

► Learning Objectives

1. Distinguish financial accounting from management accounting
2. Understand how management accountants affect strategic decisions
3. Describe the set of business functions in the value chain and identify the dimensions of performance that customers are expecting of companies
4. Explain the five-step decision-making process and its role in management accounting
5. Describe three guidelines management accountants follow in supporting managers
6. Understand how management accounting fits into an organization's structure
7. Understand what professional ethics mean to management accountants

All businesses are concerned about revenues and costs.

Whether their products are automobiles, fast food, or the latest designer fashions, managers must understand how revenues and costs behave or risk losing control. Managers use cost accounting information to make decisions related to strategy formulation, research and development, budgeting, production planning, and pricing, among others. Sometimes these decisions involve tradeoffs. The following article shows how companies like Apple make those tradeoffs to increase their profits.

iTunes Variable Pricing: Downloads Are Down, but Profits Are Up¹

Can selling less of something be more profitable than selling more of it? In 2009, Apple changed the pricing structure for songs sold through iTunes from a flat fee of \$0.99 to a three-tier price point system of \$0.69, \$0.99, and \$1.29. The top 200 songs in any given week make up more than one-sixth of digital music sales. Apple now charges the higher price of \$1.29 for these hit songs by artists like Taylor Swift and the Black Eyed Peas.

After the first six months of the new pricing model in the iTunes store, downloads of the top 200 tracks were down by about 6%. While the number of downloads dropped, the higher prices generated more revenue than before the new pricing structure was in place. Since Apple's iTunes costs—wholesale song costs, network and transaction fees, and other operating costs—do not vary based on the price of each download, the profits from the 30% increase in price more than made up for the losses from the 6% decrease in volume.

To increase profits beyond those created by higher prices, Apple also began to manage iTunes' costs. Transaction costs (what Apple pays credit-card processors like Visa and MasterCard) have decreased, and Apple has also reduced the number of people working in the iTunes store.

¹ Sources: Bruno, Anthony and Glenn Peoples. 2009. Variable iTunes pricing a moneymaker for artists. *Reuters*, June 21. <http://www.reuters.com/article/idUSTRE55K0DJ20090621>; Peoples, Glenn. 2009. The long tale? *Billboard*, November 14. http://www.billboard.biz/bbbiz/content_display/magazine/features/e3i35ed869fbd929cccca52ed7fd9262d3?imw=Y; Savitz, Eric. 2007. Apple: Turns out, iTunes makes money Pacific Crest says; subscription services seems inevitable. *Barron's* "Tech Trader Daily" blog, April 23. <http://blogs.barrons.com/techtraderdaily/2007/04/23/apple-turns-out-itunes-makes-money-pacific-crest-says-subscription-service-seems-inevitable/>

The study of modern cost accounting yields insights into how managers and accountants can contribute to successfully running their businesses. It also prepares them for leadership roles. Many large companies, such as Constellation Energy, Jones Soda, Nike, and the Pittsburgh Steelers, have senior executives with accounting backgrounds.

Financial Accounting, Management Accounting, and Cost Accounting

As many of you have already seen in your financial accounting class, accounting systems take economic events and transactions, such as sales and materials purchases, and process the data into information helpful to managers, sales representatives, production supervisors, and others. Processing any economic transaction means collecting, categorizing, summarizing, and analyzing. For example, costs are collected by category, such as materials, labor, and shipping. These costs are then summarized to determine total costs by month, quarter, or year. The results are analyzed to evaluate, say, how costs have changed relative to revenues from one period to the next. Accounting systems provide the information found in the income statement, the balance sheet, the statement of cash flow, and in performance reports, such as the cost of serving customers or running an advertising campaign. Managers use accounting information to administer the activities, businesses, or functional areas they oversee and to coordinate those activities, businesses, or functions within the framework of the organization. Understanding this information is essential for managers to do their jobs.

Individual managers often require the information in an accounting system to be presented or reported differently. Consider, for example, sales order information. A sales manager may be interested in the total dollar amount of sales to determine the commissions to be paid. A distribution manager may be interested in the sales order quantities by geographic region and by customer-requested delivery dates to ensure timely deliveries. A manufacturing manager may be interested in the quantities of various products and their desired delivery dates, so that he or she can develop an effective production schedule. To simultaneously serve the needs of all three managers, companies create a database—sometimes called a data warehouse or infobarn—consisting of small, detailed bits of information that can be used for multiple purposes. For instance, the sales order database will contain detailed information about product, quantity ordered, selling price, and delivery details (place and date) for each sales order. The database stores information in a way that allows different managers to access the information they need. Many companies are building their own Enterprise Resource Planning (ERP) systems, single databases that collect data and feed it into applications that support the company's business activities, such as purchasing, production, distribution, and sales.

Financial accounting and management accounting have different goals. As many of you know, **financial accounting** focuses on reporting to external parties such as investors, government agencies, banks, and suppliers. It measures and records business transactions and provides financial statements that are based on generally accepted accounting principles (GAAP). The most important way that financial accounting information affects managers' decisions and actions is through compensation, which is often, in part, based on numbers in financial statements.



Learning Objective 1

Distinguish financial accounting

... reporting on past performance to external users

from management accounting

... helping managers make decisions

Management accounting measures, analyzes, and reports financial and nonfinancial information that helps managers make decisions to fulfill the goals of an organization. Managers use management accounting information to develop, communicate, and implement strategy. They also use management accounting information to coordinate product design, production, and marketing decisions and to evaluate performance. Management accounting information and reports do not have to follow set principles or rules. The key questions are always (1) how will this information help managers do their jobs better, and (2) do the benefits of producing this information exceed the costs?

Exhibit 1-1 summarizes the major differences between management accounting and financial accounting. Note, however, that reports such as balance sheets, income statements, and statements of cash flows are common to both management accounting and financial accounting.

Cost accounting provides information for management accounting and financial accounting. **Cost accounting** measures, analyzes, and reports financial and nonfinancial information relating to the costs of acquiring or using resources in an organization. For example, calculating the cost of a product is a cost accounting function that answers financial accounting's inventory-valuation needs and management accounting's decision-making needs (such as deciding how to price products and choosing which products to promote). Modern cost accounting takes the perspective that collecting cost information is a function of the management decisions being made. Thus, the distinction between management accounting and cost accounting is not so clear-cut, and we often use these terms interchangeably in the book.

We frequently hear business people use the term *cost management*. Unfortunately, that term has no uniform definition. We use **cost management** to describe the approaches and activities of managers to use resources to increase value to customers and to achieve organizational goals. Cost management decisions include decisions such as whether to enter new markets, implement new organizational processes, and change product designs. Information from accounting systems helps managers to manage costs, but the information and the accounting systems themselves are not cost management.

Cost management has a broad focus and is not only about reduction in costs. Cost management includes decisions to incur additional costs, for example to improve

Decision Point

How is management accounting different from financial accounting?

Exhibit 1-1

Major Differences Between Management and Financial Accounting

	Management Accounting	Financial Accounting
Purpose of information	Help managers make decisions to fulfill an organization's goals	Communicate organization's financial position to investors, banks, regulators, and other outside parties
Primary users	Managers of the organization	External users such as investors, banks, regulators, and suppliers
Focus and emphasis	Future-oriented (budget for 2011 prepared in 2010)	Past-oriented (reports on 2010 performance prepared in 2011)
Rules of measurement and reporting	Internal measures and reports do not have to follow GAAP but are based on cost-benefit analysis	Financial statements must be prepared in accordance with GAAP and be certified by external, independent auditors
Time span and type of reports	Varies from hourly information to 15 to 20 years, with financial and nonfinancial reports on products, departments, territories, and strategies	Annual and quarterly financial reports, primarily on the company as a whole
Behavioral implications	Designed to influence the behavior of managers and other employees	Primarily reports economic events but also influences behavior because manager's compensation is often based on reported financial results

customer satisfaction and quality and to develop new products, with the goal of enhancing revenues and profits.

Strategic Decisions and the Management Accountant

Strategy specifies how an organization matches its own capabilities with the opportunities in the marketplace to accomplish its objectives. In other words, strategy describes how an organization will compete and the opportunities its managers should seek and pursue. Businesses follow one of two broad strategies. Some companies, such as Southwest Airlines and Vanguard (the mutual fund company) follow a cost leadership strategy. They have been profitable and have grown over the years on the basis of providing quality products or services at low prices by judiciously managing their costs. Other companies such as Apple Inc., the maker of iPods and iPhones, and Johnson & Johnson, the pharmaceutical giant, follow a product differentiation strategy. They generate their profits and growth on the basis of their ability to offer differentiated or unique products or services that appeal to their customers and are often priced higher than the less-popular products or services of their competitors.

Deciding between these strategies is a critical part of what managers do. Management accountants work closely with managers in formulating strategy by providing information about the sources of competitive advantage—for example, the cost, productivity, or efficiency advantage of their company relative to competitors or the premium prices a company can charge relative to the costs of adding features that make its products or services distinctive. **Strategic cost management** describes cost management that specifically focuses on strategic issues.

Management accounting information helps managers formulate strategy by answering questions such as the following:

- Who are our most important customers, and how can we be competitive and deliver value to them? After Amazon.com's success in selling books online, management accountants at Barnes and Noble presented senior executives with the costs and benefits of several alternative approaches for building its information technology infrastructure and developing the capabilities to also sell books online. A similar cost-benefit analysis led Toyota to build flexible computer-integrated manufacturing (CIM) plants that enable it to use the same equipment efficiently to produce a variety of cars in response to changing customer tastes.
- What substitute products exist in the marketplace, and how do they differ from our product in terms of price and quality? Hewlett-Packard, for example, designs and prices new printers after comparing the functionality and quality of its printers to other printers available in the marketplace.
- What is our most critical capability? Is it technology, production, or marketing? How can we leverage it for new strategic initiatives? Kellogg Company, for example, uses the reputation of its brand to introduce new types of cereal.
- Will adequate cash be available to fund the strategy, or will additional funds need to be raised? Proctor & Gamble, for example, issued new debt and equity to fund its strategic acquisition of Gillette, a maker of shaving products.

The best-designed strategies and the best-developed capabilities are useless unless they are effectively executed. In the next section, we describe how management accountants help managers take actions that create value for their customers.

Value Chain and Supply Chain Analysis and Key Success Factors

Customers demand much more than just a fair price; they expect quality products (goods or services) delivered in a timely way. These multiple factors drive how a customer experiences a product and the value or usefulness a customer derives from the product. How then does a company go about creating this value?

Learning Objective 2

Understand how management accountants affect strategic decisions

... they provide information about the sources of competitive advantage

Decision Point

How do management accountants support strategic decisions?

Learning Objective 3

Describe the set of business functions in the value chain and identify the dimensions of performance that customers are expecting of companies

... R&D, design, production, marketing, distribution, and customer service supported by administration to achieve cost and efficiency, quality, time, and innovation

Value-Chain Analysis

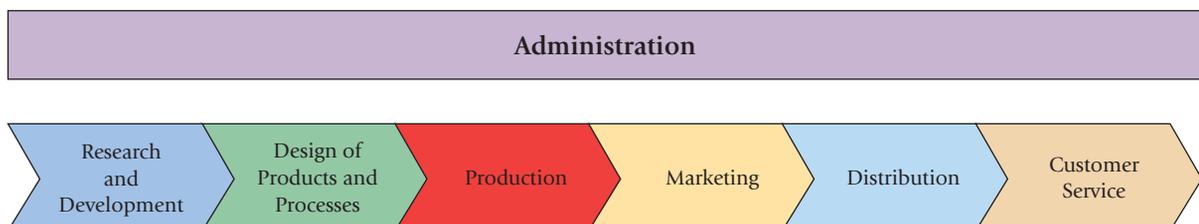
Value chain is the sequence of business functions in which customer usefulness is added to products. Exhibit 1-2 shows six primary business functions: research and development, design, production, marketing, distribution, and customer service. We illustrate these business functions using Sony Corporation's television division.

1. **Research and development (R&D)**—Generating and experimenting with ideas related to new products, services, or processes. At Sony, this function includes research on alternative television signal transmission (analog, digital, and high-definition) and on the clarity of different shapes and thicknesses of television screens.
2. **Design of products and processes**—Detailed planning, engineering, and testing of products and processes. Design at Sony includes determining the number of component parts in a television set and the effect of alternative product designs on quality and manufacturing costs. Some representations of the value chain collectively refer to the first two steps as technology development.²
3. **Production**—Procuring, transporting and storing (also called inbound logistics), coordinating, and assembling (also called operations) resources to produce a product or deliver a service. Production of a Sony television set includes the procurement and assembly of the electronic parts, the cabinet, and the packaging used for shipping.
4. **Marketing (including sales)**—Promoting and selling products or services to customers or prospective customers. Sony markets its televisions at trade shows, via advertisements in newspapers and magazines, on the Internet, and through its sales force.
5. **Distribution**—Processing orders and shipping products or services to customers (also called outbound logistics). Distribution for Sony includes shipping to retail outlets, catalog vendors, direct sales via the Internet, and other channels through which customers purchase televisions.
6. **Customer service**—Providing after-sales service to customers. Sony provides customer service on its televisions in the form of customer-help telephone lines, support on the Internet, and warranty repair work.

In addition to the six primary business functions, Exhibit 1-2 shows an administrative function, which includes functions such as accounting and finance, human resource management, and information technology, that support the six primary business functions. When discussing the value chain in subsequent chapters of the book, we include the administrative support function within the primary functions. For example, included in the marketing function is the function of analyzing, reporting, and accounting for resources spent in different marketing channels, while the production function includes the human resource management function of training front-line workers.

Each of these business functions is essential to companies satisfying their customers and keeping them satisfied (and loyal) over time. Companies use the term *customer relationship management (CRM)* to describe a strategy that integrates people and technology in all business functions to deepen relationships with customers, partners, and distributors. CRM initiatives use technology to coordinate all customer-facing activities

Exhibit 1-2 Different Parts of the Value Chain



² M. Porter, *Competitive Advantage* (New York: Free Press, 1985).

(such as marketing, sales calls, distribution, and post sales support) and the design and production activities necessary to get products to customers.

At different times and in different industries, one or more of these functions is more critical than others. For example, a company developing an innovative new product or operating in the pharmaceutical industry, where innovation is the key to profitability, will emphasize R&D and design of products and processes. A company in the consumer goods industry will focus on marketing, distribution, and customer service to build its brand.

Exhibit 1-2 depicts the usual order in which different business-function activities physically occur. Do not, however, interpret Exhibit 1-2 as implying that managers should proceed sequentially through the value chain when planning and managing their activities. Companies gain (in terms of cost, quality, and the speed with which new products are developed) if two or more of the individual business functions of the value chain work concurrently as a team. For example, inputs into design decisions by production, marketing, distribution, and customer service managers often lead to design choices that reduce total costs of the company.

Managers track the costs incurred in each value-chain category. Their goal is to reduce costs and to improve efficiency. Management accounting information helps managers make cost-benefit tradeoffs. For example, is it cheaper to buy products from outside vendors or to do manufacturing in-house? How does investing resources in design and manufacturing reduce costs of marketing and customer service?

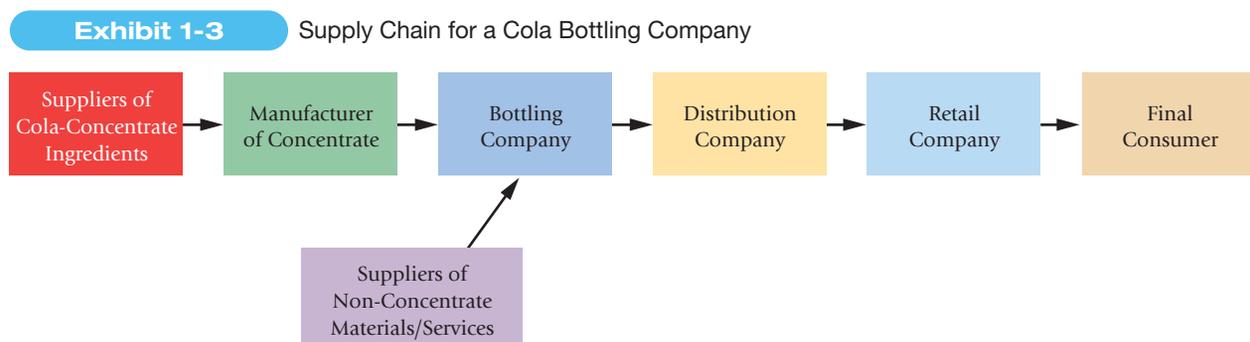
Supply-Chain Analysis

The parts of the value chain associated with producing and delivering a product or service—production and distribution—is referred to as the *supply chain*. **Supply chain** describes the flow of goods, services, and information from the initial sources of materials and services to the delivery of products to consumers, regardless of whether those activities occur in the same organization or in other organizations. Consider Coke and Pepsi, for example; many companies play a role in bringing these products to consumers. Exhibit 1-3 presents an overview of the supply chain. Cost management emphasizes integrating and coordinating activities across all companies in the supply chain, to improve performance and reduce costs. Both the Coca-Cola Company and Pepsi Bottling Group require their suppliers (such as plastic and aluminum companies and sugar refiners) to frequently deliver small quantities of materials directly to the production floor to reduce materials-handling costs. Similarly, to reduce inventory levels in the supply chain, Wal-Mart is asking its suppliers, such as Coca-Cola, to be responsible for and to manage inventory at both the Coca-Cola warehouse and Wal-Mart.

Key Success Factors

Customers want companies to use the value chain and supply chain to deliver ever improving levels of performance regarding several (or even all) of the following:

- **Cost and efficiency**—Companies face continuous pressure to reduce the cost of the products they sell. To calculate and manage the cost of products, managers must first understand the tasks or activities (such as setting up machines or distributing



products) that cause costs to arise. They must also monitor the marketplace to determine prices that customers are willing to pay for products or services. Management accounting information helps managers calculate a target cost for a product by subtracting the operating income per unit of product that the company desires to earn from the “target price.” To achieve the target cost, managers eliminate some activities (such as rework) and reduce the costs of performing activities in all value-chain functions—from initial R&D to customer service.

Increased global competition places ever-increasing pressure on companies to lower costs. Many U.S. companies have cut costs by outsourcing some of their business functions. Nike, for example, has moved its manufacturing operations to China and Mexico. Microsoft and IBM are increasingly doing their software development in Spain, eastern Europe, and India.

- **Quality**—Customers expect high levels of quality. Total quality management (TQM) aims to improve operations throughout the value chain and to deliver products and services that exceed customer expectations. Using TQM, companies design products or services to meet the needs and wants of customers and make these products with zero (or very few) defects and waste, and minimal inventories. Managers use management accounting information to evaluate the costs and revenue benefits of TQM initiatives.
- **Time**—Time has many dimensions. New-product development time is the time it takes for new products to be created and brought to market. The increasing pace of technological innovation has led to shorter product life cycles and more rapid introduction of new products. To make product and design decisions, managers need to understand the costs and benefits of a product over its life cycle.

Customer-response time describes the speed at which an organization responds to customer requests. To increase customer satisfaction, organizations need to reduce delivery time and reliably meet promised delivery dates. The primary cause of delays is bottlenecks that occur when the work to be performed on a machine, for example, exceeds available capacity. To deliver the product on time, managers need to increase the capacity of the machine to produce more output. Management accounting information helps managers quantify the costs and benefits of relieving bottleneck constraints.

- **Innovation**—A constant flow of innovative products or services is the basis for ongoing company success. Managers rely on management accounting information to evaluate alternative investment and R&D decisions.

Companies are increasingly applying the key success factors of cost and efficiency, quality, time, and innovation to promote sustainability—the development and implementation of strategies to achieve long-term financial, social, and environmental performance. For example, the Japanese copier company Ricoh’s sustainability efforts aggressively focus on energy conservation, resource conservation, product recycling, and pollution prevention. By designing products that can be easily recycled, Ricoh simultaneously improves efficiency, cost, and quality. Interest in sustainability appears to be intensifying. Already, government regulations, in countries such as China and India, are impelling companies to develop and report on their sustainability initiatives.

Management accountants help managers track performance of competitors on the key success factors. Competitive information serves as a *benchmark* and alerts managers to market changes. Companies are always seeking to *continuously improve* their operations. These improvements include on-time arrival for Southwest Airlines, customer access to online auctions at eBay, and cost reduction on housing products at Lowe’s. Sometimes, more-fundamental changes in operations, such as redesigning a manufacturing process to reduce costs, may be necessary. However, successful strategy implementation requires more than value-chain and supply-chain analysis and execution of key success factors. It is the decisions that managers make that help them to develop, integrate, and implement their strategies.

Decision Point

How do companies add value, and what are the dimensions of performance that customers are expecting of companies?

Decision Making, Planning, and Control: The Five-Step Decision-Making Process

We illustrate a five-step decision-making process using the example of the *Daily News*, a newspaper in Boulder, Colorado. Subsequent chapters of the book describe how managers use this five-step decision-making process to make many different types of decisions.

The *Daily News* differentiates itself from its competitors based on in-depth analyses of news by its highly rated journalists, use of color to enhance attractiveness to readers and advertisers, and a Web site that delivers up-to-the-minute news, interviews, and analyses. It has substantial capabilities to deliver on this strategy, such as an automated, computer-integrated, state-of-the-art printing facility; a Web-based information technology infrastructure; and a distribution network that is one of the best in the newspaper industry.

To keep up with steadily increasing production costs, Naomi Crawford, the manager of the *Daily News*, needs to increase revenues. To decide what she should do, Naomi works through the five-step decision-making process.

1. Identify the problem and uncertainties. Naomi has two main choices:

- a. Increase the selling price of the newspaper, or
- b. increase the rate per page charged to advertisers.

The key uncertainty is the effect on demand of any increase in prices or rates. A decrease in demand could offset any increase in prices or rates and lead to lower overall revenues.

2. Obtain information. Gathering information before making a decision helps managers gain a better understanding of the uncertainties. Naomi asks her marketing manager to talk to some representative readers to gauge their reaction to an increase in the newspaper's selling price. She asks her advertising sales manager to talk to current and potential advertisers to assess demand for advertising. She also reviews the effect that past price increases had on readership. Ramon Sandoval, the management accountant at the *Daily News*, presents information about the impact of past increases or decreases in advertising rates on advertising revenues. He also collects and analyzes information on advertising rates charged by competing newspapers and other media outlets.

3. Make predictions about the future. On the basis of this information, Naomi makes predictions about the future. She concludes that increasing prices would upset readers and decrease readership. She has a different view about advertising rates. She expects a market-wide increase in advertising rates and believes that increasing rates will have little effect on the number of advertising pages sold.

Naomi recognizes that making predictions requires judgment. She looks for biases in her thinking. Has she correctly judged reader sentiment or is the negative publicity of a price increase overly influencing her decision making? How sure is she that competitors will increase advertising rates? Is her thinking in this respect biased by how competitors have responded in the past? Have circumstances changed? How confident is she that her sales representatives can convince advertisers to pay higher rates? Naomi retests her assumptions and reviews her thinking. She feels comfortable with her predictions and judgments.

4. Make decisions by choosing among alternatives. When making decisions, strategy is a vital guidepost; many individuals in different parts of the organization at different times make decisions. Consistency with strategy binds individuals and timelines together and provides a common purpose for disparate decisions. Aligning decisions with strategy enables an organization to implement its strategy and achieve its goals. Without this alignment, decisions will be uncoordinated, pull the organization in different directions, and produce inconsistent results.

Consistent with the product differentiation strategy, Naomi decides to increase advertising rates by 4% to \$5,200 per page in March 2011. She is confident that the *Daily News*'s distinctive style and Web presence will increase readership, creating value for advertisers. She communicates the new advertising rate schedule to the sales department. Ramon estimates advertising revenues of \$4,160,000 (\$5,200 per page \times 800 pages predicted to be sold in March 2011).

Learning Objective 4

Explain the five-step decision-making process

... identify the problem and uncertainties, obtain information, make predictions about the future, make decisions by choosing among alternatives, implement the decision, evaluate performance, and learn

and its role in management accounting

... planning and control of operations and activities

Steps 1 through 4 are collectively referred to as *planning*. **Planning** comprises selecting organization goals and strategies, predicting results under various alternative ways of achieving those goals, deciding how to attain the desired goals, and communicating the goals and how to achieve them to the entire organization. Management accountants serve as business partners in these planning activities because of their understanding of what creates value and the key success factors.

The most important planning tool when implementing strategy is a budget. A **budget** is the quantitative expression of a proposed plan of action by management and is an aid to coordinating what needs to be done to execute that plan. For March 2011, budgeted advertising revenue equals \$4,160,000. The full budget for March 2011 includes budgeted circulation revenue and the production, distribution, and customer-service costs to achieve sales goals; the anticipated cash flows; and the potential financing needs. Because the process of preparing a budget crosses business functions, it forces coordination and communication throughout the company, as well as with the company's suppliers and customers.

5. **Implement the decision, evaluate performance, and learn.** Managers at the *Daily News* take actions to implement the March 2011 budget. Management accountants collect information to follow through on how actual performance compares to planned or budgeted performance (also referred to as scorekeeping). Information on actual results is different from the *pre-decision* planning information Naomi collected in Step 2, which enabled her to better understand uncertainties, to make predictions, and to make a decision. The comparison of actual performance to budgeted performance is the *control* or *post-decision* role of information. **Control** comprises taking actions that implement the planning decisions, deciding how to evaluate performance, and providing feedback and learning to help future decision making.

Measuring actual performance informs managers how well they and their subunits are doing. Linking rewards to performance helps motivate managers. These rewards are both intrinsic (recognition for a job well-done) and extrinsic (salary, bonuses, and promotions linked to performance). A budget serves as much as a control tool as a planning tool. Why? Because a budget is a benchmark against which actual performance can be compared.

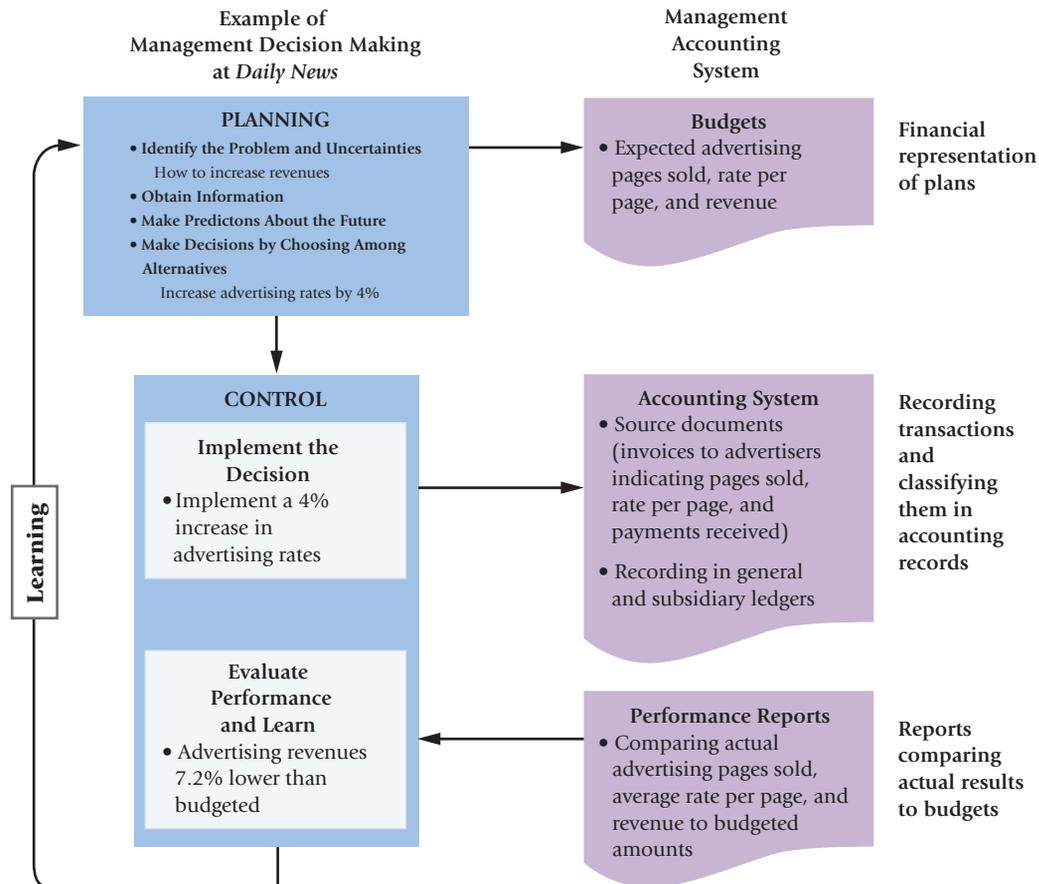
Consider performance evaluation at the *Daily News*. During March 2011, the newspaper sold advertising, issued invoices, and received payments. These invoices and receipts were recorded in the accounting system. Exhibit 1-4 shows the *Daily News's* performance report of advertising revenues for March 2011. This report indicates that 760 pages of advertising (40 pages fewer than the budgeted 800 pages) were sold. The average rate per page was \$5,080, compared with the budgeted \$5,200 rate, yielding actual advertising revenues of \$3,860,800. The actual advertising revenues were \$299,200 less than the budgeted \$4,160,000. Observe how managers use both financial and nonfinancial information, such as pages of advertising, to evaluate performance.

The performance report in Exhibit 1-4 spurs investigation and learning. **Learning** is examining past performance (the control function) and systematically exploring alternative ways to make better-informed decisions and plans in the future. Learning can lead to changes in goals, changes in strategies, changes in the ways decision alternatives are identified,

Exhibit 1-4

Performance Report of Advertising Revenues at the *Daily News* for March 2011

	Actual Result (1)	Budgeted Amount (2)	Difference: (Actual Result – Budgeted Amount) (3) = (1) – (2)	Difference as a Percentage of Budgeted Amount (4) = (3) ÷ (2)
Advertising pages sold	760 pages	800 pages	40 pages Unfavorable	5.0% Unfavorable
Average rate per page	\$5,080	\$5,200	\$120 Unfavorable	2.3% Unfavorable
Advertising revenues	\$3,860,800	\$4,160,000	\$299,200 Unfavorable	7.2% Unfavorable

**Exhibit 1-5**

How Accounting Aids Decision Making, Planning, and Control at the *Daily News*

changes in the range of information collected when making predictions, and sometimes changes in managers.

The performance report in Exhibit 1-4 would prompt the management accountant to raise several questions directing the attention of managers to problems and opportunities. Is the strategy of differentiating the *Daily News* from other newspapers attracting more readers? In implementing the new advertising rates, did the marketing and sales department make sufficient efforts to convince advertisers that, even with the higher rate of \$5,200 per page, advertising in the *Daily News* was a good buy? Why was the actual average rate per page \$5,080 instead of the budgeted rate of \$5,200? Did some sales representatives offer discounted rates? Did economic conditions cause the decline in advertising revenues? Are revenues falling because editorial and production standards have declined? Answers to these questions could prompt the newspaper's publisher to take subsequent actions, including, for example, adding more sales personnel or making changes in editorial policy. Good implementation requires the marketing, editorial, and production departments to work together and coordinate their actions.

The management accountant could go further by identifying the specific advertisers that cut back or stopped advertising after the rate increase went into effect. Managers could then decide when and how sales representatives should follow-up with these advertisers.

The left side of Exhibit 1-5 provides an overview of the decision-making processes at the *Daily News*. The right side of the exhibit highlights how the management accounting system aids in decision making.

Key Management Accounting Guidelines

Three guidelines help management accountants provide the most value to their companies in strategic and operational decision making: Employ a cost-benefit approach, give full recognition to behavioral and technical considerations, and use different costs for different purposes.

Decision Point

How do managers make decisions to implement strategy?

Learning Objective 5

Describe three guidelines management accountants follow in supporting managers

... employing a cost-benefit approach, recognizing behavioral as well as technical considerations, and calculating different costs for different purposes

Cost-Benefit Approach

Managers continually face resource-allocation decisions, such as whether to purchase a new software package or hire a new employee. They use a **cost-benefit approach** when making these decisions: Resources should be spent if the expected benefits to the company exceed the expected costs. Managers rely on management accounting information to quantify expected benefits and expected costs although all benefits and costs are not easy to quantify. Nevertheless, the cost-benefit approach is a useful guide for making resource-allocation decisions.

Consider the installation of a company's first budgeting system. Previously, the company used historical recordkeeping and little formal planning. A major benefit of installing a budgeting system is that it compels managers to plan ahead, compare actual to budgeted information, learn, and take corrective action. These actions lead to different decisions that improve performance relative to decisions that would have been made using the historical system, but the benefits are not easy to measure. On the cost side, some costs, such as investments in software and training are easier to quantify. Others, such as the time spent by managers on the budgeting process, are harder to quantify. Regardless, senior managers compare expected benefits and expected costs, exercise judgment, and reach a decision, in this case to install the budgeting system.

Behavioral and Technical Considerations

The cost-benefit approach is the criterion that assists managers in deciding whether, say, to install a proposed budgeting system instead of continuing to use an existing historical system. In making this decision senior managers consider two simultaneous missions: one technical and one behavioral. The technical considerations help managers make wise economic decisions by providing them with the desired information (for example, costs in various value-chain categories) in an appropriate format (such as actual results versus budgeted amounts) and at the preferred frequency. Now consider the human (the behavioral) side of why budgeting is used. Budgets induce a different set of decisions within an organization because of better collaboration, planning, and motivation. The behavioral considerations encourage managers and other employees to strive for achieving the goals of the organization.

Both managers and management accountants should always remember that management is not confined exclusively to technical matters. Management is primarily a human activity that should focus on how to help individuals do their jobs better—for example, by helping them to understand which of their activities adds value and which does not. Moreover, when workers underperform, behavioral considerations suggest that management systems and processes should cause managers to personally discuss with workers ways to improve performance rather than just sending them a report highlighting their underperformance.

Different Costs for Different Purposes

This book emphasizes that managers use alternative ways to compute costs in different decision-making situations, because there are different costs for different purposes. A cost concept used for the external-reporting purpose of accounting may not be an appropriate concept for internal, routine reporting to managers.

Consider the advertising costs associated with Microsoft Corporation's launch of a major product with a useful life of several years. For external reporting to shareholders, television advertising costs for this product are fully expensed in the income statement in the year they are incurred. GAAP requires this immediate expensing for external reporting. For internal purposes of evaluating management performance, however, the television advertising costs could be capitalized and then amortized or written off as expenses over several years. Microsoft could capitalize these advertising costs if it believes doing so results in a more accurate and fairer measure of the performance of the managers that launched the new product.

We now discuss the relationships and reporting responsibilities among managers and management accountants within a company's organization structure.

Decision Point

What guidelines do management accountants use?

Organization Structure and the Management Accountant

We focus first on broad management functions and then look at how the management accounting and finance functions support managers.

Line and Staff Relationships

Organizations distinguish between line management and staff management. **Line management**, such as production, marketing, and distribution management, is directly responsible for attaining the goals of the organization. For example, managers of manufacturing divisions may target particular levels of budgeted operating income, certain levels of product quality and safety, and compliance with environmental laws. Similarly, the pediatrics department in a hospital is responsible for quality of service, costs, and patient billings. **Staff management**, such as management accountants and information technology and human-resources management, provides advice, support, and assistance to line management. A plant manager (a line function) may be responsible for investing in new equipment. A management accountant (a staff function) works as a business partner of the plant manager by preparing detailed operating-cost comparisons of alternative pieces of equipment.

Increasingly, organizations such as Honda and Dell are using teams to achieve their objectives. These teams include both line and staff management so that all inputs into a decision are available simultaneously.

The Chief Financial Officer and the Controller

The **chief financial officer (CFO)**—also called the **finance director** in many countries—is the executive responsible for overseeing the financial operations of an organization. The responsibilities of the CFO vary among organizations, but they usually include the following areas:

- **Controllershship**—includes providing financial information for reports to managers and shareholders, and overseeing the overall operations of the accounting system
- **Treasury**—includes banking and short- and long-term financing, investments, and cash management
- **Risk management**—includes managing the financial risk of interest-rate and exchange-rate changes and derivatives management
- **Taxation**—includes income taxes, sales taxes, and international tax planning
- **Investor relations**—includes communicating with, responding to, and interacting with shareholders
- **Internal audit**—includes reviewing and analyzing financial and other records to attest to the integrity of the organization's financial reports and to adherence to its policies and procedures

The **controller** (also called the *chief accounting officer*) is the financial executive primarily responsible for management accounting and financial accounting. This book focuses on the controller as the chief management accounting executive. Modern controllers do not do any controlling in terms of line authority except over their own departments. Yet the modern concept of controllership maintains that the controller exercises control in a special sense. By reporting and interpreting relevant data, the controller influences the behavior of all employees and exerts a force that impels line managers toward making better-informed decisions as they implement their strategies.

Exhibit 1-6 is an organization chart of the CFO and the corporate controller at Nike, the leading footwear and apparel company. The CFO is a staff manager who reports to and supports the chief executive officer (CEO). As in most organizations, the corporate controller at Nike reports to the CFO. Nike also has regional controllers who support regional managers in the major geographic regions in which the company operates, such

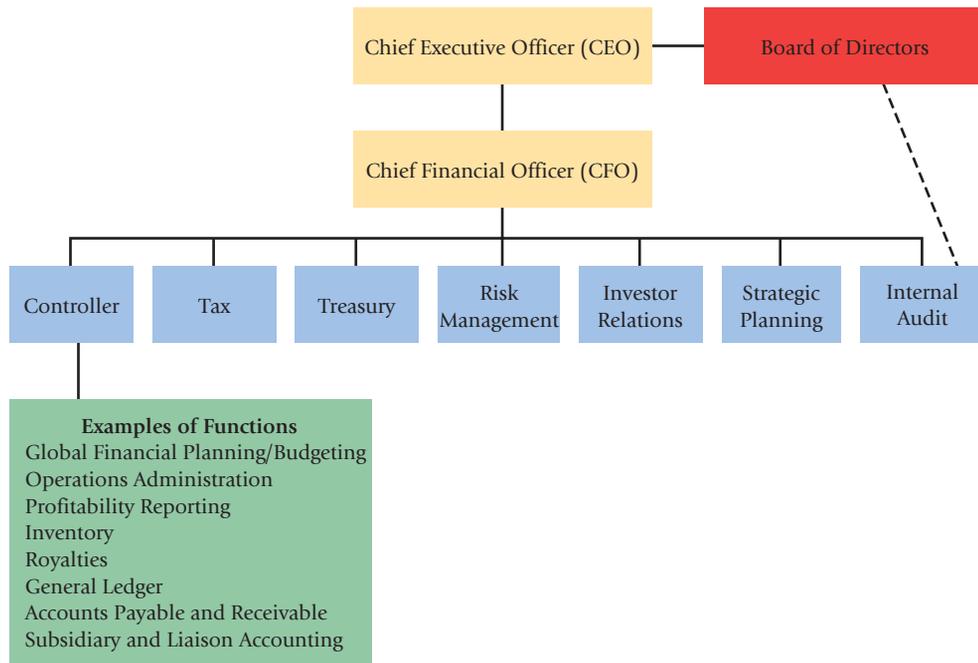
Learning Objective 6

Understand how management accounting fits into an organization's structure

... for example, the responsibilities of the controller

Exhibit 1-6

Nike: Reporting Relationship for the CFO and the Corporate Controller



as the United States, Asia Pacific, Latin America, and Europe. Individual countries sometimes have a country controller. Organization charts such as the one in Exhibit 1-6 show formal reporting relationships. In most organizations, there also are informal relationships that must be understood when managers attempt to implement their decisions. Examples of informal relationships are friendships among managers (friendships of a professional or personal kind) and the personal preferences of top management about the managers they rely on in decision making.

Ponder what managers do to design and implement strategies and the organization structures within which they operate. Then think about the management accountants' and controllers' roles. It should be clear that the successful management accountant must have technical and analytical competence *as well as* behavioral and interpersonal skills. The Concepts in Action box on page 15 describes some desirable values and behaviors and why they are so critical to the partnership between management accountants and managers. We will refer to these values and behaviors as we discuss different topics in subsequent chapters of this book.

Decision Point

Where does the management accounting function fit into an organization's structure?

Learning Objective 7

Understand what professional ethics mean to management accountants

... for example, management accountants must maintain integrity and credibility in every aspect of their job

Professional Ethics

At no time has the focus on ethical conduct been sharper than it is today. Corporate scandals at Enron, WorldCom, and Arthur Andersen have seriously eroded the public's confidence in corporations. All employees in a company, whether in line management or staff management, must comply with the organization's—and more broadly, society's—expectations of ethical standards.

Institutional Support

Accountants have special obligations regarding ethics, given that they are responsible for the integrity of the financial information provided to internal and external parties. The Sarbanes-Oxley legislation in the United States, passed in 2002 in response to a series of corporate scandals, focuses on improving internal control, corporate governance, monitoring of managers, and disclosure practices of public corporations. These regulations call for tough ethical standards on managers and accountants and provide a process for employees to report violations of illegal and unethical acts.

Concepts in Action

Management Accounting Beyond the Numbers



When you hear the job title “accountant,” what comes to mind? The CPA who does your tax return each year? Individuals who prepare budgets at Dell or Sony? To people outside the profession, it may seem like accountants are just “numbers people.” It is true that most accountants are adept financial managers, yet their skills do not stop there. To be successful, management accountants must possess certain values and behaviors that reach well beyond basic analytical abilities.

Working in cross-functional teams and as a business partner of managers. It is not enough that management accountants simply be technically competent in their area of study. They also need to be able to work in teams, to

learn about business issues, to understand the motivations of different individuals, to respect the views of their colleagues, and to show empathy and trust.

Promoting fact-based analysis and making tough-minded, critical judgments without being adversarial. Management accountants must raise tough questions for managers to consider, especially when preparing budgets. They must do so thoughtfully and with the intent of improving plans and decisions. In the case of Washington Mutual’s bank failure, management accountants should have raised questions about whether the company’s risky mortgage lending would be profitable if housing prices declined.

Leading and motivating people to change and be innovative. Implementing new ideas, however good they may be, is seldom easy. When the United States Department of Defense sought to consolidate more than 320 finance and accounting systems into a centralized platform, the accounting services director and his team of management accountants made sure that the vision for change was well understood throughout the agency. Ultimately, each individual’s performance was aligned with the transformative change and incentive pay was introduced to promote adoption and drive innovation within this new framework.

Communicating clearly, openly, and candidly. Communicating information is a large part of a management accountant’s job. A few years ago, Pitney Bowes Inc. (PBI), a \$4 billion global provider of integrated mail and document management solutions, implemented a reporting initiative to give managers feedback in key areas. The initiative succeeded because it was clearly designed and openly communicated by PBI’s team of management accountants.

Having a strong sense of integrity. Management accountants must never succumb to pressure from managers to manipulate financial information. They must always remember that their primary commitment is to the organization and its shareholders. At WorldCom, under pressure from senior managers, members of the accounting staff concealed billions of dollars in expenses. Because the accounting staff lacked the integrity and courage to stand up to and report corrupt senior managers, WorldCom landed in bankruptcy. Some members of the accounting staff and the senior executive team served prison terms for their actions.

Sources: Dash, Eric and Andrew Ross Sorkin. 2008. Government seizes WaMu and sells some assets. *New York Times*, September 25. <http://www.nytimes.com/2008/09/26/business/26wamu.html>; Garling, Wendy. 2007. Winning the Transformation Battle at the Defense Finance and Accounting Service. *Balanced Scorecard Report*, May–June. http://cb.hbsp.harvard.edu/cb/web/product_detail.seam?R=B0705C-PDF-ENG; Gollakota, Kamala and Vipin Gupta. 2009. *WorldCom Inc.: What went wrong*. Richard Ivey School of Business Case No. 905M43. London, ON: The University of Western Ontario. http://cb.hbsp.harvard.edu/cb/web/product_detail.seam?R=905M43-PDF-ENG; Green, Mark, Jeannine Garrity, Andrea Gumbus, and Bridget Lyons. 2002. Pitney Bowes Calls for New Metrics. *Strategic Finance*, May. <http://www.allbusiness.com/accounting-reporting/reports-statements-profit/189988-1.html>

Professional accounting organizations, which represent management accountants in many countries, promote high ethical standards.³ Each of these organizations provides certification programs indicating that the holder has demonstrated the competency of technical knowledge required by that organization in management accounting and financial management, respectively.

In the United States, the Institute of Management Accountants (IMA) has also issued ethical guidelines. Exhibit 1-7 presents the IMA’s guidance on issues relating to competence,

³ See Appendix C: Cost Accounting in Professional Examinations in MyAccountingLab and at www.pearsonhighered.com/horngren for a list of professional management accounting organizations in the United States, Canada, Australia, Japan, and the United Kingdom.

Exhibit 1-7**Ethical Behavior for
Practitioners of
Management
Accounting and
Financial Management**

Practitioners of management accounting and financial management have an obligation to the public, their profession, the organizations they serve, and themselves to maintain the highest standards of ethical conduct. In recognition of this obligation, the Institute of Management Accountants has promulgated the following standards of ethical professional practice. Adherence to these standards, both domestically and internationally, is integral to achieving the Objectives of Management Accounting. Practitioners of management accounting and financial management shall not commit acts contrary to these standards nor shall they condone the commission of such acts by others within their organizations.

IMA STATEMENT OF ETHICAL PROFESSIONAL PRACTICE

Practitioners of management accounting and financial management shall behave ethically. A commitment to ethical professional practice includes overarching principles that express our values and standards that guide our conduct.

PRINCIPLES

IMA's overarching ethical principles include: Honesty, Fairness, Objectivity, and Responsibility. Practitioners shall act in accordance with these principles and shall encourage others within their organizations to adhere to them.

STANDARDS

A practitioner's failure to comply with the following standards may result in disciplinary action.

COMPETENCE

Each practitioner has a responsibility to:

1. Maintain an appropriate level of professional expertise by continually developing knowledge and skills.
2. Perform professional duties in accordance with relevant laws, regulations, and technical standards.
3. Provide decision support information and recommendations that are accurate, clear, concise, and timely.
4. Recognize and communicate professional limitations or other constraints that would preclude responsible judgment or successful performance of an activity.

CONFIDENTIALITY

Each practitioner has a responsibility to:

1. Keep information confidential except when disclosure is authorized or legally required.
2. Inform all relevant parties regarding appropriate use of confidential information. Monitor subordinates' activities to ensure compliance.
3. Refrain from using confidential information for unethical or illegal advantage.

INTEGRITY

Each practitioner has a responsibility to:

1. Mitigate actual conflicts of interest. Regularly communicate with business associates to avoid apparent conflicts of interest. Advise all parties of any potential conflicts.
2. Refrain from engaging in any conduct that would prejudice carrying out duties ethically.
3. Abstain from engaging in or supporting any activity that might discredit the profession.

CREDIBILITY

Each practitioner has a responsibility to:

1. Communicate information fairly and objectively.
2. Disclose all relevant information that could reasonably be expected to influence an intended user's understanding of the reports, analyses, or recommendations.
3. Disclose delays or deficiencies in information, timeliness, processing, or internal controls in conformance with organization policy and/or applicable law.

Source: Statement on Management Accounting Number 1-C. 2005. *IMA Statement of Ethical Professional Practice.* Montvale, NJ: Institute of Management Accountants. Reprinted with permission from the Institute of Management Accountants, Montvale, NJ, www.imanet.org.

confidentiality, integrity, and credibility. To provide support to its members to act ethically at all times, the IMA runs an ethics hotline service. Members can call professional counselors at the IMA's Ethics Counseling Service to discuss their ethical dilemmas. The counselors help identify the key ethical issues and possible alternative ways of resolving them, and confidentiality is guaranteed. The IMA is just one of many institutions that help navigate management accountants through what could be turbulent ethical waters.

Typical Ethical Challenges

Ethical issues can confront management accountants in many ways. Here are two examples:

- **Case A:** A division manager has concerns about the commercial potential of a software product for which development costs are currently being capitalized as an asset rather than being shown as an expense for internal reporting purposes. The manager's bonus is based, in part, on division profits. The manager argues that showing development costs as an asset is justified because the new product will generate profits but presents little evidence to support his argument. The last two products from this division have been unsuccessful. The management accountant disagrees but wants to avoid a difficult personal confrontation with the boss, the division manager.
- **Case B:** A packaging supplier, bidding for a new contract, offers the management accountant of the purchasing company an all-expenses-paid weekend to the Super Bowl. The supplier does not mention the new contract when extending the invitation. The accountant is not a personal friend of the supplier. The accountant knows cost issues are critical in approving the new contract and is concerned that the supplier will ask for details about bids by competing packaging companies.

In each case the management accountant is faced with an ethical dilemma. Case A involves competence, credibility, and integrity. The management accountant should request that the division manager provide credible evidence that the new product is commercially viable. If the manager does not provide such evidence, expensing development costs in the current period is appropriate. Case B involves confidentiality and integrity.

Ethical issues are not always clear-cut. The supplier in Case B may have no intention of raising issues associated with the bid. However, the appearance of a conflict of interest in Case B is sufficient for many companies to prohibit employees from accepting "favors" from suppliers. Exhibit 1-8 presents the IMA's guidance on "Resolution of Ethical Conflict." The accountant in Case B should discuss the invitation with his or her immediate supervisor. If the visit is approved, the accountant should inform the supplier that the

Exhibit 1-8

Resolution of Ethical Conflict

In applying the Standards of Ethical Professional Practice, you may encounter problems identifying unethical behavior or resolving an ethical conflict. When faced with ethical issues, you should follow your organization's established policies on the resolution of such conflict. If these policies do not resolve the ethical conflict, you should consider the following courses of action:

1. Discuss the issue with your immediate supervisor except when it appears that the supervisor is involved. In that case, present the issue to the next level. If you cannot achieve a satisfactory resolution, submit the issue to the next management level. If your immediate superior is the chief executive officer or equivalent, the acceptable reviewing authority may be a group such as the audit committee, executive committee, board of directors, board of trustees, or owners. Contact with levels above the immediate superior should be initiated only with your superior's knowledge, assuming he or she is not involved. Communication of such problems to authorities or individuals not employed or engaged by the organization is not considered appropriate, unless you believe there is a clear violation of the law.
2. Clarify relevant ethical issues by initiating a confidential discussion with an IMA Ethics Counselor or other impartial advisor to obtain a better understanding of possible courses of action.
3. Consult your own attorney as to legal obligations and rights concerning the ethical conflict.

Source: Statement on Management Accounting Number 1-C. 2005. IMA Statement of Ethical Professional Practice. Montvale, NJ: Institute of Management Accountants. Reprinted with permission from the Institute of Management Accountants, Montvale, NJ, www.imanet.org.

Decision Point

What are the ethical responsibilities of management accountants?

invitation has been officially approved subject to following corporate policy (which includes maintaining information confidentiality).

Most professional accounting organizations around the globe issue statements about professional ethics. These statements include many of the same issues discussed by the IMA in Exhibits 1-7 and 1-8. For example, the Chartered Institute of Management Accountants (CIMA) in the United Kingdom identifies the same four fundamental principles as in Exhibit 1-7: competency, confidentiality, integrity, and credibility.

Problem for Self-Study

Campbell Soup Company incurs the following costs:

- a. Purchase of tomatoes by a canning plant for Campbell's tomato soup products
- b. Materials purchased for redesigning Pepperidge Farm biscuit containers to make biscuits stay fresh longer
- c. Payment to Backer, Spielvogel, & Bates, the advertising agency, for advertising work on Healthy Request line of soup products
- d. Salaries of food technologists researching feasibility of a Prego pizza sauce that has minimal calories
- e. Payment to Safeway for redeeming coupons on Campbell's food products
- f. Cost of a toll-free telephone line used for customer inquiries about using Campbell's soup products
- g. Cost of gloves used by line operators on the Swanson Fiesta breakfast-food production line
- h. Cost of handheld computers used by Pepperidge Farm delivery staff serving major supermarket accounts

Required

Classify each cost item (a–h) as one of the business functions in the value chain in Exhibit 1-2 (p. 6).

Solution

- a. Production
- b. Design of products and processes
- c. Marketing
- d. Research and development
- e. Marketing
- f. Customer service
- g. Production
- h. Distribution

Decision Points

The following question-and-answer format summarizes the chapter's learning objectives. Each decision presents a key question related to a learning objective. The guidelines are the answer to that question.

Decision

1. How is management accounting different from financial accounting?

Guidelines

Financial accounting reports to external users on past financial performance using GAAP. Management accounting provides future-oriented information in formats that help managers (internal users) make decisions and achieve organizational goals.

- | | |
|--|--|
| 2. How do management accountants support strategic decisions? | Management accountants contribute to strategic decisions by providing information about the sources of competitive advantage. |
| 3. How do companies add value, and what are the dimensions of performance that customers are expecting of companies? | Companies add value through R&D; design of products and processes; production; marketing; distribution; and customer service. Customers want companies to deliver performance through cost and efficiency, quality, timeliness, and innovation. |
| 4. How do managers make decisions to implement strategy? | Managers use a five-step decision-making process to implement strategy: (1) identify the problem and uncertainties; (2) obtain information; (3) make predictions about the future; (4) make decisions by choosing among alternatives; and (5) implement the decision, evaluate performance, and learn. The first four steps are the planning decisions, which include deciding on organization goals, predicting results under various alternative ways of achieving those goals, and deciding how to attain the desired goals. Step 5 is the control decision, which includes taking actions to implement the planning decisions and deciding on performance evaluation and feedback that will help future decision making. |
| 5. What guidelines do management accountants use? | Three guidelines that help management accountants increase their value to managers are (a) employ a cost-benefit approach, (b) recognize behavioral as well as technical considerations, and (c) identify different costs for different purposes. |
| 6. Where does the management accounting function fit into an organization's structure? | Management accounting is an integral part of the controller's function in an organization. In most organizations, the controller reports to the chief financial officer, who is a key member of the top management team. |
| 7. What are the ethical responsibilities of management accountants? | Management accountants have ethical responsibilities that relate to competence, confidentiality, integrity, and credibility. |

Terms to Learn

Each chapter will include this section. Like all technical terms, accounting terms have precise meanings. Learn the definitions of new terms when you initially encounter them. The meaning of each of the following terms is given in this chapter and in the Glossary at the end of this book.

- | | | |
|--|--|--|
| budget (p. 10)
chief financial officer (CFO) (p. 13)
control (p. 10)
controller (p. 13)
cost accounting (p. 4)
cost-benefit approach (p. 12)
cost management (p. 4)
customer service (p. 6) | design of products and processes (p. 6)
distribution (p. 6)
finance director (p. 13)
financial accounting (p. 3)
learning (p. 10)
line management (p. 13)
management accounting (p. 4)
marketing (p. 6) | planning (p. 10)
production (p. 6)
research and development (R&D) (p. 6)
staff management (p. 13)
strategic cost management (p. 5)
strategy (p. 5)
supply chain (p. 7)
value chain (p. 6) |
|--|--|--|

Assignment Material

Questions

- 1-1** How does management accounting differ from financial accounting?
- 1-2** "Management accounting should not fit the straitjacket of financial accounting." Explain and give an example.



- 1-3** How can a management accountant help formulate strategy?
- 1-4** Describe the business functions in the value chain.
- 1-5** Explain the term “supply chain” and its importance to cost management.
- 1-6** “Management accounting deals only with costs.” Do you agree? Explain.
- 1-7** How can management accountants help improve quality and achieve timely product deliveries?
- 1-8** Describe the five-step decision-making process.
- 1-9** Distinguish planning decisions from control decisions.
- 1-10** What three guidelines help management accountants provide the most value to managers?
- 1-11** “Knowledge of technical issues such as computer technology is a necessary but not sufficient condition to becoming a successful management accountant.” Do you agree? Why?
- 1-12** As a new controller, reply to this comment by a plant manager: “As I see it, our accountants may be needed to keep records for shareholders and Uncle Sam, but I don’t want them sticking their noses in my day-to-day operations. I do the best I know how. No bean counter knows enough about my responsibilities to be of any use to me.”
- 1-13** Where does the management accounting function fit into an organization’s structure?
- 1-14** Name the four areas in which standards of ethical conduct exist for management accountants in the United States. What organization sets forth these standards?
- 1-15** What steps should a management accountant take if established written policies provide insufficient guidance on how to handle an ethical conflict?



Exercises

1-16 Value chain and classification of costs, computer company. Compaq Computer incurs the following costs:

- a. Electricity costs for the plant assembling the Presario computer line of products
- b. Transportation costs for shipping the Presario line of products to a retail chain
- c. Payment to David Kelley Designs for design of the Armada Notebook
- d. Salary of computer scientist working on the next generation of minicomputers
- e. Cost of Compaq employees’ visit to a major customer to demonstrate Compaq’s ability to interconnect with other computers
- f. Purchase of competitors’ products for testing against potential Compaq products
- g. Payment to television network for running Compaq advertisements
- h. Cost of cables purchased from outside supplier to be used with Compaq printers

Required

Classify each of the cost items (a–h) into one of the business functions of the value chain shown in Exhibit 1-2 (p. 6).

1-17 Value chain and classification of costs, pharmaceutical company. Merck, a pharmaceutical company, incurs the following costs:

- a. Cost of redesigning blister packs to make drug containers more tamperproof
- b. Cost of videos sent to doctors to promote sales of a new drug
- c. Cost of a toll-free telephone line used for customer inquiries about drug usage, side effects of drugs, and so on
- d. Equipment purchased to conduct experiments on drugs yet to be approved by the government
- e. Payment to actors for a television infomercial promoting a new hair-growth product for balding men
- f. Labor costs of workers in the packaging area of a production facility
- g. Bonus paid to a salesperson for exceeding a monthly sales quota
- h. Cost of Federal Express courier service to deliver drugs to hospitals

Required

Classify each of the cost items (a–h) as one of the business functions of the value chain shown in Exhibit 1-2 (p. 6).

1-18 Value chain and classification of costs, fast food restaurant. Burger King, a hamburger fast food restaurant, incurs the following costs:

- a. Cost of oil for the deep fryer
- b. Wages of the counter help who give customers the food they order
- c. Cost of the costume for the King on the Burger King television commercials
- d. Cost of children’s toys given away free with kids’ meals
- e. Cost of the posters indicating the special “two cheeseburgers for \$2.50”
- f. Costs of frozen onion rings and French fries
- g. Salaries of the food specialists who create new sandwiches for the restaurant chain
- h. Cost of “to-go” bags requested by customers who could not finish their meals in the restaurant

Classify each of the cost items (a–h) as one of the business functions of the value chain shown in Exhibit 1-2 (p. 6).

Required

1-19 Key success factors. Grey Brothers Consulting has issued a report recommending changes for its newest manufacturing client, Energy Motors. Energy Motors currently manufactures a single product, which is sold and distributed nationally. The report contains the following suggestions for enhancing business performance:

- Add a new product line to increase total revenue and to reduce the company's overall risk.
- Increase training hours of assembly line personnel to decrease the currently high volumes of scrap and waste.
- Reduce lead times (time from customer order of product to customer receipt of product) by 20% in order to increase customer retention.
- Reduce the time required to set up machines for each new order.
- Benchmark the company's gross margin percentages against its major competitors.

Link each of these changes to the key success factors that are important to managers.

Required

1-20 Planning and control decisions. Conner Company makes and sells brooms and mops. It takes the following actions, not necessarily in the order given. For each action (a–e) state whether it is a planning decision or a control decision.

- Conner asks its marketing team to consider ways to get back market share from its newest competitor, Swiffer.
- Conner calculates market share after introducing its newest product.
- Conner compares costs it actually incurred with costs it expected to incur for the production of the new product.
- Conner's design team proposes a new product to compete directly with the Swiffer.
- Conner estimates the costs it will incur to sell 30,000 units of the new product in the first quarter of next fiscal year.

1-21 Five-step decision-making process, manufacturing. Garnicki Foods makes frozen dinners that it sells through grocery stores. Typical products include turkey dinners, pot roast, fried chicken, and meat loaf. The managers at Garnicki have recently introduced a line of frozen chicken pies. They take the following actions with regard to this decision.

- Garnicki performs a taste test at the local shopping mall to see if consumers like the taste of its proposed new chicken pie product.
- Garnicki sales managers estimate they will sell more meat pies in their northern sales territory than in their southern sales territory.
- Garnicki managers discuss the possibility of introducing a new chicken pie.
- Garnicki managers compare actual costs of making chicken pies with their budgeted costs.
- Costs for making chicken pies are budgeted.
- Garnicki decides to introduce a new chicken pie.
- To help decide whether to introduce a new chicken pie, the purchasing manager calls a supplier to check the prices of chicken.

Classify each of the actions (a–g) as a step in the five-step decision-making process (identify the problem and uncertainties, obtain information, make predictions about the future, choose among alternatives, implement the decision, evaluate performance, and learn). The actions are not listed in the order they are performed.

Required

1-22 Five-step decision-making process, service firm. Brite Exteriors is a firm that provides house painting services. Robert Brite, the owner, is trying to find new ways to increase revenues. Mr. Brite performs the following actions, not in the order listed.

- Mr. Brite calls Home Depot to ask the price of paint sprayers.
- Mr. Brite discusses with his employees the possibility of using paint sprayers instead of hand painting to increase productivity and thus revenues.
- The workers who are not familiar with paint sprayers take more time to finish a job than they did when painting by hand.
- Mr. Brite compares the expected cost of buying sprayers to the expected cost of hiring more workers who paint by hand, and estimates profits from both alternatives.
- The project scheduling manager confirms that demand for house painting services has increased.
- Mr. Brite decides to buy the paint sprayers rather than hire additional painters.

Classify each of the actions (a–f) according to its step in the five-step decision-making process (identify the problem and uncertainties, obtain information, make predictions about the future, choose among alternatives, implement the decision, evaluate performance, and learn).

Required

1-23 Professional ethics and reporting division performance. Marcia Miller is division controller and Tom Maloney is division manager of the Ramses Shoe Company. Miller has line responsibility to Maloney, but she also has staff responsibility to the company controller.

Maloney is under severe pressure to achieve the budgeted division income for the year. He has asked Miller to book \$200,000 of revenues on December 31. The customers' orders are firm, but the shoes are still in the production process. They will be shipped on or around January 4. Maloney says to Miller, "The key event is getting the sales order, not shipping the shoes. You should support me, not obstruct my reaching division goals."

Required

1. Describe Miller's ethical responsibilities.
2. What should Miller do if Maloney gives her a direct order to book the sales?

**Problems**

1-24 Planning and control decisions, Internet company. WebNews.com offers its subscribers several services, such as an annotated TV guide and local-area information on weather, restaurants, and movie theaters. Its main revenue sources are fees for banner advertisements and fees from subscribers. Recent data are as follows:

Month/Year	Advertising Revenues	Actual Number of Subscribers	Monthly Fee Per Subscriber
June 2009	\$ 415,972	29,745	\$15.50
December 2009	867,246	55,223	20.50
June 2010	892,134	59,641	20.50
December 2010	1,517,950	87,674	20.50
June 2011	2,976,538	147,921	20.50

The following decisions were made from June through October 2011:

- a. June 2011: Raised subscription fee to \$25.50 per month from July 2011 onward. The budgeted number of subscribers for this monthly fee is shown in the following table.
- b. June 2011: Informed existing subscribers that from July onward, monthly fee would be \$25.50.
- c. July 2011: Offered e-mail service to subscribers and upgraded other online services.
- d. October 2011: Dismissed the vice president of marketing after significant slowdown in subscribers and subscription revenues, based on July through September 2011 data in the following table.
- e. October 2011: Reduced subscription fee to \$22.50 per month from November 2011 onward.

Results for July–September 2011 are as follows:

Month/Year	Budgeted Number of Subscribers	Actual Number of Subscribers	Monthly Fee per Subscriber
July 2011	145,000	129,250	\$25.50
August 2011	155,000	142,726	25.50
September 2011	165,000	145,643	25.50

Required

1. Classify each of the decisions (a–e) as a planning or a control decision.
2. Give two examples of other planning decisions and two examples of other control decisions that may be made at WebNews.com.

1-25 Strategic decisions and management accounting. A series of independent situations in which a firm is about to make a strategic decision follow.

Decisions:

- a. Roger Phones is about to decide whether to launch production and sale of a cell phone with standard features.
- b. Computer Magic is trying to decide whether to produce and sell a new home computer software package that includes the ability to interface with a sewing machine and a vacuum cleaner. There is no such software currently on the market.
- c. Christina Cosmetics has been asked to provide a "store brand" lip gloss that will be sold at discount retail stores.
- d. Marcus Meats is entertaining the idea of developing a special line of gourmet bologna made with sun dried tomatoes, pine nuts, and artichoke hearts.

1. For each decision, state whether the company is following a low price or a differentiated product strategy.
2. For each decision, discuss what information the management accountant can provide about the source of competitive advantage for these firms.

Required

1-26 Management accounting guidelines. For each of the following items, identify which of the management accounting guidelines applies: cost-benefit approach, behavioral and technical considerations, or different costs for different purposes.

1. Analyzing whether to keep the billing function within an organization or outsource it
2. Deciding to give bonuses for superior performance to the employees in a Japanese subsidiary and extra vacation time to the employees in a Swedish subsidiary
3. Including costs of all the value-chain functions before deciding to launch a new product, but including only its manufacturing costs in determining its inventory valuation
4. Considering the desirability of hiring one more salesperson
5. Giving each salesperson the compensation option of choosing either a low salary and a high-percentage sales commission or a high salary and a low-percentage sales commission
6. Selecting the costlier computer system after considering two systems
7. Installing a participatory budgeting system in which managers set their own performance targets, instead of top management imposing performance targets on managers
8. Recording research costs as an expense for financial reporting purposes (as required by U.S. GAAP) but capitalizing and expensing them over a longer period for management performance-evaluation purposes
9. Introducing a profit-sharing plan for employees

1-27 Role of controller, role of chief financial officer. George Perez is the controller at Allied Electronics, a manufacturer of devices for the computer industry. He is being considered for a promotion to chief financial officer.

1. In this table, indicate which executive is *primarily* responsible for each activity.

Required

Activity	Controller	CFO
Managing accounts payable		
Communicating with investors		
Strategic review of different lines of businesses		
Budgeting funds for a plant upgrade		
Managing the company's short-term investments		
Negotiating fees with auditors		
Assessing profitability of various products		
Evaluating the costs and benefits of a new product design		

2. Based on this table and your understanding of the two roles, what types of training or experiences will George find most useful for the CFO position?

1-28 Pharmaceutical company, budgeting, ethics. Eric Johnson was recently promoted to Controller of Research and Development (R&D) for PharmaCor, a *Fortune* 500 pharmaceutical company, which manufactures prescription drugs and nutritional supplements. The company's total R&D cost for 2012 was expected (budgeted) to be \$5 billion. During the company's mid-year budget review, Eric realized that current R&D expenditures were already at \$3.5 billion, nearly 40% above the mid-year target. At this current rate of expenditure, the R&D division was on track to exceed its total year-end budget by \$2 billion!

In a meeting with CFO, James Clark, later that day, Johnson delivered the bad news. Clark was both shocked and outraged that the R&D spending had gotten out of control. Clark wasn't any more understanding when Johnson revealed that the excess cost was entirely related to research and development of a new drug, Lyricon, which was expected to go to market next year. The new drug would result in large profits for PharmaCor, if the product could be approved by year-end.

Clark had already announced his expectations of third quarter earnings to Wall Street analysts. If the R&D expenditures weren't reduced by the end of the third quarter, Clark was certain that the targets he had announced publicly would be missed and the company's stock price would tumble. Clark instructed Johnson to make up the budget short-fall by the end of the third quarter using "whatever means necessary."

Johnson was new to the Controller's position and wanted to make sure that Clark's orders were followed. Johnson came up with the following ideas for making the third quarter budgeted targets:

- Stop all research and development efforts on the drug Lyricon until after year-end. This change would delay the drug going to market by at least six months. It is also possible that in the meantime a PharmaCor competitor could make it to market with a similar drug.
- Sell off rights to the drug, Markapro. The company had not planned on doing this because, under current market conditions, it would get less than fair value. It would, however, result in a onetime gain that could offset the budget short-fall. Of course, all future profits from Markapro would be lost.
- Capitalize some of the company's R&D expenditures reducing R&D expense on the income statement. This transaction would not be in accordance with GAAP, but Johnson thought it was justifiable, since the Lyricon drug was going to market early next year. Johnson would argue that capitalizing R & D costs this year and expensing them next year would better match revenues and expenses.

Required

- Referring to the "Standards of Ethical Behavior for Practitioners of Management Accounting and Financial Management," Exhibit 1-7 on page 16, which of the preceding items (a–c) are acceptable to use? Which are unacceptable?
- What would you recommend Johnson do?

1-29 Professional ethics and end-of-year actions. Janet Taylor is the new division controller of the snack-foods division of Gourmet Foods. Gourmet Foods has reported a minimum 15% growth in annual earnings for each of the past five years. The snack-foods division has reported annual earnings growth of more than 20% each year in this same period. During the current year, the economy went into a recession. The corporate controller estimates a 10% annual earnings growth rate for Gourmet Foods this year. One month before the December 31 fiscal year-end of the current year, Taylor estimates the snack-foods division will report an annual earnings growth of only 8%. Warren Ryan, the snack-foods division president, is not happy, but he notes that "the end-of-year actions" still need to be taken.

Taylor makes some inquiries and is able to compile the following list of end-of-year actions that were more or less accepted by the previous division controller:

- Deferring December's routine monthly maintenance on packaging equipment by an independent contractor until January of next year
- Extending the close of the current fiscal year beyond December 31 so that some sales of next year are included in the current year
- Altering dates of shipping documents of next January's sales to record them as sales in December of the current year
- Giving salespeople a double bonus to exceed December sales targets
- Deferring the current period's advertising by reducing the number of television spots run in December and running more than planned in January of next year
- Deferring the current period's reported advertising costs by having Gourmet Foods' outside advertising agency delay billing December advertisements until January of next year or by having the agency alter invoices to conceal the December date
- Persuading carriers to accept merchandise for shipment in December of the current year although they normally would not have done so

Required

- Why might the snack-foods division president want to take these end-of-year actions?
- Taylor is deeply troubled and reads the "Standards of Ethical Behavior for Practitioners of Management Accounting and Financial Management" in Exhibit 1-7 (p. 16). Classify each of the end-of-year actions (a–g) as acceptable or unacceptable according to that document.
- What should Taylor do if Ryan suggests that these end-of-year actions are taken in every division of Gourmet Foods and that she will greatly harm the snack-foods division if she does not cooperate and paint the rosiest picture possible of the division's results?

1-30 Professional ethics and end-of-year actions. Deacon Publishing House is a publishing company that produces consumer magazines. The house and home division, which sells home-improvement and home-decorating magazines, has seen a 20% reduction in operating income over the past nine months, primarily due to the recent economic recession and the depressed consumer housing market. The division's Controller, Todd Allen, has felt pressure from the CFO to improve his division's operating results by the end of the year. Allen is considering the following options for improving the division's performance by year-end:

- Cancelling two of the division's least profitable magazines, resulting in the layoff of twenty-five employees.
- Selling the new printing equipment that was purchased in January and replacing it with discarded equipment from one of the company's other divisions. The previously discarded equipment no longer meets current safety standards.

- c. Recognizing unearned subscription revenue (cash received in advance for magazines that will be delivered in the future) as revenue when cash is received in the current month (just before fiscal year end) instead of showing it as a liability.
 - d. Reducing the division's Allowance for Bad Debt Expense. This transaction alone would increase operating income by 5%.
 - e. Recognizing advertising revenues that relate to January in December.
 - f. Switching from declining balance to straight line depreciation to reduce depreciation expense in the current year.
1. What are the motivations for Allen to improve the division's year-end operating earnings?
 2. From the point of view of the "Standards of Ethical Behavior for Practitioners of Management Accounting and Financial Management," Exhibit 1-7 on page 16, which of the preceding items (a–f) are acceptable? Which are unacceptable?
 3. What should Allen do about the pressure to improve performance?

Required

Collaborative Learning Problem

1-31 Global company, ethical challenges. Bredahl Logistics, a U.S. shipping company, has just begun distributing goods across the Atlantic to Norway. The company began operations in 2010, transporting goods to South America. The company's earnings are currently trailing behind its competitors and Bredahl's investors are becoming anxious. Some of the company's largest investors are even talking of selling their interest in the shipping newcomer. Bredahl's CEO, Marcus Hamsen, calls an emergency meeting with his executive team. Hamsen needs a plan before his upcoming conference call with uneasy investors. Bredahl's executive staff make the following suggestions for salvaging the company's short-term operating results:

- a. Stop all transatlantic shipping efforts. The start-up costs for the new operations are hurting current profit margins.
 - b. Make deep cuts in pricing through the end of the year to generate additional revenue.
 - c. Pressure current customers to take early delivery of goods before the end of the year so that more revenue can be reported in this year's financial statements.
 - d. Sell-off distribution equipment prior to year-end. The sale would result in one-time gains that could offset the company's lagging profits. The owned equipment could be replaced with leased equipment at a lower cost in the current year.
 - e. Record executive year-end bonus compensation for the current year in the next year when it is paid after the December fiscal year-end.
 - f. Recognize sales revenues on orders received, but not shipped as of the end of the year.
 - g. Establish corporate headquarters in Ireland before the end of the year, lowering the company's corporate tax rate from 28% to 12.5%.
1. As the management accountant for Bredahl, evaluate each of the preceding items (a–g) in the context of the "Standards of Ethical Behavior for Practitioners of Management Accounting and Financial Management," Exhibit 1-7 on page 16. Which of the items are in violation of these ethics standards and which are acceptable?
 2. What should the management accountant do with respect to those items that are in violation of the ethical standards for management accountants?

Required