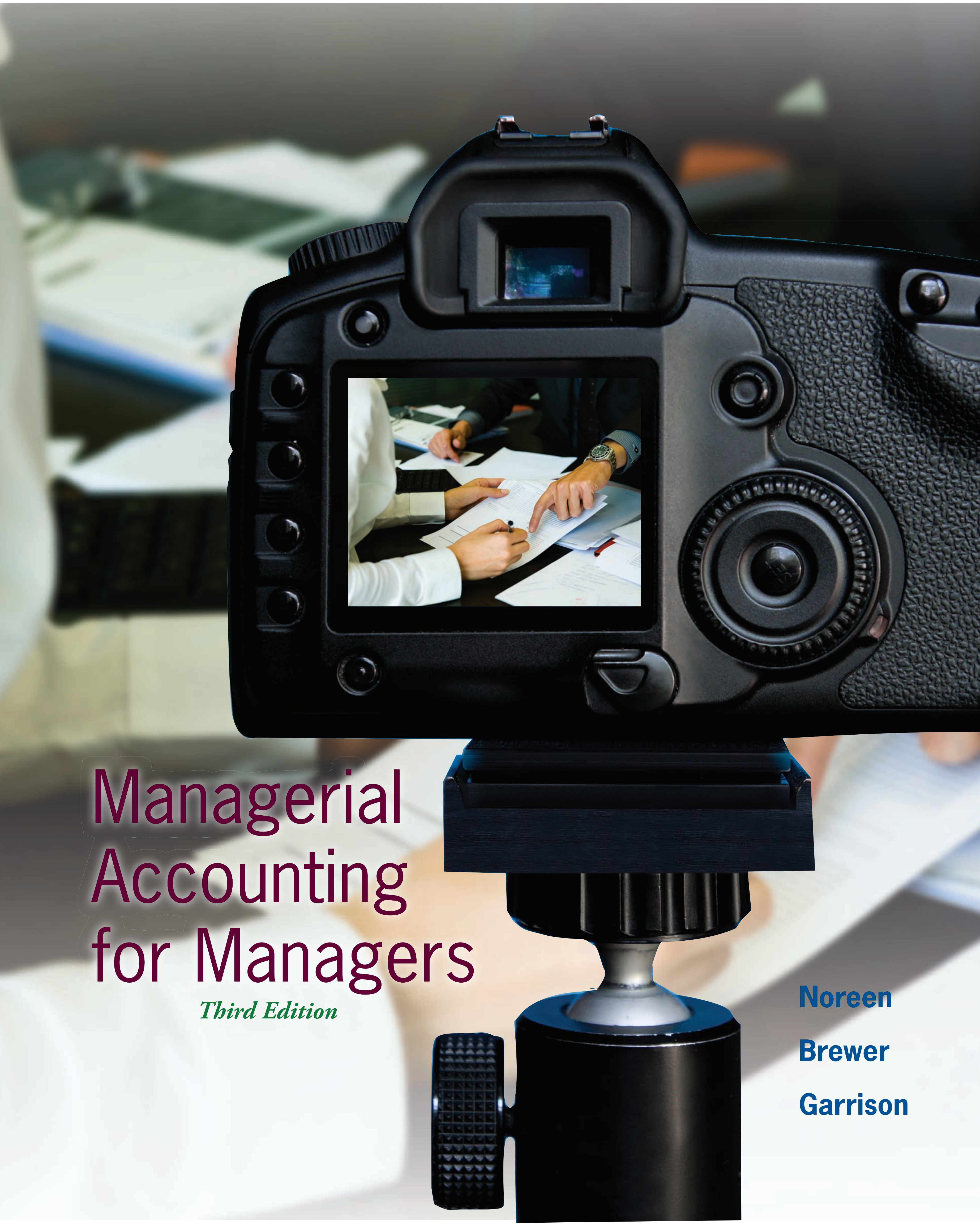


Managerial Accounting for Managers

Third Edition

Noreen

Brewer

Garrison

connect plus+ ACCOUNTING

The integrated solutions for Noreen's Managerial Accounting for Managers 3e have been proven to help you achieve your course goals of improving student readiness, enhancing student engagement, and increasing their comprehension of content. Known for its engaging style, the Noreen solution employs the use of current companies, LearnSmart, and instant feedback on practice problems to help students engage with course materials, comprehend the content, and achieve higher outcomes in the course.

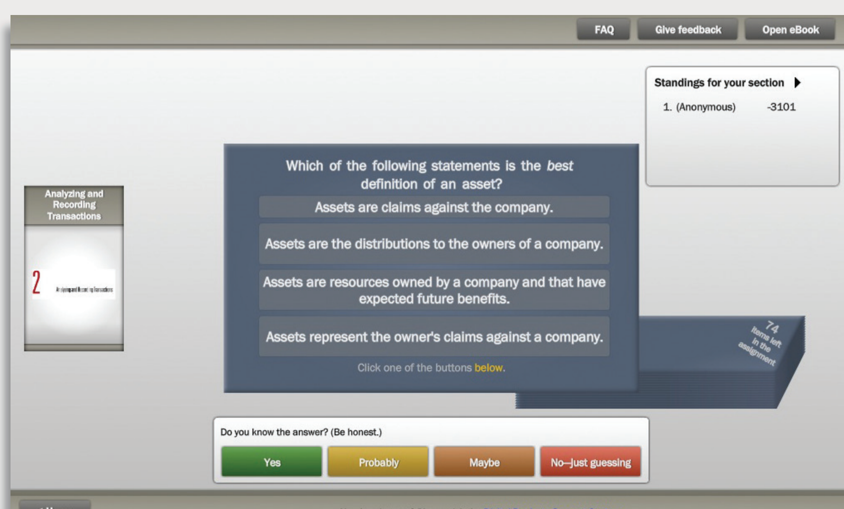
McGraw-Hill's adaptive learning component, **LearnSmart**, provides assignable modules that help students master core concepts and come to class more prepared.

In addition, **Interactive Presentations** deliver learning objectives in an interactive environment, giving students access to course-critical content anytime, anywhere.

Finally, our new **Intelligent Response Technology**-based content offers students an intelligent homework experience that helps them stay focused on learning instead of navigating the technology.

PROVEN EFFECTIVE

FEATURES



McGraw-Hill LearnSmart™ is an adaptive learning program that identifies what an individual student knows and doesn't know. LearnSmart's adaptive learning path helps students learn faster, study more efficiently, and retain more knowledge.

LearnSmart™

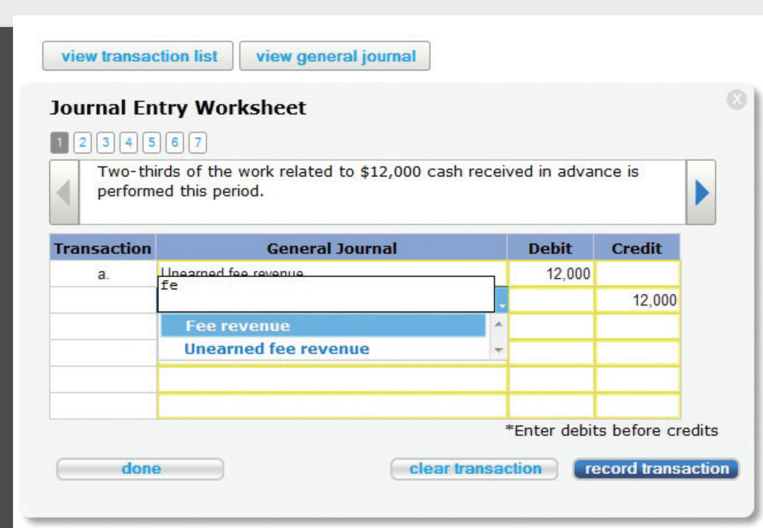
Get Connected.

Interactive Presentations

Connect Accounting's **Interactive Presentations** teach each chapter's core learning objectives and concepts through an engaging, hands-on presentation, bringing the text content to life. Interactive Presentations harness the full power of technology to truly engage and appeal to all learning styles. Interactive Presentations are ideal in all class formats—online, face-to-face, or hybrid.

Intelligent Response Technology

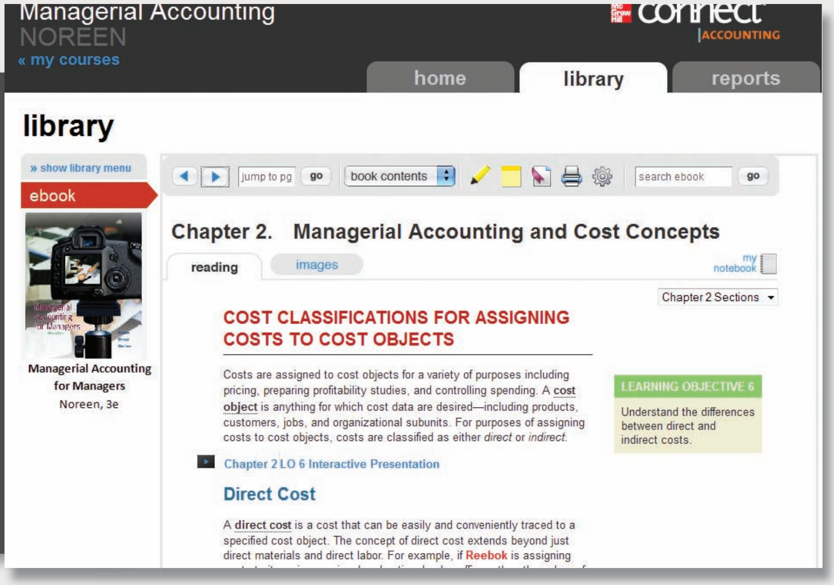
Intelligent Response Technology (IRT) is Connect Accounting's new student interface for end-of-chapter assessment content. Intelligent Response Technology provides a general journal application that looks and feels more like what you would find in a general ledger software package, improves answer acceptance to reduce student frustration with formatting issues (such as rounding), and, for select questions, provides an expanded table that guides students through the process of solving the problem.



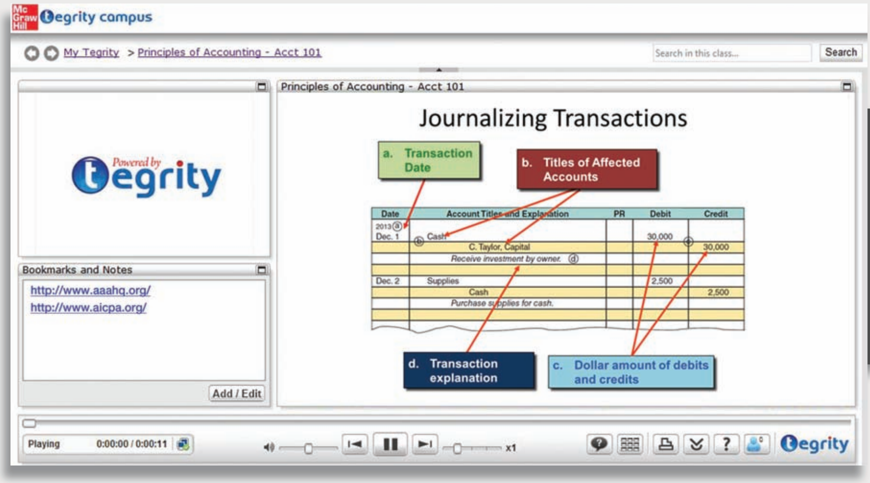
Get Engaged.

eBooks

Connect Plus includes a media-rich eBook that allows you to share your notes with your students. Your students can insert and review their own notes, highlight the text, search for specific information, and interact with media resources. Using an eBook with Connect Plus gives your students a complete digital solution that allows them to access their materials from any computer.



Lecture Capture



Make your classes available anytime, anywhere. With simple, one-click recording, students can search for a word or phrase and be taken to the exact place in your lecture that they need to review.

Managerial Accounting for Managers

Managerial Accounting for Managers

Third Edition

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MANAGERIAL ACCOUNTING FOR MANAGERS

Published by McGraw-Hill/Irwin, a business unit of The McGraw-Hill Companies, Inc., 1221 Avenue of the Americas, New York, NY, 10020.

This book is printed on acid-free paper.

1 2 3 4 5 6 7 8 9 0 DOW/DOW 1 0 9 8 7 6 5 4 3

ISBN 978-0-07-802542-6
MHID 0-07-802542-7

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Media Project Manager: *Ron Nelms*
Typeface: *10.5/12 Times Roman*
Compositor: *Laserwords Private Limited*
Printer: *R. R. Donnelley*

Library of Congress Cataloging-in-Publication Data

Noreen, Eric W.
Managerial accounting for managers / Eric W. Noreen, Peter C. Brewer, Ray H. Garrison. — 3rd ed.
p. cm.
Includes index.
ISBN 978-0-07-802542-6 (alk. paper) — ISBN 0-07-802542-7 (alk. paper)
1. Managerial accounting. I. Brewer, Peter C. II. Garrison, Ray H. III. Title.
HF5657.4.N668 2014
658.15'11 dc23

2012034089

Dedication

To our families and to our many colleagues who use this book.

—Eric W. Noreen, Peter C. Brewer,
and Ray H. Garrison

About the Authors

Eric W. Noreen has held appointments at institutions in the United States, Europe, and Asia. He is emeritus professor of accounting at the University of Washington.

His BA degree is from the University of Washington and his MBA and PhD degrees are from Stanford University. A Certified Management Accountant, he was awarded a Certificate of Distinguished Performance by the Institute of Certified Management Accountants.

Professor Noreen has served as associate editor of *The Accounting Review* and the *Journal of Accounting and Economics.* He has numerous articles in academic journals including: the *Journal of Accounting Research; The Accounting Review;* the *Journal of Accounting and Economics; Accounting Horizons; Accounting, Organizations and Society; Contemporary Accounting Research;* the *Journal of Management Accounting Research;* and the *Review of Accounting Studies.*

Professor Noreen has won a number of awards from students for his teaching. ■

Ray H. Garrison is emeritus professor of accounting at Brigham Young University, Provo, Utah. He received his BS and MS degrees from Brigham Young University and his DBA degree from Indiana University.

As a certified public accountant, Professor Garrison has been involved in management consulting work with both national and regional accounting firms. He has published articles in The *Accounting Review, Management Accounting,* and other professional journals. Innovation in the classroom has earned Professor Garrison the Karl G. Maeser Distinguished Teaching Award from Brigham Young University. ■

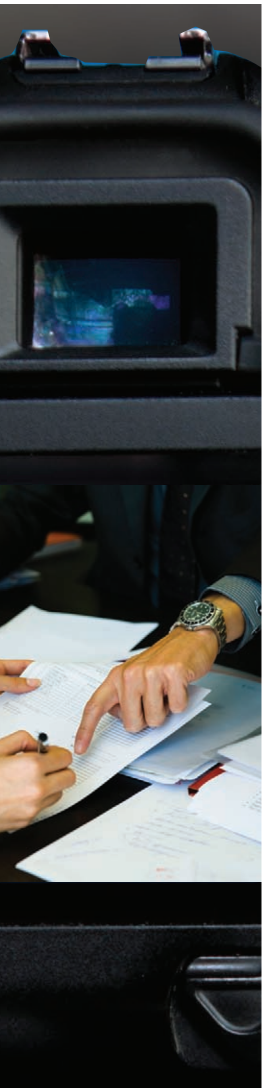
Peter C. Brewer is a professor in the Department of Accountancy at Miami University, Oxford, Ohio. He holds a BS degree in accounting from Penn State University, an MS degree in accounting from the University of Virginia, and a PhD from the University of Tennessee. He has published more than 35 articles in a variety of journals including: *Management Accounting Research;* the *Journal of Information Systems; Cost Management; Strategic Finance;* the *Journal of Accountancy; Issues in Accounting Education;* and the *Journal of Business Logistics.*

Professor Brewer is a member of the editorial board of the *Journal of Accounting Education* and has served on the editorial board of *Issues in Accounting Education.* His article "Putting Strategy into the Balanced Scorecard" won the 2003 International Federation of Accountants' Articles of Merit competition and his articles "Using Six Sigma to Improve the Finance Function" and "Lean Accounting: What's It All About?" were awarded the Institute of Management Accountants' Lybrand Gold and Silver Medals in 2005 and 2006. He has received Miami University's Richard T. Farmer School of Business Teaching Excellence Award and has been recognized on two occasions by the Miami University Associated Student Government for "making a remarkable commitment to students and their educational development." He is a leading thinker in undergraduate management accounting curriculum innovation and is a frequent presenter at various professional and academic conferences.

Prior to joining the faculty at Miami University, Professor Brewer was employed as an auditor for Touche Ross in the firm's Philadelphia office. He also worked as an internal audit manager for the Board of Pensions of the Presbyterian Church (U.S.A.). ■

Focus on the Future Manager

with Noreen/Brewer/Garrison



In **Managerial Accounting for Managers,** the authors have crafted a streamlined managerial accounting book that is perfect for non-accounting majors who intend to move into managerial positions. The traditional Process Costing, Statement of Cash Flows, and Financial Statement Analysis chapters have been dropped to enable instructors to **focus their attention on the bedrocks of managerial accounting**—planning, control, and decision making. Noreen/Brewer/Garrison focuses on the fundamentals, allowing students to develop the conceptual framework managers need to succeed.

In its third edition, *Managerial Accounting for Managers* continues to adhere to three core standards:

FOCUS. Noreen/Brewer/Garrison pinpoints the key managerial concepts students will need in their future careers. With no journal entries or financial accounting topics to worry about, students can focus on the fundamental principles of managerial accounting.

RELEVANCE. With its insightful Business Focus vignettes that begin each chapter, current In Business examples throughout the text, and tried-and-true end-of-chapter material, students will always see the real-world applicability of Noreen/Brewer/Garrison.

BALANCE. There is more than one type of business, and so Noreen/Brewer/Garrison covers a variety of business models, including nonprofit, retail, service, wholesale, and manufacturing organizations. Service company examples are highlighted with icons in the margins of the text.

"It's a very clear book with a healthy focus on decision making and service businesses. Great for non-majors."

—Mark Holtzman, Seton Hall University

"Very well-written and compatible with a user-based approach."

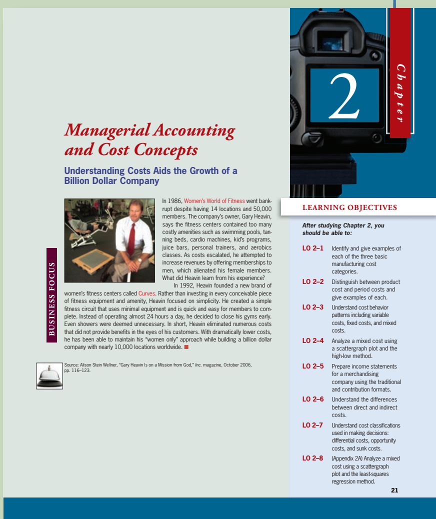
—Kay Poston, University of Indianapolis

"The best introductory management accounting book I have used. It is complete, concise, and written at a level beginning students can understand."

—Christine Haynes, University of West Georgia

Noreen's Powerful Pedagogy

Managerial Accounting for Managers is full of pedagogy designed to make studying productive and hassle-free.



Chapter

2

Managerial Accounting and Cost Concepts

Understanding Costs Aids the Growth of a Billion Dollar Company

BUSINESS FOCUS

In 1986, Women's World of Fitness went bankrupt despite having 14 locations and 50,000 members. The company's owner, Gary Heavin, says the fitness centers contained too many costly amenities such as swimming pools, tanning beds, cardio machines, kid's programs, juice bars, personal trainers, and aerobics classes. As costs escalated, he attempted to increase revenues by offering memberships to men, which alienated his female members. What did Heavin learn from his experience?

In 1992, Heavin founded a new brand of women's fitness centers called Curves. Rather than investing in every conceivable piece of fitness equipment and amenity, Heavin focused on simplicity. He created a simple fitness circuit that uses minimal equipment and is quick and easy for members to complete. Instead of operating almost 24 hours a day, he decided to close his gyms early. Even showers were deemed unnecessary. In short, Heavin eliminated numerous costs that did not provide benefits in the eyes of his customers. With dramatically lower costs, he has been able to maintain his "women only" approach while building a billion dollar company with nearly 10,000 locations worldwide. ■

Source: Alison Stein Wellner, "Gary Heavin Is on a Mission from God," Inc. magazine, October 2006, pp. 116–123.

LEARNING OBJECTIVES

After studying Chapter 2, you should be able to:

- **LO 2–1** Identify and give examples of each of the three basic manufacturing cost categories.
- **LO 2–2** Distinguish between product cost and period costs and give examples of each.
- **LO 2–3** Understand cost behavior patterns including variable costs, fixed costs, and mixed costs.
- **LO 2–4** Analyze a mixed cost using a scattergraph plot and the high-low method.
- **LO 2–5** Prepare income statements for a merchandising company using the traditional and contribution formats.
- **LO 2–6** Understand the differences between direct and indirect costs.
- **LO 2–7** Understand cost classifications used in making decisions: differential costs, opportunity costs, and sunk costs.
- **LO 2–8** (Appendix 2A) Analyze a mixed cost using a scattergraph plot and the least-squares regression method.

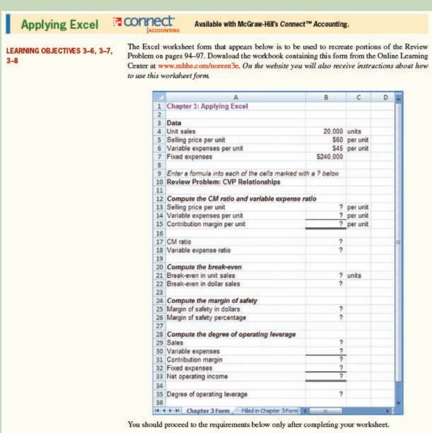
21

Opening Vignette

Each chapter opens with a **Business Focus** feature that provides a real-world example for students, allowing them to see how the chapter's information and insights apply to the world outside the classroom. **Learning Objectives** alert students to what they should expect as they progress through the chapter.

"Many concepts in accounting are rather abstract if not given some type of context to understand them in. The business focus features help to provide this context and can lead to discussions in class if the instructor wishes."

—Jeffrey Wong, University of Nevada, Reno



Applying Excel connect ACCOUNTING **Available with McGraw-Hill's *Connect™ Accounting.***

LEARNING OBJECTIVES 3–6, 3–7, 3–8

The Excel worksheet form that appears below is to be used to recreate portions of the Review Problem on pages 94–97. Download the workbook containing this form from the Online Learning Center at www.mhhe.com/noreen3e. *On the website you will also receive instructions about how to use this worksheet form.*

	A	B	C	D
1	Chapter 3: Applying Excel			
2				
3	**Data**			
4	Unit sales	20,000	units	
5	Selling price per unit	$60	per unit	
6	Variable expenses per unit	$45	per unit	
7	Fixed expenses	$240,000		
8				
9	*Enter a formula into each of the cells marked with a ? below*			
10	**Review Problem: CVP Relationships**			
11				
12	***Compute the CM ratio and variable expense ratio***			
13	Selling price per unit	?	per unit	
14	Variable expenses per unit	?	per unit	
15	Contribution margin per unit	?	per unit	
16				
17	CM ratio	?		
18	Variable expense ratio	?		
19				
20	***Compute the break-even***			
21	Break-even in unit sales	?	units	
22	Break-even in dollar sales	?		
23				
24	***Compute the margin of safety***			
25	Margin of safety in dollars	?		
26	Margin of safety percentage	?		
27				
28	***Compute the degree of operating leverage***			
29	Sales	?		
30	Variable expenses	?		
31	Contribution margin	?		
32	Fixed expenses	?		
33	Net operating income	?		
34				
35	Degree of operating leverage	?		
36				

Chapter 3 Form / Filled in Chapter 3 Form

You should proceed to the requirements below only after completing your worksheet.

"An excellent pedagogical feature that helps further reinforce students' knowledge of key concepts in the text book, while strengthening students' Excel skills that are so important in the work place."

—Marianne L. James, California State University, Los Angeles

Applying Excel

NEW to the third edition of Noreen!

This **NEW** and exciting end-of-chapter feature **links the power of Excel with managerial accounting concepts** by illustrating how Excel functionality can be used to better understand accounting data. Applying Excel goes beyond plugging numbers into a template by providing students with an opportunity to build their own Excel worksheets and formulas. Students are then asked "what if" questions in which they analyze not only **how** related pieces of accounting data affect each other but **why** they do. Applying Excel immediately precedes the Exercises in eleven of the twelve chapters in the book and is also **integrated with McGraw-Hill *Connect*® *Accounting*,** allowing students to practice their skills online with algorithmically generated datasets and to watch animated, narrated tutorials on how to use formulas in Excel.

"[Applying Excel is] an excellent way for students to programmatically develop spreadsheet skills without having to be taught spreadsheet techniques by the instructor. A significant associated benefit is that students gain more exposure to the dynamics of accounting information by working with what-if scenarios."

—Earl Godfrey, Gardner–Webb University

In Business Boxes

These helpful boxed features offer a glimpse into how real companies use the managerial accounting concepts discussed within the chapter. Each chapter contains from three to fourteen of these current examples.

IN BUSINESS

THE CHALLENGES OF MANAGING CHARITABLE ORGANIZATIONS

Charitable organizations, such as Harlem Children's Zone, Sports4Kids, and Citizen Schools, are facing a difficult situation. Many donors—aware of stories involving charities that spent excessively on themselves while losing sight of their mission—have started prohibiting their charity of choice from using donated funds to pay for administrative costs. However, even the most efficient charitable organizations find it difficult to expand without making additions to their infrastructure. For example, Sports4Kids' nationwide expansion of its sports programs drove up administrative costs from 5.6% to 14.7% of its total budget. The organization claims that this cost increase was necessary to build a more experienced management team to oversee the dramatically increased scale of operations.

Many charitable organizations are starting to seek gifts explicitly to fund administrative expenses. Their argument is simple—they cannot do good deeds for other people without incurring such costs.

Source: Rachel Emma Silverman and Sally Beatty, "Save the Children (But Pay the Bills, Too)," *The Wall Street Journal*, December 26, 2006, pp. D1–D2.

"I love these. Again, a connection to the real world that adds credence to the course."

—Larry N. Bitner, Shippensburg University

Managerial Accounting in Action Vignettes

These vignettes depict cross-functional teams working together in real-life settings, working with the products and services that students recognize from their own lives. Students are shown step-by-step how accounting concepts are implemented in organizations and how these concepts are applied to solve everyday business problems. First, "The Issue" is introduced through a dialogue; the student then walks through the implementation process; finally, "The Wrap-up" summarizes the big picture.

Job-Order Costing—An Example

To introduce job-order costing, we will follow a specific job as it progresses through the manufacturing process. This job consists of two experimental couplings that Yost Precision Machining has agreed to produce for Loops Unlimited, a manufacturer of roller coasters. Couplings connect the cars on the roller coaster and are a critical component in the performance and safety of the ride. Before we begin our discussion, recall from a previous chapter that companies generally classify manufacturing costs into three broad categories: (1) direct materials, (2) direct labor, and (3) manufacturing overhead. As we study the operation of a job-order costing system, we will see how each of these three types of costs is recorded and accumulated.

MANAGERIAL ACCOUNTING IN ACTION
The Issue

YOST
Precision Machining

Yost Precision Machining is a small company in Michigan that specializes in fabricating precision metal parts that are used in a variety of applications ranging from deep-sea exploration vehicles to the inertial triggers in automobile air bags. The company's top managers gather every morning at 8:00 A.M. in the company's conference room for the daily planning meeting. Attending the meeting this morning are: Jean Yost, the company's president; David Cheung, the marketing manager; Debbie Turner, the production manager; and Marc White, the company controller. The president opened the meeting:

Jean: The production schedule indicates we'll be starting Job 2B47 today. Isn't that the special order for experimental couplings, David?

David: That's right. That's the order from Loops Unlimited for two couplings for their new roller coaster ride for Magic Mountain.

Debbie: Why only two couplings? Don't they need a coupling for every car?

David: Yes. But this is a completely new roller coaster. The cars will go faster and will be subjected to more twists, turns, drops, and loops than on any other existing roller coaster. To hold up under these stresses, Loops Unlimited's engineers completely redesigned the cars and couplings. They want us to make just two of these new

"This element is exceptional. The situations truly reflect real life issues business people would face—not just "textbook" manufactured examples that always have black-and-white answers."

—Ann E. Selk, University of Wisconsin–Green Bay

Applying Excel connect ACCOUNTING Available with McGraw-Hill's *Connect™ Accounting.*

LEARNING OBJECTIVE 2–5 The Excel worksheet form that appears on the next page is to be used to recreate Exhibit 2–12 on page 39. Download the workbook containing this form from the Online Learning Center at www.mhhe.com/noreen3e. *On the website you will also receive instructions about how to use this worksheet form.*

Exercises connect ACCOUNTING All applicable exercises are available with McGraw-Hill's *Connect™ Accounting.*

EXERCISE 2–1 Classifying Manufacturing Costs [LO 2–1]
Your Boat, Inc., assembles custom sailboats from components supplied by various manufacturers. The company is very small and its assembly shop and retail sales store are housed in a Gig Harbor, Washington, boathouse. Below are listed some of the costs that are incurred at the company.
Required:

All applicable problems are available with McGraw-Hill's *Connect™ Accounting.* connect ACCOUNTING **Problems**

PROBLEM 2–14 Contribution Format versus Traditional Income Statement [LO 2–5]
House of Organs, Inc., purchases organs from a well-known manufacturer and sells them at the retail level. The organs sell, on the average, for $2,500 each. The average cost of an organ from the manufacturer is $1,500. The costs that the company incurs in a typical month are presented below:

Cases connect ACCOUNTING All applicable cases are available with McGraw-Hill's *Connect™ Accounting.*

CASE 2–25 Scattergraph Analysis; Selection of an Activity Base [LO 2–4]
Mapleleaf Sweepers of Toronto manufactures replacement rotary sweeper brooms for the large sweeper trucks that clear leaves and snow from city streets. The business is seasonal, with the largest demand during and just preceding the fall and winter months. Because there are so many different kinds of sweeper brooms used by its customers, Mapleleaf Sweepers makes all of its

"The problem material is still the best I can find."

—Noel McKeon, Florida State College–Jacksonville

"The teaching supplementary materials are excellent for new professors as well as seasoned professors."

—Terence Pitre, University of St. Thomas

End-of-Chapter Material

Building on Garrison/Noreen/Brewer's reputation for having the best end-of-chapter review and discussion material of any text on the market, Noreen's problem and case material continues to conform to AACSB recommendations and makes a great starting point for class discussions and group projects.

In this edition, the authors have added a **NEW** end-of-chapter feature called Applying Excel. Applying Excel integrates key course concepts and Excel—a software students will encounter in the workplace, whether they go into accounting or any other business major. With Applying Excel, students not only gain practice working with Excel software, they also learn how Excel can be used to present accounting data and how that data is interrelated. For more information on this exciting new feature, please see page viii.

Author-Written Supplements

Unlike other managerial accounting texts, the book's authors write all of the major supplements, ensuring a perfect fit between text and supplements. For more information on ***Managerial Accounting for Managers'*** supplements package, see page xviii.

- Instructor's Resource Guide
- Test Bank
- Solutions Manual
- Workbook/Study Guide

Utilizing the Icons

To reflect our service-based economy, the text is replete with examples from service-based businesses. A helpful icon distinguishes service-related examples in the text.

Ethics assignments and examples serve as a reminder that good conduct is vital in business. Icons call out content that relates to ethical behavior for students.

The writing icon denotes problems that require students to use critical thinking as well as writing skills to explain their decisions.

An Excel© icon alerts students that spreadsheet templates are available for use with select problems and cases.

The IFRS icon highlights content that may be affected by the impending change to IFRS and possible convergence between U.S. GAAP and IFRS.

"I strongly recommend this book to colleagues [for the] introductory course in managerial accounting. It fits students without a background in managerial accounting. It is the best textbook in managerial accounting."

—Yousef Jahmani, Savannah State University

"Excellent, comprehensive book. Easy for students to read and understand."

—Sandy Copa, North Hennepin College

"Students can easily understand the book. [Noreen] covers all the pertinent topics needed in Managerial Accounting in a concise, easy to understand format."

—Linda Malgeri, Kennesaw State University

New to the Third Edition

Faculty feedback helps us continue to improve **Managerial Accounting for Managers.** In response to reviewer suggestions the authors have made the following changes:

A **NEW Applying Excel** feature has been added to Chapters 2–12. Applying Excel gives students the opportunity to practice using Excel formulas to build their own worksheets. They are then asked a series of "what if" questions, all of which illustrate the relationship among various pieces of accounting data. The Applying Excel feature links directly to the concepts introduced in the chapter, providing students with an invaluable opportunity to apply what they have learned using a software they will use throughout their careers, whether they become accountants or not, and is integrated into *Connect Accounting*.

The Differential Analysis and Capital Budgeting chapters have been moved up to Chapters 7 and 8, in order to put a stronger emphasis on decision making, a critical skill for managers.

The **In Business boxes** have been updated throughout to provide relevant and updated real-world examples for use in classroom discussion and to support student understanding of key concepts as they read through the chapter.

The **end-of-chapter practice material** has been updated throughout.

Chapter 1

This introductory chapter has been completely overhauled to help all business students better understand why managerial accounting is relevant to their future careers.

Chapter 2

This chapter has been extensively rewritten to include coverage of mixed costs and contribution format income statements. The redundant coverage of the schedule of cost of goods manufactured has been eliminated so that it is now only covered in Chapter 3. The comparison of financial and managerial accounting has been moved to Chapter 1.

Chapter 4

This chapter has added a cost formula approach to computing predetermined overhead rates. A new learning objective related to computing job costs was added. An exhibit that provides a conceptual overview of manufacturing cost flows has been moved to this chapter from Chapter 2.

Chapter 5

The segmented income statements have been moved to this chapter. The coverage of variable and absorption costing has been extensively reorganized to improve the flow of discussion.

Chapter 6

Added three new end-of-chapter exercises/problems.

Chapters 7 and 8

Moved these chapters up to more strongly emphasize decision making for managers. Also in Chapter 7, rewrote the section dealing with elevating the constraint.

Chapter 9

Added 3 new end of chapter exercises and problems.

Chapter 11

This chapter has been extensively reorganized and rewritten to emphasize continuity with the flexible budgeting chapter.

Chapter 12

This chapter has been reorganized, moving the segmented statements to an earlier chapter and adding nonfinancial performance measures to the chapter.

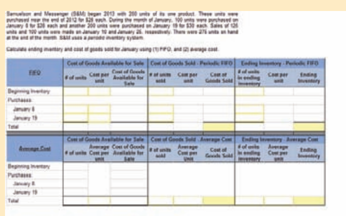
A Market-Leading Book Deserves

McGraw-Hill *Connect®* *Accounting*

McGraw-Hill *Connect Accounting* is an online assignment and assessment solution that connects you with the tools and resources necessary to achieve success through faster learning, more efficient studying, and higher retention of knowledge.

Online Assignments

McGraw-Hill *Connect Accounting* helps students learn more efficiently by providing feedback and practice material when and where they need it. *Connect Accounting* grades homework automatically and students benefit from the immediate feedback that they receive, particularly on any questions they may have missed. Furthermore, algorithmic questions provide students with unlimited opportunities for practice.



Intelligent Response Technology (IRT)

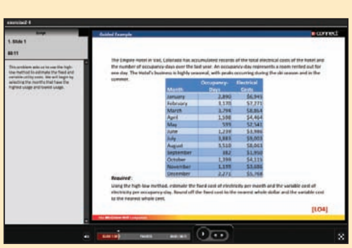
IRT is a redesigned student interface for our end-of-chapter assessment content. The benefits include improved answer acceptance to reduce students' frustration with formatting issues (such as rounding), expanded tables that look and feel more like what you would find in an accounting software package, and select questions redesigned to test students' knowledge more fully.

LearnSmart

LearnSmart, adaptive self-study technology within *Connect Accounting,* ensures your students are learning faster, studying more efficiently, and retaining more knowledge by pinpointing the concepts that each individual student does not understand and mapping out a personalized study plan for his or her success. Based on students' self-diagnoses of their proficiency, LearnSmart intelligently delivers a series of adaptive questions, providing students with a personalized one-on-one tutor experience.

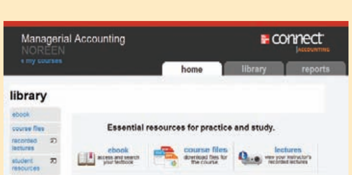
NEW Interactive Presentations

Interactive Presentations, assignable by individual learning objective within *Connect Accounting,* teach the core concepts of the text in an animated, narrated, and interactive multimedia format, bringing the key concepts of the course to life—particularly helpful for online courses and for those audio and visual learners who struggle reading the textbook page by page.



NEW Guided Examples

Guided Examples, available as hints within *Connect Accounting* when enabled by the instructor, provide a narrated, animated, step-by-step walkthrough of select exercises similar to those assigned. These short presentations provide reinforcement when students need it most.



Student Resource Library

The *Connect Accounting* Student Library gives students access to additional resources such as recorded lectures, online practice materials, an eBook, and more.

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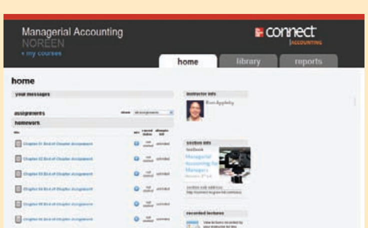

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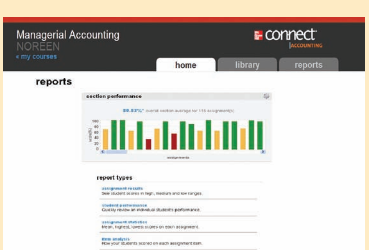

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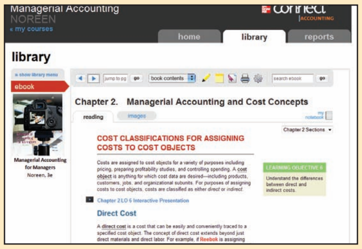

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Instructor Supplements

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Each test bank question for *Managerial Accounting for Managers, 3e* maps to a specific chapter learning outcome/-objective listed in the text. You can use our test bank software, EZ Test, and *Connect* to easily query for learning outcomes/objectives that directly relate to the learning objectives for your course. You can then use the reporting features of EZ Test and *Connect* to aggregate student results in similar fashion, making the collection and presentation of assurance of learning data simple and easy.

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Online Learning Center (www.mhhe.com/noreen3e)

The password-protected instructor side of the book's Online Learning Center (OLC) houses all the instructor resources you need to administer your course, including:

- Suggested Cases
- Solutions Manual with suggested course outlines
- Test Bank
- Instructor's Resource Guide
- Instructor PowerPoint slides
- Excel Template Solutions
- Applying Excel Solutions
- Sample Syllabus

If you choose to use *Connect Accounting* with Noreen 3e, you will have access to these same resources via the Instructor Library.

Instructor CD-ROM

MHID 0077432355
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Instructor's Resource Guide

Available on the password-protected Instructor OLC and Instructor's Resource CD, and within the *Connect* Instructor Library.

This supplement contains the teaching transparency masters, PowerPoint slides, and extensive chapter-by-chapter lecture notes to help with classroom presentation. It contains useful suggestions for presenting key concepts and ideas.

This manual is coordinated with the PowerPoint slides, making lesson planning even easier.

Solutions Manual

Available on the Instructor's CD, Instructor's OLC, and within the *Connect* Instructor Library.

This supplement contains completely worked-out solutions to all assignment material. In addition, the manual contains suggested course outlines and a listing of exercises, problems, and cases scaled according to difficulty and estimated time for completion. Solutions to the NEW Applying Excel feature is housed here and includes the completed Excel forms.

Student **Supplements**

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- NEW Applying Excel Forms
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- Excel Templates
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This NEW and exciting feature has been added to Chapters 2–12 of the text. Applying Excel gives you the opportunity to build your own Excel worksheet using Excel formulas. You are then asked to answer "what if" questions, all of which illustrate the relationship among various pieces of accounting data. The Applying Excel feature links directly to the concepts introduced in the chapter, providing you with an invaluable opportunity to apply what you have learned utilizing an application you will use throughout your career.

Workbook/Study Guide

MHID: 0077432371
ISBN-13: 9780077432379

This printed study aid provides suggestions for studying chapter material, summarizes essential points in each chapter, and tests your knowledge using self-test questions and exercises.

Acknowledgments

Suggestions have been received from many of our colleagues throughout the world. Each of those who have offered comments and suggestions has our thanks.

The efforts of many people are needed to develop and improve a text. Among these people are the reviewers and consultants who point out areas of concern, cite areas of strength, and make recommendations for change. In this regard, the following professors provided feedback that was enormously helpful in preparing the third edition of ***Managerial Accounting for Managers***:

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We are grateful for the outstanding support from McGraw-Hill. In particular, we would like to thank Tim Vertovec, Director; Donna Dillon, Brand Manager; Katie Jones, Development Editor; Pat Frederickson, Content Project Manager; Carol Bielski, Buyer; Matt Baldwin, Designer; and Joanne Mennemeier, Photo Research Coordinator.

Thank you to the following individuals who helped prepare the supplements: Jon A. Booker and Charles W. Caldwell of Tennessee Technological University, Cynthia J. Rooney of the University of New Mexico, and Susan C. Galbreath of Lipscomb University for crafting the Instructor and Student PowerPoint Slides; Ilene Persoff of CW Post Campus/Long Island University for updating the Quizzes and Exams; and Jack Terry of ComSource Associates, Inc., for creating the Excel templates.

Thank you to our Digital Contributor, Margaret Shackell-Dowell (Cornell University), for her many contributions to *Connect Accounting* for Noreen 3e, including Guided Example content, Interactive Presentation review, accuracy checking, and for her efforts as lead subject matter expert on Intelligent Response Technology. Thanks also to Jeannie Folk (College of DuPage) for her reviews of Interactive Presentations and Guided

Examples, and Patti Lopez (Valencia College) for her efforts as lead subject matter expert on LearnSmart, and accuracy checker on *Connect Accounting,* and Donald Campbell (Brigham Young University-Idaho) for *Connect Accounting* accuracy checking. Finally, we would like to thank Ilene Persoff and Helen Roybark for working so hard to ensure an error-free third edition.

We are grateful to the Institute of Certified Management Accountants for permission to use questions and/or unofficial answers from past Certificate in Management Accounting (CMA) examinations. Likewise, we thank the American Institute of Certified Public Accountants, the Society of Management Accountants of Canada, and the Chartered Institute of Management Accountants (United Kingdom) for permission to use (or to adapt) selected problems from their examinations. These problems bear the notations CPA, SMA, and CIMA respectively.

Eric W. Noreen • Peter C. Brewer • Ray H. Garrison

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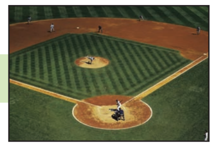

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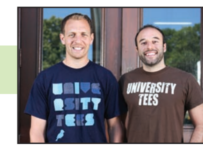

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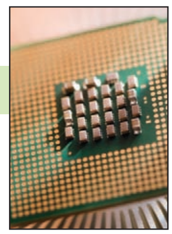

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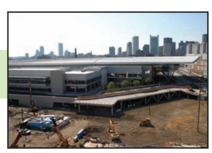

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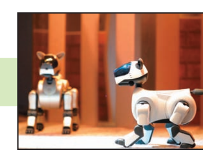

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Chapter 1

Managerial Accounting: An Overview

BUSINESS FOCUS

Managerial Accounting: It's More Than Just Crunching Numbers

"Creating value through values" is the credo of today's management accountant. It means that management accountants should maintain an unwavering commitment to ethical values while using their knowledge and skills to influence decisions that create value for organizational stakeholders. These skills include managing risks and implementing strategy through planning, budgeting and forecasting, and decision support. Management accountants are strategic business partners who understand the financial and operational sides of the business. They not only report and analyze financial measures, but also nonfinancial measures of process performance and corporate social performance. Think of these responsibilities as profits (financial statements), process (customer focus and satisfaction), people (employee learning and satisfaction), and planet (environmental stewardship). ■

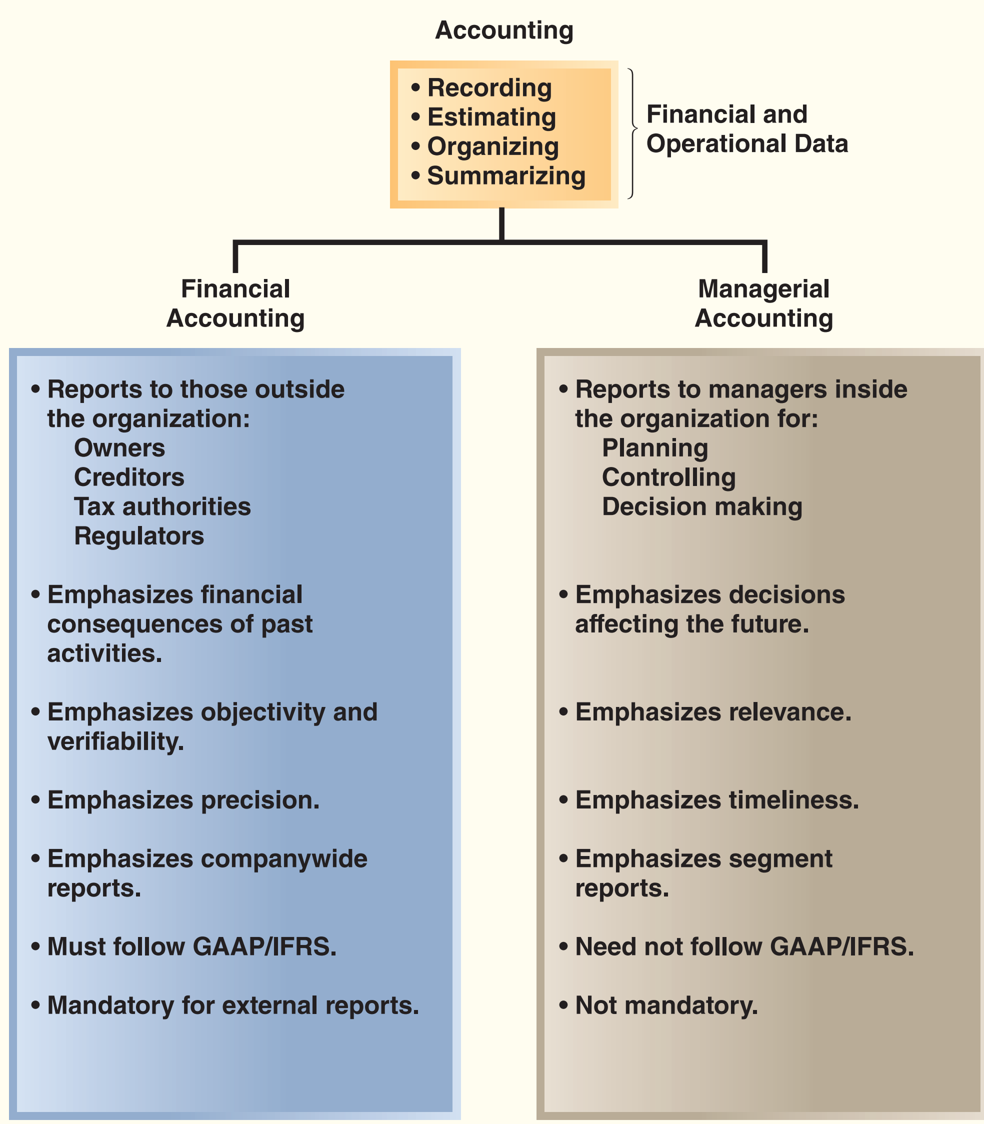
Source: Conversation with Jeff Thomson, president and CEO of the Institute of Management Accountants.

This chapter explains why managerial accounting is important to the future careers of all business students. It begins by answering three questions: (1) What is managerial accounting? (2) Why does managerial accounting matter to your career? and (3) What skills do managers need to succeed? It concludes by discussing two topics important to all managers—the role of ethics in business and corporate social responsibility.

What Is Managerial Accounting?

Many students enrolled in this course will have recently completed an introductory *financial accounting* course. **Financial accounting** is concerned with reporting financial information to external parties, such as stockholders, creditors, and regulators. **Managerial accounting** is concerned with providing information to managers for use within the organization. Exhibit 1–1 summarizes seven key differences between financial and managerial accounting. It recognizes that the fundamental difference between financial and managerial accounting is that financial accounting serves the needs of those

EXHIBIT 1–1
Comparison of Financial and Managerial Accounting



outside the organization, whereas managerial accounting serves the needs of managers employed *inside* the organization. Because of this fundamental difference in users, financial accounting emphasizes the financial consequences of past activities, objectivity and verifiability, precision, and companywide performance, whereas managerial accounting emphasizes decisions affecting the future, relevance, timeliness, and *segment* performance. A **segment** is a part or activity of an organization about which managers would like cost, revenue, or profit data. Examples of business segments include product lines, customer groups (segmented by age, ethnicity, gender, volume of purchases, etc.), geographic territories, divisions, plants, and departments. Finally, financial accounting is mandatory for external reports and it needs to comply with rules, such as generally accepted accounting principles (GAAP) and international financial reporting standards (IFRS), whereas managerial accounting is not mandatory and it does not need to comply with externally imposed rules.

As mentioned in Exhibit 1–1, managerial accounting helps managers perform three vital activities—*planning, controlling,* and *decision making.* **Planning** involves establishing goals and specifying how to achieve them. **Controlling** involves gathering feedback to ensure that the plan is being properly executed or modified as circumstances change. **Decision making** involves selecting a course of action from competing alternatives. Now let's take a closer look at these three pillars of managerial accounting.

Planning

Assume that you work for Procter & Gamble (P&G) and that you are in charge of the company's campus recruiting for all undergraduate business majors. In this example, your planning process would begin by establishing a goal such as: our goal is to recruit the "best and brightest" college graduates. The next stage of the planning process would require specifying how to achieve this goal by answering numerous questions such as:

- How many students do we need to hire in total and from each major?
- What schools do we plan to include in our recruiting efforts?
- Which of our employees will be involved in each school's recruiting activities?
- When will we conduct our interviews?
- How will we compare students to one another to decide who will be extended job offers?
- What salary will we offer our new hires? Will the salaries differ by major?
- How much money can we spend on our recruiting efforts?

As you can see, there are many questions that need to be answered as part of the planning process. Plans are often accompanied by a *budget.* A **budget** is a detailed plan for the future that is usually expressed in formal quantitative terms. As the head of recruiting at P&G, your budget would include two key components. First, you would have to work with other senior managers inside the company to establish a budgeted amount of total salaries that can be offered to all new hires. Second, you would have to create a budget that quantifies how much you intend to spend on your campus recruiting activities.

Controlling

Once you established and started implementing P&G's recruiting plan, you would transition to the control process. This process would involve gathering, evaluating, and responding to feedback to ensure that this year's recruiting process meets expectations. It would also include evaluating the feedback in search of ways to run a more effective recruiting campaign next year. The control process would involve answering questions such as:

- Did we succeed in hiring the planned number of students within each major and at each school?
- Did we lose too many exceptional candidates to competitors?

- Did each of our employees involved in the recruiting process perform satisfactorily?
- Is our method of comparing students to one another working?
- Did the on-campus and office interviews run smoothly?
- Did we stay within our budget in terms of total salary commitments to new hires?
- Did we stay within our budget regarding spending on recruiting activities?

As you can see, there are many questions that need to be answered as part of the control process. When answering these questions your goal would be to go beyond simple yes or no answers in search of the underlying reasons why performance exceeded or failed to meet expectations. Part of the control process includes preparing *performance reports*. A **performance report** compares budgeted data to actual data in an effort to identify and learn from excellent performance and to identify and eliminate sources of unsatisfactory performance. Performance reports can also be used as one of many inputs to help evaluate and reward employees.

Although this example focused on P&G's campus recruiting efforts, we could have described how planning enables FedEx to deliver packages across the globe overnight, or how it helped Apple develop and market the iPad. We could have discussed how the control process helps Pfizer, Eli Lilly, and Abbott Laboratories ensure that their pharmaceutical drugs are produced in conformance with rigorous quality standards, or how Kroger relies on the control process to keep its grocery shelves stocked. We also could have looked at planning and control failures such as BP's massive oil spill in the Gulf of Mexico. In short, all managers (and that probably includes you someday) perform planning and controlling activities.

Decision Making

Perhaps the most basic managerial skill is the ability to make intelligent, data-driven decisions. Broadly speaking, many of those decisions revolve around the following three questions. *What* should we be selling? *Who* should we be serving? *How* should we execute? Exhibit 1–2 provides examples of decisions pertaining to each of these three categories.

The left-hand column of Exhibit 1–2 suggests that every company must make decisions related to the products and services that it sells. For example, each year Procter & Gamble must decide how to allocate its marketing budget across 23 brands that each generates over $1 billion in sales as well as other brands that have promising growth potential. Mattel must decide what new toys to introduce to the market. Southwest Airlines must decide what ticket prices to establish for each of its thousands of flights per day. General Motors must decide whether to discontinue certain models of automobiles.

EXHIBIT 1–2
Examples of Decisions

What should we be selling?	Who should we be serving?	How should we execute?
What products and services should be the focus of our marketing efforts?	Who should be the focus of our marketing efforts?	How should we supply our parts and services?
What new products and services should we offer?	Who should we start serving?	How should we expand our capacity?
What prices should we charge for our products and services?	Who should pay price premiums or receive price discounts?	How should we reduce our capacity?
What products and services should we discontinue?	Who should we stop serving?	How should we improve our efficiency and effectiveness?

The middle column of Exhibit 1–2 indicates that all companies must make decisions related to the customers that they serve. For example, Sears must decide how to allocate its marketing budget between products that tend to appeal to male versus female customers. FedEx must decide whether to expand its services into new markets across the globe. Hewlett-Packard must decide what price discounts to offer corporate clients that purchase large volumes of its products. A bank must decide whether to discontinue customers that may be unprofitable.

The right-hand column of Exhibit 1–2 shows that companies also make decisions related to how they execute. For example, Boeing must decide whether to rely on outside vendors such as Goodrich, Saab, and Rolls-Royce to manufacture many of the parts used to make its airplanes. Cintas must decide whether to expand its laundering and cleaning capacity in a given geographic region by adding square footage to an existing facility or by constructing an entirely new facility. In an economic downturn, a manufacturer might have to decide whether to eliminate one 8-hour shift at three plants or to close one plant. Finally, all companies have to decide among competing improvement opportunities. For example, a company may have to decide whether to implement a new software system, to upgrade a piece of equipment, or to provide extra training to its employees.

This portion of the chapter has explained that the three pillars of managerial accounting are planning, controlling, and decision making. This book helps prepare you to become an effective manager by explaining how to make intelligent data-driven decisions, how to create financial plans for the future, and how to continually make progress toward achieving goals by obtaining, evaluating, and responding to feedback.

Why Does Managerial Accounting Matter to Your Career?

Many students feel anxious about choosing a major because they are unsure if it will provide a fulfilling career. To reduce these anxieties, we recommend deemphasizing what you cannot control about the future; instead focusing on what you can control right now. More specifically, concentrate on answering the following question: What can you do now to prepare for success in an unknown future career? The best answer is to learn skills that will make it easier for you to adapt to an uncertain future. You need to become adaptable!

Whether you end up working in the United States or abroad, for a large corporation, a small entrepreneurial company, a nonprofit organization, or a governmental entity, you'll need to know how to plan for the future, how to make progress toward achieving goals, and how to make intelligent decisions. In other words, managerial accounting skills are useful in just about any career, organization, and industry. If you commit energy to this course, you'll be making a smart investment in your future—even though you cannot clearly envision it. Next, we will elaborate on this point by explaining how managerial accounting relates to the future careers of business majors and accounting majors.

Business Majors

Exhibit 1–3 on the next page provides examples of how planning, controlling, and decision making affect three majors other than accounting—marketing, operations management, and human resource management.

The left-hand column of Exhibit 1–3 describes some planning, controlling, and decision-making applications in the marketing profession. For example, marketing managers make planning decisions related to allocating advertising dollars across various communication mediums and to staffing new sales territories. From a control standpoint, they may closely track sales data to see if a budgeted price cut is generating an anticipated increase in unit sales, or they may study inventory levels during the holiday shopping season so that they can adjust prices as needed to optimize sales.

EXHIBIT 1–3
Relating Managerial Accounting to Three Business Majors

	Marketing	Operations Management	Human Resource Management
Planning	How much should we budget for TV, print, and Internet advertising?	How many units should we plan to produce next period?	How much should we plan to spend for occupational safety training?
	How many salespeople should we plan to hire to serve a new territory?	How much should we budget for next period's utility expense?	How much should we plan to spend on employee recruitment advertising?
Controlling	Is the budgeted price cut increasing unit sales as expected?	Did we spend more or less than expected for the units we actually produced?	Is our employee retention rate exceeding our goals?
	Are we accumulating too much inventory during the holiday shopping season?	Are we achieving our goal of reducing the number of defective units produced?	Are we meeting our goal of completing timely performance appraisals?
Decision Making	Should we sell our services as one bundle or sell them separately?	Should we buy a new piece of equipment or upgrade our existing machine?	Should we hire an on-site medical staff to lower our health care costs?
	Should we sell directly to customers or use a distributor?	Should we redesign our manufacturing process to lower inventory levels?	Should we hire temporary workers or full-time employees?

Marketing managers also make many important decisions such as whether to bundle services together and sell them for one price or to sell each service separately. They may also decide whether to sell products directly to the customer or to sell to a distributor, who then sells to the end consumer.

The middle column of Exhibit 1–3 states that operations managers have to plan how many units to produce to satisfy anticipated customer demand. They also need to budget for operating expenses such as utilities, supplies, and labor costs. In terms of control, they monitor actual spending relative to the budget, and closely watch operational measures such as the number of defects produced relative to the plan. Operations managers make numerous decisions, such as deciding whether to buy a new piece of equipment or upgrade an existing piece of equipment. They also decide whether to invest in redesigning a manufacturing process to reduce inventory levels.

The right-hand column of Exhibit 1–3 explains how human resource managers make a variety of planning decisions, such as budgeting how much to spend on occupational safety training and employee recruitment advertising. They monitor feedback related to numerous management concerns, such as employee retention rates and the timely completion of employee performance appraisals. They also help make many important decisions such as whether to hire on-site medical staff in an effort to lower health care costs, and whether to hire temporary workers or full-time employees in an uncertain economy.

For brevity, Exhibit 1–3 does not include all business majors, such as finance, supply chain management, management information systems, and economics. Can you explain how planning, controlling, and decision-making activities would relate to these majors?

Accounting Majors

Many accounting graduates begin their careers working for public accounting firms that provide a variety of valuable services for their clients. Some of these graduates will build successful and fulfilling careers in the public accounting industry; however, most will leave public accounting at some point to work in other organizations. In fact, the Institute of Management Accountants (IMA) estimates that more than 80% of professional accountants in the United States work in nonpublic accounting environments (www.imanet.org/about_ima/our_mission.aspx).

The public accounting profession has a strong financial accounting orientation. Its most important function is to protect investors and other external parties by assuring them that companies are reporting historical financial results that comply with applicable accounting rules. Managerial accountants also have strong financial accounting skills. For example, they play an important role in helping their organizations design and maintain financial reporting systems that generate reliable financial disclosures. However, the primary role of managerial accountants is to partner with their coworkers within the organization to improve performance.

Given the 80% figure mentioned above, if you are an accounting major there is a very high likelihood that your future will involve working for a nonpublic accounting employer. Your employer will expect you to have strong financial accounting skills, but more importantly, it will expect you to help improve organizational performance by applying the planning, controlling, and decision-making skills that are the foundation of managerial accounting.

IN BUSINESS

A NETWORKING OPPORTUNITY

The Institute of Management Accountants (IMA) is a network of more than 60,000 accounting and finance professionals from over 120 countries. Every year the IMA hosts a student leadership conference that attracts 300 students from over 50 colleges and universities. Guest speakers at past conferences have discussed topics such as leadership, advice for a successful career, how to market yourself in a difficult economy, and excelling in today's multigenerational workforce. One student who attended the conference said, "I liked that I was able to interact with professionals who are in fields that could be potential career paths for me." For more information on this worthwhile networking opportunity, contact the IMA at the phone number and website shown below.

Source: Conversation with Jodi Ryan, the Institute of Management Accountants' Director of Alliances and Student/Academic Communities. (800) 638-4427 or visit its website at www.imanet.org.

Professional Certification—A Smart Investment If you plan to become an accounting major, the Certified Management Accountant (CMA) designation is a globally respected credential (sponsored by the IMA) that will increase your credibility, upward mobility, and compensation. Exhibit 1–4 on the next page summarizes the topics covered in the two-part CMA exam. For brevity, we are not going to define all the terms included in this exhibit. Its purpose is simply to emphasize that the CMA exam focuses on the planning, controlling, and decision-making skills that are critically important to nonpublic accounting employers. The CMA's internal management orientation is a complement to the highly respected Certified Public Accountant (CPA) exam that focuses on rule-based compliance—assurance standards, financial accounting standards, business law, and the tax code. Information about becoming a CMA is available on the IMA's website (www.imanet.org) or by calling 1-800-638-4427.

EXHIBIT 1–4
CMA Exam Content Specifications

Part 1	*Financial Planning, Performance, and Control*
	Planning, budgeting, and forecasting
	Performance management
	Cost management
	Internal controls
	Professional ethics
Part 2	*Financial Decision Making*
	Financial statement analysis
	Corporate finance
	Decision analysis and risk management
	Investment decisions
	Professional ethics

IN BUSINESS

HOW'S THE PAY?

The Institute of Management Accountants has created the following table that allows individuals to estimate what their salary would be as a management accountant.

			Your Calculation
Start with this base amount		$72,288	$72,288
If you are top-level management	ADD	$36,591	
OR, if you are entry-level management	SUBTRACT	$23,553	
Number of years in the field _____	TIMES	$700	
If you have an advanced degree	ADD	$12,216	
If you hold the CMA	ADD	$8,185	
OR, if you hold the CPA	ADD	$11,872	_____
Your estimated salary level			=====

For example, if you make it to top-level management in 10 years, have an advanced degree and a CMA, your estimated salary would be $136,280 [$72,288 + $36,591 + (10 × 700) + $12,216 + $8,185].

Source: David L. Schroeder, Lee Schiffel, and Kenneth A. Smith, "IMA 2009 Salary Survey," *Strategic Finance*, June 2010, pp. 21–39.

What Skills Do Managers Need to Succeed?

Managers possess a variety of skills that enable them to do their jobs, including strategic management skills, enterprise risk management skills, process management skills, measurement skills, and leadership skills. We will discuss each of these skill sets in turn.

Strategic Management Skills

Successful managers understand that the plans they set forth, the variables they seek to control, and the decisions they make are all influenced by their company's *strategy*. A **strategy** is a "game plan" that enables a company to attract customers by distinguishing itself from competitors. The focal point of a company's strategy should be its target customers. A company can only succeed if it creates a reason for customers to choose it over a competitor. These reasons, or what are more formally called *customer value propositions,* are the essence of strategy.

Customer value propositions tend to fall into three broad categories—*customer intimacy, operational excellence,* and *product leadership.* Companies that adopt a *customer intimacy* strategy are in essence saying to their customers, "You should choose us because we can customize our products and services to meet your individual needs better than our competitors." Ritz-Carlton, Nordstrom, and Virtuoso (a premium service travel agency) rely primarily on a customer intimacy value proposition for their success. Companies that pursue the second customer value proposition, called *operational excellence,* are saying to their target customers, "You should choose us because we deliver products and services faster, more conveniently, and at a lower price than our competitors." Southwest Airlines, Walmart, and Google are examples of companies that succeed first and foremost because of their operational excellence. Companies pursuing the third customer value proposition, called *product leadership,* are saying to their target customers, "You should choose us because we offer higher quality products than our competitors." Apple, BMW, Cisco Systems, and W. L. Gore (the creator of GORE-TEX® fabrics) are examples of companies that succeed because of their product leadership. Although one company may offer its customers a combination of these three customer value propositions, one usually outweighs the other in terms of importance.[1]

IN BUSINESS

A FOUR-YEAR WAITING LIST AT VANILLA BICYCLES

Sacha White started Vanilla Bicycles in Portland, Oregon, in 2001. After eight years in business, he had a four-year backlog of customer orders. He limits his annual production to 40–50 bikes per year that sell for an average of $7,000 each. He uses a silver alloy that costs 20 times as much as brass (which is the industry standard) to join titanium tubes together to form a bike frame. White spends three hours taking a buyer's measurements to determine the exact dimensions of the bike frame. He has resisted expanding production because it would undermine his strategy based on product leadership and customer intimacy. As White said, "If I ended up sacrificing what made Vanilla special just to make more bikes, that wouldn't be worth it to me."

Source: Christopher Steiner, "Heaven on Wheels," *Forbes,* April 13, 2009, p. 75.

Enterprise Risk Management Skills

As a future manager, you need to understand that every business strategy, plan, and decision involves risks. **Enterprise risk management** is a process used by a company to identify those risks and develop responses to them that enable it to be reasonably assured of meeting its goals. The left-hand column of Exhibit 1–5 provides 12 examples of business risks. This list is not exhaustive; rather, its purpose is to illustrate the diverse nature of business risks that companies face. Whether the risks relate to the weather, computer hackers, complying with the law, employee theft, or products harming customers, they all have one thing in common: If the risks are not managed effectively, they can threaten a company's ability to meet its goals.

Once a company identifies its risks, it can respond to them in various ways such as accepting, avoiding, or reducing the risk. Perhaps the most common risk management tactic is to reduce risks by implementing specific controls. The right-hand column of Exhibit 1–5 on the next page provides an example of a control that could be

[1] These three customer value propositions were defined by Michael Treacy and Fred Wiersema in "Customer Intimacy and Other Value Disciplines," *Harvard Business Review,* Volume 71 Issue 1, pp. 84–93.