

# **Managerial Accounting**

Creating Value in a Dynamic Business Environment

**ELEVENTH EDITION** 



# Managerial Accounting

# Creating Value in a Dynamic Business Environment

**Eleventh Edition** 

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Cornell University

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University of Texas at Austin





#### MANAGERIAL ACCOUNTING: CREATING VALUE IN A DYNAMIC BUSINESS ENVIRONMENT, 11TH EDITION

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Ronald W. Hilton: To Meg, Brad, Molly, Tim, Kerry, and Liliana.

David E. Platt: To Nancy, Evan, and Hannah.

#### Praise for MANAGERIAL ACCOUNTING

"Extremely comprehensive, easy to read managerial accounting textbook that provides well-designed integrated examples along with coverage of service-based companies."

-Angela Sandberg, Jacksonville State University

"I am loving the book, and I see the students learning the concepts a lot guicker than my previous experience."

-Patti Brown, The University of Texas at Austin

"I would describe it as the Cadillac of core management accounting textbooks."

-Bill Wempe, Texas Christian University

"This is an excellent text—well balanced, well organized, and up to date with current topics, including service industries and state-of-the-art manufacturing environments. I highly recommend it also for the excellent examples and illustrations through focus companies and contrasting companies."

-John C. Anderson, San Diego State University

"I've been using this text since its second edition, and it gets better each year with continuous improvement."

-Steve G. Green, United States Air Force Academy

"Well written with good explanations of the 'why' and 'how'."

-Christa Morgan, Georgia Perimeter College

"Major strength is how it relates managerial accounting to the general management function and reveals the managerial accountant as an important member of the management team."

-Linda C. Bowen, University of North Carolina-Chapel Hill

"The book goes beyond covering the basics and organizes and integrates contemporary topics nicely."

-Harrison McCraw, State University of West Georgia

"Well written, well organized and excellent end of chapter problems."

-Kathleen Sevigny, Boston College

"The technology supplements and instructor resources are top-notch and very appropriate for our students."

-Marilyn Okleshen, Minnesota State University-Mankato

"The book is very thorough, well written, and still remains student-friendly. The supplements are outstanding."

-Ben Baker, Davidson College

"A solid, well-written, user-friendly book; can't go wrong with it!"

-Rochelle Greenberg, Florida State University

Hilton & Platt *Managerial Accounting*: After 11 editions, one of the most enduring and respected managerial accounting books on the market.



Keeping pace with the speed of modern business, the authors combine their experience and expertise to make sure *Managerial Accounting* is the most relevant, accurate, and up-to-date textbook in the field. *Managerial Accounting* continues to focus and update content to bridge accounting and management practices.

#### About the Authors



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**Ronald W. Hilton** is a Professor Emeritus of Accounting at Cornell University. With bachelor's and master's degrees in accounting from The Pennsylvania State University, he received his PhD from The Ohio State University. A Cornell faculty member since 1977, Professor Hilton also has taught accounting at Ohio State and the University of Florida, where he held the position of Walter J. Matherly Professor of Accounting. Prior to pursuing his doctoral studies, Hilton worked for Peat, Marwick, Mitchell and Company and served as an officer in the United States Air Force.

Professor Hilton is a member of the Institute of Management Accountants and has been active in the American Accounting Association. He has served as associate editor of *The Accounting Review* and as a member of its editorial board. Hilton also has served on the editorial board of the *Journal of Management Accounting Research*. He has been a member of the resident faculties of both the Doctoral Consortium and the New Faculty Consortium sponsored by

the American Accounting Association. With wide-ranging research interests, Hilton has published articles in many journals, including the *Journal of Accounting Research, The Accounting Review, Management Science, Decision Sciences*, the *Journal of Economic Behavior and Organization, Contemporary Accounting Research*, and the *Journal of Mathematical Psychology*. He also has published a monograph in the *AAA Studies in Accounting Research* series, and he is a co-author of *Cost Management: Strategies for Business Decisions, Budgeting: Profit Planning and Control*, and *Cost Accounting: Concepts and Managerial Applications*. Professor Hilton's current research interests focus on contemporary cost management systems and international issues in managerial accounting. In recent years, he has toured manufacturing facilities and consulted with practicing managerial accountants in North America, Europe, Asia, and Australia.



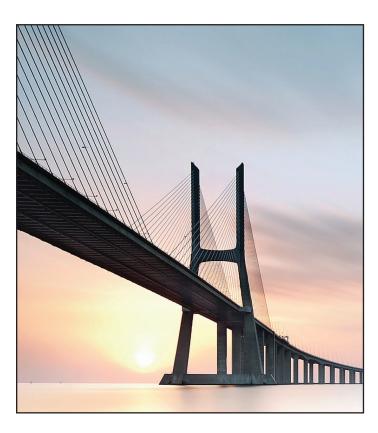
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**David E. Platt** is the Associate Dean for Undergraduate Programs at the McCombs School of Business, University of Texas at Austin. He earned his BS in Economics from the Wharton School at the University of Pennsylvania, his MBA in Marketing from Syracuse University, and his PhD in Accounting from Cornell University. After earning his CPA while working for Pricewaterhouse Coopers, he spent several years doing financial and product management at a supply chain systems integrator. Dr. Platt currently teaches a variety of managerial accounting courses at UT, including the sophomore-level Fundamentals of Managerial Accounting, and has received teaching awards at both the undergraduate and graduate levels. He directed UT—Austin's Center for International Business Education and Research (CIBER) and has served as a chair of the Partnership in International Management, a consortium of leading graduate business schools worldwide. He has been a visiting lecturer at the Sorbonne Graduate Business School, and has delivered training for companies in the U.S., Europe, Latin America, and China.

# How Does Hilton & Platt 11e Prepare Students for the Businesses of Today and Tomorrow?

#### Managerial Accounting.

Business is always changing: new technologies, new models, new global competitors. And students, despite being more technologically adept every year, need a framework for all of that change so that they can hit the ground running in their careers. To keep up, managers must be able to interpret the rapid flow of information and make the right decisions. Assisted by the tools of managerial accounting, and by managerial accounting professionals, managers will work side by side in global cross-functional teams to make the complex decisions that today's dynamic business environment requires of them. The goal of *Managerial Accounting* is to acquaint students of business with the fundamental tools of managerial decision making and to provide a context for understanding and react-



ing to the dramatic ways in which business is changing. The emphasis throughout the text is on using accounting information to help manage an organization, while explaining concepts in a way that students can relate to. They should not only be able to produce accounting information, but also understand how managers are likely to use and react to the information in a range of businesses.

"It is a well-written book with numerous well-selected cases, allowing students to see the contemporary business operations and practices in the real world."

-Dennis Hwang, Bloomsburg University

#### Relevant.

Focus Companies provide a powerful strategy for fostering learning, and the integration of Focus Companies throughout the Hilton & Platt text is unmatched by other managerial accounting books. Each chapter introduces important managerial accounting topics within the context of a realistic company. Students see the immediate impact of managerial accounting decisions on companies and gain exposure to different types of organizations.

#### Balanced.

Hilton & Platt *Managerial Accounting* offers the most balanced coverage of service and manufacturing companies. The authors recognize that students will be working in a great variety of business environments and will benefit from exposure to diverse types of companies. A wide variety of examples from retail, service, manufacturing, and nonprofit organizations are included.

#### Contemporary.

Hilton & Platt continues to be the leader in presenting the most contemporary coverage of managerial accounting topics. The traditional tools of managerial accounting such as budgeting and product costing have been updated with current approaches. Emerging topics such as environmental cost management, monetizing the Internet, and time-driven activity-based costing are also discussed.

- "The company story acts as a hook to get students interested in the chapter material."
- Michele Matherly, University of North Carolina at Charlotte
- "I like the mix of company types."
- —Barbara Durham, University of Central Florida
- "Balanced, time-proven approach to managerial accounting."
- -Michael Flores, Wichita State University

"A nice intro textbook, with multiple perspectives on the behavioral aspects of managerial accounting. Touches many modern issues facing the field."

Theodore Rodgers, Emory University

- "Perhaps what sets Hilton & Platt apart from the competition is its recognition that the world consists of more than manufacturing firms and that managerial accounting plays a significant role in service and not-for-profit organizations."
- —Lanny Solomon, University of Missouri— Kansas City
- "Very current with managerial accounting topics (RFID, . . ., ABC, outsourcing, decision making)."
- -Maggie Houston, Wright State University

#### Flexible.

Managerial Accounting is written in a modular format allowing topics to be covered in the order you want. For example, some instructors prefer to cover contribution-margin approaches to decision making and/or relevant costs early in the course. So Chapter 6 (cost behavior and estimation), Chapter 7 (CVP), and Chapter 14 (relevant costs) are written so they can be covered immediately after Chapter 2, which introduces basic cost concepts. A table showing the text's flexibility is in the Introduction to the Instructor's Manual.

#### How Does Hilton & Platt 11e Help Students Learn Managerial Accounting in the Context of Business?

#### **FOCUS COMPANIES**

Students need to see the relevance of managerial accounting information in order to actively engage in learning the material. Ron Hilton and Dave Platt use their years working as managers and consultants to create Focus Companies that illustrate key concepts, and students immediately see the significance of the material and become excited about the content.

Whenever the Focus Company is presented in the chapter, its logo is shown so the student sees its application to the text topic.

"I like the 'Focus on the Company' at the beginning of each chapter and this type of boxed info throughout each chapter."

-Anna Cianci, Drexel University

#### **CONTRAST COMPANIES**

A Contrast Company is also introduced in each chapter. In most cases these highlight an industry different from that of the Focus Company. This feature allows even greater emphasis on service-industry firms and other nonmanufacturing environments. It also helps demonstrate the wide applicability of the managerial accounting techniques being taught.





#### **Real-World Examples**

The Hilton & Platt text provides a variety of thought-provoking, real-world examples to focus students on managerial accounting tools and professionals as an essential part of the management process. Featured organizations include Amazon, Ford Motor Company, Southwest Airlines, Whole Foods Market, General Electric, FedEx, and many others. These companies are highlighted in blue in the text.

#### In Their Own Words

Quotes from both practicing managers and managerial accountants are included in the margins throughout the text. These actual quotes show how the field of management accounting is changing, emphasize how the concepts are actually used, and demonstrate that management accountants are key players in most companies' management teams. In the e-book, the quotes are hyperlinked to the appropriate point in the References. Many references have, in turn, been hyperlinked to the source material.

#### **Management Accounting Practice**

The managerial accounting practices of wellknown, real-world organizations are highlighted in these boxes. They stimulate student interest and provide a springboard for classroom discussion.

#### **Focus on Ethics**

This feature is included in most chapters. Focus on Ethics poses an ethical dilemma, then asks tough questions that underscore the importance of ethical management. Some of these are based on real-world incidents while others are fictional but based on well-established anecdotal evidence.

supplies, the manufacturers of diagnostic equipment, the private-practice physicians whose patients use the hospital, and the ambulance services that transport patients to the hospital. The value chain for Tile Walt Dunney Studies would include upstraren contributions are supplied to the private products of the hospital. The value chain for Tile Walt Dunney Studies would include upstraren contributions are supplied to the product of the een success and failure for a company, and the decisions for Whole I

"Great graphics, exhibits, and illustrations to keep the computer generation interested."

-Kathy Sevigny, Boston University

are co-located with the people that they support That's our approach and we're moving more and more toward that and les and less toward a centra group that provides infor nation." (1j)

mig deployed unfectional manufacture arms. Managerial account with executives from top management, marketing and sales personnel, design engineers operations managers, legal experts, quality-control personnel, and virtually every other specialized type of employee in an organization. Managerial teams are formed to make specialized type of employee in an organization. Managerial teams are formed to make decisions, engage in planning exercises, or address operational problems from many perspectives. Since financial and other managerial accounting issues often are critically important in addressing business problems, managerial accountants roundinely play a major role in these cross-functional teams. Panel B of Exhibit 1–4 depicts several plausible cross-functional teams formed to address a variety of hypothetical business problems at The Walt Disney Company, Notice that each of these teams pulls together individuals from surieties for equipment. individuals from a variety of specialities, such as marketing, operations, general manage-ment, customer relations, and the general counsel's office (legal issues). Given Disney's overall business strategy, creative talent is almost always present in these cross-functional teams; moreover, managerial accountants play an important role as well.

#### **Physical Location**

Finally, where do managerial accountants actually do their work? The answer is "just about everywhere." As Panel C of Exhibit 1–4 highlights, managerial accountants are not sequestered remote corner business contrary, the cated



MANAGING THE COSTS OF UNUSED CAPACITY IN THE AUTO INDUSTRY: A GLOBAL CHALLENGE

Most companies cannot easily adjust their production capacity to match demand. Once a manufacturer of automobiles has invested in a factory, its options for increasing or decreasing that capacity and related costs are limited. If sales are low, management can reduce the nours of production, but the facility costs remain. Moreover, labor costs often cannot e be adjusted because of national labor laws, union rules, and practical concerns such as training costs and employee loyalty.

So, if the costs of unused capacity cannot be adjusted to match demand, how can a o, in the Costs of unitsed Lapacity Camino the adjusted to ination definition, now cari a company manage capacity to avoid the drain on income that comes with unused capacity? The solution involves isolating the capacity problem: (i) shift production between facilities to maximize utilization of capacity in selected primary facilities while creating additional unused capacity in secondary facilities, and (2) sell or find alternative uses for the now-

vastly-underutilized secondary facilities.

American automaker Ford Motor Co. followed exactly this approach in addressing their profitability problems in the European market. "We know what it takes to be profitable in Europe work to acity with while account aw-produced way-produced by the second second

"Good extras within chapters—ethics at the end of each chapter, MAPs throughout chapter, the Focus vs. In Contrast real world examples.'

-Mike Thomas, Humboldt State University

#### Focus on Ethics

#### DID BOEING EXPLOIT ACCOUNTING RULES TO CONCEAL COST OVERRUNS AND PRODUCTION SNAFUS?

Aircraft manufacturers use job-order costing to determine

Aircraft manufacturers use job-order costing to determine the cost of an airplane. As this chapter discusses, supply chain management and production controls are also important tools used by manufacturers to manage production costs. As BusinestWeek reports, however, things don't always go according to plan.

For three years, Boein'g's top management had been seeking a merger with McDonnell-Douglas Composition, whose board of directors was reluctant to approve the deal. Finally, the deal went through, and the world's largest aerospace company was born—the first manufacture ever with the ability to build everything that files, from helicopters and fighter jets to space stations. \*\*Unfortunately, "a disaster was quietly unfolding inside Boeing's sprawling factories—one that would utilizately wage to provide the proposition of provinces everything to the great provides and provides one that would utilizately wind the provides of provides and provides of provides and provides one that would utilizately wind the provides of provides and provides one that would utilizately wind the provides of the provides of provides and provides one that would utilizately wind the provides of the prov

ng's sprawling factories—one that would ultimately wind ne

In May of 2002. BusinessWe th investigation, which "reconstructed this hidden chapter in the company's history—and analyzed its cur rent implications." The BusinessWeek article alleges that "nev rent implications." The BusinessMeek article alleges that "new details supplied by seeed indice that Boched and supplied by seeed indice that Boched and B tiatives that never panned out. 'Boeing managed its earnit to the point where it got caught,' says Debra A. Smith, a pener at Constraints Management, a Seattle-area manufacturi ultancy, and a form senior auditor

# How Can My Students Use Hilton & Platt 11e to Master the Concepts of Managerial Accounting?

#### **End-of-Chapter Assignment Material**

Each chapter includes an extensive selection of assignment material, including Review Questions, Exercises, Problems, and Cases. Our problem and case material conforms to AECC and AACSB recommendations and facilitates class discussions and projects.

#### **Review Problems on Cost Classifications**

#### Problem '

Several costs incurred by Myrtle Beach Golf Equipment, Inc. are listed below. For each cost, indicate which of the following classifications best describe the cost. More than one classification may apply to the same cost item. For example, a cost may be both a variable cost and a product cost.

Cost Classification

- a. Variable
- b. Fixed
- c. Period
- d. Product
  e. Administrative
- f. Selling
- g. Manufacturing
- h. Research and development
- i. Direct material
- j. Direct labor
- Manufacturing overhead

#### **Key Terms**

For each term's definition refer to the indicated page, or turn to the glossary at the end of the text.

controllable cost, 53 conversion costs, 44 cost, 36 cost driver, 48 cost object, 52 cost of goods manufactured, 45 cost of goods odd, 37 differential cost, 55 direct cost, 52

average cost per unit, 56

expense, 37 finished goods, 41 fixed cost, 49 gross margin, 40 gross profit, 40 idle time, 44 incremental cost, 55 indirect cost, 52 indirect labor, 43

indirect material, 43

direct material 43

manufacturing overhead, 43 marginal cost, 56 operating expenses, 40 operating income, 40 operating profit, 40 opportunity cost, 53 out-of-pocket costs, 54 overtime premium, 43 period costs, 37 prime costs, 44

raw material, 41 schedule of cost of goods manufactured, 45 schedule of cost of goods sold, 45 service departments (or support departments), 43 sunk costs, 54 total manufacturing cost, 44

variable cost, 48

#### **Review Questions**

- 2-1. Distinguish between product costs and period costs.
- $\hbox{\bf 2-2.} \quad \hbox{Why are product costs also called inventoriable costs?}$
- 2–3. What is the most important difference between a manufacturing firm and a service industry firm, with regard to the classification of costs as product costs or period costs?
- **2–4.** List several product costs incurred in the production of a backpack.
- 2–5. List, describe, and give an example of each of the four different types of production processes.
- Why is the cost of idle time treated as manufacturing overhead?
- 2–7. Explain why an overtime premium is included in manufacturing overhead.
- **2–17.** Which of the following costs are likely to be controllable by the chief of nursing in a hospital?
  - a. Cost of medication administered.
  - Cost of overtime paid to nurses due to scheduling errors.
- Cost of depreciation of hospital beds.
- Distinguish between out-of-pocket costs and opportunity costs.
- 2–19. Define the terms sunk cost and differential cost.
- **2–20.** Distinguish between marginal and average costs.
- 2-21. Think about the process of registering for classes at your college or university. What additional information would you like to have before you register? How would thelp you? That sort of internation mixture areate

**Review Problems** present both a problem and a complete solution, allowing students to review the entire problem-solving process.

Key Terms are bolded in the text and linked to their definition in the eBook version. In the print version, they are repeated at the end of the chapter with page references. The book also includes a complete Glossary of Key Terms (fully hyperlinked in the eBook).

#### **Review Questions, Exercises,**

Problems, and Cases are comprehensive in covering the points in the chapter. They exhibit a wide range of difficulty, and the Instructor's Manual provides guidance for the instructor on the difficulty level and time required for each problem.

Numerous adapted CMA and CPA problems are included.

"Best selection of problems of any text: a large number of problems, problems at all levels, including many interesting, different problems that challenge students, and often interesting real world applications."

-Lynda Thoman, Purdue University

**EXCEL®** Spreadsheets Spreadsheet applications are essential to contemporary accounting practice. Students must recognize the power of spreadsheets and know how accounting data are presented in them. Excel applications are discussed where appropriate in the text.

Several exercises and problems in each chapter include an optional requirement for students to **Build a Spreadsheet** to develop the solution.

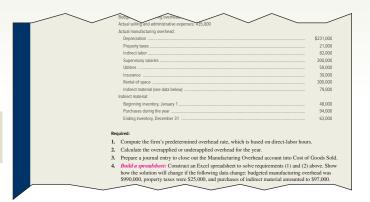
"Use of spreadsheets [is a strength]."

—Ralph Greenberg, Temple University

Many problems can be solved using the Excel spreadsheet templates found in Connect. An Excel logo appears in the margin next to these problems for easy identification.

"Good description of managerial accounting tools. Easy to read and understand. Strength is in the end-of-chapter problems—good variety and lots of them."

—Priscilla Wisner, Thunderbird School of Global Management





**NEW! Excel Simulations** Simulated Excel questions, assignable within Connect, allow students to practice their Excel skills—such as basic formulas and formatting—within the content of managerial accounting. These questions feature animated, narrated Help and Show Me tutorials (when enabled), as well as automatic feedback and grading for both students and professors.

#### Icons identify key business areas in the Problems and Cases in each chapter:



**Ethical Issues** 



**Group Work** 



Internet Research



International Setting



Business Communication



Excel Template

#### What's New in the 11th Edition?

#### **New and Updated Companies and Content**

Chapter 3, which introduces product costing, features a new focus company, Blue River Paddle Boards. This company produces recreational water sports products and continues the authors' commitment to keeping the example companies fresh and relevant for students.

Chapter 5, on activity-based costing (ABC), introduces time-driven activity-based costing via that chapter's contrast company, Immunity Medical Center. The use of a health care organization shows how this important topic extends beyond manufacturing into one of today's most important and high-profile industries. In addition, it continues the text's leadership in providing indepth examples showing the applicability of managerial accounting outside of manufacturing.

We also incorporated the topic of "big data" into the text. The challenges and opportunities of big data, though in large part beyond the scope of this text, are introduced to provide students with greater perspective on the origins and analysis of data for decision making, and hopefully to alert them to the relevance of a topic they will encounter in subsequent courses. The challenges and opportunities of big data are summarized in Chapter 6, and an example of its relevance to activity-based costing is provided in a MAP (Management Accounting Practice) box in Chapter 5.

#### **Updated Pedagogy**

Many chapters include revisions of pedagogy, streamlined and condensed explanations, and the addition of more current examples and references from the popular business press. In the prior edition, we enhanced budgeting pedagogy by placing it first into a nonmanufacturing setting before subsequently addressing the complexities of the manufacturing environment. In an analogous fashion, in Chapter 5 of the 11th edition we begin activitybased costing in the manufacturing setting where it is most easily understood, after which we use the specific version of ABC called time-driven ABC to show how the technique applies in a service environment (health care).

#### **End-of-Chapter Assignment Material**

The end-of-chapter assignment material has been heavily revised. Virtually all of the quantitative exercises,

problems, and cases contain data different from that used in the 10th edition. In addition, the authors updated many of the products and services produced by the companies featured both in the text and in the assignment material. In the e-book, the Key Figures that are provided for most Problems and Cases in the text have been integrated as "poptips," remaining hidden until the student clicks on a small icon to pop up the answer that is selectively provided to help students make sure they are on the right track.

#### **Service Industry Examples**

Despite the recent resurgence in U.S. manufacturing, the service industry continues to play a dominant role in the economy. As noted above regarding Companies and Pedagogy, the authors have continued their track record of finding and integrating examples from service industry organizations. Widely acknowledged as having the most service industry focus of any managerial accounting text, the 11th edition widens the margin even further.

#### In Their Own Words

The authors continually work to update many of the quotations in this popular feature, keeping them fresh and relevant for today's students. Many of the quotations are new in this edition. These quotes from practicing managers and managerial accountants portray the important role managerial accounting plays in today's dynamic business environment.

#### **Management Accounting Practice (MAPs)**

Many of these real-world examples have been revised and updated to make them more current, and several new examples have been added. For example, in Chapter 2 the Affordable Care Act has been included in a MAP to connect this cutting-edge topic to managing health care costs.

Your feedback is crucial in improving each new edition of *Managerial Accounting*. In response to your suggestions, you will find revised coverage of key topical areas, new pedagogy for the most challenging topics, and new assignment material in the 11th edition.

#### **Instructor Supplements**

Assurance of Learning Ready Many educational institutions today are focused on the notion of assurance of learning, an important element of some accreditation standards. Hilton & Platt Managerial Accounting, 11e is designed specifically to support your assurance of learning initiatives with a simple, yet powerful, solution. Each test bank question for Managerial Accounting, 11e maps to a specific chapter learning outcome/objective listed in the text. You can use our test bank software and Connect to easily guery for learning outcomes/objectives that directly relate to the learning objectives for your course. You can then use the reporting features of Connect to aggregate student results in similar fashion, making the collection and presentation of assurance of learning data simple and easy.

**AACSB Statement** McGraw-Hill Education is a proud corporate member of AACSB International. Recognizing the importance and value of AACSB accreditation, we have sought to recognize the curricula guidelines detailed in AACSB standards for business accreditation by connecting selected questions in Hilton & Platt Managerial Accounting 11e with the general knowledge and skill guidelines found in the AACSB standards. The statements contained in Hilton & Platt 11e are provided only as a guide for the users of this text. The AACSB leaves content coverage and assessment clearly within the realm and control of individual schools, the mission of the school. and the faculty. The AACSB charges schools with the obligation of doing assessment against their own content and learning goals. While Hilton & Platt 11e and its teaching package make no claim of any specific AACSB qualification or evaluation, we have labeled selected questions according to the six general knowledge and skills areas. The labels or tags within Hilton & Platt 11e are as indicated. There are, of course, many more within the test bank, the text, and the teaching package which might be used as a "standard" for

your course. However, the labeled questions are suggested for your consideration.

**connect** 

Connect houses all the instructor resources you

need to administer your course, including:

- Solutions Manual
- Test Bank
- Instructor PowerPoint® slides
- Instructor's Manual
- Excel Spreadsheet Solutions
- Supplementary Chapter Solutions

"The available website accompanying the text offers some challenging and helpful aids for students."

-Melvin Houston, Wayne State University

**Instructor's Manual** This comprehensive manual includes step-by-step, explicit instructions on how the text can be used to implement alternative teaching methods. It also provides guidance for instructors who use the traditional lecture method. The guide includes lesson plans and demonstration problems with student work papers, as well as solutions.

**Solutions Manual** Prepared by the authors, the solutions manual contains complete solutions to all the text's end-of-chapter review questions, exercises, problems, and cases. The solutions manual also includes a discussion of the issues in each of the chapter-by-chapter Focus on Ethics pieces.

**Excel Spreadsheet Templates** This resource includes solutions to spreadsheet problems found in the text end-of-chapter material.

**PowerPoint Presentations** A complete set of Instructor PowerPoints follows the chapter-by-chapter content.

**Test Bank** This test bank contains multiple choice questions, essay questions, and short problems. Each test item is coded for level of diffculty, learning objective, AACSB, AICPA, and Bloom's.



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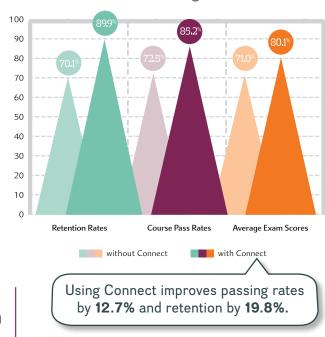
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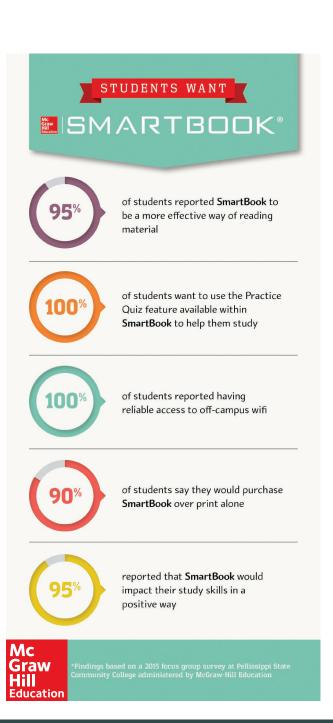
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#### **Focus Company and Contrast Company Used in Each Chapter**

Chapter Title	Focus Company	Focus Company Logo	Focus Company Industry	Contrast Company
The Changing Role of Managerial     Accounting in a Dynamic     Business Environment	The Walt Disney Company	Walt Disney Company	Entertainment company	Whole Foods Market, Inc. (grocery retailer)
2. Basic Cost Management Concepts	Comet Computer; Southwest Airlines, Walmart, and Caterpillar	Cometcomp.com	Computer manufacturer with heavy reliance on Internet sales; airline, retailer, and manufacturer, respectively	Midas, Inc. (automotive service company)
<b>3.</b> Product Costing and Cost Accumulation in a Batch Production Environment	Blue River Paddle Boards	Blue River PADDLE BOARDS	Manufacturer of stand-up paddle boards and related equipment	Small World Advertising (Ad and Public Relations Firm)
<b>4.</b> Process Costing and Hybrid Product-Costing Systems	MVP Sports, Wisconsin Division	Sports Equipment Company	Manufacturer of baseball gloves	MVP Sports, Minnesota Division
<b>5.</b> Activity-Based Costing and Management	Patio Grill Company	Patio Grill company	Manufacturer of gas barbeque grills	Immunity Medical Center (health care services)
<b>6.</b> Activity Analysis, Cost Behavior, and Cost Estimation	Donut Desire	DONUT	Food service; donut shops in Toronto, Ontario, Canada	Constellation Communications Technology (satellite manufacturer)
7. Cost-Volume-Profit Analysis	Seattle Contemporary Theater	SEA TIL	Nonprofit arts organization	Digital: Time (digital clock manufacturer)
8. Variable Costing and the Costs of Quality and Sustainability	FitDat.com	fit dat	Designer and manufacturer of fitness monitors	FitDat.com (manufacturer)
<b>9.</b> Financial Planning and Analysis: The Master Budget	Snowcap Music Festivals	Snoweap Music Festivals	Producer of music festivals	FestiChair.com (manufacturer and Internet retailer)

#### **Focus Company and Contrast Company Used in Each Chapter**

	Chapter Title	Focus Company	Focus Company Logo	Focus Company Industry	Contrast Company
10.	Standard Costing and Analysis of Direct Costs	DCdesserts.com	DC desserts	Producer of fresh fancy desserts, with complete reliance on e-commerce for both sales and purchasing	Forest Home National Bank (financial services company)
11.	Flexible Budgeting and Analysis of Overhead Costs	DCdesserts.com	DCdesserts	Producer of fresh fancy desserts, with complete reliance on e-commerce for both sales and purchasing	Upstate Auto Rentals (vehicle rental services company)
12.	Responsibility Accounting, Operational Performance Measures, and the Balanced Scorecard	Aloha Hotels and Resorts	Alorels & RESORTE	Hotel chain	Forest Home National Bank (financial services company)
13.	Investment Centers and Transfer Pricing	Suncoast Food Centers	Suncoast FOOD CENTERS	Retail grocery chain	Food Processing Division (food processor)
14.	Decision Making: Relevant Costs and Benefits	Worldwide Airways	Worldwide Airways	Airline company	International Chocolate Company (chocolate manufacturer)
15.	Target Costing and Cost Analysis for Pricing Decisions	Sydney Sailing Supplies	SYDNEY SALLING SUPPLIES	Manufacturer of sailboats in Sydney, Australia	Marine Services Division (marina contractor)
16.	Capital Expenditure Decisions	City of Mountainview	MOUNTAINVIEW	City government	High Country Department Stores (retailer)
17.	Allocation of Support Activity Costs and Joint Costs	Riverside Clinic	RIVERSIDE	Health care provider	International Chocolate Company (chocolate manufacturer)

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# Managerial Accounting

Creating Value in a Dynamic Business Environment

# The Changing Role of Managerial Accounting in a Dynamic Business Environment

COMPANY >>>



THIS CHAPTER'S FOCUS
COMPANY is The Walt Disney

Walt Disney
Company

Company. This entertainment services company is a giant in the industry with theme parks, feature film studios, animation studios, television broad-

casting, hotels and resorts, and retail stores. Using The Walt Disney Company as an illustration, we will introduce the field of managerial accounting and its major themes. Some of you are



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excited about studying accounting. But even more of you are asking, "Why do I need to study mana-

gerial accounting? I'm not going to be an accountant!" That is a good question. We will explore how managerial accountants work in partnership with managers to add value to the organization, and how managers also use managerial accounting tools to make their decisions.

Each chapter is built around a focus company in which the chapter's key points are illustrated. This chapter's focus is on The Walt Disney Company. The focus companies in subsequent chapters are not real companies, but they are realistic scenarios built on actual company practices. Whenever the focus company is discussed in the chapter, the company logo appears in the margin.

#### <<< IN CONTRAST



In contrast to the entertainment services setting of The Walt Disney

Company, we will turn our attention to Whole Foods Market,

Inc. This fast-growing food retailer has over 400 stores around North America and Europe. A leader in the area of corporate social responsibility, Whole Foods Market is frequently faced with challenging decisions that require them to balance the need to run a profitable business and satisfy their investors against the cost of their much-publicized commitment to organic foods and sustainable production. We will explore

Each chapter also includes a contrast company. In most cases, the contrast company will present a key chapter topic in an industry that is different from that of the focus company. In this chapter, the focus company (Walt Disney) is an entertainment services company, whereas the contrast company (Whole Foods Market) is a food retailer.

managerial accounting's contribution to Whole Foods Market's efforts to sell products that are more costly to produce in a competitive market while still achieving appropriate returns for investors.



#### After completing this chapter, you should be able to:

Learning Objectives highlight the key topics to be covered in the chapter. They are repeated in the margin of the text where they are discussed. Also, each end-of-chapter assignment lists its learning objectives in the margin.

- **1-1** Define managerial accounting and describe its role in the management process.
- **1-2** Explain four fundamental management processes that help organizations attain their goals.
- **1-3** List and describe five objectives of managerial accounting activity.
- **1-4** Explain the major differences between managerial and financial accounting.
- **1-5** Describe the accounting and finance structure in an organization.
- **1-6** Describe the roles of an organization's chief financial officer (CFO) or controller, treasurer, and internal auditor.
- 1-7 Understand and explain the value chain concept.
- **1-8** Explain how investments in capacity affect managerial decision making.
- **1-9** Discuss the professional organizations and certifications in the field of managerial accounting.
- **1-10** Describe the ethical responsibilities and ethical standards that apply to managerial accounting.

Many different kinds of organizations affect our daily lives. Manufacturers, retailers, service industry firms, agribusiness companies, nonprofit organizations, and government agencies provide us with a vast array of goods and services. All of these organizations have two things in common. First, every organization has a set of *goals* or objectives. An airline, such as Quantas or Southwest Airlines, might specify profitability and customer service as its goals. The New York Police Department's goals would include public safety and security coupled with cost minimization. Second, in pursuing an organization's goals, managers need *information*. The information needs of management range across financial, production, marketing, legal, and environmental issues. Generally, the larger the organization, the greater management's need for information.

In this chapter, we will explore the role of managerial accounting within the overall management process. In the remaining chapters, we will expand our study by exploring the many concepts and tools used in managerial accounting.

#### Managerial Accounting: A Business Partnership with Management

Learning Objective 1-1

Define managerial accounting and describe its role in the management process.

Managerial accounting is the process of identifying, measuring, analyzing, interpreting, and communicating information in pursuit of an organization's goals. Managerial accounting is an integral part of the management process, and managerial accountants are important strategic partners in an organization's management team. But note that the actions listed above are not done just by accountants: all managers use the tools of managerial accounting. That is why you are here—even if you are not planning to be an accountant!

An organization's management team seeks to create value for the organization by managing resources, activities, and people to achieve the organization's goals effectively and efficiently. Managerial accounting provides tools and perspectives that help managers accomplish this, and for that reason it is important that every business student study it.

**Managerial accountants** are specialists in using the tools of managerial accounting to help the organization and its managers run the operation effectively. Their knowledge builds from the material in this textbook to include advanced tools as well as knowledge and techniques specific to a company and its industry.

The role of managerial accounting is very different now than it was years ago. In the past, managerial accountants were organized into support departments, often physically separated from the managers for whom they provided reports and information. Now, rather than isolate managerial accountants in a separate department, companies usually locate them in the operating departments where they are working with other managers to make decisions and resolve operational problems. Managerial accountants, often carrying the job title of "analyst," take on leadership roles on their teams and are sought out for the valuable information they provide. The role of the accountant in leading-edge companies "has been transformed from number cruncher and financial historian to being business partner and trusted advisor." And the tools of managerial accounting are used by all managers.

"We are looked upon as business advisors, more than just accountants, and that has a lot to do with the additional analysis and the forward-looking goals we are setting." (1a)<sup>1</sup>

Caterpillar

#### Managing Resources, Activities, and People

The owners, directors, or trustees of an organization set its goals, generally with the help of management. For example, The Walt Disney Company's goals are set by its board of directors, who are elected by the company's stockholders. The overall goal of The Walt Disney Company, according to a recent annual report, may be expressed as a commitment to creative excellence and corporate citizenship coupled with strict financial discipline in order to maximize value to the company's shareholders.<sup>3</sup>

In pursuing its goals, an organization acquires *resources* (for example, funding, patents, and buildings), hires *people*, and then engages in an organized set of *activities*. It is up to the management team to make the best use of the organization's resources, activities, and people in achieving the organization's goals. In trying to accomplish this, the day-to-day work of the management team comprises four activities:

- 1. Decision making
- **2.** Planning
- **3.** Directing operational activities
- 4. Controlling

Walt Disney
Company

Learning Objective 1-2

Explain four fundamental management processes that help organizations attain their goals.

<sup>&</sup>lt;sup>1</sup>In Their Own Words Throughout the text, you will find these quotes from both practicing managers and managerial accountants. Collectively they portray the important role managerial accounting plays in today's dynamic business environment. The references for these quotes appear at the end of the text. The references are organized by chapter; thus reference (1a) relates to the first quote in Chapter 1, and so forth.

<sup>&</sup>lt;sup>2</sup>Gary Siegel, "The Image of Corporate Accountants," Strategic Finance 82, no. 2 (August 2000), p. 71.

<sup>&</sup>lt;sup>3</sup>The Walt Disney Company, which is discussed in this chapter, is, of course, a real company. However, the subsequent focus organizations around which chapters are built are not real organizations. They are, rather, realistic settings in which to discuss business and managerial accounting issues. In most cases, they are based on real organizations. Similarly, each chapter includes a discussion of a contrast company. Some of these contrast companies, such as food retailer Whole Foods Market, Inc., in this chapter, are real companies. Others, however, are fictitious companies that are based on real organizations. These realistic illustrations and scenarios are intended to help students connect the business and managerial accounting issues discussed in this book to everyday life.

#### **Decision Making**

Several years ago, Disney's board of directors decided that one of the company's growth objectives would be to expand its theme park operations in Florida. It was not immediately clear, however, what would be the best way to accomplish that goal. Would it be best to expand one of the company's three existing theme parks—the Magic Kingdom, Epcot, or Disney's Hollywood Studios? Or should the company branch out in an entirely new direction with a brand new theme park attraction? How would each of these alternative courses of action mesh with the company's other goals of bringing the best in creative entertainment to its customers and maintaining sound financial discipline? Disney's top management team had to make a decision about the best way to expand the company's Florida operations, which entailed choosing among the available alternatives.

#### **Planning**

Disney's top management team decided to expand the company's Florida operations by building an entirely new theme park named Disney's Animal Kingdom. Created and designed by Walt Disney's Imagineering Division, this 500-acre theme park would offer guests wide-ranging adventures and tell the fascinating stories of all animals—ancient and present-day, real and imagined. Now the detailed planning phase began. How would the Animal Kingdom's many attractions designed by the Imagineering Division be laid out and organized? What food and beverage operations would be appropriate? How many employees would be needed on a day-to-day basis? What supplies would be required to run the park? How much would electricity and other utilities cost? How much would running the park during a typical year cost? Finally, how should the park's admission be priced given predicted attendance? Disney's management team had to *plan* for running the Animal Kingdom, which meant *developing a detailed financial and operational description of anticipated operations*.

#### **Directing Operational Activities**

Now the theme park has been built, equipped, and staffed. How many cashiers should be on duty on Saturday morning? How much food should be ordered each day? How much cash will be needed to meet the payroll, pay the utility bills, and buy maintenance supplies next month? All of these questions fall under the general heading of *directing operational activities*, which means *running the organization on a day-to-day basis*.

#### Controlling

The theme park has operated for several years now. Is the company's goal being accomplished? More specifically, have the theme park's operations adhered to the plans developed by management for achieving the goal? In seeking to answer these questions, management is engaged in *control*, which means *ensuring that the organization operates in the intended manner and achieves its goals*.

#### How Managerial Accounting Adds Value to the Organization

Managers need information for all of the managerial activities described in the preceding section. That information comes from a variety of sources, including economists, financial experts, marketing and production personnel, accountants, and the organization's managerial accounting system.

"What I need is someone who can analyze data, see problems and figure out solutions . . . [just doing] debits and credits and financial statements doesn't really help me." (1b)

**Tente Casters Inc** 

In Their Own Words
These quotes are from
practicing managers or
managerial accountants.
The quotes show how
various managerial
accounting concepts are
actually used and that
managerial accountants
are key players in most
companies.

#### **Objectives of Managerial Accounting Activity**

Managerial accounting activity comprises a set of tools, systems and perspectives that add value to an organization by supporting five major objectives:

- 1. Providing information for decision making and planning.
- 2. Assisting managers in directing and controlling operational activities.
- 3. Motivating managers and other employees toward the organization's goals.
- **4.** Measuring the performance of activities, subunits, managers, and other employees within the organization.
- 5. Assessing the organization's competitive position, and working with other managers to ensure the organization's long-run competitiveness in its industry.

Although financial data make up a large part of the inputs and outputs of a managerial accounting system, there is a strong trend toward the presentation of nonfinancial data as well. Managerial accounting systems supply all kinds of information to management in support of management's role in directing the organization's activities. Measuring, managing, and continually improving operational activities are critical to an organization's success. As we will see in subsequent chapters, contemporary managerial accounting systems are focusing more and more on the activities that occur at all levels of the organization.

To illustrate the objectives of managerial accounting activity, let us continue with the example of Disney's Animal Kingdom.

**Providing Information for Decision Making and Planning** For virtually all major decisions, Disney's management team would rely heavily on managerial accounting information. For example, the *decision* to establish the new theme park would be influenced by estimates of the costs of building the Animal Kingdom and maintaining it throughout its life. The theme park's managers also would rely on managerial accounting data in formulating plans for the park's operations. Prominent in those *plans* would be a budget detailing the projected revenues and costs of providing entertainment.

Because of the complexity and importance of this decision, Disney's managerial accountants were key participants in the management team as decisions were made and plans formulated for the theme park's operations.

Assisting Managers in Directing and Controlling Operational Activities Directing and controlling day-to-day operations require a variety of data about the process of providing entertainment services. For example, in *directing* operational activities, the park's management team would need data about customer food-service demand patterns in order to make sure appropriate staffing was provided in the theme park's various food venues. In *controlling* operations, management would compare actual costs incurred with those specified in the budget.

Managerial accounting information often assists management through its **attention-directing function.** Managerial accounting reports rarely solve a decision problem. However, managerial accounting information often directs managers' attention to an issue that requires their skills. To illustrate, suppose Disney's Animal Kingdom incurred electricity costs that significantly exceeded the budget. This fact does not explain why the budget was exceeded, nor does it tell management what action to take, but it does direct management's attention to the situation. Suppose that upon further investigation, the accounting records reveal that Disney's electric rates have increased substantially. This information will help management in framing the decision problem. Should steps be taken to conserve electricity? Should they seek out a different electric power provider? Perhaps management should consider investing in a more sophisticated air conditioning system to manage the Florida heat.

Learning Objective 1-3

List and describe five objectives of managerial accounting activity.

"In five years [we will become] even more strategic. Really understanding the ins and outs of all the organizations, and really trying to be visionary—understanding what is happening to our business." (1c)

Hewlett-Packard

"What we're seeing is less transactional and more decision support type of work.

More analytical, more... option analysis. Looking at the whole spectrum of options in helping management make decisions." (1d)



Facebook, Walmart, Amazon, Coursera, and edX

The managerial accounting practices of well-known, real-world organizations are highlighted in these boxes. You'll see how topics in the chapter are actually used. Actual companies are indicated in blue whenever they are referenced.

#### **USING MANAGERIAL ACCOUNTING TO MONETIZE THE INTERNET**

Monetizing the Internet means finding a way to generate revenues from users in order to make a profit after the costs of providing the Internet service or content. Creating a successful revenue model is one of the biggest challenges faced by Internet companies. Here are some examples of how companies are using managerial accounting as they try to monetize the Internet.

#### Facebook

Four months after Facebook's initial public offering (IPO) of its stock on May 18, 2012, with its shares trading more than 50% below their \$38 per share initial offering price, investors were demanding answers to a question they had begun asking soon after the IPO: "How will [Facebook] continue to monetize its more than 900 million users on a consistent basis?" Many changes in Facebook's site during the following months were intended to do exactly that, with managerial accountants analyzing the costs and benefits of different courses of action. For example, design changes in March 2013 were intended to "help the company increase monetization by improving its ability to target content to users with increased precision based on 'likes.' "5 A few years later, Facebook stock was trading for almost three times the IPO price.

#### Walmart

Walmart was slow to embrace Internet sales because of their investment in bricks-and-mortar stores. But they see an opportunity to use it in conjunction with their stores to provide what competitor Amazon cannot. "Customers who buy some of the more than 1.5 million products on Walmart.com can have them shipped free to a local Walmart, where new service desks at the front of some stores make it easier for customers to retrieve their stuff." A managerial accounting cost analysis showed the initiative to be profitable, so Walmart is now experimenting with other innovations to take advantage of their retail infrastructure. Still, "Walmart has been repeatedly outgunned and outsmarted by Amazon's price-matching, robot-utilizing, competition-crushing machine," and with just a fraction of Amazon's online presence, the managerial accountants there are going to be busy analyzing initiatives for some time to come.

#### Higher Education

Many view the Internet as the solution to the high cost of higher education, and companies like Coursera and edX have sprung up to deliver MOOCs (massive open online courses). While their effectiveness is yet to be proven, their efficiency in bringing content to thousands of users appeals to many. But there is one unsolved problem: even if it proves to be effective, no one has yet figured out how to monetize MOOCs! "All of this could well add up to the future of higher education—if anyone can figure out how to make money."

#### Motivating Managers and Other Employees Toward the Organization's Goals

Organizations have goals. However, organizations also are made up of people who have goals of their own. The goals of individuals are diverse, and they do not always match

January 7, 2013, p. A1.

<sup>&</sup>lt;sup>4</sup>Steven Russolillo and Kaitlyn Kiernan, "MarketBeat: Facebook Shares Fall Below \$30," *Wall Street Journal*, May 29, 2012.

<sup>&</sup>lt;sup>5</sup>Andrew Tonner, "What Does Facebook's Redesign Mean for Investors?" *The Motley Fool*, March 7, 2013, http://www.fool.com/investing/general/2013/03/07/what-does-facebooks-redesign-mean-for-investors.aspx.

<sup>&</sup>lt;sup>6</sup>M. Bustillo and G. A. Fowler, "Wal-Mart Uses Its Stores To Get an Edge Online," *The Wall Street Journal*, December 15, 2009, p. B1.

<sup>&</sup>lt;sup>7</sup>Hiroko Tabuchi, "Wal-Mart, Lagging in Online Sales, is Strengthening E-Commerce," *NYTimes.com*, June 5, 2015. <sup>8</sup>Tamar Lewin, "Students Rush to Web Classes, But Profits May Be Much Later," *New York Times*,

those of the organization. A key purpose of managerial accounting is to motivate managers and other employees to direct their efforts toward achieving the organization's goals. One means of achieving this purpose is through budgeting. In establishing a budget for Disney's Animal Kingdom, top management indicates how resources are to be allocated and what activities are to be emphasized. When actual operations do not conform to the budget, the managerial accounting system will highlight the deviation from plan, and managerial accounting tools will help the theme park's managers to analyze and explain the reasons for the deviation.

Measuring the Performance of Activities, Subunits, Managers, and Other Employees within the Organization One means of motivating people toward the organization's goals is to measure their performance in achieving those goals. Such measurements then can be used as the basis for rewarding performance through positive feedback, promotions, and pay raises. For example, most large corporations compensate their executives, in part, on the basis of the profit achieved by the subunits they manage. In other organizations, managers are rewarded on the basis of operational measures, such as product quality, sales, or on-time delivery. At Disney's Animal Kingdom, for example, management could be rewarded, in part, on the basis of growth in attendance at the theme park.

In addition to measuring the performance of people, the managerial accounting system measures the performance of an organization's subunits, such as divisions, product lines, geographical territories, and departments. These measurements help the subunits' managers obtain the highest possible performance level in their units. Such measurements also help top management decide whether a particular subunit is a viable economic investment. For example, it may turn out that a particular attraction at Disney's Animal Kingdom is too costly an activity to continue, despite the efforts of a skilled management team.

Assessing the Organization's Competitive Position, and Working with Other Managers to Ensure the Organization's Long-Run Competitiveness in Its Industry The business environment often changes very rapidly. These changes result from global competition, rapidly advancing technology, and improved communication systems, such as social media. The activities that make an enterprise successful today may no longer be sufficient next year. A crucial role of managerial accounting is to continually assess how an organization stacks up against the competition, with an eye toward continuously improving. Among the questions asked in assessing an organization's competitive position are the following:

- How well is the organization doing in its internal operations and business processes?
- How well is the organization doing in the eyes of its customers? Are their needs being served as well as possible?
- How well is the organization doing from the standpoint of innovation, learning, and continuously improving operations? Is the organization a trendsetter that embraces new products, new services, and new technology? Or is it falling behind?
- How well is the organization doing financially? Is the enterprise viable as a continuing entity?

#### The Balanced Scorecard

One example of a managerial accounting tool that is used to assess competitive position and ensure long-run competitiveness is a management framework called the *balanced scorecard*.<sup>9</sup>

"You want to be on the team. You want to be the business consultant. You want to be thought of as a value-adding department versus just someone who closes the books." (1e)

Qwest (now part of CenturyLink)

<sup>&</sup>lt;sup>9</sup>The balanced scorecard concept was developed by Robert S. Kaplan and David P. Norton. See Robert S. Kaplan and David P. Norton, *The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment* (Boston: Harvard Business School Press, 2001).