recession, spending and demand decrease, making the economic climate more difficult. In a recovery, spending and demand increase, making it easier.
- Gross domestic product, or GDP, is the value of all goods and services produced within a nation. Four sectors comprise the total economy: consumer spending, business investment, government spending, and net exports (exports minus imports).
- The federal government uses fiscal policy to stimulate or cool off the economy by adjusting taxes and spending.
- Monetary policy uses interest rates, purchases and sales of government securities, and moral suasion to heat or cool the economy. Monetary policy is controlled by the Federal Reserve Board.

Chapter 7



Going by the Numbers: Economic Indicators

In This Chapter

- Where to find economic indicators
- The single most important economic indicator
- What housing starts mean to businesses
- How to view economic trends

In the previous chapter, you learned the basics of economic theory: the concepts of recessions and recoveries, of inflation and unemployment, and the effects of fiscal and monetary policy on the business cycle. All of these influences have a strong impact on business—and on your business.

Managers steer their companies through the economic waters much the way a captain steers a ship on the ocean. The waters are sometimes calm, sometimes rough. A squall can pop up out of nowhere, and a full-blown storm can do damage. But you can also see some smooth sailing.

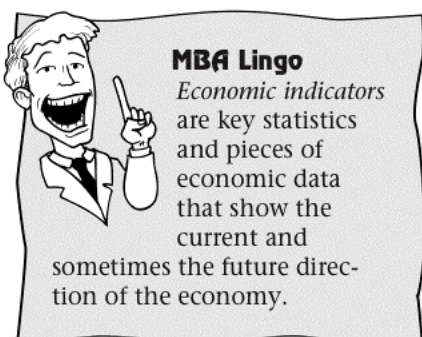
Just as sea captains navigate by reading their charts and buoys and getting regular weather reports, managers steer their businesses by reading economic signals, what economists call indicators. These indicators help us to know where the economy is and where it might be headed. Then, as a manager, you can make the right moves, gearing up for recoveries and cutting back for recessions.

In this chapter, I'll show you how to analyze and understand the key economic indicators and their importance.

What Are the Key Indicators?

How can we understand what's happening in the economy? Economists use *economic data* to track, forecast, and analyze economies and industries.

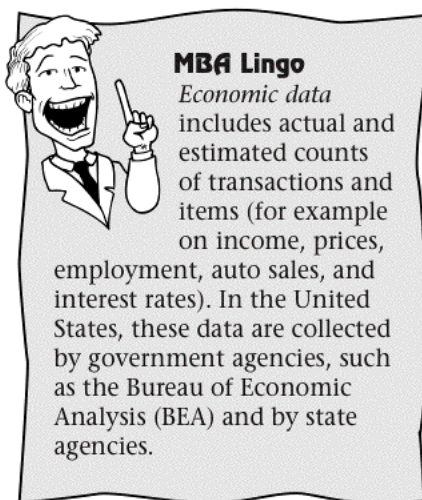
From the various economic data issued by the government agencies and other institutions, economists have found that certain statistics point to the current or future state of the economy. These data, called economic indicators because they indicate the state of the economy, can help you as a business person steer your company through periods of economic change.



Where can you find economic data? You'll find data presented with solid analysis in the business press, particularly in the *Wall Street Journal*, the nation's daily business newspaper. The economic and business coverage in the *New York Times* and many other newspapers has improved a lot in the past decade. A number of business magazines, especially *Business Week*, also provide solid economic news.

Several sites on the World Wide Web, particularly those of the U.S. Department of Commerce (www.doc.gov) and the economic consulting firm DRI/Standard & Poor's (www.dri.mcgraw-hill.com), provide economic data online.

In the following pages we will examine these key economic indicators:



- Economic growth rate
- Prices and inflation
- Interest rates
- Unemployment
- Consumer confidence
- Housing starts and sales
- Retail sales and new car sales
- Stock market

The Biggest Indicator: Economic Growth Rate

This is the major indicator to watch: It's the rate at which the economy as a whole, as measured by GDP, is growing. You'll recall that in Chapter 6, "It's the Economy,"

I defined GDP as the total economy. It is measured by adding the following: total spending by consumers, total investment by businesses, total spending by the government, and net exports (exports minus imports).

This number is reported every month. Unfortunately, it is then later revised as the Bureau of Economic Analysis collects more data. The difference between the originally reported estimate and the final revision can be as high as one to two percentage points. This is on a number with a long-term average of 3 percent.

Look for deviations from that 3-percent baseline as well as the trend over time. The most important element is the trend. If economic growth is slowing down over a period of months or quarters, there is a good chance that conditions will become more difficult for many businesses. During periods of slow growth, consumers tend to trim their spending; therefore most businesses do the same. Companies do not want to be stuck with products that they can't sell so they tend to cut their level of production. If you see your business slowing down, it is generally a good idea to monitor your customers' behavior—and your sales trends—closely and perhaps adjust your hiring, buying, and production plans downward. Don't panic, but do be especially careful during a slowdown.

If economic growth is speeding up, consumers tend to spend more freely. They feel secure in their jobs and are more willing to spend and to use credit to finance purchases. In those times most businesses try to "make hay while the sun shines" by taking advantage of these conditions. When you see an economic expansion coming, be ready to gear up your production. You may have to hire more people and even expand your facilities. As in a slowdown, however, you should watch your own customers and your own sales closely to see if your business is sharing in the good times. Avoid overexpanding and adding too many people on staff or adding too much new office space or equipment. Just like bad economic times, good ones don't last forever.

MBA Lingo

The *economic growth rate* measures how much bigger (or smaller) an economy is in one period compared with the same period a year ago. The economic growth of a city, state, province, or nation can be measured. The growth of national economies is the most widely followed.



Buying Power: Prices and Inflation

As noted in Chapter 6, inflation refers to an overall increase in the price of goods and services when demand exceeds supply. Some inflation is a natural consequence of rapid economic growth.

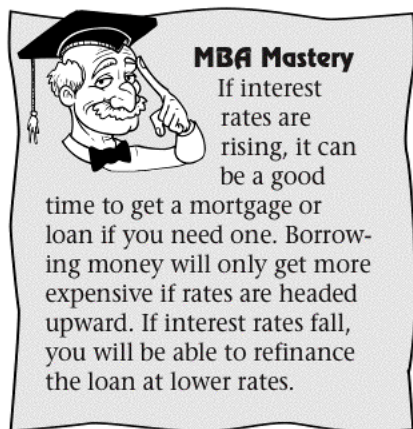
However, inflation also represents a decrease in the buying power of the currency. If a suit that costs \$100 this year costs \$200 next year, for example, the value of the dollar has decreased. In times of inflation, prices rise more quickly than wages, so the buying power of consumers decreases.

High inflation is considered bad because it undermines confidence in the currency and can generate disorder. U.S. economic policy in the 1990s aims to minimize inflation; that is, to keep the inflation rate near zero.

The main indicators of inflation are the *Consumer Price Index (CPI)* and the *Producer Price Index (PPI)*. The CPI measures the price of various goods and services consumers purchase. The PPI measures the price of materials that businesses purchase. When these indexes are reported the year-earlier numbers are given, so you will know whether the inflation is up or down. Also, the media tell you whether they are up or down.

The Cost of Money: Interest Rates

As I discussed in Chapter 6, an interest rate is the price of money. Low interest rates make money—in the form of credit—available to consumers and businesses. Low interest rates generate demand because “easy money” prompts people to borrow and then buy.



Key interest rates to watch are the *federal funds rate* and the *discount rate* because these are the only rates that the Federal Reserve can directly set. As you learned in Chapter 6, if the Fed raises rates, it is trying to slow down growth. If it lowers rates, it is trying to stimulate growth. Rather than over-react to an increase or decrease, look for a pattern in increases and decreases over several months or quarters.

The other key rate to watch is the *prime rate*, which is the interest rate large banks charge to their best business customers. This rate is set by banks, not by the Fed. Again, watch the trend in the prime rate to get a general idea of where interest rates are headed.

Out of Work: Unemployment

The *unemployment rate* measures the percentage of people in the work force who are out of work. Some controversy surrounds this rate, mostly because the definition of “work force” is unclear. If a person has stopped looking for work, he or she is no longer considered in the work force. Therefore, many long-term unemployed people are not included in the rate. Some experts believe that the rate as currently calculated in the U.S. understates unemployment.

Nonetheless, an unemployment rate from 4 to 7 percent is considered very good in the U.S. or in a state or city. Anything over 10 percent is considered high.

While low unemployment is certainly good, it does put pressure on businesses to increase their wages (and thus one of their biggest costs). Low unemployment indicates a “tight labor market” and enables workers to demand higher wages because they cannot be so

easily replaced. Higher unemployment allows businesses to hold the line when workers demand higher wages because the workers know they may not be able to find new jobs easily.

Safety and Security: Consumer Confidence

Both the University of Michigan and the Conference Board (a business-supported source of information located in New York City) issue their own indexes of *consumer confidence*. These indexes gauge consumer psychology by asking a sample of consumers whether they expect to be better or worse off in the upcoming months, whether they feel secure in their jobs, and similar questions.

The University of Michigan index includes a survey of buying plans, which indicate how many consumers are planning a major purchase such as a heavy appliance or a car in the next six months to a year.

Many economists and business people watch indexes of consumer confidence because they see them as early warning signs of the future path of the economy. High or increasing confidence means continued or coming recovery, while low or falling confidence means the opposite.

MBA Lingo

The *prime rate*, often simply called “the prime,” is the rate on loans that a bank charges its most creditworthy corporate customers (that is, the customers most likely to repay the loan). The prime rate is traditionally set by several major New York City banks.



MBA Lingo

Consumer confidence is a measure of how consumers feel about the economy and about their prospects in the current and future economy.



Settling Down: Housing Starts and Sales

Housing trends are important not just because buying a house, apartment, or condominium represents a major purchase. It represents a chain of major purchases.

A house or condo needs furniture, carpeting, draperies, appliances, electronic equipment, and, often, the services of painters, plasterers, or landscapers. (As you sign all those mortgage papers, be happy to do your part to boost our economy!)

Housing starts and *housing sales* indicate the strength of the economy. Increasing or high levels of starts and sales indicate a robust economy, while decreasing or low levels of starts indicate a weak economy. People build and buy homes when they expect the economy to remain strong enough to provide them with jobs and incomes to pay the mortgage. Housing starts and sales at the local or state level are an excellent indicator of the health of the local or state economy.



MBA Lingo

Housing starts are exactly that: the number of houses on which construction started in a specific area

during a certain period. These are a sign of things to come, since it takes three to six months for those houses to enter the inventory of homes to be sold.

Housing sales, which are usually broken into sales of new and existing homes, are another indicator of economic health.

In general, the more housing activity there is in a nation, state, or city, the better for the economy.

Finally, the trend in home prices indicates the demand for housing in an area, as well as the general desirability of that area as a place to live. High or increasing prices indicate high demand. To a degree, this reflects the strength of the economy and availability of jobs in the area.

Shop 'Til You Drop: Retail Sales and New Car Sales

Strong retail sales and new car sales indicate economic vitality and high consumer income. Watch for changes in the trend, that is, for a strengthening or weakening of retail or auto sales.

When retail sales are strengthening it is important to be able to meet consumer demand. Many businesses find that they must expand their operation by adding sales space or equipment or increasing the size of the sales or production

staffs. It may also be possible to raise prices when sales are strong because demand is strong enough to support higher prices.

Weakening retail sales signal a time for many businesses to pull back. If customer demand is about to decrease, it is generally a good idea to trim production and to avoid building up inventories. If your sales decrease, you do not want to be stuck with unsaleable goods. Also, if you overexpanded your operation during the good times, you may find that you have to lay off some workers or stop leasing as much space and equipment as you needed during the economic expansion.

Watching Wall Street: The Stock Market

The stock market is a favorite economic indicator, but few people are completely certain what it is an indicator of, aside from general business and consumer confidence. It is more of a psychological barometer than an actual economic indicator, because although stock prices are strongly related to corporate earnings, market emotion can also move prices.

The *Dow Jones Industrial Average* is based upon 30 New York Stock Exchange listed stocks taken to be representative of the market as a whole. This is probably the most widely followed indicator, but the *S&P 500*, a group of 500 stocks monitored by the financial information firm Standard & Poor's, is more representative because it is based on a much larger sample than "the Dow."

In general, a high or rising stock market indicates a recovery is in progress; a falling market indicates recession. But because it takes a while for investors to react to economic developments, the stock market can usually be viewed as a *lagging*, rather than a *leading*, indicator.

What to Watch for When You Watch

As I've emphasized throughout this chapter, watch for trends in economic data. By this I mean both the trend over the past few reports of each indicator and *year-over-year* comparisons. (These comparisons compare the data for the most current period with the data for the same period last year.) Watching trends and year-earlier comparisons will enable you to place the data in context.

Don't react to every change in an indicator. But don't wait forever to start adjusting or to incorporate a change in the economy into your planning. If you've been operating in a recovery (or a recession) for a while, you could adopt a mind-set geared to that climate and be caught off-guard by a change.

Learn to understand the economy's effect on your business. Over years of observation, you will get a feel for this. Some businesses, such as finance companies (nonbank lenders of money), collection agencies, and used-car dealers, do well in recessions. Many others, including restaurants, travel agencies, and other businesses that sell highly *discretionary* (non-essential) items, can get hurt in a severe downturn. If you see a recession coming, prepare for it.

Also learn about the effect of the national economy on your region. Regional differences can be significant. The south and west (with California a notable exception at times) have seen generally stronger growth than the north and east over the past 10 to 20 years. While no city, state, or region is recession-proof, some have proven more resilient to downturns than others.

Finally, here's a rule of thumb: Mixed signals often herald change. If all the indicators point upward

MBA Lingo

The *Dow Jones Industrial Average* is a widely reported and closely followed measure of stock market activity. "The Dow," as it is often called, is based upon the prices of 30 widely owned stocks. The average measures the aggregate value of these stocks.

The *Standard & Poor's Composite Index of 500 Stocks*, called the S&P 500, is based on 500 widely owned stocks and serves a function very similar to that of the Dow.



MBA Lingo

A *lagging* indicator points to an economic development—a recovery or recession—that has already occurred.

A *leading* indicator points to a development that lies ahead.



MBA Mastery

Whether you think the economy will improve or you think it will worsen, sooner or later you're going to be right—thanks to the never-ending business cycle.



toward recovery, we are in a recovery and will probably stay there for a while. And if all the signals are pointing downward toward recession, we are probably in one. But if some signals point up and some point down, expect a change from the current situation, whatever it is.

The Least You Need to Know

- Economic indicators can often tell you about the general direction of the economy, but how your specific business will be affected can only be determined by you over time.
- The economic growth rate represents the most important and (aside from the Dow Jones Industrial Average) most widely reported indicator. If growth is about three percent or more the economy is generally considered healthy.
- Housing starts and sales are a particularly good indicator of future economic growth because when people buy houses they then need to buy furniture and other goods to stock up the house.
- The important thing to watch in any economic indicator is the trend over several periods. That can tell you much more about the economy's direction than one or two readings of an indicator.

Chapter 8



Getting Down to Business: Operations Management

In This Chapter

- The secrets of resource management
- Performing a cost-benefit analysis
- The law of diminishing returns
- The difference between fixed and variable costs
- Understanding economies of scale
- Centralization versus decentralization

Decisions, decisions. Managing a business operation calls for making dozens of decisions a day, some of them small, some large, some of them routine, and some extraordinary. For certain kinds of decisions—particularly those relating to the operations and resources of the business—analytical tools like the ones in this chapter, based on the concepts from Chapter 7, “Going by the Numbers: Economic Indicators,” will help you make the best decision.

Here is an example of what I mean.

Picture two people, each running a separate business. One is a trained manager, the other is not and operates by the seat of his pants. They are each going to face dozens of similar decisions every day: A supplier will call and ask how much he should deliver next week. The evening shift supervisor will want to know if they should add another person to her

team because it's getting busy after 7 p.m. A machine will break down and it may have to be replaced, or repaired depending on which is more economical. Each of the businesses may need to add capacity, but the boss must decide how much to add.

The trained manager will have ways of looking at these decisions that are unavailable to the guy who goes by his gut. He will have a way of thinking about these situations that is more systematic and organized than the approaches the other fellow uses. The trained manager has this more sophisticated view of business situations because he understands key concepts in operations management.

The concepts we'll examine in this chapter can make the difference between guesswork and a good decision.

Managing Your Resources

Many business decisions come down to figuring out how to allocate your resources. Your resources include money, labor, materials, or buildings and equipment. Every business operates with limited resources—a finite amount of money, labor, materials, and buildings—so the savvy manager must decide the best use of the resources she has.

Here are some tough calls a manager may have to make when it comes to allocating resources:

- How much money should a company invest in developing a new product?
- What is the best size for a business? How much staff and physical space is needed?
- How does a manager determine the best buys on expensive equipment (for example, computer networks, industrial ovens, or tractors)?
- When should a store open and close for business?
- How much time should a project take, and how should it be done?
- Given two or more potential locations to expand a business, which one should a company choose?



How do managers answer these questions? Since resources are limited, managers must put them where they will do the most good; that is, where they will earn the highest *return*, or profit.

Certain key concepts help managers determine the best ways to use resources to maximize returns. These concepts are:

- Cost-benefit analysis
- The Law of Diminishing Returns
- Fixed costs and variable costs

- Economies of scale
- Centralization and decentralization

I'll cover each of these concepts over the following pages.

Cost-Benefit Analysis: What's It Worth?

Everything in business—an item, a campaign, an employee, an operation—has a cost associated with it. This cost is almost always measurable in dollars. Most things that have a cost also have an associated benefit. This benefit is usually (but not always) a return measurable in dollars.

You'll often hear a business person say, "You've got to spend money to make money." However, not every expenditure earns money. Among those that do, some earn more than others. Therefore, before spending money, most business people do a cost-benefit analysis. There are various tools to analyze cost-benefit analysis, and you'll see some of them, such as break-even analysis and cross-over analysis, in Chapter 9.

For now, let's consider a small neighborhood copy shop. Like the owner of any business that serves the public, the guy running the copy shop has to figure out his hours of operation. He might consider several factors; for instance, the hours of his nearest competitor and the convenience of his largest customers. But his major concern is the cost versus the benefit of opening an hour earlier or closing an hour later.

Let's say he long ago figured out that he has to open the shop at 7 a.m., because that's when people who are headed to work and school stop off on their way. However, he's been closing at 11 p.m. only because the previous owner did. He isn't sure the evening hours are worth it.

After sitting down with sales data from the past three months, he has the information he needs for a cost-benefit analysis. He knows the cost of staying open that last hour, and he knows the average amount of money he makes in that last hour.

He's figured out that it costs him \$23.00 to stay open from 10 to 11 p.m. This includes the cost of electricity for the lights and equipment, the cost of heat, and the assistant manager's salary. If he closes at 10, he saves all this money.

MBA Lingo

Cost-benefit analysis is a way of measuring the benefits expected from a decision, measuring the costs expected to be incurred in the decision, and then see if the benefits exceed the costs. If they do, then the analysis is in favor of going ahead with the planned course of action.



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The *net benefit* is the benefit after deducting (or "netting out") the costs.





MBA Mastery
Some people find it odd that a business or office manager will try to scrape a few cents off on some small items (coffee, pens, office supplies) that the firm buys regularly. But in a high-volume operation, pennies add up. Cost control lowers costs, and by lowering costs you automatically increase the benefit.

In terms of the benefit, he's figured out the profit on the volume he does in that last hour. He makes an average profit of five-and-a-half cents a copy (this is based just on the cost of making the copy; it doesn't count the costs of electricity, heat, and labor). He makes an average of 460 copies in that last hour. Thus, he makes an average of \$25.30 (460 copies times .055 cents per copy) in that last hour of operation. That's the "benefit."

Now the big question is: Does the benefit outweigh the cost?

In this case it does. If you take the benefit of \$25.30 and subtract the cost of \$23.00, you get \$2.30. (This is also known as the *net benefit*—the benefit after deducting or "netting out" the costs.) So on a pure cost-benefit basis, it is worth it to keep the copy shop open that last hour.

Of course, other considerations may enter into the decision. For instance, if the assistant manager wants to start going

home earlier or if late-evening crime is rising, the owner may decide that it's just not worth it to stay open the extra hour for \$2.30. But on a pure cost-benefit basis, it is worth it.

There are various ways of doing cost-benefit analysis. There are even various ways of placing a dollar value on the costs and benefits. We will explore some of them in this book. The key element at this point, however, is that a manager looks at most situations in terms of costs and benefits.



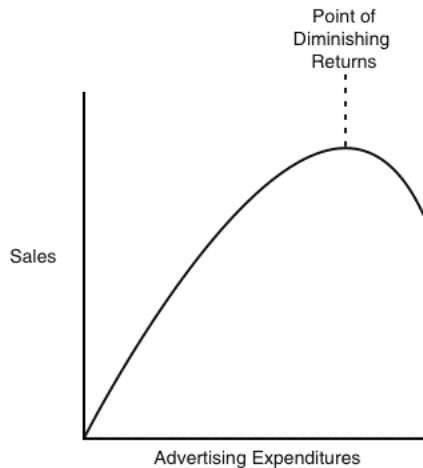
Case in Point
Often a business will do things not justified on a pure cost-benefit basis. These include encouraging employees to do volunteer work, sponsoring a local little-league team, or even keeping a long-term, newly disabled employee on the payroll until retirement.

The company does these things out of decency or good citizenship. However, many managers believe these actions also create a positive corporate image and that this benefit can translate to increased sales.

Too Much of a Good Thing: The Law of Diminishing Returns

The law of diminishing returns basically says: You *can* have too much of a good thing. In other words, if you keep adding more resources to your company's existing resources, you will at first see an added return. But after a while, you'll see a fall-off in the added return the resource brings.

For example, let's say our copy shop owner decides to advertise his business, something he's never done before. He wants to place ads in local newspapers and on the radio. The following chart shows what happens. At first, his sales increase rapidly as people hear about his shop and stop in for copies. Then, sales continue to increase, but each additional day or week of advertising will produce more sales at a reduced or diminished rate. Hence the idea of diminishing returns. In other words, there is a limit on how many dollars of new sales that additional advertising will add.



MBA Lingo

The *Law of Diminishing Returns* states that the marginal return, that is the added return, produced by any resource will decrease with each additional unit of that resource that is added.



Diminishing returns are inevitable.

The law of diminishing returns pops up constantly. For example, in most situations requiring workers, you will get more work done, or get it done faster, with each worker that you add. However, eventually each added worker will be able to add less and less additional production (unless you add none of another resource, such as machinery).

Estimating when returns will diminish can be tricky. There are no commonly used formulas or rules of thumb because when the "law" will kick in depends upon the situation. For example, a logging operation selectively clearing a forest can keep adding new workers and up to some point each added worker will be able to cut down more trees per day.

However, at some point the added worker is not going to be able to cut the same number of trees. There may be so many workers that they get in one another's way or the trucks may not be able to haul away the logs fast enough for them to be able to work or some other factor will limit their productivity. In a sense the only way to figure out when this will occur is by balancing your resources, for example, two loggers per saw, ten loggers per truck, or through experience, or both.



MBA Lingo

Fixed costs are those that remain the same regardless of the amount of product the company makes and sells; for example, the rent on office space, the cost of insurance, and the cost of managerial salaries are fixed. *Variable costs* change with the company's production and sales volume. Variable costs include the compensation of the sales force and production workers, the cost of materials, and delivery costs.

Counting Costs: Fixed and Variable Costs

Most businesses have both *fixed costs* and *variable costs*. Fixed costs are those that remain the same regardless of the amount of product the company makes and sells. For the copy shop, for example, the mortgage on the building and the cost of insurance are fixed. Some, but not all fixed costs, are considered overhead (costs not directly associated with production or sales).

Variable costs, on the other hand, change with the company's production and sales volume. For the copy shop, variable costs include the compensation of the copy clerks and the cost of copy paper and ink. One reason layoffs are common in troubled companies (and during recessions) is that in most firms, labor represents the largest variable cost. (If the copy shop hits a drastic downturn in business, some of the clerks may be fired in order to save the owner money on their salaries.)



MBA Alert

Try to keep fixed costs as low as possible, particularly in a new or small business. If sales decrease because of a recession or new competition, you can cut your variable costs and fight back, for example by selling harder. But if you're stuck with high fixed costs when sales decrease, your business can get killed.

There's a saying in business: In the long run, all costs are variable. This means that over a long enough period the company can eliminate even a fixed cost; for example, the company can sell its factory or equipment. This is true, but the long run can be very long indeed, so it's wise to think of fixed costs as being fixed.

Some businesses, particularly in manufacturing, have inherently high fixed costs. Oil refining, automobile manufacturing, and printing are good examples. Other businesses, particularly service businesses, tend to have a high proportion of variable costs. Delivery services, temp agencies, and law firms fall into this category. Keep in mind, however, that almost every business has a mix of fixed and variable costs.

Size Matters: Economies of Scale

Economies of scale explain why many things are “cheaper by the dozen.” Economies of scale make *volume discounts* possible because the average cost of making a unit of product decreases with each additional one you make.

Economies of scale occur as volume increases because fixed costs are spread out over more pieces, or units, of product. Each added unit absorbs a bit more of the fixed costs, and that lowers the amount of fixed costs that all the previous units must absorb. Thus the average cost per unit falls. This occurs even though variable costs remain pretty much the same on each unit.

Let’s go back to the copy shop example. Let’s say the owner has a high-volume copier that cost \$10,000 per year to lease. Let’s also say that the variable costs, for paper and toner and so on, are two cents a copy.

Look at the difference in cost per copy at two levels of volume: 500,000 copies and 1,000,000 copies over the course of the five years.

	500,000 Copies/Yr	1,000,000Copies/Yr
Total variable costs (paper, toner)	\$10,000	\$20,000
Total fixed costs (annual copier lease)	<u>10,000</u>	<u>10,000</u>
Total cost of copies	20,000	30,000
Cost per copy	\$0.04	\$0.03

As you can see, although the fixed costs (the annual lease cost of the copier) and variable costs (the two-cent cost per copy) are the same, the total cost per copy is lower at the higher volume.

Economies of scale mean that the more a company does something—that is, the greater the scale of its operation—the more economically it can do it. This can give a company a competitive advantage.

Consider this: In the copier example, the company that makes a million copies in a year could charge customers an average of eight cents a copy and still make a profit of five cents a copy. The company doing half a million copies a year would have to charge customers nine cents a copy in order to make a nickel a copy. The company with the higher volume could thus charge

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A *volume discount* occurs when you pay less per item the more you buy. Businesses give volume discounts in order to increase their sales. They take a lower profit on each item in order to make a greater total profit.



MBA Lingo

Economies of scale refer to the lower costs that occur with higher production volumes. The cost-per-unit of manufacturing an item generally decreases, the more of them that an operation makes.



lower costs than the one with the lower volume. This could enable that company to pull in even more business, and boost volume further.



Case in Point

Many people decry the big commercial chains that dominate many businesses, but these megacompanies have been thriving for years. Long ago, chain businesses began to dominate markets like general retailing (Sears and Wal-Mart) and fast-food (Pizza Hut and McDonald's). More recently they've gone into, yes, photocopying (Sir Speedy, Kinko's).

Economies of scale often enable these operations to underprice local, single-site operators and ultimately make it impossible for the single-site shops to compete on price. They typically compete on selection and services.

Economies of scale are also the reason behind many corporate mergers. (A merger occurs when two companies combine their operations.) Most mergers consolidate certain functions to lower the costs of doing business. For example, the merged company does not need two Accounting functions or two Human Resources departments. So they combine them into one (or just eliminate one) and then spread the fixed costs of the consolidated department over the larger, merged operation.

Come Together, Go Apart: Centralization and Decentralization

Centralization and its opposite, decentralization, drive many business decisions. Centralization is an attempt to combine functions or operations. You centralize various functions by putting them together into one function. Often you seek economies of scale or some other form of efficiency.

Think of it this way: McDonald's is a huge franchise with thousands of separate restaurants all over the world. McDonald's could have each restaurant buy its own food, paper goods, and so on. However, by buying food and paper goods from a one supplier—that is, by using a centralized purchasing function—McDonald's can give greater volume to suppliers and get volume discounts. Likewise, a magazine publisher such as Condé Nast, which puts out *Vogue*, *House & Garden*, and *Vanity Fair*, among others, can get better deals on paper and ink with centralized purchasing.

If you have all your buying done from one central function in the company, that increased scale gets you volume discounts. However there are other reasons to centralize an operation. A major one is control. A centralized function, for purchasing or hiring for example, provides greater control over costs or salaries than letting a bunch of smaller units make their own decisions. Centralization can also bring greater control over the quality of materials purchased or the qualifications of people hired.

The central function, whatever it is, should not meddle in decisions that it has decided to leave to the operating managers. It should take care of them completely for the smaller units; for example, letting Purchasing deal with suppliers so individual operating managers don't have to. Or it should issue guidelines, such as HR's salary ranges for new hires and promotions.

How Much Centralization Is Good?

Managers repeatedly wonder how much centralization is good. As often occurs, where you stand depends on where you sit. Senior managers like centralization because it gives them greater control. Managers lower in the ranks prefer decentralization because they can make more decisions. They often feel positioned to make the best decisions because they're closer to customers and employees than "some guy back at headquarters." Plus, they need the authority to do their jobs.

A company has to balance the urges to centralize and decentralize. If decision-making authority is too centralized, people feel like automatons. They feel they're not trusted to think. But if decision making is too decentralized, there's a danger of lost control, particularly financial and quality control.

To date, the best solution seems to be the one crafted by Alfred Sloan, the CEO who assembled General Motors in 1934. Under Sloan, GM featured centralized policy controls but decentralized operational decision-making.

Decision-making was so decentralized that a plant manager could buy auto glass from outside of GM (which had its own glass-making facility) if he could get a better deal. As noted in Peter Drucker's business classic, *Concept of the Corporation* (John Day & Co., 1496, revised 1972), this gave GM's own glass factory competition so they wouldn't become complacent. However, the glass did have to meet the quality standards for all GM products.

MBA Lingo

Centralization means placing a function or decision, such as buying office supplies, hiring workers, or pricing products in one area for the entire company. This yields more control and more standardized results or decisions.

Decentralization means allowing individual business units, for example, offices in various cities or countries, to handle functions and decisions independently. A middle ground is for headquarters to issue guidelines within which individual units can make their own decisions.



In a more recent business classic, *In Search of Excellence* (Harper & Row, 1982), Tom Peters mentions that excellent companies have what he calls “tight-loose controls.” They are tight in terms of company goals, but loose in terms of how managers are allowed to achieve those goals.



Case in Point

Centralization and decentralization are both current trends in business. For example, the global scale of many businesses justifies huge, multinational operations. These outfits require central controls to ensure quality and profitability. But they also must be decentralized enough to deal with local practices in a variety of markets.

You'll See These Concepts, If You Look

The five key concepts discussed in this chapter come up often in business. Even when managers do not discuss them or refer to them directly, these notions underlie many business decisions.

A manager often makes decisions almost unconsciously based on one of these concepts. She may know that adding another worker would not be worth it, without actually thinking about diminishing returns or cost-benefit. Or she may squeeze more workers into the same space because she knows she can't buy a new facility and increase her fixed costs yet. A manager doesn't have to talk about economies of scale to understand volume discounts or group life insurance.

Nonetheless, understanding these business basics will help you know what's really at work in business decisions. They will also help you use the analytical tools we examine in the next chapter.

The Least You Need to Know

- Every business faces both fixed and variable costs. Fixed costs do not change with the amount you produce and sell, but variable costs do.
- Economies of scale occur when a business produces high volume, which enables it to drive down the cost-per-unit. Economies of scale are the reason many large operations and chain stores are so successful.
- Be aware that the law of diminishing returns affects almost all new ventures or campaigns. When you first do something, you get a relatively high return, but over time, the return decreases.
- A conscious or subconscious cost-benefit analysis underlies almost every decision a manager makes.



Decisions, Decisions: Analytical Tools for Operations

In This Chapter

- The importance of break-even analysis
- Performing a cross-over analysis
- Using planning and scheduling tools
- Making a decision tree

Having seen the concepts that can help you look at business situations like a pro, it's time to get hold of some tools that can help you in these situations. These analytical tools, as they are called, are structured ways of examining business situations and making managerial decisions. These tools all have one purpose—to help you make better decisions more easily.

Some of these tools, such as break-even analysis and cross-over analysis, enable you to compare two or more choices in a standard manner. Others such as planning and scheduling tools and decision trees enable you to get the elements of a complex problem with several parts “on the table” so you can see what you are dealing with. These tools are not a substitute for managerial decision making. Instead they are designed to help managers in that process, and generally these tools do what they are designed to do.

The Manager's Toolbox

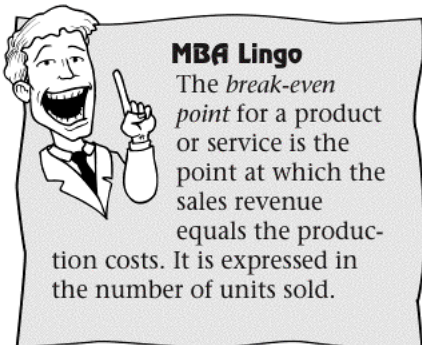
Analytical tools have one purpose—to help you make better business decisions. The four tools we consider in this chapter are:

- Break-even analysis
- Cross-over analysis
- Planning and scheduling tools
- Decision trees

These tools apply to a wide variety of businesses and situations.

Break-Even Analysis

The *break-even point* for a product or service is the point at which the sales revenue equals the production costs. It is expressed in the number of units sold. Simply put, it is the point where you start making money.



The importance of a break-even analysis is that when you are planning to offer a new product or service, you need to know how many sales you have to make to begin making a profit. Break-even analysis shows you that number of sales.

Calculate the break-even point with the following formula:

$$\text{Break-even units} = \frac{\text{Fixed Costs}}{(\text{Selling Price} - \text{Variable Cost per Unit})}$$

Note that to use this formula, you need to know both the fixed and variable costs (see Chapter 8, "Getting Down to Business: Key Concepts in Operations Management") of making the product or delivering the service.

Finding the Break-Even Point

Let's go back to the copy shop example used in Chapter 7. Remember, the shop uses a copy machine leased for \$10,000 (which represents a fixed cost) and that paper, ink, and so on cost two cents a copy (which represents a variable cost). Let's say that the average copy sells for eight cents.

Plugging these figures into the formula gives us:

$$\text{Break-even units} = \$10,000 / (\$0.08 - 0.02)$$

or

$$\text{Break-even units} = \$10,000 / \$0.06$$

or

$$\text{Break-even} = 166,667 \text{ units}$$

Another way of saying this is that the machine “pays for itself” after about 167,000 copies.

Break-even analysis helps in this decision because the manager can think about the volume he can expect to do in some period of time. Also, plugging other values into the formula shows what might happen in other circumstances.

For example, if the shop owner can lease a machine with total fixed costs of \$5,000 per year, or 50 percent of \$10,000, the break-even point will also fall by 50 percent, to about 83,000 units.

$$\text{Break-even} = \$5,000 / \$0.06$$

or

$$\text{Break-even} = 83,333 \text{ units}$$

Alternatively, if the outfit can raise the average price of a copy to 10 cents, it can decrease the break-even point below 167,000 units even with fixed costs of \$10,000.

$$\text{Break-even units} = \$10,000 / (\$0.10 - 0.02)$$

or

$$\text{Break-even units} = \$10,000 / \$0.08$$

or

$$\text{Break-even} = 125,000 \text{ units}$$

You could also figure out the result of both raising the price to 10 cents a copy *and* lowering fixed costs to \$5,000 (which lowers the break-even point to 62,500 units).

As you will see in Chapter 14, “Making Investment Decisions,” break-even analysis is frequently used to make investment decisions. You consider the variables involved—aspects such as lease price, selling price, and variable costs—and then compare these from one machine to another. Of course, you must also consider the machine itself, the volume it can handle, copy quality, and reliability. But financial aspects like the ones considered in break-even analysis are key to any decision.

You can plot the break-even point on a chart that will help you visualize the break-even point, as well as the costs and profits, at various sales volumes.

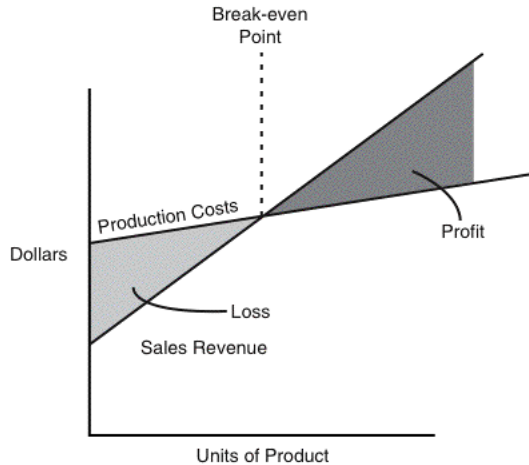
This chart doesn’t precisely reveal costs and profits, but it does portray the relation between them at various volumes.

MBA Alert

When you do break-even analysis, be sure to consider *all* fixed and variable costs. I’ve simplified the examples in this chapter for the sake of clarity. But you will sometimes have to dig for all the information you need in order to factor every cost into the analysis.



The break-even point.

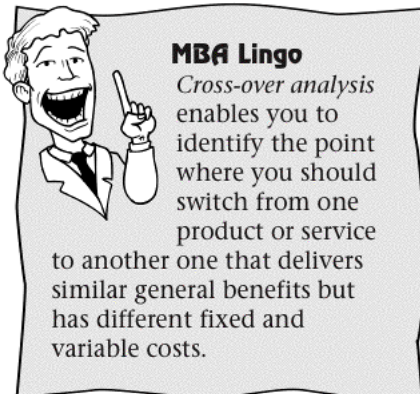


The chart also implies that anything that you do to shift the break-even point to the left—for instance, lowering your fixed or variable costs or raising your price—will get you into profits sooner. Conversely, anything that shifts the break-even point to the right will delay your profits.

Cross-Over Analysis

As a manager, you will at times face the option of buying one of two comparable pieces of equipment. Usually each will have its own set of fixed and variable costs. The question is: Which machine should you buy?

Suppose you are still the copy shop owner from our example in Chapter 8 and you can buy one of two copiers. Machine 1 has fixed costs of \$10,000 and variable costs of two cents a copy. Machine 2 has fixed costs of \$5,000 and variable costs of four cents a copy.



MBA Lingo

Cross-over analysis enables you to identify the point where you should switch from one product or service to another one that delivers similar general benefits but has different fixed and variable costs.

Which machine you will buy depends mostly on the volume of copies you expect to do. So the first thing to do is figure out the *cross-over point*, that is, the unit volume at which the cost of the two machines is equal. Cross-over analysis will identify that point.

Here's the formula:

Cross-over units = (Machine 2's fixed costs – Machine 1's fixed costs) divided by (Machine 1's variable costs – Machine 2's variable costs)

Cross-over units = $(5,000 - 10,000) / (.02 - .04)$

Cross-over units = $(-5,000) / (-.02)$

Cross-over units = 250,000 copies

At 250,000 copies (per year), the total cost of each of the two machines is equal.

Above and below that volume, one machine is preferable to the other. Which one?

To find out, calculate the cost of each machine at a unit volume just below the cross-over point and just above that point.

For instance, at 240,000 copies the cost of each machine is as follows:

$$\text{Machine 1} \quad (240,000 \times \$0.02) + \$10,000 = \$14,800$$

$$\text{Machine 2} \quad (240,000 \times \$0.04) + \$5,000 = \$14,600$$

These two calculations tell us that Machine 2 is the cheaper one, at 240,000 copies.

At 260,000 units the cost of each machine is as follows:

$$\text{Machine 1} \quad (260,000 \times \$0.02) + \$10,000 = \$15,200$$

$$\text{Machine 2} \quad (260,000 \times \$0.04) + \$5,000 = \$15,400$$

These two calculations tell us that Machine 1 is the cheaper one, at 260,000 copies.

So we see that Machine 2—the one with the lower fixed costs—will be preferable below the cross-over point, and Machine 1 will be preferable above that volume.

Again, which machine should the copy shop owner buy? It depends on the volume he expects. If the volume will be above 250,000 units, he should purchase Machine 1. If the volume will be lower, he should purchase Machine 2.

This, of course, assumes that he can forecast the volume with some accuracy. Also, as with break-even analysis, these calculations ignore any differences in copy quality, speed, reliability, and so forth.

Planning and Scheduling Tools

Project management—planning, launching, and controlling a project—requires special tools, ones somewhat different from those needed when managing an ongoing operation. A project has a beginning, a middle, and an end. The project manager must plan and coordinate numerous activities, and keep them on track so that the project achieves its goal, on time and on budget. In the following sections I'll show you how you can best manage projects.

The Critical Path to Project Management

The *Critical Path Method*, or *CPM*, is a visual tool that will help you plan and control the tasks and activities in a project. The Critical Path Method was developed by the chemical giant DuPont in the late 1950s for managing large projects, such as the construction of huge production facilities.

MBA Lingo

The *Critical Path Method (CPM)* is a visual tool that helps managers plan and control the tasks and activities in a project.



Part 2 ► How It All Operates

Let's say you are planning to open a restaurant and have identified the following major tasks as the key ones in the project:

Task Code	Task Description	Predecessors	Time (Weeks)
A	Find location	none	6
B	Negotiate lease	A	2
C	Do renovations	A, B	8
D	Hire chef	none	8
E	Purchase fixtures	A, B	2
F	Plan menu	D	2
G	Hire and train crew	D, F	8
H	Install and test fixtures	A, B, F	4
I	Conduct a dry run	All	1
Total time			41

Notice that in addition to identifying the tasks, you must put them in order. You must identify *predecessor tasks*, that is, tasks that must be completed before others can begin. You must estimate the time each task will consume.

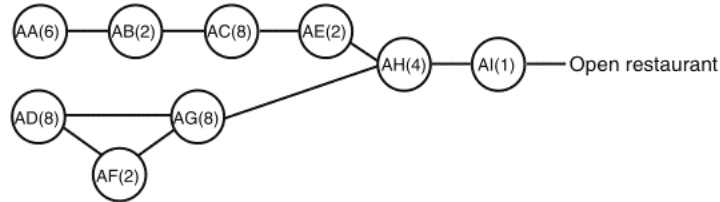
Notice also that the 10 tasks in our restaurant example are not exhaustive. For simplicity I've left out advertising, food purchasing, and so on.

Getting the Picture

The first step in CPM analysis is to chart the tasks visually in order to see the relationships among them.

Once you see the relationships, you realize that you can do certain tasks concurrently. In this example, you might think of the project as having two tracks: a "Facilities Track" and a "Food Track." The Facilities Track (Tasks A, B, C, and E) involves getting the restaurant space ready. The Food Track (Tasks D, F, and G) involves hiring the chef and crew and getting the menu squared away.

CPM helps you see how to "collapse" the project and get it finished in less elapsed time than the total project will require. Here's how to set it up with estimated times included:



The longest path through the project is called the *critical path*. In our example, that path extends from point A to point I, and it will take a total of 23 weeks. This means that the total elapsed time of the project will be 23 weeks, even though the total project time is 41 weeks. That's because the Facilities Track will take 18 weeks but the 16-week Food Track can be completed concurrently.

Note that the Food Track itself can be collapsed from 18 weeks to 16 weeks by planning the menu with the chef while also hiring the crew. This does not improve the total elapsed time, but there is no reason not to get whatever you can done in the most efficient way possible. After all, in business, Murphy's Law is always in operation.

Getting PERT

PERT, which stands for *Program Evaluation and Review Technique*, resembles Critical Path Management. PERT was developed by the U.S. Navy and the Lockheed Corporation for the Polaris missile system project in the late 1950s.

The major difference between PERT and CPM is that PERT enables you to make an optimistic, pessimistic, and "best guess" estimate of the time it will take to complete each task and the entire project. Then you calculate a weighted average by assigning a value of "1" to the pessimistic and optimistic estimates, and a value of "4" to the best guess. Then you plug the values into the following formula:

$$\text{Estimated time} = (\text{Optimistic} \times 1) + (\text{Best Guess} \times 4) + (\text{Pessimistic} \times 1) \text{ divided by } 6$$

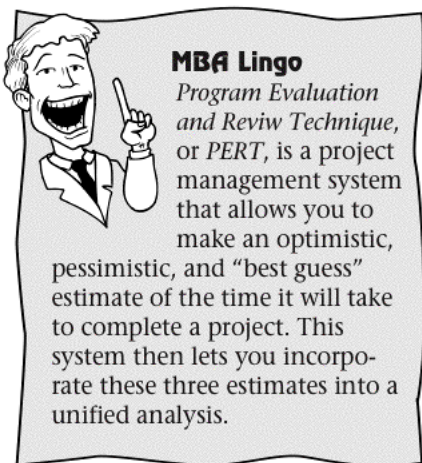
(You divide by six because one plus four plus one equals six, and you are calculating a weighted average of the time estimates.)

Let's say the "best guess" estimate of a task's duration is 10 weeks, the pessimistic estimate is 14 weeks, and the optimistic estimate is 8 weeks. The PERT formula would calculate the estimated time as follows:

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If you'd like to explore project management software, you can find planning tools such as Critical Path Management in project-planning software packages such as Microsoft Project.





Estimated time = $8 + (10 \times 4) + 14$ divided by 6

Estimated time = $62 / 6$

Estimated time = 10.2 weeks

I am showing you a simplified version of PERT. The actual system can incorporate very sophisticated statistical techniques.

For your planning purposes, the real value of PERT is the idea of coming up with the optimistic and pessimistic estimates, and then seeing which way any deviation from the best guess would be likely to go. In this case, since 10.2 is greater than 10, the likelihood is that if you vary from the "best guess," it is likely to be in the pessimistic direction.

In my own version of PERT, I figure pessimistic estimates for the large tasks that I can't directly control. When telling senior management about a project, I give them only the pessimistic estimates for these tasks (and thus the project) and pretend they're best guesses.

On a product development project with a major company, I brought the project in eight weeks late from the best guess (due to "programming problems" beyond my control). But it was only two weeks late from the pessimistic estimate, which was the only one I gave management. And I had *doubled* the programming time estimate that Management Information Systems had given me!

Decision Trees: More Visual Aids

A *decision tree* is another visual tool to help you in decision making. Like PERT, a decision tree includes the element of probability by allowing three estimates.

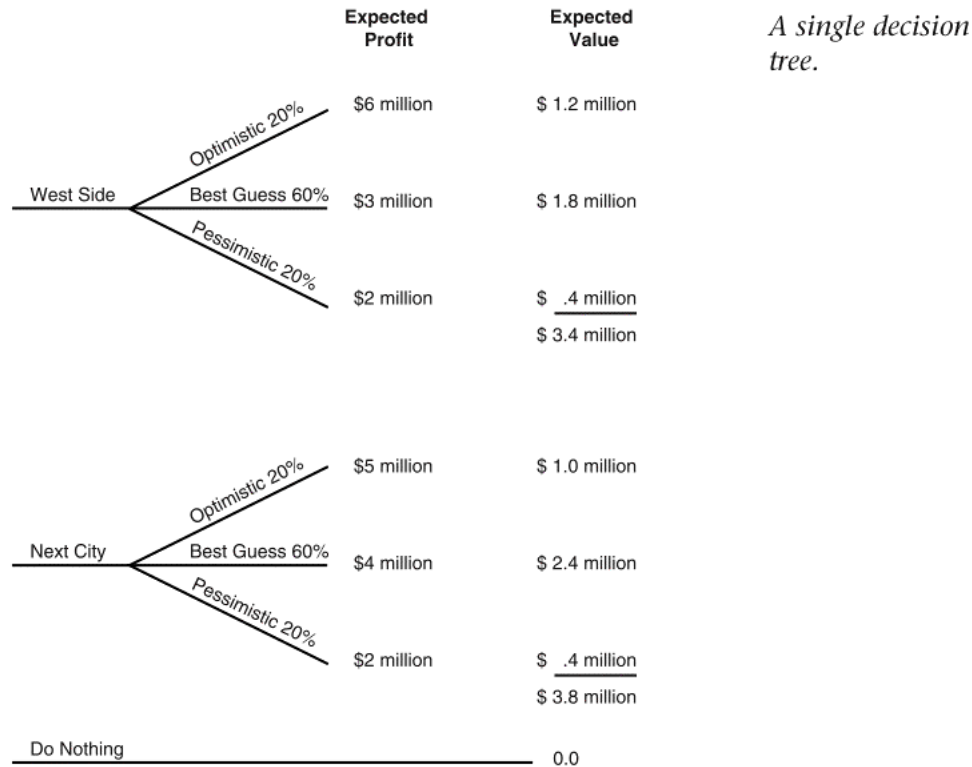
Let's say that our copy shop owner has an opportunity to expand to the west side of his own city or into the next city. He also, of course, could choose not to expand at all.

He estimates his profits over the next five years at each of the two locations to be:

Estimate	West Side	Next City
Optimistic	\$6 million	\$5 million
Best Guess	3 million	4 million
Pessimistic	2 million	2 million

For both locations, he has a 60 percent likelihood that the best guess will occur, and a 20 percent likelihood that either the optimistic or pessimistic estimate will occur.

Therefore the decision tree would look like this:



The decision tree lets you visually consider choices and risk. Putting probabilities on the estimates forces you to think carefully about what might really happen. When viewing an opportunity, it's easy for many of us to get carried away with optimism, so it's good to incorporate a pessimistic estimate into the analysis. The decision tree is one way of doing that.

So, back to our example. What should our copy shop owner do?

If he were to make his choice strictly on the basis of the decision tree, he should choose the alternative with the highest "expected value." In our example, that means he would choose to expand into the next city. The expected value of that choice is \$3.8 million dollars while that of expanding to the west side is \$3.4 million.

In actual practice, of course, he would use the decision tree as simply one more tool in his analysis. And that is what I hope you would do.

MBA Lingo

A decision tree enables you to graphically illustrate potential decisions (or "scenarios") and the potential outcomes of these decisions. Essentially, this is a visual aid to decision making that incorporates probabilities.



Use as Many as You Can

In this chapter I've given you some MBA-style analytical tools. There are many more of these tools, but these are the most useful of the bunch.

These tools are here to give you an edge. So use all of the tools that you can, because the risk of making a wrong decision is often greater than you think.

Remember, though, that analytical tools are not magical. They're only ways to develop information and communicate about plans and decisions. In almost all situations, you have to decide based on what the tools tell you and on considerations that these tools simply cannot incorporate into their analysis.

The Least You Need to Know

- Analytical tools are structured ways of examining business situations and they help you make better decisions more easily.
- Break-even analysis tells you how many units of something you must sell in order to start making a profit.
- Cross-over analysis helps you decide which of two competing prices of equipment you should buy or lease, depending on the amount of use the machine will get.
- Visual tools, such as the critical path method and decision trees, can help you "see" solutions because they help you see the parts of the problem and your choices.

Part 3

All About Money

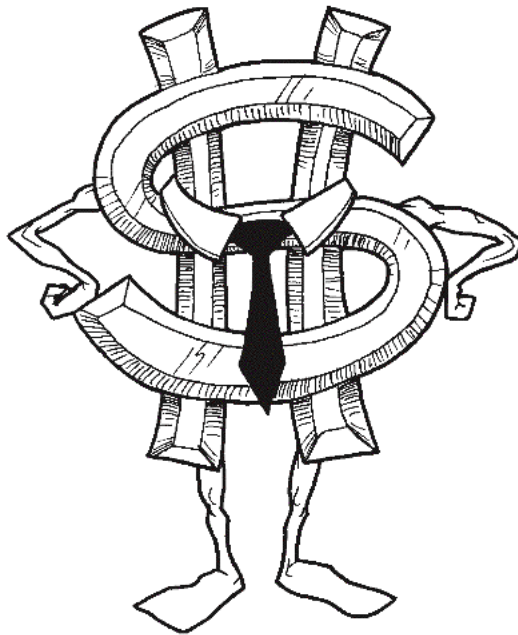
Some people find accounting confusing and finance frustrating, but I'm not sure why. It can't be the arithmetic, because if you can add, subtract, multiply, and divide—or use a calculator—then you can deal with the numbers in everything from basic budgets to major investments.

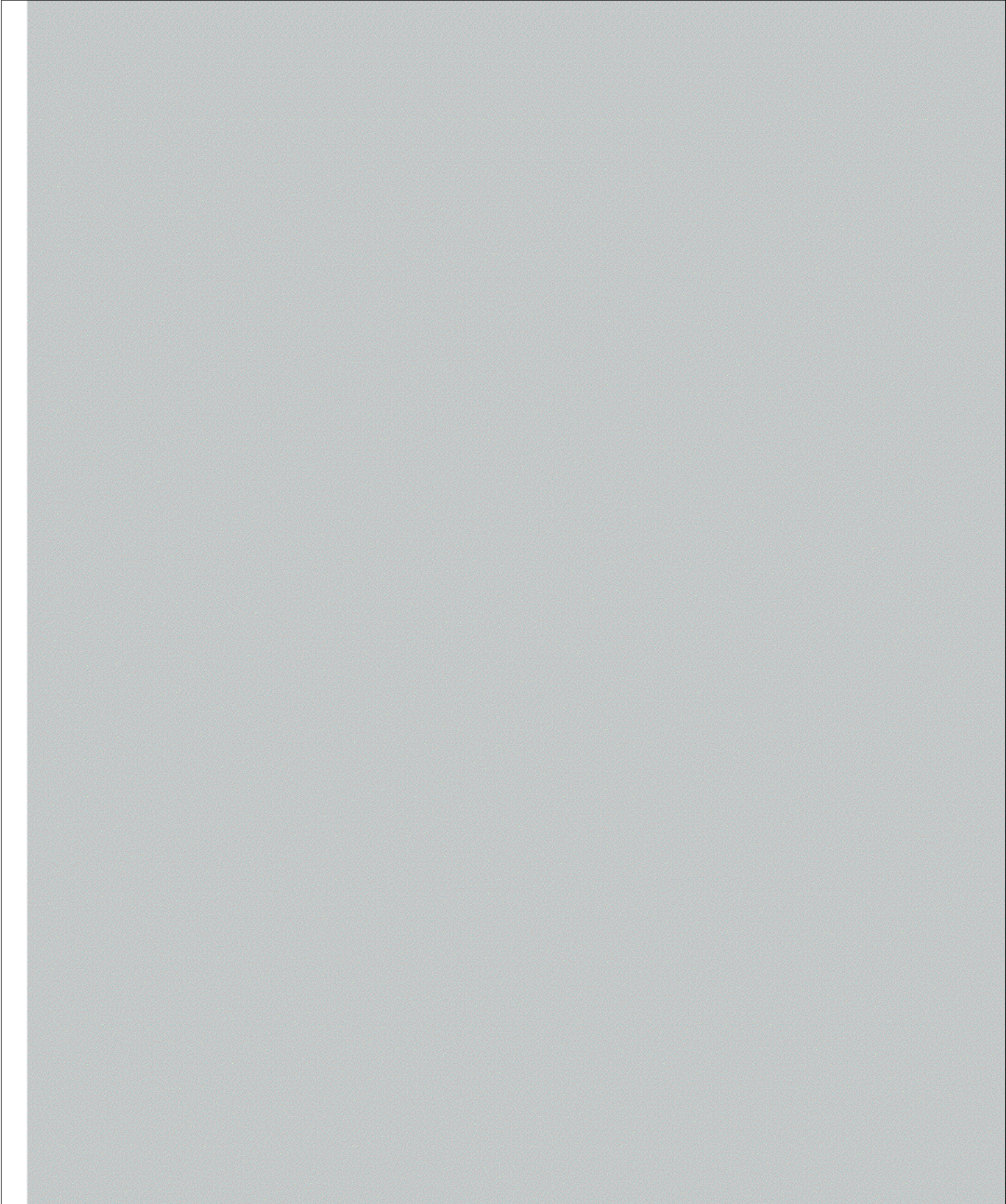
Of course, if the numbers don't give you trouble, then the words might. If you find terms like “depreciation,” “present value,” and “shareholders' equity” mysterious, don't worry. They're just words. And they have straightforward meanings, once they've been explained.

This part of the book explains all that and more, including how money flows through a company, where it comes from, and where it goes. It also shows you how to read financial statements, and once you can do that, you're on your way to real “business literacy.”

To succeed today, you've got to be able to “do the numbers”—or at least understand what those who do them are doing.

Turn the page and let's start crunching.







Chapter 10

Meet Your Balance Sheet

In This Chapter

- The importance of financial statements
- Assets and liabilities: How money flows through a business
- A tour through the balance sheet accounts

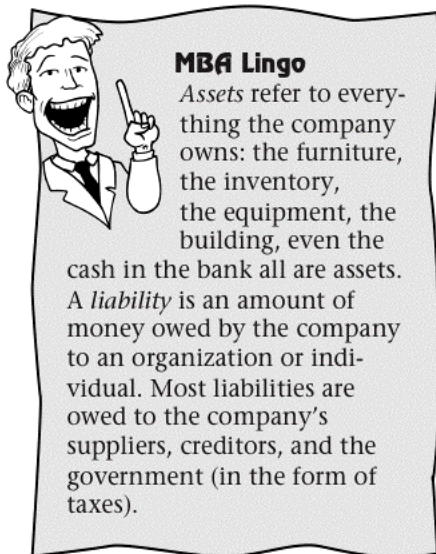
Money constantly flows through a company, and someone has to keep track of it. That's why God made accountants. Someone also has to make sure the company makes decisions that make money. That's where financial managers come in.

Accountants and financial managers have special ways of analyzing the health and growth of a company. They mainly use numbers, and they present these numbers in financial statements. Financial statements are the most important way you can understand and analyze a company. As a manager, you must understand these statements in order to know how your budgets, transactions, and decisions affect the company.

This chapter introduces the first of three main financial statements—the balance sheet.

Assets, Liabilities, and Owners' Equity: You Need 'Em All

To understand the balance sheet, you must first understand how money moves in and out of a company. Every transaction that a company conducts represents either an inflow



or outflow of cash. Most inflows of cash come from sales, but some come from loans or from the sale of stock. Most outflows of cash are created by expenses. When the company purchases materials, pays its employees, or pays interest on a loan, it has paid an expense.

In general, every single thing the company owns can be classified as an *asset*. The furniture, the inventory, the equipment, the building, even the cash in the bank and in the petty-cash drawer—all are assets. Assets have one thing in common: They are there to generate cash (unless they *are* cash, and even then, the cash should be invested). If an asset can't generate cash somehow, it doesn't belong on *the books*—the records kept by the bookkeeper or accounting staff.

Assets also include accounts receivable—money owed the company by customers who have purchased goods or services on credit. I'll explain accounts receivable in more detail later in the chapter.

A *liability* is an amount of money owed by the company to an organization or individual. Liabilities must be paid on or before some specific date and for a specific reason. Most liabilities are owed to the company's suppliers and creditors. One common exception is "Taxes Payable" which are, of course, owed to the government.

Liabilities arise from transactions that took place in the past. For instance, if someone sent you a keg of nails, they also sent you an invoice that you probably have 30 days to pay. That invoice is a liability.

Owners' equity is the amount left for the company's owners after the liabilities are subtracted from the assets. Put another way:

$$\text{Assets} - \text{Liabilities} = \text{Owners' Equity}$$

This simply means that the shareholders *own* the assets and *owe* the liabilities. After you subtract what is owed from what is owned, you have the actual stake the owners have in the company, and the actual value of the company. Owners' equity is also called *net worth*.

Meet the Balance Sheet

The *balance sheet* shows assets, liabilities, and owners' equity at a certain time, usually at the end of a quarter or *fiscal year* (the year that the company uses for budgeting and financial reporting).

The formula for the balance sheet is:

$$\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$$

You'll notice that this version of the formula is a bit different from the calculation for owners' equity. This version expresses three things:

- The balance sheet presents assets on the left-hand side of the statement and liabilities and owners' equity on the right-hand side. (For reasons of space or format, some balance sheets present assets on the top and liabilities and owners' equity below, but the concept remains the same: $\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$.)
- The balance sheet must balance. Assets *must* equal liabilities plus owners' equity.
- Assets are financed by liabilities and owners' equity. Liabilities and equity exist to finance assets. Assets exist to generate cash to pay off the liabilities, with enough left over to give the owners a profit.

This is how the money flows through a business. Owners invest money in the company and suppliers extend it credit. That creates owners' equity and liabilities. Management uses that money to buy assets. Assets generate cash that flows back to the right-hand side of the balance sheet to pay off the liabilities, with money left over for the owners (which is profit or income).

The balance sheet is usually described as a snapshot of a company. That is true, because it is a picture of the company's accounts at a certain date. But the snapshot idea leads some people to forget the dynamic relationship between assets, liabilities, and equity. For reasons that will become clear later, it's useful to think about the balance sheet as representing a flow of money through the business.

Let's look at a balance sheet and then take a tour of the various asset, liability, and owners' equity accounts.

MBA Lingo

Owners' equity is the amount left for the company's owners after the liabilities are subtracted from the assets. Assets minus liabilities equals owners' equity. Owners' equity is also called *net worth*.



MBA Lingo

The *balance sheet* shows assets, liabilities, and owners' equity at a certain time, usually at the end of a quarter or fiscal year. A *fiscal year* is the year that the company uses for budgeting and financial reporting. Most U.S. companies (about 70 percent) are on a calendar year fiscal year, that is, their fiscal year is from January 1 through December 31. Other companies use fiscal years geared to their particular season.



A Sample Balance Sheet

To make the balance sheet clearer, take a look at the following sample balance sheet for a fictional company.

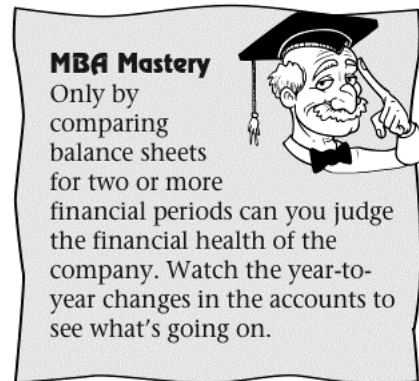
Balance Sheet for Sample Company, Inc.

December 31	12/31/98	12/31/97
Assets		
Current Assets:		
Cash	\$900,000	\$600,000
Marketable Securities	1,700,000	920,000
Accounts Receivable (Less: Allowance for Bad Debt of \$40,000 in 1998 and \$38,000 in 1997)	4,000,000	3,800,000
Inventories	<u>5,400,000</u>	<u>6,000,000</u>
Total Current Assets	\$12,000,000	\$11,320,000
Property, Plant & Equipment:		
Buildings & Machinery	\$9,700,000	\$9,090,000
Less: Accumulated Depreciation	(3,600,000)	(3,000,000)
Land	<u>900,000</u>	<u>900,000</u>
Total Property, Plant & Equipment	\$7,000,000	\$6,990,000
Other Assets:		
Prepayments & Deferred Charges	200,000	180,000
Intangibles (good will, patents)	200,000	200,000
Total Assets	<u>\$19,400,000</u>	<u>\$18,690,000</u>
Liabilities & Owners' Equity		
Current Liabilities:		
Accounts Payable	\$2,000,000	\$1,880,000
Notes Payable	1,700,000	1,800,000
Accrued Expenses Payable	660,000	600,000
Federal Income & Taxes Payable	640,000	380,000
Current Portion of Long-Term Debt	<u>400,000</u>	<u>400,000</u>
Total Current Liabilities	\$5,400,000	\$5,060,000
Long-Term Liabilities:		
Long-Term Debt	<u>5,000,000</u>	<u>5,400,000</u>
Total Liabilities	\$10,400,000	\$10,460,000

December 31	12/31/98	12/31/97
Owners' Equity		
Preferred Stock (6%, \$100 par value, 1,200 shares authorized, issued, and outstanding)	1,200,000	1,200,000
Common Stock (\$10 par value, 300,000 shares authorized, issued, and outstanding)	3,000,000	3,000,000
Additional Paid-in Capital	1,400,000	1,400,000
Retained Earnings	<u>3,400,000</u>	<u>2,630,000</u>
Total Owners' Equity	\$9,000,000	\$8,230,000
Total Liabilities & Owners' Equity	<u>\$19,400,000</u>	<u>\$18,690,000</u>

As you look at this balance sheet, keep a few points in mind:

- Remember that each dollar value on the balance sheet is a “snapshot” of the account, meaning its value as of the date of the financial statement (in this case, December 31 of 1998 and 1997).
- Total assets must equal total liabilities and owners' equity. It's called a balance sheet because it has to balance.
- Parentheses indicate a negative number, one to be subtracted from the column it appears in.
- Assets are listed in order of their *liquidity*; that is, how easily they can be converted to cash. Obviously, cash comes first; next come marketable securities (for example Treasury bills, because the U.S. government is obligated to pay them). Then come accounts receivable, because your customers are obligated to pay them. Assets which are more difficult to convert or sell (buildings and land, for instance) come later.
- Liabilities and owners' equity are listed in the order in which they are scheduled to be paid (notice that the owners come last!).
- Current assets are expected to be liquidated—that is, turned into cash—within one year of the date of the balance sheet. Current liabilities are payable within one year.
- You need balance sheets for two (or more) periods so you can compare the values in the accounts for the two periods. A balance sheet for one period offers no basis of comparison and is therefore of little value.



A Tour of the Assets

I realize there are a lot of terms and numbers in this balance sheet that may be new to you. You've probably heard the old joke: "How do you eat an elephant?" Answer: "One bite at a time." So we are going to take these accounts line by line, a bite at a time.



MBA Lingo

Marketable securities are short-term investments, usually in U.S. government securities or the commercial paper of other firms. *Commercial paper* is the name for short-term promissory notes issued by large banks and corporations. The maturities run from two to 270 days. Marketable securities are often called near-cash assets because they are highly liquid.

Note that although our sample balance sheet and the following list is not exhaustive, it does present the assets commonly found on the balance sheet of a commercial or industrial company, such as a retailer or manufacturer. Financial services companies, such as banks, and companies in specialized industries, such as power generating or oil refining, have their own specific kinds of assets in addition to these. The assets we cover here are the standard ones you'll find in most companies.

Cash

Cash means the cash in the company's checking and savings accounts, and in petty cash. Often you will see cash and marketable securities together on one line of a balance sheet.

Marketable Securities

Marketable securities are short-term investments, usually in U.S. government securities or the *commercial paper* of other firms. The securities have short maturities and stable prices. Because of their liquidity, these securities are referred to as *near-cash assets*. Companies put money in marketable securities because they often earn higher interest than checking or savings accounts earn.

Marketable securities are shown on the balance sheet at "the lower of cost or market," meaning at their original cost—the price the company paid for them—or the current market price, if it is lower. This keeps the value shown for these assets conservative. Often when the securities are shown at cost and the current market value is higher, that current value will be shown in parentheses or in a footnote to the financial statement.



MBA Lingo

Accounts receivable are amounts owed by customers who have purchased goods or services from the company on trade credit.

Accounts Receivable and Bad Debt

Accounts receivable are amounts owed by customers who have purchased goods or services from the company on trade credit. In Chapter 15, "Budget Basics," I will examine credit management, which is necessary because some customers pay their bills more quickly than others.

Unfortunately, some do not pay at all—hence the allowance for bad debt that is noted on the balance sheet. This

allowance is a *contra account* set up to accumulate an amount for those accounts receivable (or receivables) that will ultimately be uncollectible.

The company knows that some percentage (2 percent or so in most lines of business) of accounts receivable will be uncollectible. At the time of the sale, the company sets this amount aside for bad debt expense.

Inventories

Inventories are goods for sale to customers or goods in the manufacturing process at the time the balance sheet is prepared.

A manufacturer will usually have three kinds of inventory: raw materials, work in process, and finished goods. *Raw materials* are goods that the company purchased to make its products, while *work in process* is currently somewhere in the manufacturing process, as the name implies. Work in process is often called *unfinished goods*. *Finished goods* are goods awaiting sale.

A retailer has inventory and no raw materials or work in process because it only buys and sells finished goods.

Service companies typically do not sell goods (except as a sideline; for example, when hair salons sell hair-care products) so they usually have minimal or no inventory on their balance sheets.

Property, Plant, and Equipment

Property, plant, and equipment refers to the buildings (offices, factories, warehouses, and so on) and equipment (machinery, furniture, and fixtures, such as lighting and display cases) owned by the company. Often you will see various elements of property, plant, and equipment broken out separately, for example, buildings and equipment, or buildings and fixtures and furniture.

Note that the property, plant, and equipment amounts represent the company's productive capacity and premises, rather than products the company is in business to sell. Thus, property, plant, and equipment are called "fixed assets."

Accumulated depreciation is a contra account for tracking the depreciation of the value of fixed assets. Because

MBA Lingo

Inventories are goods for sale to customers or goods in the manufacturing process at the time the balance sheet is prepared. Manufacturers have three kinds of inventory: *raw materials*, which are goods that the company purchased to make its products; *work in process*, goods currently in the manufacturing process, and *finished goods*, which are goods awaiting sale.



MBA Alert

Be sure to keep your current assets moving. You want your inventories and receivables to keep flowing through the company (or "turning over") because you are then selling product and collecting money more quickly. Ways to speed up the flow of current assets through a company include stocking only fast-moving merchandise, discounting slow-moving items, taking deliveries of merchandise more often to keep inventories low, and collecting accounts receivable aggressively.





MBA Lingo

Fixed assets are tangible property used in the operations of a business. They are not expected to be consumed or converted to cash in the ordinary course of business. For most companies, productive plant, machinery, and equipment, and furniture and fixtures (such as display cases and lighting) account for almost all the fixed assets. Fixed assets are usually shown on the balance sheet at their depreciated value.

the value of equipment and buildings generally decreases with age, the balance sheet must reflect the true worth of the fixed assets (as opposed to the amounts they were bought for). Depreciation, which I'll explain fully in Chapter 13, "Look at the Books: Accounting Systems," is a way of *allocating* the cost of a fixed asset to each year of the asset's life. In other words, the cost of the asset is charged against income over the life of the asset, rather than all in one year.

By the way, in the sample balance sheet, I've shown depreciation as a separate line on the statement, while the allowance for bad debt contra account was deducted as part of the accounts receivable line. Either presentation is correct.

You do not depreciate assets that are used right away or within one year (for example, paper or office supplies). But, as I'll explain in Chapter 13, you must under tax law depreciate assets with a longer life, such as productive equipment or company cars.

Land

Land owned by the company is usually carried at cost (the price paid for it) and listed separately from other fixed assets.



MBA Lingo

Depreciation is a way of allocating the cost of a fixed asset with a life of more than one year. The cost of the asset is charged against income over the life of the asset, rather than all in one year. *Allocating* a cost (any cost) means assigning portions of that cost to subsequent operating periods.

Prepayments and Deferred Charges

Prepayments and deferred charges are in a sense not really assets, but rather prepaid liabilities.

The best example of a prepayment is insurance premiums paid in advance. The company has paid the bill, say, for five years of insurance coverage in advance. That prepayment creates an asset that will be used up over the five-year period. So it is carried as a long-term asset.

Deferred charges are similar. They represent money already spent that will yield a benefit in the coming years. For example, *research and development* expenses for a new product may be allocated over the life of that product. The company sets up an asset account for that amount so it can make that allocation.

Intangibles

Intangibles are assets that provide a business advantage although they do not physically exist. Intangible assets include items such as trademarks, patents, and good will.

A trademark is a legally protected brand name, slogan, or design of a product or firm. A registered trademark cannot be used by another company, because the firm that owns it used its resources to develop and establish that trademark.

Patents give an exclusive right to a product or process to the holder of the patent. Like a trademark, this protects the company or person who developed the product or process from having their work exploited by others.

Good will is the amount of money paid for an asset; for example, a product line or another company, above the value it was assigned by the previous owner. Companies vary in their accounting for good will. In most cases, when one company buys another, it must write off any good will within 40 years.

MBA Lingo

Prepayments and deferred charges represent monies that have already been spent that will yield benefits in upcoming years. Prepaid insurance premiums and money allocated to research and development are examples of prepayments and deferred charges, respectively.



MBA Lingo

Intangibles are assets that provide a business advantage although they do not physically exist. Intangible assets include patents, trademarks, and good will.



The Major Liabilities

Like assets, the kinds of liabilities listed on the balance sheet will be a bit different for companies in financial services and specialized industries. However, the following sections present the most common liabilities for most types of firms.

Accounts Payable

Accounts payable, or *payables*, are the amounts the company owes to its suppliers. (In other words, one company's receivables are another's accounts payable.)

Notes Payable

Notes payable can include commercial paper or other promissory notes (meaning a written promise to pay) that represent short-term borrowings of the company, meaning those payable within one year.

MBA Lingo

Accounts payable, or *payables*, are the amounts the company owes to its suppliers. *Notes payable* can include commercial paper or other promissory notes that represent short-term borrowings of the company.





MBA Lingo

Accrued means recorded but not paid, collected, or allocated. In the case of the balance sheet, *accrued expenses* sums up the money that the company owes to others (for example, employees, attorneys, and utility companies) who have not been paid for services rendered on the date of the balance sheet.



MBA Lingo

On the balance sheet, *current liabilities* are those payable within a year, meaning within a year of the date of the balance sheet. *Long-term debt* is all debt due after one year from the date of the balance sheet.

Accrued Expenses Payable

The *accrued* expenses account sums up all of the other money that the company owes to companies and individuals it does business with, including employees and independent contractors, attorneys and other outside professionals, and utilities such as the electric and telephone companies who have not been paid for services rendered on the date of the balance sheet.

Federal Income and Other Taxes Payable

Every business that makes a profit must pay federal income taxes and, where applicable, state and city income taxes. There are also real estate taxes, excise taxes, payroll taxes, other business taxes—you get the idea. Taxes are accrued on the books until they're due, and the accrued amount is shown in this account.

Current Portion of Long-Term Debt

Remember the distinction between current (or short-term) liabilities and long-term liabilities? Current liabilities are those payable within a year, meaning within a year of the date of the balance sheet.

Thus the current portion of long-term debt is the portion of long-term debt that is due in the coming year. For instance, if the Sample Company took out a three-year *term loan* on December 31, 1998, the portion of the loan that must be

repaid in the first year (that is, 1999) would be shown in this account. The amount to be repaid in the other two years would be shown in the long-term debt account.

Long-Term Debt

Long-term debt is all debt due after one year from the date of the balance sheet. This debt mostly represents financing from banks and bondholders.

Owner's Equity

Owner's equity refers to the financial stake the owner's have in the company. The business has assets, and after you subtract what the business owes to anyone it owes money to, then what is left is the owner's stake. Note that this number can be zero or even negative if the company owes more than it has in assets. (That is, of course, a terrible

situation that leads to bankruptcy if not quickly corrected with substantial and profitable growth in sales.)

Any corporation can issue stock. This includes any incorporated business, from a one-person company to a giant outfit that employs thousands of people and issues stock to the public. A corporation will always have an account for stock on the balance sheet as shown in our example.

An unincorporated business, such as a *proprietorship* or *partnership*, will not have accounts for stock but will show the owners' equity in the form of capital contributions (money invested in the business by the owner or owners) and retained earnings (which is the same as retained earnings in our example—money earned by the business and then reinvested in the business).

Stock

Stock, or *capital stock*, represents ownership in a corporation. A *share* of stock is one unit of ownership. An owner's percentage of all the outstanding shares indicates her percentage of ownership. Investors buy stock in order to share in the company's profits. The company issues stock in order to raise money from investors.

Investors affect the finances and direction of a company in several ways:

- An investor purchases a stake in the company's future earnings.
- An investor shares in future earnings in the form of *dividends* (payments made to stockholders out of the company's income).
- An investor also gets *voting rights*, meaning she can vote on issues that affect the company, such as who'll be on the board of directors and whether the company will be sold to another company.

Note the difference between an investor and a creditor: While the investor influences and benefits

MBA Lingo

A *corporation* is a legal structure for a business, registered with the state and separate from the owners and managers.

This means that ownership can be easily divided or transferred through the sale of stock and that the business can outlive the owners. A corporation also provides what is known as *limited liability*, meaning the owners can only lose what they have invested in the business and are generally not personally liable for the debts of the business. A *proprietorship* is an unincorporated business with one owner. A *partnership* is an unincorporated business with more than one owner and a legal contract that states the terms and conditions of the partnership.



MBA Lingo

Stock, or *capital stock*, represents ownership in a corporation. A *share* of stock is one unit of ownership. Investors buy stock in order to share in the company's profits. They are paid *dividends*, and also have *voting rights*. A *dividend* is a payment made to stockholders out of the company's income during a quarter or year.





MBA Lingo

Stock comes in different *classes* or types. The most popular classes of stock are preferred stock and common stock. Holders of *preferred stock* have no voting rights, are paid dividends at a fixed rate, and receive dividends before the holders of *common stock*. Common-stock holders have voting rights and do not receive dividends at a fixed rate.

from the growth and direction of the company, a creditor merely lends money to the company.

A company may issue several *classes* of stock, each with different features such as dividend policies and voting rights. The two broad classes of stock are preferred stock and common stock.

Preferred Stock

Preferred stock pays a dividend at a specific rate, regardless of how the company performs. Owners of preferred stock do not have voting rights. It is called preferred stock because the dividend on this stock must be paid before dividends are paid on the common stock.

Owners of preferred stock do not have a contractual right to a dividend. They only get dividends if the company has earnings to pay them.



MBA Lingo

Par value is the value assigned to a share of stock by the company. The actual selling price of the stock is determined in the market. The amount paid to the company in excess of the par value of the stock is counted as additional paid-in capital.

Common Stock

Owners of common stock have voting rights, but do not receive dividends at a fixed rate. Because holders of common stock share in the future earnings of the company, the value and price of this stock can rise (appreciate) or fall as the company's business prospects change. Most holders of common stock purchase it as much for the potential for appreciation as for future dividends.

Common stock can pay dividends well in excess of those paid on preferred stock.



MBA Lingo

Any income not distributed as dividends is classified as *retained earnings* and is reinvested into the company.

Additional Paid-in Capital

When a company issues stock, the stock has a *par value*, a value assigned to a share of stock by the company; for example, \$1 or \$5 or \$10 a share. This value does not determine the selling price (that is, the market value) of the stock. The selling price, the price the investor actually pays per share, is determined in the market.

The amount paid to the company in excess of the par value of the stock is counted as *additional paid-in capital*. It is capital paid into the company in addition to the stock's par value. (Additional paid-in capital is also known as *paid-in surplus*.)

Retained Earnings

When the company earns a profit for a period, it can only do one of two things with the money: distribute it to shareholders in the form of dividends, or retain it in the company to finance more assets. Any income not distributed as dividends goes into *retained earnings*. It is thus reinvested in the company and becomes part of the capital that finances the company.



Case in Point

Young, growing companies often go for years without paying a dividend. The stock of these companies is often called a *growth stock* because the company is growing so fast. Instead of paying a dividend, the company retains all of its earnings to finance the growing level of assets it needs in order to support its rapidly growing sales.

Investors who buy growth stocks understand this and target appreciation of the stock price rather than dividends as their investment goal.

The Least You Need to Know

- A balance sheet shows the values in the company's accounts on a certain date. It is therefore often referred to as a "snapshot" of the company on that date.
- It is best to have at least two years of balance sheets to review. One balance sheet reveals very little about the company.
- The simple formula for the balance sheet is: $\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$.
- Current assets include cash; marketable securities; accounts receivable; property, plant, and equipment; and intangibles.
- Liabilities include accounts payable, notes payable, accrued expenses payable, taxes, and long-term liabilities.
- Owners' equity includes stock, additional paid-in capital, and retained earnings.



Making a Statement: Income and Cash Flow

In This Chapter

- Using the income statement to understand a company
- A tour through the income statement accounts
- How cash flow shows where the money comes from—and goes

In Chapter 10, “Meet Your Balance Sheet,” you took a detailed tour of one of the key financial statements, the balance sheet. Now let’s turn to the other two major financial statements—the income statement and the cash flow statement.

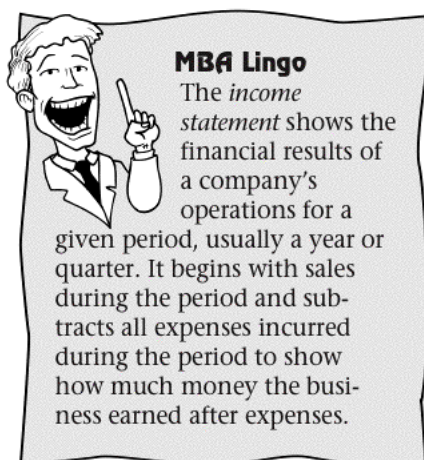
The income statement is as important to your understanding of a company as the balance sheet. The cash flow statement is secondary. What it shows—the sources and uses of the cash that flowed through a company during a period—is important, but it is constructed from the balance sheet and income statement accounts. I include it here, though, because with any company, large or small, the way cash flows through a business is key.

Introducing the Income Statement

The *income statement* presents the results of a company’s operations for a given period, usually a quarter or fiscal year. The income statement shows the company’s sales and expenses for that period. It also shows whether the company had a profit or a loss for the period, so the income statement is also called the profit and loss statement or the P&L.

The simple formula for the income statement is:

$$\text{Sales} - \text{Expenses} = \text{Income}$$



Clearly, the higher the sales and the lower the expenses, the greater the income. But the income statement is not quite that simple, because there are various types of expenses (just as there are various types of assets, liabilities, and owners' equity on the balance sheet). Seeing these various expenses on the income statement tells you how the company is spending its money, and where management is most and least efficient.

While the balance sheet is a snapshot of the company on a certain date, the income statement covers operations over an entire period, usually a year. Unlike the balance sheet accounts, those on the income statement began at zero at the beginning of the period. So when you see "Sales" or "Salaries" on an income statement, you are seeing the total dollar amount of sales made or salaries paid during the period.

Let's look at a sample income statement to see what all this means.

Income Statement for Sample Company, Inc.

December 31, 1998

	1998	1997
Sales	\$22,000,000	\$20,400,000
Cost of Goods Sold	<u>16,400,000</u>	<u>15,400,000</u>
Gross Income	5,600,000	5,000,000
Selling, General & Administrative Expense	2,800,000	2,650,000
Depreciation Expense	<u>600,000</u>	<u>550,000</u>
Operating Income	2,200,000	1,800,000
Other Expenses:		
Interest Expense	270,000	300,000
Other Income:		
Interest on Marketable Securities	<u>100,000</u>	<u>80,000</u>
Income Before Taxes	\$2,030,000	\$1,580,000
Provision for Income Taxes	<u>960,000</u>	<u>730,000</u>
Net Income (Loss)	<u>\$1,070,000</u>	<u>\$850,000</u>

Here are points to keep in mind when examining an income statement:

- As with the balance sheet, you should have at least two years of income statements to examine. Trends in sales and income are particularly important to watch. Sales and income growth are management's main responsibilities, so you want to see growth in those areas. Flat or falling sales are usually a sign of real trouble.
- Companies are driven to sell because ultimately all their money comes from sales. As you see on the statement, all expenses are deducted from sales. Other income or interest income are not part of the company's regular business.
- *Cost of goods sold* captures production expenses, the expenses of producing the products. These are sometimes called direct expenses.
- Selling, general, and administrative expenses capture the costs of selling the products and of operating the administrative functions.
- The accounts "other expenses" and "other income" record expenses and income not related to operating the business. An example of an "other expense" would be the costs of defending the company against a lawsuit. In contrast, winning a settlement in a lawsuit would generate "other income."

A Tour Through the Income Statement

Let's examine the income statement accounts. Remember: Each account started at zero at the beginning of the period (in this case, the beginning of the year) and accumulated the amount shown during that period.

Sales

Sales (also called revenue, revenues, total sales, or total revenue) is the amount of money the company took in, before any expenses, on its operations. This means that sales does

MBA Lingo

Cost of goods sold is the expenses of buying goods and producing the product. They are called direct costs or direct expenses because they are directly associated with making what the company sells, as opposed to the costs of selling the product or administrative costs. The major components of costs of goods sold are materials and labor.



MBA Mastery

When you review an income statement, try to visualize the various parts of the operation. Try to "see" what the company is doing in the real world. These are not just numbers on a page. Behind these numbers are real people, making sales, products, and decisions and exchanging money and earning their livings. A company is a dynamic system, so try to understand the dynamics.





MBA Lingo

Gross income equals sales minus the cost of goods sold. It is the money earned by the company on sales after deducting the direct expenses of making the product. This figure is also called gross profit.



MBA Alert

If you manage a company or department that produces a product, be sure to monitor the individual direct expenses that go into making that product. This includes the cost of materials, parts, and hardware, as well as your labor costs (watch overtime, which adds up quickly) and your costs of operating machinery. Those different expenses are the numbers to watch in order to control your production costs and achieve high gross income. It's just another case of "watch out for the dimes and the dollars will take care of themselves."

not include money the company took in, for example, by selling off old property, plant, and equipment. That would be shown under "other income." Nor does sales include interest earned on marketable securities, which would be included under interest income.

Sometimes you'll see a contra account (see Chapter 10), called *allowance for returns*, presented with sales. For instance, you might see "Sales \$1 Million Less: Allowance for Returns \$20,000." That contra account is set up because manufacturers and retailers know that some percentage of their products will be returned by dissatisfied customers or those finding breakage or defects. In this case, the contra account represents 2 percent of total sales ($\$1 \text{ million} \times .02 = \$20,000$), which is in the normal range for a manufacturer.

Cost of Goods Sold

For a retailer, cost of goods sold equals the price the retailer paid to suppliers for the merchandise it sells in the stores. This would also include the transportation costs of getting the goods into the stores.

For a manufacturer, cost of goods sold equals the total cost of producing its products. The major production expenses include the cost of materials; the wages and benefits of production workers; freight and transportation; and the rent, power, lights, maintenance, and other costs of operating the factory.

Cost of goods sold should capture all of the costs directly associated with making (or, for a retailer, acquiring) the product the company sells.

Gross Income

Gross income is the amount of money the company earns on its sales before the selling, general, and administrative expenses, which is the next expense item. Gross income is also called *gross profit*.

Some income statements don't report income at this level. They don't break out cost of goods sold and instead deduct selling, general, and administrative expenses and go straight to operating income. To me, that's sad, because it omits important information. You'll see why in the next chapter.

Selling, General, and Administrative Expense (SG&A)

After a manufacturer makes a product (or after a retailer buys it from a supplier), that product must be sold. That means you have to pay salespeople salaries and commissions. They have to use the phone, send out letters, and travel to clients and probably buy them lunch (even drinks and dinner) now and then. All of these expenses, as well as marketing expenses, are included in this account.

On top of that, there are all those support functions—human resources, MIS, accounting, and finance—as well as office space, power, light, supplies, and everything else needed to run a company. The salaries and benefits of managers are also included in SG&A, as it's usually called, since they do not work directly on producing the product.

Depreciation Expense

Depreciation expense is the amount of depreciation charged against sales during the period. This is *not* the same as accumulated depreciation on the balance sheet. Accumulated depreciation on the balance sheet is the total of all the past depreciation expense on the company's existing property, plant, and equipment.

This means that depreciation expense on the income statement for a period is added to the amount of accumulated depreciation on the balance sheet at the beginning of the period.

If you examine Sample Company's balance sheet in Chapter 10 and compare it to the income statement in this chapter, you'll see that the difference in accumulated depreciation between the balance sheet dated 1998 and the one dated 1997 is \$600,000. That \$600,000 is the depreciation expense charged to operations on the company's 1998 income statement.

MBA Lingo

Operating income equals sales minus the cost of goods sold and minus selling, general, and administrative expenses. This is the amount earned by the company on sales after deducting the direct expenses of making the product and the expenses of selling it and of all other aspects of running the business itself. Operating income is also called operating profit.



Operating Income

Subtracting SG&A from gross income gives you *operating income*, also called *operating profit*, *income from operations*, or *income from continuing operations*.

Note that operating income only represents income directly related to operations. Income from other sources—such as from the sale of a division or the settlement of a lawsuit—is listed separately under “Other Income.”

Other Expenses

Other expenses include interest expense, plus any extraordinary or non-recurring expenses, as they are called. Although they are not shown in the earlier statement, other expenses can include costs of litigation, settlements paid in lawsuits, or the expense of closing down a division.

Interest Expense

Interest expense is counted separately from both operating and other expenses. Interest expense relates fairly directly to doing business, but it varies with both the amount the company borrows and, often, with the level of interest rates. Managers and investors like to watch interest expense closely because, while there are good reasons to borrow money, too much debt generates high interest expenses that drag on a company's operations.



Case in Point

When Time Inc. merged with Warner Communications Inc. in 1989, the merged company, Time Warner Inc., was saddled with \$16 billion in debt on its balance sheet. The interest expense on this debt pulled down earnings for years and continues to do so to this day, even though the debt has been cut to less than half that original amount.



MBA Mastery

Because business people (like the rest of us)

dislike paying taxes, companies have methods—legal ones, of course—of minimizing their pretax income so that they minimize their taxes. In Chapter 13, “Look at the Books: Accounting Systems,” I will show you various accounting methods that affect reported income.

Other Income

Other income, also called extraordinary or non-recurring income, is incoming money not generated by regular operations.

Interest income is the most common category of other income. It is counted separately for the same reason that we count interest expense separately. Unless the company is a bank (in which case interest income actually represents sales), interest income is “gravy”—not a source of income from operations.

Although they are not shown in the earlier statement, other sources of income can include money paid to the company in settlement of a lawsuit, money from the sale of fixed assets, or money from the sale of an intangible asset, such as a trademark or patent.

Income Before Taxes

Income before taxes is income from all sources—operations as well as extraordinary items—before the government gets a crack at it. Income before taxes is also called pretax income.

Provision for Income Taxes

Corporate income tax rates can vary from year to year at the federal, state, and local levels. In the sample income statement, I've simply assumed a total tax rate of about 30 percent.

This is called a *provision for income taxes* because the taxes will be charged against the income earned in this period even if they have not actually been paid in this period. In other words, this account shows the total income tax expense charged to income during the period.

Net Income (Loss)

This is the bottom line you've heard so much about. Net income is what's left of sales and other income after you deduct cost of goods sold; selling, general, and administrative expense; other expenses; and taxes.

If all the expenses exceed sales and other income during the period, the company has a loss for the period. It is *in the red*. (Note that in the earlier statement, parentheses are placed around the word "Loss" in the "Net Income" line to indicate a negative number.)

MBA Lingo

People say a company with a loss for a period is *in the red* because losses used to be written in the books in red ink. You'll also hear the expression "red ink," as in, "If this new product fails, we'll be swimming in red ink."



Get Insights Into Income

The income statement represents management's report card for a quarter or a year. Just reading a couple of years of a company's income statements will tell you a lot. Here are some of the questions you'll be able to answer after looking at income statements:

- Are sales rising, falling, or just plain flat?
- Are costs rising or falling faster or slower than sales? Or are they keeping pace with the movement in sales?
- How about interest expense? Did interest expense rise or fall from one year to the next?
- Is income keeping pace or is it changing in relation to sales? How's the bottom line holding up?
- Did the company incur any extraordinary windfalls or charges?

How Are Your Employees Doing?

Sales per employee and net income per employee are two quick measures you can easily calculate from an income statement. They can be quite revealing.

- To calculate sales per employee, simply divide the sales figure on the income statement by the number of employees in the company.
- To calculate net income per employee, divide the net income figure by the number of employees.

If either of these figures is on a downward trend, it may mean that the company is not efficiently managing its human resources. You can also compare the results of these calculations with the corresponding numbers for other companies in the same industry to see how your use of employee resources rates.

You'll examine a number of calculations for analyzing both the balance sheet and the income statement in Chapter 12, "The Big Picture: Financial Analysis."

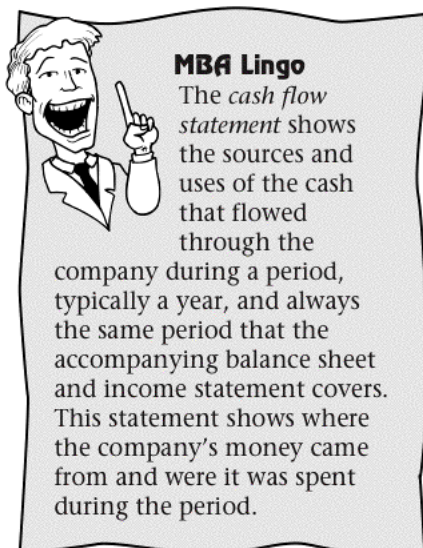
The Cash Flow Statement

I wrap up this introduction to financial statements with the *cash flow statement*. This is also called the statement of sources and uses of cash, but, for brevity, let's stick with cash flow statement.

Like the balance sheet and income statement, the cash flow statement is presented in a company's annual report. The cash flow statement is important for two reasons:

1. It improves your understanding of what's going on in the balance sheet and income statement, because the cash flow statement is calculated from account values on those statements.
2. It highlights an essential point: Cash is King. A company must generate actual cash (dough, jack, moola) and it must generate it from operations, rather than through borrowing or by selling off pieces of itself.

A company can have high levels of assets, but not much cash. It can have inventory that can't be sold, receivables that can't be collected, and machinery that can't produce what customers want. In those cases the outfit isn't generating cash, and cash is what you need to pay your bills and distribute dividends.



Easy Come, Easy Go: Cash Flow

The cash flow statement shows where the company's cash came from and where it was spent during the period covered by the statement. (This period is the same one covered by the income statement, the period between the beginning and ending balance sheets.)

A cash flow statement shows the increases or decreases in the various accounts and the effects on the cash account. An increase in an asset is a use of cash, while a decrease in an asset is a source of cash. Conversely, an increase in a liability or owners' equity account is a source of cash, while a decrease in a liability or equity account is a use of cash.

For example, if the ending balance in accounts receivable is higher than the beginning balance, that counts as a "use" of cash, because the company added more in receivables than it collected. Collecting receivables increases cash. Not collecting them decreases cash. (As you saw in Chapter 10, on Sample Company's 1998 balance sheet, receivables are higher than on the 1997 balance sheet. So that counts as a "use" of cash.)

Conversely, if the ending balance in accounts receivable is lower than the starting balance, that counts as a "source" of cash. That's because the company collected more receivables than it added during the period. The net effect on cash is an increase, so that's a "source" of cash.

The cash flow statement also accounts for "non-cash" charges—expenses that were recognized on the income statement but did not require a cash payment. Depreciation is the best example of a non-cash charge. The actual cash was spent on the fixed asset before the accounting period, but the expense is allocated (as depreciation) to the operating period. Because no cash was spent on depreciation expense, that counts as a source of cash.

A Sample Cash Flow Statement

Here is a cash flow statement for Sample Company, based on the balance sheet in Chapter 10 and the income statement you saw earlier in this chapter:

**Sample Company, Inc.
Statement of Sources and Uses of Cash
For the Year 1998**

Cash Flows From Operating Activities:

Net Income	\$1,070,000
Depreciation	600,000
Decrease (Increase) in Accounts Receivable	(200,000)
Decrease (Increase) in Inventories	600,000
Increase (Decrease) in Accounts Payable	120,000
Increase (Decrease) in Notes Payable	(100,000)

continues

continued

Increase (Decrease) in Accrued Expenses Payable	60,000
Increase (Decrease) in Taxes Payable	<u>260,000</u>
Net Cash Flow From Operations	\$2,410,000
Cash Flows From Investing Activities:	
Decrease (Increase) in Marketable Securities	(780,000)
Decrease (Increase) in Buildings and Machinery	(610,000)
Decrease (Increase) in Prepaid and Deferred Charges	<u>(20,000)</u>
Net Cash Flow From Investing Activities	(\$1,410,000)
Cash Flows From Financing Activities:	
Increase (Decrease) in Total Long-Term Debt	(400,000)
Increase (Decrease) in Preferred Stock	—
Increase (Decrease) in Common Stock	—
Increase (Decrease) in Additional Paid-in Capital	—
Dividends Paid	<u>(300,000)</u>
Net Cash Flows From Financing Activities	(700,000)
Net Change in Cash	<u>\$ 300,000</u>

Keep the following in mind as you examine this cash flow statement:

- The cash flow statement is largely “constructed” from the balance sheet and income statement, so the underlying numbers have to be sound for the cash flow statement to be accurate.
- Like the income statement, the cash flow statement covers only one period (in this case, the year 1998), the period from the beginning balance sheet to the ending balance sheet. It is certainly useful to have two or more years of cash flow statements, but it is not as essential as it is for the other two statements.
- There are three parts to the cash flow statement: cash flow from operating activities, cash flow from investing activities, and cash flow from financing activities. The most important one is cash flow from operations. A company cannot sustain itself on borrowings or investments (unless it is a financial institution).
- The cash flow statement reconciles all other accounts to the change in the cash account that occurred from the beginning balance sheet to the ending balance sheet for the accounting period.
- When more cash comes in from various sources than goes out during a period, cash flow is positive. When the opposite occurs, cash flow is negative.
- The term *gross cash flow* or *gross cash flow from operations* usually refers to net income plus depreciation.

Getting Reconciled

Using the cash flow statement, we can easily begin to *reconcile* the accounts listed on the balance sheet and income statements—that is, analyze how changes in one account affect other accounts.

For example, consider Sample Company's retained earnings shown on the balance sheet in Chapter 10. As you may remember from that chapter, net income goes to one of two places: It is either reinvested in the operation as retained earnings, or it is distributed to the shareholders as dividends. Therefore what is not retained is paid as a dividend. Since dividends are a use of cash, you have to calculate them for the cash flow statement.

MBA Lingo

A reconciliation of an account analyzes the changes in the other accounts that affect the account.



You can easily calculate the amount of dividends paid by doing a reconciliation of retained earnings accounts on Sample Company's balance sheet in Chapter 10.

Beginning Retained Earnings (12/31/97)	\$2,630,000
Plus: Net Income for 1998	1,070,000
Minus: Ending Retained Earnings (12/31/98)	<u>3,400,000</u>
Dividends Paid During 1998	\$ 300,000

This amount is shown on the cash flow statement under "Net cash flows from financing activities" because paying dividends on stock are part of using stock as a source of financing.

Actually, the cash flow statement is really just one large reconciliation of all accounts to the cash account. If you look back at Sample Company's balance sheets for 1998 and 1997 in Chapter 10, you'll see that cash increased by \$300,000. The cash flow statement identifies the changes in the other accounts that led to that \$300,000 increase.

Go With the Cash Flow

I won't go through a line-by-line examination of the cash flow statement because it does not list accounts. Each line just states whether the activity in that balance sheet or income statement account resulted in an increase or decrease in cash.

By examining each line and referring to the financial statements for Sample Company, you can see the effect on cash.

The Least You Need to Know

- The income statement, also known as the profit and loss statement or P&L, is management's report card for the quarter or year it covers. Basically, it presents the results of management's sales and cost-control efforts.
- Examine at least two years of income statements to see trends in sales and in key expense categories.
- Cash flow can be more important to a company and its owners than size, growth, or even profits. For example, a large company can generate poor cash flow, while a company with low profits can generate excellent cash flow.
- Use the cash flow statement to examine where money comes from and what it is spent on in a given period.

Chapter 12



The Big Picture: Financial Analysis

In This Chapter

- The basics of financial analysis
- Measuring liquidity ratios
- Understanding solvency ratios
- Analyzing profitability ratios

In Chapter 10, “Meet Your Balance Sheet,” and Chapter 11, “Making a Statement: Income and Cash Flow,” I showed you the basics of balance sheets, income statements, and cash flow statements. Simply reading a financial statement will tell you something—but not much. You’ll see the dollar amounts of the accounts and, if you have at least two years of statements, you’ll see if an account increased or decreased.

But to really understand a company, you must analyze its financial statements. Aside from a basic understanding of the accounts, this requires some simple calculations.

In this chapter, you’ll learn basic financial statement analysis—how to look beyond the account values and relate them to one another so you can see into the company’s structure and operation.

Let's Get Analytical: Financial Ratios

A *ratio* is a calculation that shows the relationship between two values. A ratio is nothing more than a division problem with a number on top (numerator) divided by a number on the bottom (denominator).

Financial ratios show the relationship between two financial statement accounts. Ratio analysis enables you to measure a company's performance and credit-worthiness (capability to pay its liabilities and take on additional debt). While financial ratios are not the only tool of financial analysis, they are among the most powerful.



MBA Lingo

A *ratio* is a calculation that shows the relationship between two values. Financial ratios show the relationship between two financial statement accounts.

Liquidity Ratios

The following formulas (aside from working capital, which isn't a ratio) are called *liquidity ratios*. They measure a company's capability to meet its short-term obligations and to convert receivables and inventory into cash. The liquidity ratios we will cover are current ratio, quick ratio, A/R turnover, days' sales outstanding, inventory turnover, and days' sales on hand. But first, let's examine working capital.

Working Capital

Working capital measures a company's capability to pay its current obligations. The formula for working capital is:

$$\text{Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$

Current assets and current liabilities are listed on the balance sheet.

Based on the financial statements presented in Chapters 10 and 11, let's look at the working capital for Sample Company in 1998:



MBA Lingo

Working capital measures a company's capability to pay its current obligations. Working Capital equals current assets minus current liabilities.

$$\text{Working Capital} = \$12,000,000 - 5,400,000$$

$$\text{Working Capital} = \$6,600,000$$

For Sample Company in 1997:

$$\text{Working Capital} = \$11,320,000 - 5,060,000$$

$$\text{Working Capital} = \$6,260,000$$

Working capital improved for Sample Company in 1998, rising by \$340,000, or 5 percent ($6,600,000 / 6,260,000 = 5.4$ percent). This 5 percent increase occurred while sales

increased by about 9 percent ($22,000,000 - 20,400,000 = 1,600,000$, which divided by $20,400,000 = 7.8$ percent). Since working capital should grow at about the same rate as sales, this represents good financial management.

Obviously, working capital should, at a minimum, be positive. In general, the higher the working capital, the better. However, positive working capital only tells us that the company's current assets exceed its current liabilities. A ratio can tell us how much greater it is, and a lot more.

Current Ratio

The *current ratio*, also called the *working capital ratio*, shows the relationship between current assets and current liabilities. Here's the formula:

$$\text{Current Ratio} = (\text{Current Assets}) / (\text{Current Liabilities})$$

Again, current assets and current liabilities are on the balance sheet.

For Sample Company in 1998:

$$\text{Current Ratio} = 12,000,000 / 5,400,000$$

$$\text{Current Ratio} = 2.2$$

For Sample Company in 1997:

$$\text{Current Ratio} = 11,320,000 / 5,060,000$$

$$\text{Current Ratio} = 2.2$$

In most businesses, a current ratio of 2.0 or better is considered good. It means that the company has twice the amount of current assets as current liabilities. Remember, though that some assets are more liquid than others. (See Chapter 10 for a discussion of liquidity.) Therefore, we have another measure of a company's capability to pay its current liabilities: the quick ratio.

Quick Ratio

The *quick ratio*, also called the *quick asset ratio* or *acid test ratio*, is a more stringent measure of liquidity. The formula is:

MBA Alert

Be careful when you look at working capital. It can at times be inflated by useless current assets. A badly managed company often allows poor-quality receivables or obsolete inventories to build up so that its working capital appears strong. Ratio analysis enables you to look beyond raw numbers like working capital to get a better sense of what's really going on.



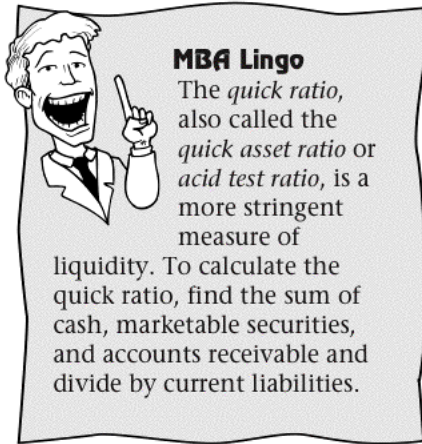
MBA Lingo

The *current ratio*, also called the *working capital ratio*, shows the relationship between current assets and current liabilities. The current ratio equals current assets divided by current liabilities.



$$\text{Quick Ratio} = (\text{Cash} + \text{Marketable Securities} + \text{Accounts Receivable}) / \text{Current Liabilities}$$

These numbers are all on the balance sheet. This ratio focuses on the capability of the company to meet its current obligations with its most liquid assets, which are cash, marketable securities, and accounts receivable. While industry norms vary, a company with a quick ratio of 1.0 or better is usually positioned to pay its current liabilities out of current assets.



For Sample Company in 1998:

$$\text{Quick Ratio} = (900,000 + 1,700,000 + 4,000,000) / 5,400,000$$

$$\text{Quick Ratio} = 6,600,000 / 5,400,000$$

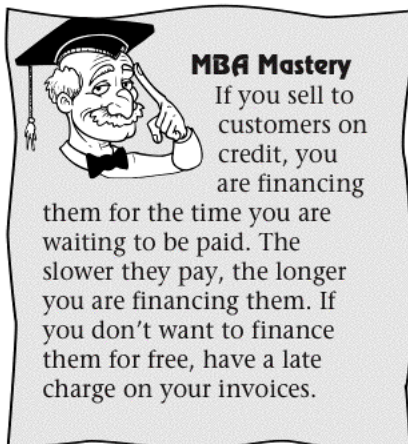
$$\text{Quick Ratio} = 1.2$$

This quick ratio of 1.2 indicates that Sample Company has a good portion of its current assets in liquid assets rather than inventories.

Let's turn now to a few ratios that measure the quality of the accounts receivable and the inventories.

Accounts Receivable Turnover

The level of accounts receivable tells us little about the quality of the receivables. Here, the term "quality" refers to the collectibility of the receivables. If accounts receivable cannot be collected, they are close to worthless.



It's also a bad sign when receivables are "slow," meaning that the company takes longer than it should to collect. In other words, the customers are not paying the invoices when they're due.

This is bad for two reasons: First, if business conditions worsen, slow receivables can become even slower and perhaps uncollectible. Second, the company has money tied up in those receivables, money that could be used to pay off liabilities or invest in marketable securities.

Here's the formula for receivables *turnover*:

$$\text{A/R Turnover} = (\text{Sales}) / \text{Average Accounts Receivable}$$

The sales figure is on the income statement. To calculate average accounts receivable, add the accounts receivable at

the beginning of the period (from the first balance sheet) to the accounts receivables at the end of the period (from the second period) and divide the sum by two.

Now in strictest terms, the numerator should be Credit Sales instead of Sales, but we're assuming that all of the company's sales are on credit. Usually you won't find credit sales broken out from total sales on financial statements anyway. (If you need to, you can calculate this number for your own company with information available from the accounting department.)

For Sample Company in 1998:

$$\begin{aligned} & \frac{\$22,000,000}{(4,000,000 + 3,800,000) / 2} \\ \text{A/R Turnover} &= \$22,000,000 / 3,900,000 \\ \text{A/R Turnover} &= 5.6 \text{ times} \end{aligned}$$

In general, the higher the turnover, the better. Why? Because the faster the receivables are turning, the less money you have tied up in them.

It's particularly useful to compare this ratio with the ratio of other companies within the same industry (known as *industry norms*). A company in an industry that allows customers to pay within 45 days instead of the more common 30 days, for example, will automatically have a lower turnover.

Collection Period

For an even more complete picture of a firm's accounts receivable, convert the receivables turnover to *collection period*. This measure is also known as *days sales outstanding*. Collection period is the average number of days it takes the company to collect its receivables.

$$\text{Collection Period} = 365 / (\text{A/R Turnover})$$

For Sample Company in 1998:

$$\text{Collection Period} = 365 / 5.6$$

$$\text{Collection Period} = 65 \text{ days}$$

This means that Sample Company takes an average of 65 days to collect its invoices. This number is "good" or "bad" only in relation to the industry norms and the *terms* on which

MBA Lingo

Turnover is the number of times the receivables went through a cycle of being created and collected (or *turned over*) in a period.

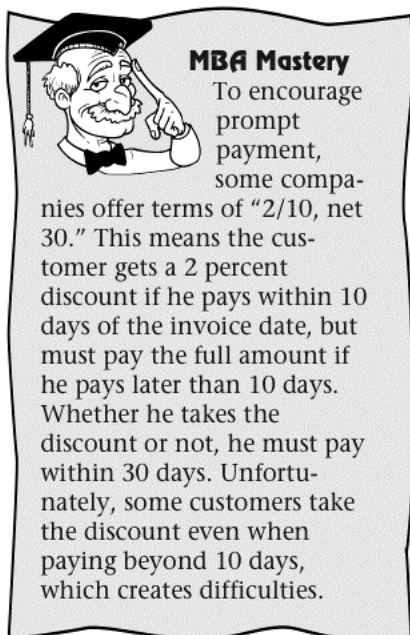


MBA Lingo

The *collection period* is the average number of days that the company takes to collect an account receivable. The collection period equals 365 days divided by the figure for accounts receivable turnover.



the company sells. If Sample Company gives customers 60 days, or even 45 days, to pay, 65 days sales outstanding and 5.6 turns a year is fine. If the terms are 30 days, (which is much more common), then Sample Company is not collecting its receivables quickly enough. In general, however, a 65-day collection period is not considered good.



Finally, remember that the collection period is one number that sums up all the accounts—those paying quickly and those paying slowly. In other words, it's an average.

Inventory Turnover

Inventory turnover resembles receivables turnover. You want to sell inventory quickly, just like you want to collect receivables fast. The faster your inventory turns over, the less money you have tied up in inventory to support a given level of sales. Here's the formula for inventory turnover:

$$\text{Inventory Turnover} = \text{Sales} / \text{Average Inventories}$$

The sales figure is on the income statement. Inventories are on the balance sheet.

$$\frac{\$22,000,000}{(5,400,000 + 6,000,000) / 2}$$

To calculate average inventory, add the inventory at the beginning of the period (from the first balance sheet) to the inventory at the end of the period (from the second period) and divide the sum by two.

$$\text{Inventory Turnover} = \$22,000,000 / 5,700,000$$

$$\text{Inventory Turnover} = 3.9 \text{ times}$$

As with all ratios, you have to judge inventory turns against industry norms. For example, a jewelry store's inventory may turn only once a year because it carries high-priced items with a large profit margin (a measure we'll discuss later in this chapter) and customers expect a wide selection. However, a grocer may turn his inventory over every three to five days because the prices and profit margins are much lower, many items are perishable, and shelf space is at a premium. A grocer can't afford to carry an item that doesn't sell briskly.

Days' Sales on Hand

As with receivables, it can be useful to convert inventory turns to a measure expressed in days—days' sales on hand. This number reveals the average number of days it takes the company to sell its inventory.

$$\text{Days' Sales on Hand} = 365 / \text{Inventory Turnover}$$

For Sample Company in 1998:

$$\text{Days' Sales on Hand} = 365 / 3.9$$

$$\text{Days' Sales on Hand} = 94 \text{ days}$$

This means that Sample Company has an average of 94 days' worth of sales in inventory. Again, this number is "good" or "bad" only compared with industry norms. (Remember, because it is an average, this number includes the fastest- as well as the slowest-moving merchandise.)

Solvency Ratios

Long-term solvency ratios examine two elements. The first is the proportion of debt the company uses in its financial structure. The second is its capability to pay the interest on the debt (that is, to service the debt).

Debt-to-Equity Ratio

The *debt-to-equity ratio*, also called the *debt-equity ratio*, is the first of the three long-term *solvency ratios* we will examine. The debt-to-equity ratio measures the extent to which the owners are using debt—that is, trade credit, liabilities, and borrowings—rather than their own funds to finance the company.

The formula for the debt-to-equity ratio is:

$$\text{Debt-to-Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Total Owners' Equity}}$$

Note that total liabilities includes all current and long-term liabilities.

Owners' equity represents the total amount that the owners have invested in the company, both in stock they've purchased and in earnings they've reinvested in the company rather than taken as dividends.

MBA Lingo

Solvency is the capability of a company (or individual) to pay its bills on time.



MBA Lingo

The *debt-to-equity ratio* compares the amount of the company's total financing from creditors compared with the amount of money invested by the shareholders. The debt-to-equity ratio is calculated by dividing total liabilities by total owners equity, both of which are on the balance sheet.





MBA Lingo

The term *financial structure* refers to the make-up of the company's financing, as seen on the right-hand side of the balance sheet. The major decision about financial structure concerns how much debt to take on relative to equity.

For Sample Company in 1998:

$$\text{Debt-to-Equity Ratio} = \$10,400,000 / \$9,000,000$$

$$\text{Debt-to-Equity Ratio} = \$10,400,000 / \$9,000,000$$

$$\text{Debt-to-Equity Ratio} = 1.2$$

Many analysts look for debt-to-equity of 1.0 or less. That means that half of the company's total financing—or less—comes from debt. However, many analysts also do not mind higher proportions of debt in a company's *financial structure* (the company financing, as seen on the right-hand side of the balance sheet) as long as they see that the company can handle the interest and principle payments.

Debt Ratio

The *debt ratio* resembles the debt-to-equity ratio. But instead of relating total debt to owner's equity, it measures only long-term debt in relation to all financial resources. This ratio shows the role of long-term debt in the firm's financial structure. The debt-equity ratio is particularly useful to long-term lenders such as banks.



MBA Lingo

The *debt ratio* compares the company's long-term debt to the amount of owners' equity. Like the Debt-to-Equity ratio, the Debt ratio measures the amount financing that comes from creditors relative to the amount invested by shareholders. The Debt ratio is calculated by dividing long-term liabilities by total owners' equity, both of which are on the balance sheet.

The formula for the debt ratio is:

$$\text{Debt Ratio} = \text{Long-Term Debt} / \text{Total Liabilities and Equity}$$

The figures for long-term debt and total liabilities and equity are on the balance sheet.

For Sample Company in 1998:

$$\text{Debt Ratio} = \$5,800,000 / \$18,690,000$$

$$\text{Debt Ratio} = 0.31$$

This tells us that 31 percent of Sample Company's total financial resources are in the form of long-term debt. Generally, the lower this number, the better. While you must consider industry practices and norms, if this number approaches 50 percent, you want to be sure the company has a reliable earnings stream.

Note that I included the current portion of long-term debt in this calculation. Some analysts might instead see that current portion of long-term debt as a current asset. But since that amount is also part of long-term debt, I include it. Either method would be correct.

Times Interest Earned

The *times interest earned ratio* measures the capability of the company to pay the interest on its long-term debt. Here is the formula:

$$\text{Times Interest Earned} = \frac{\text{Operating Income}}{\text{Interest Expense}}$$

The figures for operating income and interest expense are on the income statement. In this formula, operating income is usually called “earnings before interest and taxes” or EBIT (pronounced “e-bit”). You use *EBIT* because you want to measure the capability to pay the interest expense out of operating income before you deduct interest out of that income. You use income before taxes because interest is tax-deductible.

Don’t include “other income” in this calculation. You want to measure the company’s capability to service its debt with cash from the operations only.

For Sample Company in 1998:

$$\text{Times Interest Earned} = \$2,200,000 / \$270,000$$

$$\text{Times Interest Earned} = 8 \text{ times}$$

In 1998, Sample Company earned operating income of eight times its interest expense. As always, industry norms will dictate the appropriate value for this ratio. Generally, however, EBIT of at least three or four times interest earned is considered safe.

By the way, times interest earned is often called a coverage ratio, meaning coverage of interest expense.

Profitability Ratios

Finally, let’s look at the *profitability ratios*. These ratios measure the company’s earning power and management’s effectiveness in running operations.

MBA Mastery

Financial statements are standardized, but different companies use different accounting principles (see Chapter 13). I believe analysts should use the more conservative method of calculating a ratio when there’s more than one option. (More conservative means the method that yields the lower value.)



MBA Lingo

The *times interest earned ratio* measures the capability of the company to pay the interest on its long-term debt out of earnings from operations. Times interest earned is calculated by dividing earnings before interest and taxes (or EBIT,) by interest expense during a given period, usually a year.



MBA Lingo

EBIT (earnings before interest expense and taxes) equals operating income.



Gross Margin

Gross margin, also called the *gross profit margin*, is the first profitability ratio we'll examine. The gross margin measures the effectiveness of the company's production management.

$$\text{Gross Margin} = \text{Gross Income} / \text{Sales}$$

Gross income and sales are found on the income statement.

For Sample Company in 1998:

$$\text{Gross Margin} = 5,600,000 / 22,000,000$$

$$\text{Gross Margin} = 25.5\%$$

Obviously, the higher the gross margin, the better. The values for this number will vary widely across industries. Sample Company spends about 75 percent of its total sales on production costs; that is, on cost of goods sold. This means that Sample Company is probably a manufacturer because most retail firms try to keep their cost of goods sold to about 50 percent.

Some businesses have inherently higher margins than others. These "high margin" businesses are often those selling something that customers value highly, particularly if the item can be made cheaply. Designer clothing and other items purchased for their image or status are a good example. For instance, U.S. luxury car models such as General Motors' Cadillac and Ford's Lincoln achieve higher margins than their lower status products because the luxury models command higher prices for essentially the same components and a lot more sheet metal—and sheet metal is relatively cheap.

Another way to achieve high margins is to add a lot of value to a product. For example, a food processing company will generally have higher margins than a farmer because the food processor adds more value (through the processing and packaging) than the farmer did by growing it.



MBA Lingo

Gross margin is gross income as a percentage of sales. This ratio measures the effectiveness of production and is calculated by dividing gross income by sales.



Case in Point

Successful high-technology companies often have very high gross margins—some as high as 70 or 80 percent. That's because a high-tech company with a solution to an expensive problem can charge almost whatever it wants to those who need that solution.

Operating Margin

The *operating margin* measures operating income as a percentage of sales. In contrast to the gross margin, the operating margin measures management's effectiveness in the nonproduction areas of the company. It measures the contribution (or lack of contribution) of the sales, administrative, and other nonproduction functions.

If a company has a good gross margin and a poor operating margin, management is somehow mismanaging the areas that account for selling, general, and administrative (SG&A) expense. Perhaps sales costs are too high. Perhaps there are lavish offices, luxury cars, and high entertainment expense being charged to operations. Perhaps the administrative staff is too large. Or maybe management's salaries are (dare we say it?) too high.

Here's the formula:

$$\text{Operating Margin} = \text{Operating Income} / \text{Sales}$$

Operating income and sales are on the income statement.

For Sample Company in 1998:

$$\text{Operating Margin} = \$2,200,000 / 22,000,000$$

$$\text{Operating Margin} = 10\%$$

As is the case with all profitability measures, the higher the operating margin, the better.

MBA Lingo

Operating margin is operating income as a percentage of sales. This ratio measures the effectiveness in the non-production areas of the company and is calculated by dividing operating income by sales.



Net Margin

The *net margin* measures the bottom line—net income—as a percentage of sales. This shows the percentage of each sales dollar that the company manages to hang on to after production and operating expenses, after interest and other expenses, and after taxes.

$$\text{Net Margin} = \text{Net Income} / \text{Sales}$$

Net income and sales are found on the income statement.

For Sample Company in 1998:

$$\text{Net Margin} = \$1,070,000 / \$22,000,000$$

$$\text{Net Margin} = 4.9\%$$

MBA Lingo

Net margin is net income as a percentage of sales. This ratio measures the company's capability to deliver on the "bottom line." That is it shows what percentage of sales the company actually delivers to shareholders as after-tax earnings. The net margin is calculated by dividing net income by sales.



A net margin in the 5 percent range is very common. Interestingly, several years ago non-business people were surveyed and asked, "What percentage of a company's sales do you believe wind up as profits?" The researchers got answers ranging up to 25 and even 50 percent! This highlights the general public's lack of understanding concerning business and profits.

A net margin of around 10 percent would be excellent, particularly if the company could consistently achieve it.

Asset Turnover

As you know, management's job is to use the company's assets to generate cash. Assets must therefore generate sales and profits. The *asset turnover ratio* measures management's effectiveness at using assets to generate sales.



MBA Lingo

Asset turnover measures sales as a percentage of assets to show how well management is employing the company's assets to generate sales. Asset turnover is calculated by dividing sales by total assets.

The formula for asset turnover is:

$$\text{Asset Turnover} = \text{Sales} / \text{Total Assets}$$

The Sales figure is on the income statement. Total Assets is on the balance sheet.

For Sample Company in 1998:

$$\text{Asset Turnover} = \$22,000,000 / \$19,400,000$$

$$\text{Asset Turnover} = 1.1 \text{ times}$$

Asset turnover, or asset turns, shows how efficiently management uses assets. A ratio of about 1.0, like that of Sample

Company, may indicate either inefficient use of assets or an inherently asset-intensive business; that is, one requiring lots of plant and equipment, such as oil refining or heavy manufacturing.

Return on Assets



MBA Lingo

Return on assets shows how well management is using assets to generate income. Return on assets is calculated by dividing net income by total assets.

Return on assets (ROA) measures management's capability to use assets to generate a profit (also known as a *return*).

Here is the formula for return on assets:

$$\text{Return on Assets} = \text{Net Income} / \text{Total Assets}$$

For Sample Company in 1998:

$$\text{Return on Assets} = 1,070,000 / 19,400,000$$

$$\text{Return on Assets} = 5.5\%$$

Over time, a decrease in asset turns or return on assets may mean that management is misusing assets somehow. They may be focused on spending money on assets rather than on selling product to customers. They may be growing the asset base faster than they can grow sales. This can also lead to too much debt, because those assets must be financed.

The company could also be acquiring the wrong mix of assets. If they have equipment that could be rapidly superseded by a better technology, for example, management may soon wish they didn't have all those assets.

Return on Investment

This is *the* key measure of return, especially for shareholders and therefore, for management. *Return on investment* (ROI), also called *return on equity*, measures the return on the money the shareholders have invested in the company.

This number is critical because management must earn a good return for the owners. If management can't do this, either (1) the shareholders will sell their shares and put their money where it will get a better return, or (2) the board of directors will replace management.

Here is the formula for this important ratio:

$$\text{Return on Investment} = \frac{\text{Net Income}}{\text{Owners' Equity}}$$

Net Income is found on the income statement, Owners' Equity is on the balance sheet.

For Sample Company in 1998:

$$\text{Return on Investment} = 1,070,000 / 9,000,000$$

$$\text{Return on Investment} = 11.9\%$$

MBA Lingo

Return on investment (or ROI, also called return on equity or ROE) measures net income against the investment that it took to generate that income. Return on investment is calculated by dividing net income by owners' equity.



Generally, an ROI of 10 percent or better is considered good. Investors compare this number to the returns they can earn elsewhere on their money. They look at the returns earned by other companies and at interest rates on bonds and other securities. So management must always be aware of how they are doing, not just as managers of the business, but as stewards of the owners' money.

Keep Your Pencils—and Eyes—Sharp

Now that we've covered the main financial ratios, here are a few tips for when you do ratio analysis. Be sure to:

- *Calculate accurately.* Financial statements can be confusing at first because some accounts, such as depreciation expense and accumulated depreciation, have similar names. Also the eye can easily misalign numbers and accounts across columns.

- *Calculate conservatively.* Remember that most companies put their best foot forward in financial statements. You can make up for that by being conservative in your calculations.
- *Compare the trend in the ratio over two or more periods.* A ratio from one period can't tell you nearly as much as a trend over two or more years.
- *Cross-check your ratios and look for patterns.* Try to see management's strengths and weaknesses. Do they generate cash? Is their liquidity strong? Do they have too much debt or too many assets? Are they growing the asset base faster than sales? Where are their margins weak or strong?
- *Look beyond the ratios.* Read the footnotes to the statements and management's discussion of operations in the annual report. Keep up to date with company news on management changes, product announcements, and joint ventures.
- *Understand industry norms.* Industry norms place financial ratios in context. Industry norms for financial ratios are published by Standard & Poor's and Dun & Bradstreet Inc. and by Robert Morris Associates, a national association of bankers (named for one of the financiers of the Revolutionary War).

The Least You Need to Know

- The relationships between various financial statement accounts will tell you about the company's performance and credit-worthiness. Financial ratios are the key tools for assessing these relationships.
- The liquidity ratios measure the company's capability to meet its short-term obligations as they come due.
- The long-term solvency ratios measure an outfit's capability to meet its long-term obligations.
- The profitability ratios measure the efficiency of the company's operations. A strong gross margin indicates efficient production management, while a strong operating margin indicates efficient management of sales and administration.
- When you calculate ratios and find one that's below par, look for patterns. Also, try to find out what, exactly, is going on. Whenever possible, compare a company's ratios to industry norms.

Chapter 13



Look at the Books: Accounting Systems

In This Chapter

- How to set up an accounting system
- Accounting for inventory
- Calculating depreciation on plant and equipment

Where do financial statements come from? What goes on behind the scenes? What does a bookkeeper do? What decisions go into accounting for various assets, liabilities, and expenses? How do these decisions affect the outfit's finances?

This chapter answers these questions. It will also improve your understanding of financial statements and of business. And it will prepare you to set up an accounting system for your company or department, or help you understand the one that's already in place.

The Major Ledgers

When you hear someone refer to "the books," they are talking about the company's journals or ledgers or "the books of account." They are usually set up in books with specially ruled ledger paper.

When setting up an accounting system, you first must decide how often you'll enter transactions into the various ledgers. You can make ledger entries on a daily, weekly, monthly, or quarterly basis. For infrequent transactions, such as purchases of buildings and equipment, you would make an entry only when a transaction occurs.

You would enter other transactions more often. Retail stores or restaurants enter the day's receipts in a daily sales ledger. Assuming that the store or restaurant pays its employees each week, it would make weekly entries in the payroll ledger.

Most companies keep separate ledgers for separate kinds of transactions. They record sales transactions in the sales ledger, payroll checks in the payroll ledger, invoices sent to customers in the accounts receivable ledger, and bills received from suppliers in the accounts payable ledger.

These ledgers do not have to be separate books. They can be separate sections of a large book. As a manager, accountant, or bookkeeper, you can choose how to set up your

company's books. However, you must follow standard accounting procedures and be understandable by another accountant or bookkeeper (or, heaven forbid, the IRS).

Most businesses need at least three ledgers: one for cash receipts (that is, cash inflows), one for cash disbursements (that is, cash outflows), and a general ledger. In any system, the various journals or subledgers are *posted* to the general ledger at the end of the accounting period.

Posting means "entering an amount." In this case it means "transferred" to the general ledger, which summarizes all the company's accounts. The financial statements are drawn up from the general ledger.



MBA Lingo

A bookkeeper or accountant *posts* an account when he or she enters it into the company's books of account. If an amount is transferred from one account to another, that is also called posting.



MBA Lingo

T-accounts represent two sides of an account in a ledger. A ledger may be ruled like a T-account or the bookkeeper can create T-accounts by using a ruler and a pen to add heavier lines to the ledger paper. Another way to indicate a debit or credit is to write next to the entry the abbreviation "Dr." for a debit entry and "Cr." for a credit entry. (I don't know why it's Dr. instead of Db.)

The Double-Entry System

Bookkeeping in the United States employs the double-entry system. This means that two journal entries are made for each transaction. One entry records the transaction itself and the other records the description of the transaction. These two entries offset one another so that the net effect on the books is zero. In other words, the books must balance.

The double-entry system requires two entries: one debit and one credit. A debit is simply an entry on the left-hand side of an account. A credit is an entry on the right-hand side of an account.

The following example shows a \$1,200 sale recorded by a double entry into two T-accounts:

Accounts Receivable	Sales
\$1,200	\$1,200

A sale on credit creates a receivable, which the company will collect later. So we debit accounts receivable and we credit sales. That is, we make a left-hand entry in the accounts receivable account and a right-hand entry in the sales account.

Why?

Because a debit always represents one of the following:

- An increase in an asset account
- A decrease in a liability or equity account
- A decrease in a revenue account
- An increase in an expense account

And because a credit *always* represents one of the following:

- A decrease in an asset account
- An increase in a liability or owners' equity account
- An increase in a revenue account
- A decrease in an expense account

See Chapter 10, "Meet Your Balance Sheet," for a description of assets and liabilities.

When the company collects the receivable, that is, when the customer pays his invoice, the following entries will be made:

Cash	Accounts Receivable
\$1,200	\$1,200

Why these two entries?

We debit cash because when a customer pays an invoice, the asset called cash increases—and a debit represents an increase in an asset. Meanwhile another asset, called accounts receivable, decreases. We record that decrease with a credit to accounts receivable because a credit represents a decrease in an asset.

Remember: In the double-entry system, the accounts must balance. At any time, the sum of the debits must equal the sum of the credits. The debits and credits in a single account do not have to balance, and usually they won't. But the total of all the debits to the various accounts must equal the total of all the credits to the various accounts.

MBA Alert

Some people find the terms "debit" and "credit" confusing at first. Most of us think of "credit" as something good, as in giving someone credit for something. So it may seem odd that a credit to an asset (like cash) is a decrease, while a debit is an increase. It's best just to think of a debit as a left-side entry and a credit as a right-side entry to a T-account. It might also be useful to remember that when you pay the phone company, they "credit *your* account" (which decreases *their* account receivable).





MBA Lingo

You calculate a *trial balance* by first totaling the debits and credits in each account.

Usually there will be a debit or credit balance in each account. Then you total the debit balances and the credit balances to ensure that they are equal. If they are, the books balance.

Why?

Because every transaction generates both a debit and a credit of equal amounts. If every transaction generates two entries of equal amounts, then all the transactions must generate total debits equal to total credits. The double entries thus verify the accuracy of the bookkeeping system. In fact, the accountant can calculate a *trial balance* at any time to assure that the debits equal the credits.

What About the Financial Statements?

At the end of the accounting period, after all transactions have been recorded, the totals of the various accounts are posted to the general ledger and then to the balance sheet and the income statement. Thus what you see in the accounts on the financial statements are the account totals, or net balances, after all the entries have been posted and summed.



MBA Lingo

A *certified public accountant*, or CPA, is licensed by the state in which he or she practices. While requirements vary

from state to state, a CPA has acquired a certain level of education, passed certain exams, and accumulated a certain amount of experience. An *audit* is an objective, formal review of the accounting practices and financial records of a company.

The Accountant's Opinion

Financial statements for publicly held companies require an opinion written by an independent auditor. The auditor is a *certified public accountant* that has *audited* the company's books and financial statements.

If the accountant's opinion is unqualified (that is, the financial statements are approved "without qualification"), then the auditors "found the company's practices and records to be in accord with generally accepted accounting principles (GAAP) and to represent accurately the financial condition of the company," to quote the usual passage.

If the accountant's opinion is "qualified," then the auditors have either discovered a practice or transaction that is not in

accord with GAAP or have some other reason to believe the statements do not truly reflect the company's financial condition.

Accounting Treatment of Assets

In the chapters on accounting and finance, I've referred to the "accounting treatment" of various items. I've mentioned that accounting treatments can vary and that managers must often decide how to account for certain transactions. And I've pointed out that the accounting treatment can affect the firm's financial statements.

Let's look at two situations in which the accounting treatment of an asset can vary: accounting for inventory and accounting for depreciation.

Accounting for Inventory

In most economies, prices are not completely stable. Inflation occurs in many economies, and deflation—a general decrease in prices—is not unheard of, although it's less common. In addition, even in times of general price stability, prices of specific items can rise and fall.

Because prices change, the way a retailer accounts for the goods it buys and then sells (or the way a manufacturer accounts for the materials it buys) can affect its cost of goods sold and, therefore, its reported income.

Here's what I mean: Suppose a small fuel-oil supplier bought 1,000 gallons of fuel oil in June for \$1.00 a gallon, 1,000 gallons in July for \$2.00 a gallon, and 1,000 in August for \$3.00 a gallon. Suppose in September he sold 1,000 gallons for \$4.00 a gallon. (These prices are artificially high and fast moving, just for the example.)

Which 1,000 gallons did he sell in September?

Actually, we don't know. Fuel oil is fuel oil. But here's what happens to his gross income under three different scenarios:

If He Sold:	"June Oil"	"July Oil"	"August Oil"
Revenue	\$4,000	\$4,000	\$4,000
Cost of Goods Sold	<u>1,000</u>	<u>2,000</u>	<u>3,000</u>
Gross Income	\$3,000	\$2,000	\$1,000

See how income can change depending on how the inventory is valued?

The way most businesses track inventory is to count the items (in units, not dollars) at the beginning of the period, count the items purchased for inventory during the period, and then count the inventory at the end of the period. The total at the beginning of the period, plus the purchases during the period, minus the inventory at the end of the period, equals the amount of units sold.

The formula for cost of goods sold is:

$$\text{Cost of Goods Sold} = \text{Beginning Inventory} + \text{Purchases} - \text{Ending Inventory}$$

MBA Lingo

Generally accepted accounting principles, or GAAP, are accounting rules, conventions, and practices that the accounting profession recognizes as sound and as reasonably reflecting a company's financial condition.



Here's how it would work in the fuel-oil example:

Inventory (in gallons)	
Beginning Inventory	0
Purchases	1,000
	1,000
	<u>1,000</u>
Total	3,000
Ending Inventory	2,000
Amount Sold	1,000

This is fine, but cost of goods sold must be a dollar figure. When we go to put a dollar value on these 1,000 gallons, the question becomes: Which 1,000 gallons was sold? The answer depends on how we account for inventories.

FIFO and LIFO

The two main methods of inventory valuation are first in, first out (*FIFO*, say "fife-oh") and last in, first out (*LIFO*, say "life-oh"). Under FIFO, the company assumes that the first inventory it purchased is the first it sells. Under LIFO, the company assumes that the last inventory it purchased is the first it sells.



Regardless of the accounting method used, here are the actual purchases, in dollars, during the period:

Beginning Inventory	0
Purchases	1,000 @ \$1.00/gal. = \$1,000
	1,000 @ \$2.00/gal. = \$2,000
	<u>1,000 @ \$3.00/gal. = \$3,000</u>
Total	3,000 gallons \$6,000
Ending Inventory	2,000 gallons \$????
Amount Sold	1,000 gallons \$????

Let's look at how we would calculate the amount sold using both FIFO and LIFO.

FIFO Effects

Again, FIFO assumes that inventory is sold in the order in which the company bought it. Sticking with our fuel-oil example, under FIFO the 1,000 gallons sold during September are assumed to be the first 1,000 gallons purchased back in June. This means:

Cost of Goods Sold = Beginning Inventory + Purchases – Ending Inventory

Cost of Goods Sold = 0 + \$6,000 – \$5,000 (the inventory purchased in July and August)

Cost of Goods Sold = \$1,000

Recall that:

Revenue – Cost of Goods Sold = Gross Income

So:

\$4,000 – \$1,000 = \$3,000

FIFO yields a gross income of \$3,000.

LIFO Effects

LIFO assumes that the company sells the most recently purchased inventory first. So under LIFO, the fuel-oil company would assume that the last 1,000 gallons of fuel oil, purchased in August, were sold in September. That means:

Cost of Goods Sold = Beginning Inventory + Purchases – Ending Inventory

Cost of Goods Sold = 0 + \$6,000 – \$3,000 (the inventory purchased in June and July)

Cost of Goods Sold = \$3,000

Because:

Revenue – Cost of Goods Sold = Gross Income

\$4,000 – \$3,000 = \$1,000

LIFO yields gross income of \$1,000.

Which Method Should You Use?

Think about it: Under FIFO, income equals \$3,000. Under LIFO, income equals \$1,000. That's a significant swing in income, yet either method is acceptable.

Which one should you use?

Unfortunately, the answer is “It depends.” Here are some points to consider when you are trying to decide:

- If your firm buys and sells inventory, you *must* choose a method of accounting for inventory. Either FIFO or LIFO are permitted for income tax purposes, but once you choose a method you must stick with it or ask the IRS for permission to change.
- Each method has a different effect on income. When prices are rising, FIFO produces a higher ending inventory, and therefore a lower cost of goods sold and higher income. When prices are rising, LIFO yields a lower ending inventory, and therefore a higher cost of goods sold and lower income.
- Each method has pros and cons. Users of FIFO believe that it better represents the way a business actually moves inventory. They see FIFO as valuing inventories at closer to their replacement cost in times of inflation. (The stuff in inventory was purchased most recently, so it’s closer to current market prices.)
- Fans of LIFO believe their method better matches current costs (as in cost of goods sold) to current prices. If costs are rising, they believe that the higher value (more recently purchased) inventory should be shown as the inventory that was sold.

However, the choice of which method to use mainly depends on the effects on income. In times of rising prices, which is most of the time, FIFO will yield a higher income figure—and therefore a larger tax bite—than LIFO. Meanwhile, LIFO will yield a lower income figure—and therefore a smaller tax bite. Since business people in general and accountants in particular hate taxes, LIFO is often the choice.

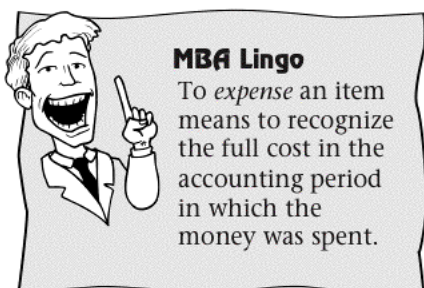
However, most managers want to show high income to current owners and to prospective investors and lenders. Therefore, FIFO is also often the choice. If raising money is a priority, FIFO may make more sense than LIFO, because you want to show investors and lenders that you can generate high income.

Accounting for Depreciation

The cost of a fixed asset—a piece of equipment or machinery or a computer or a vehicle—is allocated over the productive life of the asset. Actually, businesses would prefer to

expense the cost of these items in the period they were purchased because that would reduce reported income and thus income taxes by that much more.

From the accounting standpoint there is an excellent reason to depreciate an asset over the years of its life rather than to expense it in the year it is purchased. If the asset is depreciated, its cost is recognized and written off over the period during which it is producing revenue. The accounting principle here is that of matching costs and revenues. If an



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To *expense* an item means to recognize the full cost in the accounting period in which the money was spent.

asset is going to have a productive life of five years and produce product and sales over that period it only makes logical and financial sense to recognize some of the value of that asset during its productive life.

The match-up between the amount of cost and revenue in any particular year, however, does not have to be perfect. That's just as well because it would literally be impossible to account for depreciation this way. There are just too many assets purchased at different times to allow for that. But there are several methods of accounting for depreciation that do work well, and do what they are supposed to do, which is allocate the cost of the asset over the life of the asset.

Let's examine the three most common depreciation methods:

- Straight-line
- Double declining balance
- Sum of the years' digits

Don't let these names throw you. The calculations involved are at the grade-school level.

In examining these three methods, we will assume that the company is buying a piece of equipment for \$10,000 with a productive life of four years and no *salvage value*. We assume no salvage value purely for convenience.

When salvage value exists, just subtract that amount from the asset's full cost to get the depreciable cost (the amount subject to be depreciated).

Straight-Line Depreciation

In the straight-line method of depreciation, you simply divide the cost of the asset (or the depreciable cost, which is the same thing in our example) by the asset's years of life.

Thus you calculate straight-line depreciation on the machine in our example as shown in the following table.

Year	Depreciation Expense	Accumulated Depreciation
1	\$2,500	\$ 2,500
2	2,500	5,000
3	2,500	7,500
4	2,500	10,000

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Salvage value, or residual value, is the value of the asset after its productive life. Most fixed assets have some salvage value, although it may be minimal.

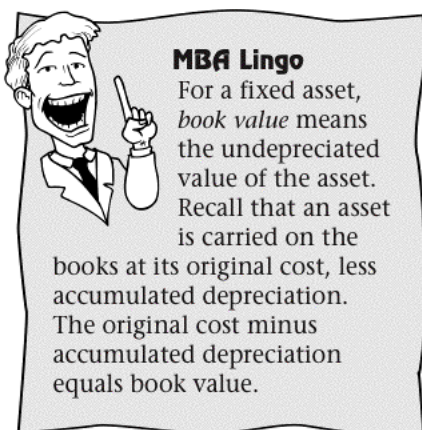


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Accelerated depreciation allows a company to allocate more of the cost of the asset to the early years of ownership. The more costs a company can charge against current revenue, the lower the income, and therefore the lower the taxes.



Straight-line depreciation is *not* a method of *accelerated depreciation*. It does not generate higher depreciation in the early years of ownership and does not lower income in those years. Therefore, many companies choose one of the two following methods of accelerated depreciation. Both are permitted by the IRS for tax calculations.



Double Declining Balance

The double declining balance method allows you to calculate depreciation by multiplying the *book value* (undepreciated value) of the asset by twice the straight-line rate. In our example, the straight-line rate is 25 percent per year, so the double declining balance rate would be 50 percent a year. This 50 percent is applied to the asset's *book value* in each year of its life.

The following table shows how to calculate depreciation on the machine in our example using the double declining balance method.

Year	Remaining Value	Depreciation Expense	Accumulated Depreciation
1	\$10,000	\$5,000	\$5,000
2	5,000	2,500	7,500
3	2,500	1,250	8,750
4	1,250	625	9,375

They don't call it accelerated depreciation for nothing. With this method, 75 percent of the value of the asset in our example is charged to depreciation in the first two years of its life.

Two points about the double declining method: First, you don't consider salvage value, even if it exists. At twice the straight-line rate, the asset is depreciated to a negligible value by the end of its life. Second, the IRS allows you to switch over to straight-line depreciation one time in the life of the asset. In our example, the logical point to do so would be year three.

If you do switch to the straight-line method, you must then consider salvage value. So if the salvage value were \$250 and the company switched over in year three, the calculation would look like this:

To figure book value at start of year three:

\$10,000	original cost
– 7,500	accumulated depreciation
– 250	salvage value
\$ 2,250	book value

Then, dividing book value by two (for the two years left in the asset's life) yields straight line depreciation of \$1,125 in year three and year four. The company gets a bit less depreciation in year three than it would if it continued using double declining balance, but a lot more in year four.

Sum of the Years' Digits

The sum of the years' digits method, also called the sum of the digits, calculates depreciation on what may at first seem an odd basis. (At least it seemed odd to me at first.)

In this method, you first add up the numbers of years in the life of the asset. Then you use that number as the denominator (the bottom one) in fractions you apply to the depreciable cost of the asset.

Confused?

I don't blame you. But here's how it works.

For example, for an asset with a six-year life, you add up the numbers $1 + 2 + 3 + 4 + 5 + 6 = 21$. That 21 is your denominator. The numerator goes in the reverse order of the years, meaning that the first year's depreciation is $6/21$ of the asset's value, the second year's depreciation is $5/21$, the third year's is $4/21$, and so on. These fractions are applied to the asset's original cost (*not* to book value).

See?

Let's use this method in our example, which you'll recall is a \$10,000 asset with a four-year life and no salvage value. The sum of the years' digits is $1 + 2 + 3 + 4 = 10$.

Year	Value $\times$ Fraction = Depreciation Expense			Accumulated Depreciation
1	\$10,000	4/10	\$4,000	\$ 4,000
2	10,000	3/10	3,000	7,000
3	10,000	2/10	2,000	9,000
4	10,000	1/10	1,000	10,000

The sum of the years' digits method will depreciate the full value of the asset by the end of the process (unlike double declining balance). Also unlike double declining balance, it first deducts salvage value if there is any.

Comparing the Three Methods of Depreciation

The method you choose will depend on your goals. As with inventory valuation, you have to consider the effects on income and taxes.

Let's compare depreciation expense from our example under the three methods. (In the double declining balance method, we are *not* switching to straight-line depreciation.)

Annual Depreciation Expense Under the Three Methods

Year	Straight-Line	Double Declining	Sum of the Balance Years' Digits
1	\$2,500	\$ 5,000	\$4,000
2	2,500	2,500	3,000
3	2,500	1,250	2,000
4	2,500	625	1,000

Here the double declining balance method depreciates half of the cost of the asset in the first year, and 75 percent in the first two years. For assets with longer life, the percentage charged to depreciation in these years would be lower—but would still be twice the straight-line rate.

The sum of the years' digits is not quite as accelerated a method, but in our example it still charges off 70 percent of the value in the first two years. This is comparable to the double declining balance rate.

Thus, under the double declining balance method, first-year income would be \$2,500 lower than under the straight-line method. Under the sum of the digits method, income would be \$1,500 lower than under the straight-line method.

You might be asking, "What about the later years? What about the years when things "flip over" and the straight-line method yields the lower reported income?"

Those are valid questions, but for now, just take the "least and latest rule" of taxes on faith: You want to pay the least amount of taxes you can and pay them as late as you can.

Matching Depreciation to Productive Life

Aside from the income and tax effects, there's the issue of matching depreciation to the life of the asset. Fans of accelerated depreciation point out that an asset is more productive in its early years. In those years machinery incurs less downtime and requires less maintenance, so there's an economic argument for accelerated depreciation.

Fans of straight-line depreciation believe the asset is productive throughout its life, so you may as well allocate its cost equally over that time. Also, perhaps they prefer to show higher income in the early years, just like users of FIFO inventory accounting. Again, investors and lenders like to see high income.

As with inventory valuation, the choice of depreciation method is up to you, considering your tax and income situation.

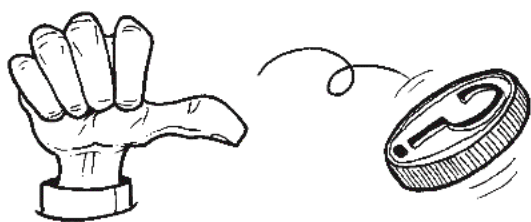
Clearly, a lot goes into financial statements, and the better you understand accounting systems and practices, the better you'll understand financial statements.

If you're in a position to make these decisions, you will certainly need to understand the effects of these choices. In fact, no matter what your position, your efforts to look behind financial statements will always be repaid. Understanding the financials is the only way to know what's really going on in a company.

The Least You Need to Know

- Because you can use various accounting treatments for certain transactions, you must often decide which one will provide greater benefit to your company. The flip side of this is that if you are looking at a company from the outside, you must be aware of which accounting treatments were used—and of their effects.
- A transaction generates a debit and a credit. A debit is an entry to the left side of an account and a credit is an entry to the right side.
- A debit represents an increase in an asset account, a decrease in a liability or equity account, a decrease in a revenue account, or an increase in an expense account. A credit represents a decrease in an asset account, an increase in a liability or equity account, an increase in a revenue account, or a decrease in an expense account.
- Of the two main methods of accounting for inventories—first in, first out (FIFO) and last in, first out (LIFO)—LIFO will, in times of rising prices, yield lower net income and thus a smaller tax bite than FIFO.
- Methods of accelerated depreciation, such as double declining balance and sum of the years' digits, allocate more of the asset's cost to the early years of its life than straight-line depreciation. Therefore, accelerated depreciation yields lower income in those early years of life.

Chapter 14



Making Investment Decisions

In This Chapter

- The time value of money
- Understanding major investment decisions
- Three ways to analyze a business investment
- Deciding whether to lease or buy an asset

Major investment decisions are among the most important—and difficult—decisions you will face as a manager. They involve large sums of money and affect the company's long-term future. These decisions also affect people's jobs.

They can even affect *your* job. Company shareholders and boards of directors take an extremely dim view of poor investment decisions.

Decisions with so much at stake require careful analysis. This chapter shows you how to analyze major business investment decisions. But first you need to know some basic concepts.

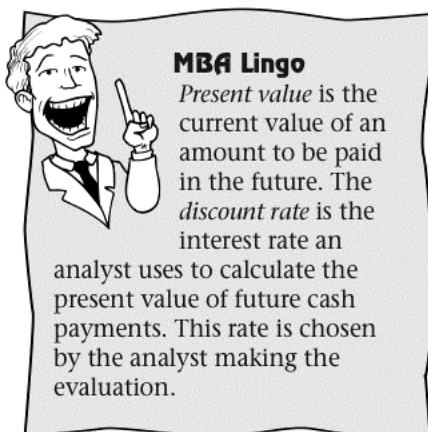
Time Is Money

The key concept in investment analysis is the *time value of money*. The time value of money refers to the fact that a dollar you receive today is worth more than a dollar you receive a year from now. It's also worth more than a dollar you receive two years from now. It's worth more than a dollar you receive at any time in the future.

Why is that? After all, it's still one dollar, right?

The dollar you receive today is worth more because you can invest it at some interest rate for one year or two years (or for however long you want to invest it). You can't invest the dollar you'll receive next year today.

Let's look at this another way. Suppose you do not have a dollar right now; instead, you have an absolute guarantee that you will receive a dollar in one year, or two years, or five years. What exactly is that dollar worth today? In other words, what is the *present value* of that dollar?



Financial professionals have the answer: The present value of that dollar is an amount that, when multiplied by the proper interest rate, becomes a dollar in the time allowed.

Here's what I mean: At a 10 percent interest rate, that dollar you have coming to you in one year is worth 90.9 cents today. Why? Because 90.9 cents multiplied by 1.10 (for the 10 percent interest) equals \$1.00.

At 15 percent interest, that dollar you have coming to you in one year is worth 87 cents today. That's because 87 cents times 1.20 is \$1.00. At 5 percent interest, that dollar is worth 95.2 cents today and at 1 percent; it's worth 99.9 cents.

These interest rates that I'm using are called *discount rates*. We call them discount rates because we are using them to discount the value of the future payment to its present value.

Believe it or not, this is the essence of investment analysis: You discount future payments (that is, future cash flows) produced by the investment to their present value. Then you compare these cash flows to the amount you have to invest to produce those cash flows. Then you ask yourself, "Is this worth it?"

A Present Value Table

The following table shows the present value of one dollar for the years and discount rates indicated. For example, the present value of \$1.00 discounted at 10 percent for five years is 62.1 cents.

The following table is hardly exhaustive. Complete tables give more interest rates (for example, from 1 percent to 40 percent), and cover every period from one to 50 years or more. The interest rates and periods in this table will be enough for our purposes. You can find extensive present value tables in finance textbooks. In fact, you can find books with nothing but present value tables. (Talk about bedtime reading!)

Present Value of \$1.00

Years	Interest Rate								
	5%	6%	7%	8%	9%	10%	11%	12%	15%
1	.952	.943	.936	.926	.917	.909	.901	.893	.870
2	.907	.890	.873	.857	.842	.826	.812	.797	.756
3	.864	.840	.816	.794	.772	.751	.731	.712	.658
4	.823	.792	.763	.735	.708	.683	.659	.636	.572
5	.784	.747	.713	.681	.650	.621	.593	.567	.497
6	.746	.705	.666	.630	.596	.564	.535	.507	.432
7	.711	.665	.623	.583	.547	.513	.482	.452	.376
8	.677	.627	.582	.540	.502	.467	.434	.404	.327
9	.645	.592	.544	.500	.460	.424	.390	.361	.284
10	.614	.558	.508	.463	.422	.386	.352	.323	.247
12	.557	.497	.444	.397	.355	.319	.286	.257	.187
15	.481	.417	.362	.315	.271	.239	.209	.183	.123
20	.377	.312	.258	.214	.178	.148	.124	.104	.061

You will see how to use this table a bit later in this chapter. For now, just know that it's best to evaluate major investments with a method that considers the time value of money. Before we look at these methods, let's look at the kinds of investments we're talking about.

Major Business Investment Decisions

The investment decisions we need to evaluate concern *capital expenditures*. These are investments in new plant and equipment, improvements to existing capacity, or perhaps the acquisition of another company.

Investment in Plant and Equipment

An investment in new plant and equipment is the classic investment decision for a manufacturer. Adding capacity is a serious move because it's expensive and affects future costs. The company must either spend its cash, borrow money, or issue stock to raise cash. So management better be sure that the added sales and profits will make the investment worthwhile.

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A *capital expenditure* cannot be charged as an expense in the current accounting period. It must be recognized over time because the asset associated with the expense will last longer than one year. (This resembles depreciation.) Instead a capital expenditure must be *capitalized*, which means placed on the balance sheet as an asset with its cost to be allocated to subsequent accounting periods.



Every investment takes money, but building new capacity (like a new factory) is a long-term decision. You can't unload it like a bad stock. It's hard to say after a year or two, "Gee, this wasn't a good idea. Let's sell this factory we just built." You probably won't get the true value of the assets, and there will be costs associated with disposing of them.

Study your asset turnover and return on assets (see Chapter 12, "The Big Picture: Financial Analysis," for more on ratios) before adding new capacity. Seriously consider your growth prospects when analyzing any investment in plant and equipment.

Acquisition of a Company

The acquisition of another company is even more complex. The acquiring company must have a plan for either integrating the acquired company into its operations or leaving it as a separate outfit. Both of these choices have their own complexities (which we won't go into here).

A company can pay for an acquisition with cash, stock, or a mix of cash and stock. Accounting for acquisitions is a field unto itself. Nonetheless, the decision to acquire a company—and, for that matter, the price that should be paid for that company—should be based on the present value of the future cash flows.

GIGO, Once Again

You've probably heard the expression GIGO (pronounced "gee-goo"). (No, it's not another method of accounting for inventory.) GIGO is a saying from computer professionals. It means Garbage In, Garbage Out. (Hmmm...maybe it could refer to inventory!)

Here's the point: If you put bad data into a computer, you'll get bad information out. Similarly, when you analyze an investment, the accuracy of your result depends on the reliability of the numbers you use. You need solid estimates of future cash flows, and the best possible fix on the discount rate to use in the analysis. We'll examine ways of choosing the discount rate after we look at the investment analysis methods.

Three Ways to Analyze Investments

We will examine three methods of analyzing business investments:

1. Net present value
2. Internal rate of return
3. Payback period

The first two, net present value and internal rate of return, consider the time value of money. The payback period does not.

Net Present Value

In the *net present value* (NPV) method, you calculate the net present value of all future cash outflows (the money you'll invest) and cash inflows (the money the investment will produce). "Net" here means you subtract the outflows from the inflows. If this net amount is positive—if the discounted cash inflows exceed the outflow—then the net present value is positive and the investment may be worth undertaking.

The discount rate you use is your *required rate of return*; that is, the return you need to achieve on the investment.

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The *required rate of return* on an investment is the rate that the company or person doing the analysis and making the investment has defined as the rate that they must achieve for the investment to be worth making.



Calculating NPV

Suppose you are a regional manufacturer based in Phoenix. You see an opportunity to expand into the southeast by building a production and distribution facility near Atlanta. Building the facility requires a \$22 million investment.

You have a seven-year *horizon* for the investment because after seven years you may, for personal reasons, sell the entire business. But you're not sure. So one way or another, you want this deal to work as seven-year investment.

Over the next seven years you estimate the income from the new facility to be:

Year 1	\$ 2 million
Year 2	5 million
Year 3	7 million
Year 4	8 million
Year 5	<u>10 million</u>
	\$32 million

You thus have a total of \$32 million in future cash inflows associated with this investment.

Let's say you need at least a 10 percent return on investment for this deal to work. That 10 percent is the discount rate you'll use to calculate the net present value of the investment.

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The *investment horizon* refers to the length of time of the investment. The horizon is either the natural life of the investment (for example, a bond that matures on a certain date) or the time you want your money in the investment.



You do not discount the initial \$22 million investment because it's an outflow now, not in the future. It's the amount of the investment. However, if you had to invest more money over the investment horizon, for example, another \$5 million in Year 3, you would discount that amount at the 10 percent rate using the value in the earlier table for 10 percent at three years (that is, .751).

To discount the future cash inflows, you do the following calculations (the amounts in column three—"Present Value of \$1"—are from the present value table presented earlier in the chapter):

Year	Cash Inflows	Present Value of \$1	Present Value of Cash Inflow
1	\$2,000,000	× 0.909	\$1,818,000
2	5,000,000	× 0.826	4,130,000
3	7,000,000	× 0.751	5,257,000
4	8,000,000	× 0.683	5,464,000
5	10,000,000	× 0.621	<u>6,210,000</u>
			\$22,879,000

Again, that \$22,879,000 is just the present value of the future cash inflows. To calculate the *net* present value of the investment, you subtract the initial investment (the outflows) from the discounted inflows:

Present value of inflows	\$22,879,000
<i>Minus</i> initial investment	<u>\$22,000,000</u>
Net present value of investment	\$ 879,000

This \$879,000 is the net present value of the investment. It is the current value of the money the investment will make.

Seeing the Time Value of Money

To see the impact of discounting—and the importance of the time value of money—consider how this investment would look if you did not discount the cash inflows and outflows:

Undiscounted cash inflows	\$32,000,000
Initial investment	<u>\$22,000,000</u>
Net undiscounted return	\$10,000,000

Because the time value of money is real, not theoretical, it would be quite wrong to think this investment is worth \$10 million today. There's a big difference between \$10 million and \$879,000. That's why it's best to think in terms of rates and not just dollars when considering investments.

You'll make over a 10 percent return on the investment. Since 10 percent is your discount rate and the net present value of the investment is positive at that discount rate, you would say "Yes" to this investment.

If you were analyzing more than one investment opportunity with the NPV method, you would choose the one (or the ones) with the highest net present value.

Internal Rate of Return

The *internal rate of return*, or IRR, also considers the time value of money. However, the approach and calculations differ slightly from those in the NPV method.

The internal rate of return on an investment is the discount rate that brings the present value of the future net cash flows to zero. In other words, you must find the discount rate that will make the future cash inflows equal to the upfront cash outflow. In this method, you don't know the discount rate. You must find it by trial and error.

The discount rate that makes the future net cash flows equal zero is the internal rate of return on the investment. When you find that rate, you compare it to your *hurdle* (target) rate. If the internal rate of return exceeds your hurdle rate, you say "Yes" to the investment.

By the way, it's called the *internal* rate of return because it's the rate of return that the investment itself produces. The investment has only three components—the cash outflow, the cash inflows, and the number of years. Those three items are all you need to calculate the investment's internal rate of return.

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The *hurdle rate* is the return—expressed as a percentage or interest rate—that you require on an investment. To be acceptable, the investment must clear this target rate, or "hurdle."



Figuring the Internal Rate of Return

Let's stick with the example of the manufacturer expanding into the southeast and assume that our hurdle rate is still 10 percent.

To calculate the internal rate of return, let's start by discounting the cash flows at 12 percent (again, the values in the present value column come from the present value table earlier in the chapter):

Part 3 ➤ *All About Money*

Year	Cash Inflows	Present Value of \$1	Present Value of Cash Inflow
1	\$2,000,000	× 0.893	\$1,786,000
2	5,000,000	× 0.797	3,985,000
3	7,000,000	× 0.712	4,984,000
4	8,000,000	× 0.636	5,088,000
5	10,000,000	× 0.567	<u>5,670,000</u>
			\$21,513,000

Discounted cash inflows	\$21,513,000
Minus initial investment	<u>22,000,000</u>
Net amount	(\$ 487,000)

(Remember: In finance and accounting, a number in parentheses is usually negative.)

This tells us that the internal rate of return is *below* 12 percent, because 12 percent discounts the net cash flows to less than zero. So the internal rate of return is a bit lower than 12 percent. Let's try 11 percent.

Year	Cash Inflows	Present Value of \$1	Present Value of Cash Inflow
1	\$2,000,000	× 0.901	\$1,802,000
2	5,000,000	× 0.812	4,060,000
3	7,000,000	× 0.731	5,117,000
4	8,000,000	× 0.659	5,272,000
5	10,000,000	× 0.593	<u>5,930,000</u>
			\$22,181,000

Discounted cash inflows	\$22,181,000
Minus initial investment	<u>22,000,000</u>
Net amount	\$ 181,000

Because 11 percent yields a positive net amount and 12 percent yields a negative net amount, the internal rate of return on the investment is between 11 and 12 percent. In this case, it looks like it's a bit above 11 percent, meaning closer to 11 percent than to 12 percent.

We don't need to calculate the internal rate of return out to one or two decimal places—especially because our hurdle rate is 10 percent. If your hurdle rate is 10 percent, an investment with an IRR a little over 11 percent would be acceptable.

As with NPV, if you are evaluating several competing investments, you would choose the one (or ones) with the highest internal rate of return.

Payback Period

The payback period does not consider the time value of money. This makes it a lot easier to “do the numbers” but produces numbers with a lot less value.

The payback period is simply the amount of time that it will take to earn back the original amount invested. The amounts involved are not discounted.

In the example we've been using, the amount invested is \$22 million. The annual returns are shown in the following table.

Year	Cash Flow	Cumulative Return
1	\$2 million	\$2 million
2	5 million	7 million
3	7 million	14 million
4	8 million	22 million
5	<u>10 million</u>	32 million
	\$32 million	

The payback period is exactly four years. After four years, the original \$22 million investment will be recouped. If the payback period fell between any two years, you could divide the return in the final year of the payback period by 12 months and *prorate* the return to come up with a period expressed in years and months.

Aside from ignoring the time value of money, the payback period has another serious drawback: It does not consider returns after the payback period. For instance, let's say you're comparing two five-year investments: one with the returns in our example, and one with the same returns in the first four years, but with \$15 million instead of \$10 million in the fifth year. The payback period doesn't take that fifth year into account.

So what good is the payback period?

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You *prorate* an amount any time you apportion it in some mathematical manner. Depending on the situation, you may prorate an amount by the months in the year, by contractual share, or by some other means. For example, in a liability suit, a judge may prorate the damage award according to the plaintiffs' share of the suffering.



The payback period is most useful for short-term investments, meaning those of a year or less, where you can measure the payback period in months. Also, you might calculate the payback period for longer-term investments as extra information to use along with net present value or internal rate of return, or both.

Pick a Rate, but Not Just Any Rate

There are two good ways to choose the discount rate you apply to future cash flows in the NPV method or the hurdle rate you use for comparison with the internal rate of return:

1. You can use the opportunity cost.
2. You can use your cost of capital, or more properly, your incremental cost of capital.

Let's examine each of these methods.

Using the Opportunity Cost

In general, the opportunity cost is the return you could earn on the next-best investment. Here, "next-best investment" refers to one you could actually make and earn that return on. "Opportunity cost" means the cost of forgoing the opportunity.

One good way to think of opportunity cost is to use the rate you would get by investing in an interest-paying security, such as a bond. If you can invest in a low-risk bond with 8 percent interest instead of pursuing a business investment with a similar return, why not just buy the bond?



Case in Point

I've seen a number of business investments that didn't work out well. Often, after they didn't work, someone would say, "You know? We could have done better just putting the money into Treasury notes." Those people were referring to the opportunity cost, and it was something they should have considered more carefully beforehand.

Of course, that's easy to say *after* the investment sours. The trick is to consider it before investing. Far too many companies make investments with marginal or risky returns. Sometimes they kid themselves into thinking the returns are higher or more certain. But other times they fail to ask themselves, "What could we get by just investing the money in securities until we find a *great* opportunity?"

If you have a "next-best investment" and you know its return, you can use that rate in your NPV and IRR calculations.

Using the Cost of Capital

The *cost of capital* is a good rate to use in investment analysis because it is “the price you pay for money” and you can calculate that from your balance sheet. A company’s cost of capital is a weighted average of its cost of debt and its cost of equity. These, as you know, finance long-term (as opposed to current) assets.

Of course, the company must have cash to invest over on the asset side of the balance sheet, or be willing to sell some assets and invest the proceeds in other assets. In other words, the actual cash to be invested is not in the debt and equity accounts but rather in the cash and marketable securities accounts. Or the company must raise the cash from lenders or investors.

To calculate the weighted average cost of capital, first multiply the company’s cost of debt by the percentage of debt in its long-term financing, then multiply the company’s cost of equity by the percentage of equity in its long-term financing. Then add up the results.

The following table shows you what I mean.

MBA Lingo

The *prime rate* is the interest rate charged by banks to their largest, most creditworthy corporate customers. While each bank can set its own prime rate, the major banks tend to move together. The large New York banks set the pace. Because it changes, the prime rate is called a “floating rate” as opposed to a “fixed rate.”



ABC Company

Liabilities and Owners' Equity

Source of Funds	Cost	Amount on Balance Sheet	Percent of Total Capitalization
Bank Loan	prime +1%	\$1,000,000	10
Bond	8%	<u>2,000,000</u>	<u>20</u>
Total Long-Term Debt		\$3,000,000	30
Preferred Stock	5%	\$1,000,000	10
Common Stock	???	3,000,000	30
Retained Earnings	???	<u>3,000,000</u>	<u>30</u>
Total Owners' Equity		<u>\$7,000,000</u>	<u>70</u>
Total Capitalization		\$10,000,000	100

ABC Company has 30 percent of its capitalization in long-term debt and 70 percent in equity. More specifically, the company gets 10 percent of its capital from a bank loan at *prime* plus 1 percent, 20 percent from a bond on which it pays 8 percent interest, 10 percent from preferred stock, and 70 percent from common stock and retained earnings.

What's the Cost of Equity?

You may be wondering why I've shown question marks rather than the cost of common stock and retained earnings in the earlier table. That's because the cost of common equity and retained earnings is often not precisely known.

There is no guaranteed return on common stock. And retained earnings simply represent profits that were reinvested in the company rather than distributed as dividends.

The calculation of the "cost" of common equity is complex and subject to theory. The complexity concerns the rate of return required by equity investors in the market as a whole and in the company in particular. Because the return on common stock has two components—dividends and price appreciation—and both are uncertain, the calculation of the cost of equity is controversial.

So let's just say that for ABC Company, the cost of equity is 12 percent. This doesn't mean the company has to pay 12 percent to stockholders the way it pays interest on the bank loan and the bond. Instead, it means that its investors expect a return of 12 percent on their investment over the long term.

Calculate the Cost of Capital

In any event, assuming the costs presented in the earlier table and a prime rate of 6 percent, the weighted average cost of capital for ABC Company would be calculated as follows:

ABC Company

Weighted Average Cost of Capital

Source of Funds	Cost	Percent of Total Capitalization	Weighted Cost
Bank Loan	.07	× .10	= .007
Bond	.08	× .20	= .016
Preferred Stock	.05	× .10	= .005
Common Stock and Returned Earnings	.12	× .60	= <u>.072</u>
Total Weighted Average Cost of Capital		.100	= 10%

The total weighted average cost of capital for ABC Company is 10 percent. This would be a good rate for the company to use as its discount rate or hurdle rate.

Why? Because if the outfit's cost of capital is 10 percent and it can get more than that on an investment, then it will be making money on that investment.