MANAGERIAL ACCOUNTING

FIFTH EDITION

Pearson

BRAUN • TIETZ

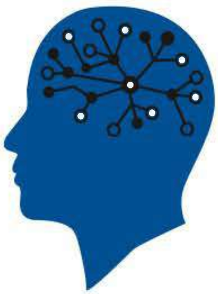
Prepare, Apply, and Confirm

- **Auto-Graded Excel Projects**—Using proven, field-tested technology, MyAccountingLab's new auto-graded Excel Projects allow instructors to seamlessly integrate Excel content into their course without having to manually grade spreadsheets. Students have the opportunity to practice important Accounting skills in Microsoft Excel, helping them to master key concepts and gain proficiency in Excel. Students simply download a spreadsheet, work live on an accounting problem in Excel, and then upload that file back into MyAccountingLab, where they receive reports on their work that provide personalized, detailed feedback to pinpoint where they went wrong on any step of the problem. Available with select titles.

- **Enhanced eText**—The Pearson eText gives students access to their textbook anytime, anywhere. In addition to note-taking, highlighting, and bookmarking, the Pearson eText offers interactive and sharing features. Students actively read and learn through auto-graded practice, author videos, and more. Instructors can share comments or highlights, and students can add their own, for a tight community of learners in any class.

- Keep students engaged in learning on their own time, while helping them achieve greater conceptual understanding of course material through author-created solutions videos, opportunities to Try It!, and live exhibits.

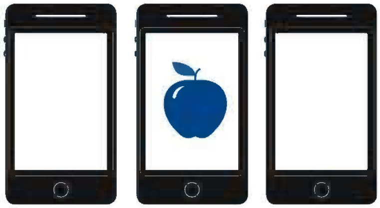
- **Dynamic Study Modules**—With a focus on key topics, these modules work by continuously assessing student performance and activity in real time and, using data and analytics, provide personalized content to reinforce concepts that target each student's particular strengths and weakness.

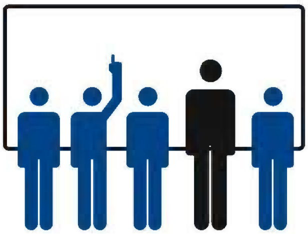


with MyAccountingLab®

- **Hallmark Features**—Personalized Learning Aids, like Help Me Solve This, Demo Docs, and instant feedback are available for further practice and mastery when students need the help most!

- **Learning Catalytics**—Generates classroom discussion, guides lecture, and promotes peer-to-peer learning with real-time analytics. Now, students can use any device to interact in the classroom.



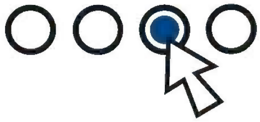


- **Personalized Study Plan**—Assists students in monitoring their own progress by offering them a customized study plan based on Homework, Quiz, and Test results. Includes regenerated exercises with unlimited practice, as well as the opportunity to earn mastery points by completing quizzes on recommended learning objectives.

- **Worked Solutions**—Provide step-by-step explanations on how to solve select problems using the exact numbers and data that were presented in the problem. Instructors will have access to the Worked Out Solutions in preview and review mode.

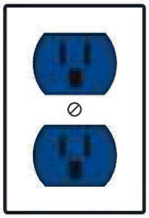
Prepare, Apply, and Confirm with MyAccountingLab®

- **Algorithmic Test Bank**—Instructors have the ability to create multiple versions of a test or extra practice for students.



- **Reporting Dashboard**—View, analyze, and report learning outcomes clearly and easily. Available via the Gradebook and fully mobile-ready, the Reporting Dashboard presents student performance data at the class, section, and program levels in an accessible, visual manner.

- **LMS Integration**—Link from any LMS platform to access assignments, rosters, and resources, and synchronize MyLab grades with your LMS gradebook. For students, new direct, single sign-on provides access to all the personalized learning MyLab resources that make studying more efficient and effective.



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ACCOUNTING in the headlines

Accounting in the Headlines.

One of the biggest challenges for accounting instructors is that students often feel disengaged from the course material, which can seem abstract and unrelated to their personal experiences. But by incorporating real-life examples, instructors can spark student interest and engagement, especially when teaching accounting at the introductory level.

Accounting in the Headlines, an award-winning blog by renowned author Wendy Tietz, does just that with stories about real companies and events that can be used in the accounting classroom to illustrate introductory financial and managerial accounting concepts.

Concise, tailorable, and updated on a weekly basis, these articles easily fit into the typical introductory accounting curriculum, whether the course is delivered in-person or online. **Accounting in the Headlines articles, along with multiple-choice and polling questions, can be assigned through** MyAccountingLab **and Learning Catalytics™. Instructors are also provided with discussion questions, PowerPoint slides, and handout files, to support learning initiatives.**

http://accountingintheheadlines.com

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Managerial Accounting

Fifth Edition

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Pearson

New York, NY

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Cover Design: Cenveo® Publisher Services
Cover Art: style-photography/shutterstock & nikolae/shutterstock
Printer/Binder: LSC Communications
Cover Printer: Phoenix

Acknowledgments of third-party content appear on the appropriate page within the text.

Cataloging-in-Publication Data is on file at the Library of Congress

1 16

Pearson

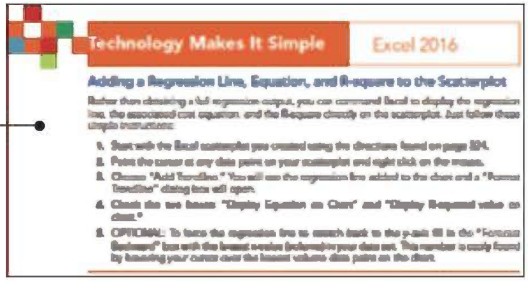
ISBN 13: 978-0-13-412852-8
ISBN 10: 0-13-412852-4

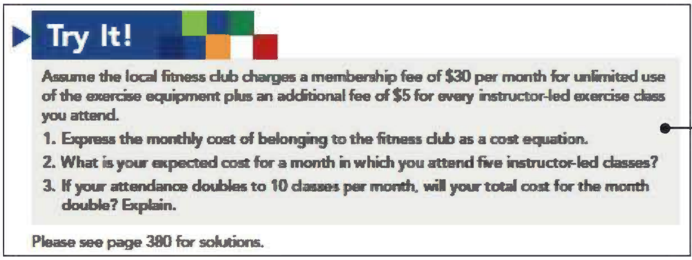
BRIEF CONTENTS

CONTENTS

Visual Walk-Through

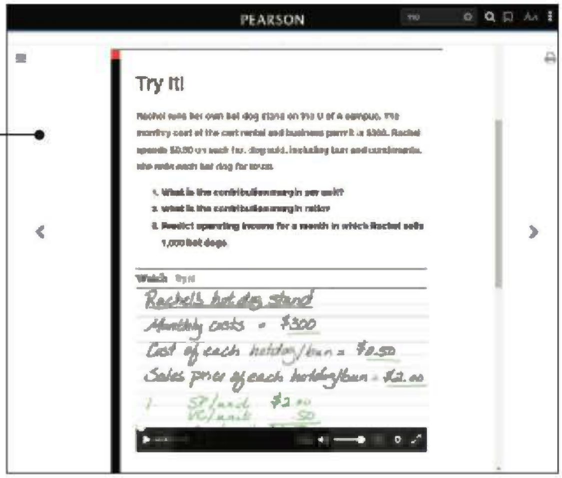
Technology Makes it Simple
Expanded to include several new topics, these features give students step-by-step directions on how to use Microsoft Excel 2016 to perform the accounting task with more efficiency. Examples include: scatterplots, regression analysis, capital budgeting, CVP graphs, budgeting, and sensitivity analysis.

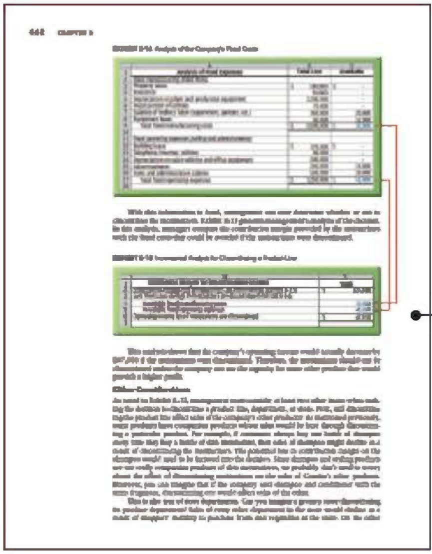




Try It! Interactive Questions
Found throughout the chapter, Try It! interactive questions give students the opportunity to apply the concept they just learned. Linking in the eText will allow students to practice in MyAccountingLab® without interrupting their interaction with the eText. Students' performance on the questions creates a precise adaptive study plan for additional practice.

Video Solutions
Found in the eText and MyAccountingLab, the video solutions feature the author walking through the Try It! problems on a white board. Designed to give students detailed help when they need it.

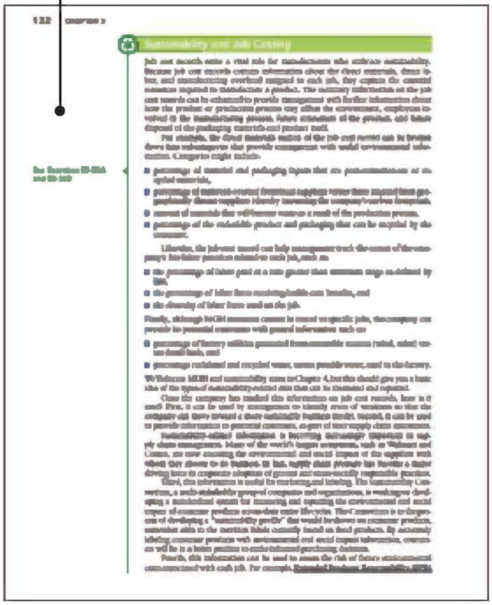




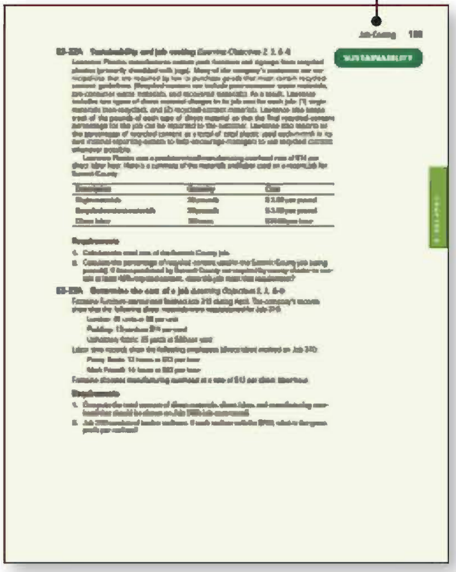
Excel Exhibits
To give students a glimpse into the real world presentation of managerial accounting topics, all financial statements and schedules are presented in Excel. In the eText, a video link on selected exhibits will teach students how to create the same schedule using Excel.

Sustainability

Within every chapter is a section on how sustainability relates to the main chapter topic.



Also included is a quick reference on which end-of-chapter problems correspond to the sustainability concept.

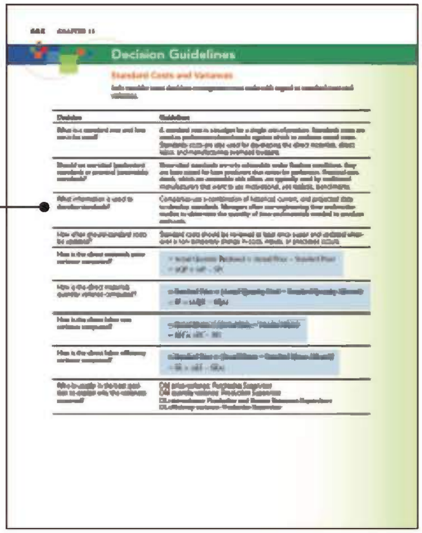


Sustainability Chapter

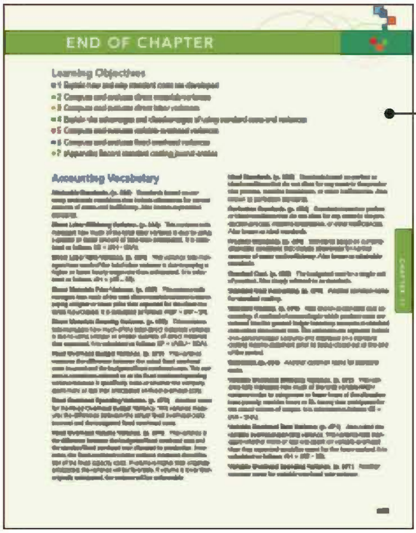
This chapter provides a deeper dive into how sustainability can generate business value. It also includes sections on sustainability reporting, the Sustainability Accounting Standards Board, and environmental management accounting systems.

Why is this important?
Found throughout the chapter, this feature connects accounting with the business environment so that students can better understand the business significance of managerial accounting.

Decision Guidelines
Found at the midpoint and end of each chapter, this feature uses a business decision context to summarize key terms, concepts, and formulas from the chapter in question and answer format.



Stop & Think
Found at various points within each chapter, this feature includes a question-and-answer snapshot asking students to critically examine a concept they just learned.



End-of-Chapter Problems

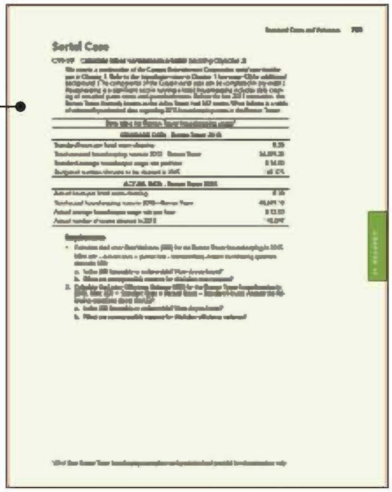
The end-of-chapter content for short exercises, exercises, and problems has been refreshed for this edition. End-of-chapter items are structured to allow students to progress from simple to more rigorous as they move from item to item.

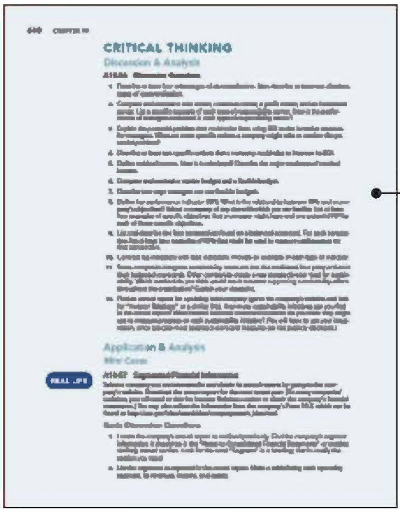
New short exercises based on real world situations have been added to every chapter to help students make the connection between the real world and the concepts being studied.

NEW!

Serial Case

A serial (continuing) case that focuses on one real world company has been added to the end-of-chapter material. The serial case consists of several small cases, one per chapter. These cases are meant to inspire critical thinking and to connect the content with real life by following one company through all of the chapters in managerial accounting.





Critical Thinking

Problems are included to provide students with the opportunity for applied critical thinking. These problems include ethical topics, mini cases, and decision-making cases in real companies.

- Ethics Mini Cases based on the IMA Statement of Professional Practice are highlighted with an icon.

  ETHICS

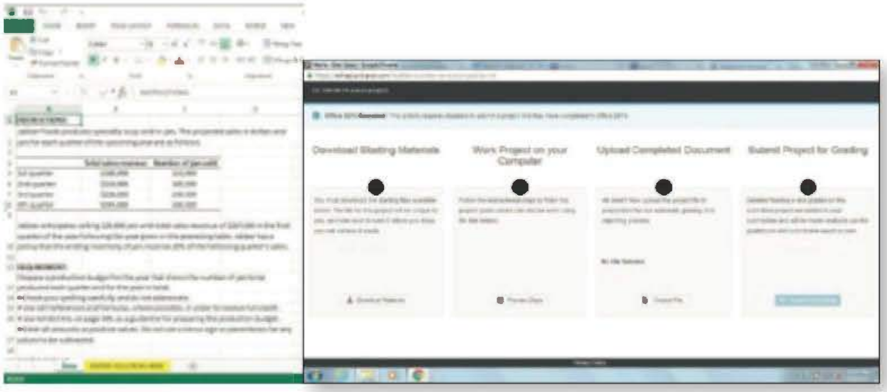
- Real Life Mini Cases focusing on a real company and the decisions presented in business are highlighted with an icon.

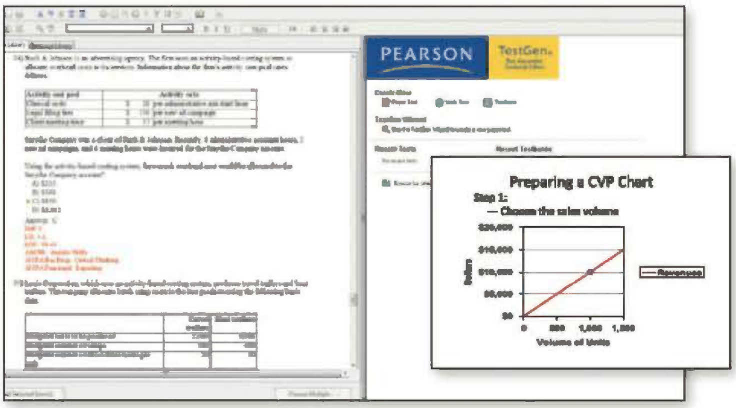
  REAL LIFE

NEW!

Excel in MyAccountingLab

- Students will download and complete problem in Microsoft Excel.
- Students receive personalized, detailed feedback upon uploading their completed spreadsheets.
- Questions will be auto-graded and reported to the grade book.





Test Bank and PowerPoints

Test bank includes algorithmic questions and 30% new material. PowerPoints have been updated and refreshed for the new edition. Worked-out problems contain the entire problem statement.

Directed Reading Guides

NEW! Directed reading guides, which have been prepared by the authors, help students take thorough notes while reading the text and glean the most important information from each chapter. Each chapter's reading guide follows the text, paragraph-by-paragraph, asking students to answer questions and fill in the blanks, thereby keeping students actively engaged while preparing for class.

Accounting in the Headlines Blog

NEW! Accounting in the Headlines, www.accountingintheheadlines.com is a blog written by Wendy Tietz. New stories are added to the blog each week. The blog contains short stories about real-life companies and current events that can be used in the accounting classroom to illustrate introductory accounting concepts. The blog posts contain discussion questions, PowerPoint slides, and handout files, making it a turnkey solution for instructors wanting to use real-life examples in their classes. All content is intended to be brief and fit easily into the typical introductory accounting class. In addition to the content found on the blog site, multiple-choice questions related to each blog post can be found in MyAccountingLab and in Learning Catalytics.

Concept Videos for Students

NEW! Short videos focusing on key concepts are available in MyAccountingLab to further emphasize major concepts. These videos can be assigned in homework or used as part of a flipped classroom strategy.

CONTENT CHANGES TO THE FIFTH EDITION

Both students and instructors will benefit from a variety of new content in the fifth edition.

New and updated content within the text:

- Refreshed chapter opening stories attract student attention and lay the groundwork for the chapter using recognizable, real-world companies.
- Updated sustainability features in each chapter show how sustainability relates to the chapter content.
- Select modifications and enhancements were made to each chapter to make it easier for students to grasp difficult concepts. Some of these modifications include the following:

Chapter 1	Redesigned to focus on the professional nature of management accounting, including the American Accounting Association's Vision Model, IMA's definition of management accounting, technical and soft skills required by professionals, summary of CMA exam requirements, and a step-by-step model for critical thinking that can be referenced and used throughout the course. The chapter also includes a section on why management accounting is important to students majoring in other fields of study.
Chapter 2	Simplified language used for product costs (rather than inventoriable product costs) now used throughout the book; revised discussion of direct and indirect costs.
Chapter 3	Introduction and illustration of manufacturing overhead as a cost pool; Decision Guidelines now include job costing journal entries.
Chapter 5	Red arrows and speech bubbles on Exhibits help students better understand process costing calculations.
Chapter 7	Learning objective 3 expanded to illustrate the impact of changing business conditions on operating income as well as on the breakeven point.
Chapter 8	Streamlined introduction on relevant data; new company example for pricing, special order, and product discontinuation decisions; new "pitfalls to avoid" section with each decision; additional summary problem with worked out solution.

Chapter 10	To provide continuity between budgeting and performance evaluation, the flexible budgeting example now includes the entire income statement using the company featured in Chapter 9; updated PepsiCo data illustrates responsibility accounting.
Chapter 11	Company example tied to Chapters 9 and 10 to provide continuity between chapter topics; variance exhibits are more specifically labeled to better serve as references for students.
Chapter 14	Updated with the latest financial information from Target, Macy's, Kohl's, and Walmart; revised description of horizontal and vertical analysis; two additional profitability ratios included in the chapter.
Chapter 15	Updated for recent company examples and new data on sustainability reporting; new sections on the Sustainability Accounting Standards Board and inclusion of the landmark 2015 Paris Agreement.

New and updated content within the end-of-chapter material:

Quick Checks	Updated quick checks in each chapter. These questions are conceptual in nature.
Short Exercises	All short exercises have been updated. In addition, a new real world short exercise is included in every chapter.
Exercises	All exercises have been updated.
Problems	All problems have been updated.
Ethics Mini Cases	Updated case at the end of each chapter based on the IMA Statement of Professional Practice.
Real Life Mini Cases	Updated case at the end of each chapter focusing on a real company situation.
Serial Case	An all-new serial case has been added to the end-of-chapter material. All of these cases focus on the same real world company and continue throughout the text.

ABOUT THE AUTHORS

Karen Wilken Braun is a professor for the Department of Accountancy in the Weatherhead School of Management at Case Western Reserve University. Dr Braun is also the Beta Alpha Psi adviser and the director of the undergraduate accounting program. Professor Braun was on the faculty of the J.M. Tull School of Accounting at the University of Georgia before her appointment at Case Western Reserve University. She has received several student-nominated Outstanding Teacher of the Year awards at both business schools, and is regularly asked to speak to student clubs and organizations about personal financial planning.

Professor Braun is a Certified Public Accountant and holds membership in the American Accounting Association (AAA), the Institute of Management Accountants, and the American Institute of Certified Public Accountants. She also holds the Chartered Global Management Accountant designation, and is a member of the AAA's Management Accounting Section as well as the Teaching, Learning and Curriculum Section. Dr. Braun has has regularly held leadership positions with the AAA's Conference on Teaching and Learning in Accounting (CTLA) including co-chairing the 2015 and 2016 conferences. She was awarded the 2016 Bea Sanders/AICPA Teaching Innovation Award for her development of Excel-based active-learning resources for introductory managerial accounting courses. Dr. Braun's research and teaching interests revolve around lean operations, sustainability, corporate responsibility, and accounting education. Dr. Braun's work has been published in *Contemporary Accounting Research, Issues in Accounting Education*, and *Journal of Accounting Education*.

Dr. Braun received her Ph.D. from the University of Connecticut and her B.A., summa cum laude, from Luther College, where she was a member of Phi Beta Kappa. Dr. Braun gained public accounting experience while working at Arthur Andersen & Co. and accumulated additional business and management accounting experience as a corporate controller.

Professor Braun has two daughters who are both in college. In her free time, she enjoys biking, gardening, hiking, skiing, and spending time with family and friends.

To my children, Rachel and Hannah, who are the joy of my life,
and to my students, who inspire me daily.

Karen W. Braun

Wendy M. Tietz is a professor for the Department of Accounting in the College of Business Administration at Kent State University. She teaches introductory financial and managerial accounting in a variety of formats, including large sections, small sections, and web-based sections. She has received numerous college and university teaching awards while at Kent State University.

Dr. Tietz is a Certified Public Accountant, a Certified Management Accountant, and a Chartered Global Management Accountant. She is a member of the American Accounting Association (AAA), the Institute of Management Accountants and the American Institute of Certified Public Accountants. She is a member of the AAA's Management Accounting Section as well as the Teaching, Learning and Curriculum Section. She has published in *Strategic Finance, IMA Educational Case Journal, Issues in Accounting Education, Accounting Education: An International Journal*, and *Journal of Accounting & Public Policy*. She regularly presents at AAA regional and national meetings.

Dr. Tietz authors a blog, Accounting in the Headlines, which has real-world news stories and resources for use in the introductory accounting classroom. Dr. Tietz was awarded the Bea Sanders/AICPA Teaching Innovation Award for her blog in 2014 and the Jim Bulloch/IMA Award for Innovations in Management Accounting Education in 2016. She was also awarded the Best Educational/Case Award for the Teaching, Learning and Curriculum Section (AAA, Ohio Region) in 2016. Dr. Tietz earned her Ph.D. from Kent State University. She received both her M.B.A. and B.S.A. from the University of Akron. She worked in industry for several years, both as a controller for a financial institution and as the operations manager and controller for a recycled plastics manufacturer.

Dr. Tietz and her husband, Russ, have two grown sons. In her spare time, she enjoys walking, reading, and spending time with family and friends. She is also intensely interested in using technology and social media in education.

To my husband, Russ, who steadfastly and enthusiastically supports every new project.

Wendy M. Tietz

ACKNOWLEDGMENTS

We'd like to extend a special thank you to our reviewers who took the time to help us develop teaching and learning tools for Managerial Accounting courses to come. We value and appreciate their commitment, dedication, and passion for their students and the classroom:

Managerial Accounting, 5e and prior editions

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1

Introduction to Managerial Accounting

Pickture/Alamy

Sources: Starbucks 2015 10-K filing www.starbucks.com/about-us/company-information/starbucks-company-timeline; starbucks.com/responsibility

Learning Objectives

- **1** Identify managers' three primary responsibilities
- **2** Distinguish financial accounting from managerial accounting
- **3** Describe the roles and skills required of management accountants within the organization
- **4** Describe the role of the Institute of Management Accountants (IMA) and apply its ethical standards
- **5** Discuss the business trends and regulations affecting management accounting

Starbucks Corporation, which began operations in 1971 as a sole coffee bean shop in Seattle's well-known Pike Street Market, now has over 23,000 company-owned and licensed stores in 68 countries around the world. The company's success can be attributed to innovative thinking, carefully disciplined expansion, and a focus on corporate responsibility. The company believes that its commitment to ethically sourced coffee, contributions to local communities, and superior employee benefits to part-time as well as full-time employees contribute to the company's objective of being one of the most recognized and respected brands in the world. Management accounting plays a role in implementing the company's strategy. Without information on the costs and benefits of different beverages, programs, distribution channels, and geographic areas, Starbucks would not be able to make responsible, yet profitable, decisions. Starbucks uses management accounting to make operating decisions that focus on corporate responsibility, while also keeping the company financially strong. Case in point: $100 invested in Starbucks's stock in 2010 would have been worth $480 at the end of fiscal 2015, a return well above the S&P 500.

As the Starbucks story shows, managers use accounting information for much more than preparing annual financial statements. They use managerial accounting information to guide their actions and decisions. For Starbucks, these decisions might include opening new stores, adding new products, or even providing new employee benefits, such as Starbucks's new tuition reimbursement plan. Management accounting information helps management decide whether any or all of these actions will help accomplish the company's ultimate goals. In this chapter, we'll introduce managerial accounting, describe how it differs from financial accounting, and discuss the skills and ethics management accountants need. We will also discuss the regulatory and business environment in which today's managers and management accountants operate.

What Is Managerial Accounting?

Managerial accounting, also referred to as management accounting, focuses on the financial insight needed for an organization to achieve success. In the words of the Institute of Management Accountants,

> **Management accounting** *is a profession that involves partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization's strategy.*[1]

As you will see throughout the book, managerial accounting is very different from financial accounting. Financial accounting focuses on providing stockholders and creditors with the information they need to make investment and lending decisions. This information takes the form of financial statements: the balance sheet, income statement, statement of shareholders' equity, and statement of cash flows. On the other hand, managerial accounting focuses on identifying, interpreting, analyzing, and implementing the financial information internal management needs to run the company efficiently, effectively, and profitably. This information takes many forms depending on management's needs.

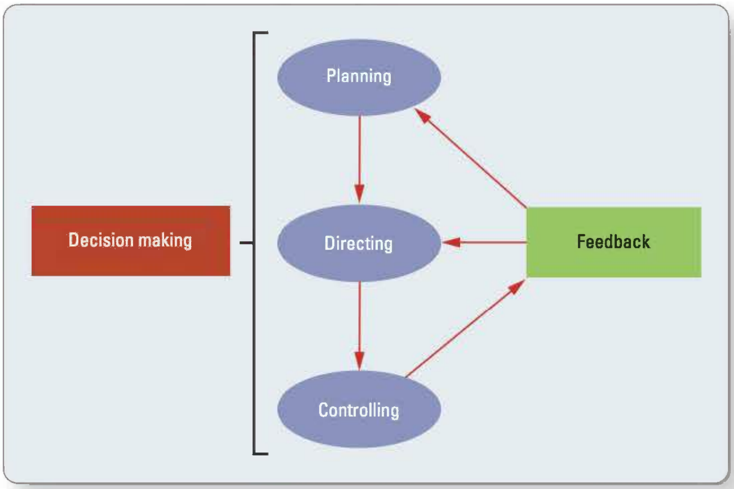
To understand the kind of information managers need, let's first look at their primary responsibilities.

Managers' Three Primary Responsibilities

1 Identify managers' three primary responsibilities

Managerial accounting helps managers fulfill their three primary responsibilities, as shown in Exhibit 1-1: planning, directing, and controlling. Integrated throughout these responsibilities is **decision making** (identifying alternative courses of action and choosing among them).

EXHIBIT 1-1 Managers' Three Primary Responsibilities



[1]Statement on Management Accounting, "Definition of Management Accounting," Institute of Management Accountants, 2008.

- **Planning** involves setting goals and objectives for the company and determining how to achieve them. For example, one of Starbucks's goals is to generate more sales. One strategy to achieve this goal is to open more retail locations. For example, the company opened 731 new company-operated stores in fiscal 2015, roughly half in the United States and half in China and the Asia-Pacific.[2] Another strategy is to develop new products and new distribution channels (such as selling coffee through grocery stores and warehouse clubs). Managerial accounting translates these plans into **budgets**—the quantitative expression of a plan. Management analyzes the budgets before proceeding to determine whether its expansion plans make financial sense.
- **Directing** means overseeing the company's day-to-day operations. Management uses sales and costs information by store, region, and distribution channel, to run daily business operations. For example, Starbucks managers use sales data to determine which beverages on the menu and products in the stores are generating the most sales. They use that information to adjust product offerings, marketing strategies, and retail expansion decisions.
- **Controlling** means evaluating the results of business operations against the plan and making adjustments to keep the company pressing toward its goals. Starbucks uses performance reports to compare each store's actual performance against the budget and then based on that *feedback* take corrective actions if needed. If actual costs are higher than planned, or actual sales are lower than planned, then management may revise its plans or adjust operations.

Management is continually making decisions while it plans, directs, and controls operations. Starbucks management must decide where to open new stores, which stores to refurnish, what prices to set for beverages and other products in the store, and so forth. Managerial accounting provides the financial insight needed to help make these decisions.

A Road Map: How Managerial Accounting Fits In

This book will show you how managerial accounting helps managers fulfill their responsibilities. The rest of the text is organized around the following themes:

1. **Managerial Accounting Building Blocks** Chapter 1 helps you understand more about the management accounting profession and today's business environment. Chapter 2 teaches you some of the language that is commonly used in managerial accounting. Just as musicians must know the notes to the musical scale, management accountants *and* managers must have a common understanding of these terms to communicate effectively with one another.
2. **Determining Unit Cost (Product Costing)** To run a business profitably, managers must be able to identify the costs associated with manufacturing its products or delivering its services. For example, Starbucks's managers need to know the cost of producing each beverage on the menu as well as the cost of operating each retail location. Managers must have this information so that they can set prices high enough to cover costs and generate an adequate profit. Chapters 3, 4, and 5 show you how businesses determine these costs. Chapter 4 also shows how managers can effectively control costs by eliminating wasteful activities and focusing on quality.
3. **Making Decisions** Before Harold Schultz opened the first Starbucks coffee house, he must have thought about the volume of sales needed just to break even—that is, just to cover costs. In order to do so, he had to first identify and estimate the types of costs the coffee house would incur, as well as the profit that would be generated on each beverage served. These topics are covered in Chapters 6 and 7. Chapter 6 shows how managers identify different types of cost behavior, while Chapter 7 shows how managers determine the profitability of each unit sold as well as the

[2]Starbucks 2015 10-K filing.

company's breakeven point. Chapter 8 continues to use cost behavior information to walk through common business decisions, such as outsourcing and pricing decisions. Finally, Chapter 12 shows how managers decide whether to invest in new equipment, new projects, or new locations.

4. **Planning** Budgets are management's primary tool for expressing its plans. Chapter 9 discusses all of the components of the master budget and the way companies like Starbucks use the budgeting process to implement their business goals and strategies.
5. **Controlling and Evaluating** Management uses many different performance evaluation tools to determine whether individual segments of the business are reaching company goals. Chapters 10 and 11 describe these tools in detail. Chapters 13 and 14 describe how the statement of cash flows and financial statement analysis can be used to evaluate the performance of the company as a whole. Finally, Chapter 15 discusses how companies are beginning to address the sustainability of their operations, by measuring, reporting, and minimizing the negative impact of their operations on people and the environment. As you saw in the opening story, some of Starbucks's primary business concerns are to use ethically sourced coffee, contribute to local communities, and provide superior employee benefits to part-time as well as full-time employees.

Differences Between Managerial Accounting and Financial Accounting

2 Distinguish financial accounting from managerial accounting

Managerial accounting information differs from financial accounting information in many respects. Exhibit 1-2 summarizes these differences. Take a few minutes to study the exhibit (on page 5), and then we'll apply it to Starbucks.

Starbucks's *financial accounting* system is geared toward producing annual and quarterly consolidated financial statements that will be used by investors and creditors to make investment and lending decisions. Since Starbucks is a publicly traded company, its financial statements can be easily found on the Internet by searching for its 10-K (annual) and 10-Q (quarterly) SEC filings. The financial statements, which must be prepared in accordance with Generally Accepted Accounting Principles (GAAP), objectively summarize the transactions that occurred between Starbucks and external parties during the previous period. The Securities and Exchange Commission (SEC) requires that the annual financial statements of publicly traded companies, such as Starbucks, be audited by independent certified public accountants (CPAs). Starbucks's financial statements are useful to its investors and creditors, but they do not provide management with enough information to run the company effectively.

Starbucks's *managerial accounting* system is designed to provide internal managers with the accounting information needed to plan, direct, and control operations. Since managerial accounting information is specifically designed to help *internal* management, it is confidential information that is generally *not* available to the public. There are no GAAP-type standards or audits required for managerial accounting. To provide Starbucks's management with the information needed to make good business decisions, managerial accounting reports focus on smaller segments of the company (such as individual retail locations, geographic areas, and specific beverages and products) rather than the company as a whole. Rather than preparing reports just once a year, Starbucks prepares managerial accounting reports as often as needed, which could be as frequently as daily or even hourly. Many companies even use "real-time performance dashboards" that constantly update so that managers have the financial information they need to control operations and make timely decisions. Since managerial accounting revolves around planning and decision making, much of it focuses on the *future* rather than on the past. Any information that is *relevant* to management will be included. Finally, since every company is different, managerial accounting systems will vary from company to company. In designing

EXHIBIT 1-2 Managerial Accounting Versus Financial Accounting

MANAGERIAL ACCOUNTING	ISSUE	FINANCIAL ACCOUNTING
Internal users such as managers.	Who are the primary users of the information?	External users, such as creditors, stockholders, and government regulators.
To help managers plan, direct, and control business operations and make business decisions.	What is the purpose of the information?	To help external users make investing and lending decisions.
Any internal accounting report deemed worthwhile by management.	What is the primary accounting product?	Financial statements.
Management determines what it wants in a report, and how it wants it formatted. Reports are prepared only when management believes the benefit of using the report exceeds the cost of preparing the report.	What must be included in the report, and how must it be formatted?	Generally Accepted Accounting Principles (GAAP) determine the content and format of financial statements.
While some information is based on past transactions, managerial accounting focuses on the future. It provides information on both external and internal transactions.	What is the underlying basis of the information?	The information is based on historical transactions with external parties.
The information must be relevant.	What information characteristic is emphasized?	The information must be reliable and objective.
Segments of the business, such as products, customers, geographical regions, departments, and divisions.	What business "unit" is the report about?	The company as a whole (consolidated financial statements). Limited segment data is provided in the footnotes.
It depends on management's needs. Some reports are prepared daily, while others may be prepared only one time.	How often are the reports prepared?	Annually and quarterly.
There are no independent audits. However, the company's internal audit function may examine the procedures used in preparing the reports.	Does anyone verify the information?	Independent certified public accountants (CPAs) audit the annual financial statements of publicly traded companies and express an opinion on the fairness of the financial information they contain.
No authoritative body requires managerial accounting reports.	Is the information required by an outside group/ government agency?	Yes, the Securities and Exchange Commission (SEC) requires publicly traded companies to issue annual audited financial statements.
Management carefully considers behavioral implications when designing the managerial accounting system.	Is there any concern over how the reports will affect employee behavior?	The concern is about adequacy of disclosure; behavioral implications are secondary.

the system, management will weigh the costs of collecting and analyzing information with the benefits they expect to receive. Management will also consider how the system will affect employees' behavior. Employees try to perform well on the parts of their jobs that the accounting system measures and rewards.

What Role Do Management Accountants Play?

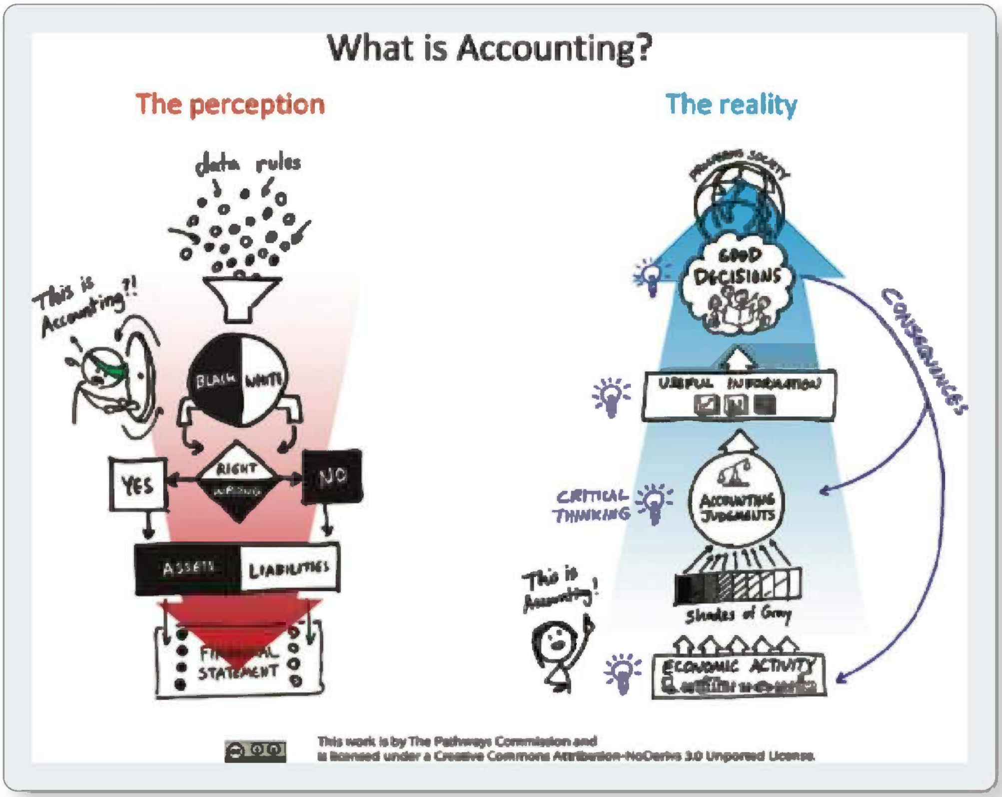
In this section, we'll look at the role of management accountants within the organization and the skills they need to help their organizations succeed.

The Role of Management Accountants

3 Describe the roles and skills required of management accountants within the organization

When you think of accountants, what do you picture? Many people picture accountants the way they were 50 to 100 years ago, before the widespread use of computers when everything about measuring business transactions was relatively simplistic. As shown on the left in Exhibit 1-3, many people have the erroneous conception that accountants are nothing more than "bean counters," plugging numbers into set formulas and using a black and white set of rules to churn out information for others to use. If this were true, being an accountant would be tedious and noncreative work indeed. Thankfully, nothing could be farther from the truth.

EXHIBIT 1-3 The Perception and the Reality



Source: © American Accounting Association. Used with permission.

As shown on the right in Exhibit 1-3, today's accountants are professionals who use an immense amount of critical thinking, insight, and judgment to capture the reality of today's complex economic events. As valued financial advisors, managerial accountants partner with management to make critical business decisions that have widespread and significant consequences for the business and for society. Let's face it: the business world is much more complex than it was in your grandparents' day. With rapidly changing technology and continual business innovation, the role of accountants has drastically changed from what it used to be. In fact, management accountants are rarely referred to by that name any more; instead, they are usually referred to as business advisors, analysts, or finance professionals.

As you go through each topic in this book, keep the blue picture in Exhibit 1-3 in mind, and ask yourself the following questions:

1. **What is the business issue, event, or problem, and how can accounting help to solve it?** Management accounting always begins with some relevant business issue that management is facing or some economic event that occurred in the past or might occur in the future. Management accounting is used to shed light on the issue and direct management's path.
2. **What are the "gray areas"?** In other words, what differences in methods, assumptions, estimates, measurement choices, and judgment calls might impact the information that is used for decision making? Because of the gray areas and judgment involved, accounting numbers are rarely as precise as they may seem.
3. **What are the implications for the business if the accounting information used in the decision is "wrong"?** Because of the gray areas, it's difficult to say that accounting information is ever "wrong." However, judgment in these gray areas could lead to financial estimates that are on the high side or on the low side. What are the consequences of numbers that are too high or too low? Would estimates that are "off" in one direction be worse than the other direction?

Since you are studying management accounting for the first time, the topics in the book may at first appear very straightforward and immutable. However, if you consider the three questions listed above, you'll begin to see the significance of the judgment calls that go into management accounting and the ramifications to the business decisions that are consequently made.

The Skills Required of Management Accountants

To understand the skills required of management accountants, let's go back to the definition of management accounting with which we started the chapter:

> *Management accounting is a profession that involves partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization's strategy.*[3]

First and foremost, management accounting is a profession (in a later section, we'll describe the professional organizations that represent management accountants). Since management accountants work in a professional advisory role, they need a vast array of

EXHIBIT 1-4 Technical and Nontechnical Competencies Needed by Management Accountants

Technical Competencies	Nontechnical Competencies
• Planning, budgeting, and forecasting	• Ethics
• Internal financial reporting	• Communication
• Performance management	• Customer service
• Cost management	• Adaptability
• Internal controls	• Strategic thinking
• Technology	• Process improvement
• Decision analysis	• Leadership
• Financial statement analysis	• Collaboration
• Investment decision making	• Business acumen
• Enterprise risk management	• Change management

[3]Statement on Management Accounting, "Definition of Management Accounting," Institute of Management Accountants, 2008.

skills. Some of these skills are technical, whereas others are nontechnical competencies, which are often referred to as "soft-skills." A recent survey of management accounting professionals revealed some of the top skills they need to help their organizations achieve success. Exhibit 1-4 summarizes some of these competencies.[4]

This book will introduce you to most of the technical competencies listed in Exhibit 1-4, as well as give you the opportunity to advance many of your nontechnical skills. As you can see in the exhibit, the ability to use technology and common software, such as Microsoft Excel, is a critical skill management accountants need to possess. Because Excel is used so pervasively in business, you will see many of the exhibits in this book featured in Excel. You will also see features in several chapters that teach you how to use Excel to perform various tasks. Regardless of your future career path, becoming as proficient as you can with Excel during this course will help you become more marketable and more valuable to your future employer.

Managerial Accounting Is Important to All Careers

As you can see, management accountants don't fit the stereotypical accountant portrayed in movies and shows. Because of their expanding role, management accountants have truly become trusted and valued internal business advisors. But what if you don't plan to major in accounting? How can this course be of use to you? Here are just a few specific ways this course can help you prepare for your future business career:

- **Entrepreneurs** If you are planning to be an entrepreneur, you'll first want to know if your business idea makes financial sense. How high will volume have to be for your business to at least break even? How high will it have to be for your business to earn the level of profit that you want to achieve? As you begin to implement your business plan, should you negotiate sales contracts that are more fixed (flat fee) or variable (fee per activity)? What about costs? Would having more fixed costs or variable costs be better? How sensitive will your profits be to changes in volume if the economy booms or if it takes a turn for the worse? How will you decide whether to invest in new equipment and technology? As your business grows in size, how will you divide it into manageable segments and relinquish oversight of day-to-day operations to others, while at the same time retain control? How can you design systems to ensure your managers will make decisions that are consistent with your goals? And if you decide to raise capital or sell your business, what will potential investors want to see when they analyze your financial statements and study your statement of cash flows? All of these topics are addressed in this book.
- **Business Management** If you are planning to be a general business manager, not a day will go by in which you don't consider the financial ramifications of your decisions. You'll need to have a firm grasp on the costs of obtaining or manufacturing every product you sell and/or every service you deliver. You'll also want to understand how costly every activity within the company is to perform and have specific strategies in hand for controlling and reducing those costs. You'll need to understand which costs will increase as your volume increases and which costs will be unaffected by changes in volume. Cost information will drive many, if not all, of your decisions about where to locate, what to produce, which suppliers to use, whether to outsource, which products to emphasize, whether to implement quality improvement initiatives, whether to automate some of your processes, how to price your products or bid for jobs, whether to discontinue certain products or operations, and so forth. Every business decision you make will be rooted in revenue and cost information, so it will be important for you to understand how those costs were obtained and what they include. Different costs will be used for different purposes. All of these topics are addressed in this book.
- **Marketing and Sales** If you are planning to be in marketing and sales, your marketing strategy, assumptions, and predictions will be the driving force behind the company's entire budget. As a result, you will be intimately involved with developing the budget. Product-line profitability reports will show you which products are most profitable and will guide your decisions about which products to emphasize. Cost information

[4]"The Skills Gap in Entry-level Management Accounting and Finance," Institute of Management Accountants and American Quality and Productivity Center, 2014.

will drive many of your pricing decisions, as well as decisions about whether to accept special orders at reduced sales prices or give volume discounts. The company's stance on sustainability may impact your ability to attract various customers and target different markets. All of these topics are addressed in this book.

- **Nonbusiness Majors** Even if you are planning to be a nurse, engineer, musician, or fashion designer, the information you learn in this course will be of consequence to you. All organizations, including nonprofits and governmental agencies, use cost and revenue information to guide their plans, actions, and decisions. No matter what your career path, every activity you engage in will impact the costs and revenues of your organization. That holds true, whether you are tending to sick patients, designing bridges, managing a symphony orchestra, or designing clothes. Management will expect you to operate under limited resources and will often look to you for revenue and expense estimates for specific projects or for specific periods of time. Management may also hand you budgets, cost data, and performance reports and expect you to understand it and use it for making decisions. The more you understand the underlying financial information, the better prepared you will be.

We've chosen to highlight just a few specific business career tracks here, but many of the same issues will pertain to all business careers, including those in logistics, supply chain management, production, and finance. There is such a huge overlap in business between managerial accounting and finance that both are often referred to as the "finance function," and the people who work in this function, regardless of whether they were accounting or finance majors, are often referred to as analysts. No matter what your eventual career, you will be using managerial accounting information. As is often said, accounting is the language of business, so the more you know about it, the more valuable you will be to your organization.

Accounting within the Organizational Structure

Most corporations are too large to be governed directly by their stockholders. Therefore, stockholders elect a board of directors to oversee the company. Exhibit 1-5 shows a typical organizational structure, with the green boxes representing employees of the firm and the orange and blue boxes representing nonemployees.

The board members meet only periodically, so they hire a chief executive officer (CEO) to manage the company on a daily basis. The CEO hires other executives to run various aspects

EXHIBIT 1-5 Typical Organizational Structure