Campfire queen Cycling champion Sentimental geologist\*

Learn more about Marjon Walrod and tell us more about you. Visit pwc.com/bringit.

Your life. You can bring it with you.



#### \*connectedthinking



## MANAGERIAL ACCOUNTING A Decision Focus



#### Note to students

You are part of an interesting new experiment. Instead of having to buy your text, working papers, and study guide, you are given them free on line. If you desire a hard copy from us please contact us at **www.freeloadpress.com** and we will supply it to you at a nominal price.

In beginning your studies you should read the **Front Matter** file first. That file contains a Preface and other information that will be helpful in understanding the materials that are available to you.

Next you should open the Contents file which shows the organization of the book.

For each chapter that has a **Careers in Accounting** file you should read that file first. These files describe various careers, such as a managerial accounting position in a company, that one can pursue after majoring in accounting. Of course, knowledge of accounting will be useful to you no matter which career you choose, even one outside of business. Then read each chapter by opening the **Chapter** file for that particular chapter. Then follow the steps in "How to Study the Chapters in This Text."

#### How to Study the Chapters in This Text

In studying each chapter:

- 1. Begin by reading the learning objectives at the beginning of each chapter.
- 2. Read "Understanding the Learning Objectives" at the end of the chapter for a preview of the chapter content.
- 3. Read the chapter content. Notice that the learning objectives appear in the margins at the appropriate places in the chapter. Each exercise at the end of the chapters identifies the learning objective(s) to which it pertains. If you learn best by reading about a concept and then working a short exercise that illustrates that concept, work the exercises as you read the chapter.
- 4. Reread "Understanding the Learning Objectives" to determine if you have achieved each objective.
- **5.** Study the New Terms to see if you understand each term. If you do not understand a certain term, refer to the page indicated to read about the term in its original context.
- **6.** Take the Self-Test and then check your answers with those at the end of the chapter.
- 7. Work the Demonstration Problem to further reinforce your understanding of the chapter content. Then, compare your solution to the correct solution that follows immediately.
- **8.** Look over the questions at the end of the chapter and think out an answer to each one. If you cannot answer a particular question, refer back into the chapter for the needed information.
- **9.** Work at least some of the exercises at the end of the chapter.
- **10.** Work the Problems assigned by your instructor, using the forms available. They can be downloaded from the publisher's website (www.freeloadpress.com).
- 11. Study the items in the "Beyond the Numbers—Critical Thinking" section and the "Using the Internet—A View of the Real World" section at the end of each chapter to relate what you have learned to real-world situations.
- 12. Work the Study Guide for the chapter. The Study Guide is a supplement that contains (for each chapter) Learning Objectives; Reference Outline; Chapter Review; Demonstration Problem and Solution (different from the one in the text); Matching, Completion, True-False, and Multiple-Choice Questions; and Solutions to all Questions and Exercises in the Study Guide. The Study Guide can be downloaded from the publisher's website (www.freeloadpress.com).

If you perform each of these steps for each chapter, you should do well in the course. Remember that a knowledge of accounting will serve you well regardless of the career you pursue.

At the end of the book there are several files that you will find helpful. The **Check Figures** file shows some number for each exercise and problem that will indicate whether you are on the right track in working those items. The **Annual Report Appendix** contains part of the Annual Report of The Limited, a real company. You are referred to this appendix in answering some of the end-of-chapter exercises and problems. If you have trouble reading this file on screen, you may want to enlarge it or print it for greater clarity. In fact, you may want to print each of these files and keep them handy while working the end-of-chapter exercises and problems.

There are three more files at the end of the text. The **Compound Interest and Annuity Tables** file contains present value and future value tables used in Chapter 10 on Capital Budgeting and Long-Range Planning. The **New Terms Index** file and the **Subject Index** file show where you can find terms in the text.

We hope you find using this free text a real benefit to your understanding of accounting. We believe it prepares you well to go on into Intermediate Accounting or to pursue a non accounting career or even a non business career. You will have a good understanding of the language of business and how financial statements are derived and used in decision making.

#### MANAGERIAL ACCOUNTING: A DECISION FOCUS, Eighth Edition

Copyright 2006 by Hermanson and Edwards. Published by Freeload Press, 2006

All rights reserved. Printed in the United States of America. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or by any information storage or retrieval system without the prior written permission of the authors.

ISBN 1-930789-75-0

#### Library of Congress Cataloging-in-Publication Data

Managerial Accounting / Roger H. Hermanson ... [et al.].— 8th ed. p. cm.
Includes bibliographical references and index.

## MANAGERIAL ACCOUNTING A Decision Focus

#### **Eighth Edition**

#### Roger H. Hermanson, Ph.D., CPA

Regents Professor Emeritus of Accounting Ernst & Young–J. W. Holloway Memorial Professor Emeritus Georgia State University

#### James Don Edwards, Ph.D., D.H.C., CPA

J. M. Tull Professor Emeritus of Accounting Terry College of Business University of Georgia

#### Susan H. Ivancevich, Ph.D., CPA

Associate Professor Department of Accounting and Business Law University of North Carolina Wilmington

#### **About the Authors**

#### Professor Roger H. Hermanson, Ph.D., CPA

Regents Professor Emeritus of Accounting and Ernst & Young-J. W. Holloway Memorial Professor Emeritus at Georgia State University. He received his doctorate at Michigan State University in 1963 and is a CPA in Georgia. Professor Hermanson taught and later served as chairperson of the Division of Accounting at the University of Maryland. He has authored or coauthored approximately one-hundred articles for professional and scholarly journals and has coauthored numerous editions of several textbooks, including Accounting Principles, Financial Accounting, Survey of Financial and Managerial Accounting, Auditing Theory and Practice, Principles of Financial and Managerial Accounting, and Computerized Accounting with Peachtree Complete III. He also has served on the editorial boards of the Journal of Accounting Education, New Accountant, Accounting Horizons, and Management Accounting. Professor Hermanson has served as coeditor

of the Trends in Accounting Education column for *Management Accounting*. He has held the office of vice president of the American Accounting Association and served on its Executive Committee. He was also a member of the Institute of Management Accountants, the American Institute of Certified Public Accountants, and the Financial Executives Institute.

Professor Hermanson has been awarded two excellence in teaching awards, a doctoral fellow's award, and a Distinguished Alumni Professor award; and he was selected as the Outstanding Faculty Member for 1985 by the Federation of Schools of Accountancy. He has served as a consultant to many companies and organizations. In 1990, Professor Hermanson was named Accounting Educator of the Year by the Georgia Society of CPAs. His wife's name is Dianne, and he has two children, Dana and Susan, both of whom are accounting professors.

## Professor James Don Edwards, Ph.D., D.H.C., CPA

J. M. Tull Professor Emeritus of Accounting in the Terry College of Business at the University of Georgia. He is a graduate of Louisiana State University and has been inducted into the Louisiana State University Alumni Federation's Hall of Distinction. He received his M.B.A. from the University of Denver and his Ph.D. from the University of Texas and is a CPA in Texas and Georgia. He has served as a professor and chairman of the Department of Accounting and Financial Administration at Michigan State University, a professor and dean of the Graduate School of Business Administration at the University of Minnesota, and a Visiting Scholar at Oxford University in Oxford, England.

Professor Edwards is a past president of the American Accounting Association and a past national vice president and executive committee member of the Institute of Management Accountants. He has served on the board of directors of the American Institute of Certified Public Accountants and as chairman of the Georgia State Board of Accountancy. He was an original trustee of the Financial Accounting Foundation, the parent organization of the FASB, and a member of the Public Review Board of Arthur Andersen & Co.

He has published in *The Accounting Review, The Journal of Accountancy, The Journal of Accounting Research, Management Accounting,* and *The Harvard Business History Review.* He is also the author of *History of Public Accounting in the United States.* He has served on various American Institute of Certified Public Accountants committees and boards, including the Objectives of Financial Statements Committee, Standards

of Professional Conduct Committee, and the CPA Board of Examiners. He was the managing editor of the centennial issue of *The Journal of Accountancy*.

In 1974, Beta Alpha Psi, the National Accounting Fraternity, selected Professor Edwards for its first annual Outstanding Accountant of the Year award. This selection is made from industry, government, and educational leaders. In 1975, he was selected by the American Accounting Association as its Outstanding Educator.

He has served the AICPA as president of the Benevolent Fund, chairman of the Awards Committee, member of the Professional Ethics Committee and Program for World Congress of Accountants. He was on the Education Standards Committee of the International Federation of Accountants and the Committee on Planning for the Institute of Management Accountants. He was the director of the Seminar for Management Accountants—Financial Reporting for the American Accounting Association. He is also a member of the Financial Executives Institute.

He received the 1993 AICPA Gold Medal Award, the highest award given by the Institute. A Doctor Honoris Causa (Honorary Doctorate) from the University of Paris was awarded to him in 1994. He is the first accountant to receive this distinction in France. The Academy of Accounting Historians awarded him the 1994 Hourglass Award which is the highest international honor in the field of Accounting History. He was inducted into the Ohio State University Accounting Hall of Fame in 2001. His wife's name is Clara, and he has one son, Jim.

#### Susan H. Ivancevich, Ph.D, CPA

Associate Professor in the Department of Accountancy in the Cameron School of Business at the University of North Carolina Wilmington.

Dr. Ivancevich earned a Bachelor of Business Administration in accounting from the J.M. Tull School of Accounting in the Terry College of Business at the University of Georgia, where she graduated with the honors of Summa Cum Laude and First Honor Graduate. She worked as a staff and senior accountant in the audit division of Arthur Andersen prior to pursuing her Ph.D. in Accounting. She earned her Ph.D. in accounting from Texas A&M University in 1994 and is a CPA in Texas.

Dr. Ivancevich has published approximately forty refereed articles in scholarly and professional journals, including journals such as *Accounting Horizons, Issues in Accounting Education, the Journal of Accounting Education, Journal of Accountancy, CPA Journal, Management Accounting*, and others. She has served as the faculty advisor to several student organizations and has been quite active in service to her universities and the profession

at large. Dr. Ivancevich was the Co-Chair of the program for the Southeast Meetings of the American Accounting Associate held in Tampa, FL in 2001. She has held memberships in the American Accounting Association, American Institute of Certified Public Accountants, Institute of Management Accountants, Institute of Internal Auditors, Association of Certified Fraud Examiners, the Council on Hotel, Restaurant, and Institutional Education, and is a former officer of the Las Vegas Chapter of Hospitality Financial and Technology Professionals.

Dr. Ivancevich received three teaching excellence awards while at the University of Nevada Las Vegas and consistently receives recognition as a professor of "impact" by students within the Cameron School of Business at the University of North Carolina Wilmington. She has extensive experience teaching managerial accounting, financial accounting, and auditing at both the undergraduate and graduate levels. Her husband, Daniel, is also an accounting professor, and they have two daughters, Katie and Amanda.

# Love The Taste. Taste The Love.

At Culver's® we can't think of anything better than serving up our creamy frozen custard and delicious classics cooked fresh the minute you order them. Which is why when we bring them to your table, they're always accompanied by a warm smile and a friendly offer to see if there's anything else we can get for you. So come on into your neighborhood Culver's and see for yourself. You might just be in love by the time you leave.



#### **Preface**

#### Philosophy and Purpose

Imagine that you have graduated from college without taking an accounting course. You are employed by a company as a sales person, and you eventually become the sales manager of a territory. While attending a sales managers' meeting, financial results are reviewed by the Vice President of Sales and terms such as gross margin percentage, cash flows from operating activities, and break-even analysis are being discussed. The Vice President eventually asks you to discuss these topics as they relate to your territory. You try to do so, but it is obvious to everyone in the meeting that you do not know what you are talking about.

Accounting courses teach you the "language of business" so you understand terms and concepts used in business decisions. If you understand how accounting information is prepared, you will be in an even stronger position when faced with a management decision based on accounting information.

The importance of transactions analysis and proper recording of transactions has clearly been demonstrated in some of the recent business failures that have been reported in the press. If the financial statements of an enterprise are to properly represent the results of operations and the financial condition of the company, the transactions must be analyzed and recorded in the accounts following generally accepted accounting principles. The debits and credits are important not only to accounting majors but also to those entering or engaged in a business career to become managers or managerial accountants because the ultimate effects of these journal entries are reflected in the financial statements. If expenses are reported as assets, liabilities and their related expenses are omitted from the financial statements, or reported revenues are recorded prematurely or do not really exist, the financial statements are misleading. The financial statements are only useful and meaningful if they are fair and clearly represent the business events of the company. Both financial and managerial accountants rely heavily on the financial statements for information.

We wrote this text to give you an understanding of how to use accounting information to analyze business performance and make business decisions. The text takes a decision focus. We use the annual reports of **real** companies to illustrate many of the accounting concepts. You are familiar with many of the companies we use, such as The Limited and Coca-Cola Company.

Gaining an understanding of accounting terminology and concepts, however, is not enough to ensure your

success. You also need to be able to find information on the Internet, analyze various business situations, work effectively as a member of a team, and communicate your ideas clearly. This text was developed to help you develop these skills.

#### **Curriculum Concerns**

Significant changes have been recommended for accounting education. Some parties have expressed concern that recent accounting graduates do not possess the necessary set of skills to succeed in an accounting career. The typical accounting graduate seems unable to successfully deal with complex and unstructured "real world" accounting problems and generally lacks communication and interpersonal skills. One recommendation is the greater use of active learning techniques in a reenergized classroom environment. The traditional lecture and structured problem solving method approach would be supplemented or replaced with a more informal classroom setting dealing with cases, simulations, and group projects. Both inside and outside the classroom, there would be two-way communication between (1) professor and student and (2) student and student. Study groups would be formed so that students could tutor other students. The purposes of these recommendations include enhancing students' critical thinking skills, written and oral communication skills, and interpersonal skills.

One of the most important benefits you can obtain from a college education is that you "learn how to learn." The concept that you gain all of your learning in school and then spend the rest of your life applying that knowledge is not valid. Change is occurring at an increasingly rapid pace. You will probably hold many different jobs during your career, and you will probably work for many different companies. Much of the information you learn in college will be obsolete in just a few years. Therefore, you will be expected to engage in life-long learning. Memorizing is much less important than learning how to think critically.

With this changing environment in mind, we have developed a text that will lend itself to developing the skills that will lead to success in your future career in business. The section at the end of each chapter titled, "Beyond the Numbers—Critical Thinking," provides the opportunity for you to address unstructured case situations, the analysis of real companies' financial situations, ethics cases, and team projects. Each chapter also includes one or two Internet projects in the section titled "Using the Internet—A View of the Real World." For many of these items, you will use written and oral communication skills in presenting your results.

## **Objectives and Overall Approach** of the Eighth Edition

The Accounting Education Change Commission (AECC) made specific recommendations regarding teaching materials and methods used in the first-year accounting course. As a result, significant changes have taken place in that course at many universities. The AECC states:

The first course in accounting can significantly benefit those who enter business, government, and other organizations, where decision-makers use accounting information. These individuals will be better prepared for their responsibilities if they understand the role of accounting information in decision-making by managers, investors, government regulators, and others. All organizations have accountability responsibilities to their constituents, and accounting, properly used, is a powerful tool in creating information to improve the decisions that affect those constituents.<sup>1</sup>

One of the purposes of the first course should be to recruit accounting majors. To help accomplish this, the text has a section preceding some chapters discussing careers in accounting.

We retained a solid coverage of accounting that serves business students well regardless of the majors they select. Those who choose not to major in accounting, which is a majority of those taking this course, will become better users of accounting information because they will know something about the preparation and uses of that information.

#### **Approach and Organization**

#### **Decision Focus**

Without actual business experience, business students sometimes lack a frame of reference in attempting to apply accounting concepts to business decisions. We seek to involve the business student more in real world business applications as we introduce and explain the subject matter.

- "An Accounting Perspective: Business Insight" boxes
  throughout the text provide examples of how companies
  featured in text examples use accounting information
  every day, or they provide other useful information.
- "Accounting Perspective: Uses of Technology" boxes throughout the text demonstrate how technology has affected the way accounting information is prepared, manipulated, and accessed.
- Some chapters contain "A Broader Perspective."
   These situations, taken from annual reports of real companies and from articles in current business

- periodicals such as *Management Accounting*, relate to subject matter discussed in that chapter or present other useful information. These real world examples demonstrate the business relevance of accounting.
- Real world questions and real world business decision cases are included in almost every chapter.
- Some of the chapters contain end-of-chapter questions, exercises, or business decision cases that require the student to refer to the Annual Report Appendix and answer certain questions. As stated earlier, this appendix is included with the text and contains the significant portions of the annual report of The Limited, Inc.
- Each chapter contains a section entitled, "Beyond the Numbers—Critical Thinking." This section contains business decision cases, annual report analysis problems, writing assignments based on the Ethical Perspective and Broader Perspective boxes, group projects, and Internet projects.

#### **Pedagogy**

Students often come into accounting principles courses feeling anxious about learning the subject matter. Recognizing this apprehension, we studied ways to make learning easier and came up with some helpful ideas on how to make this edition work even better for students.

- Improvements in the text's content reflect feedback from adopters, suggestions by reviewers, and a serious study of the learning process itself by the authors and editors. New subject matter is introduced only after the stage has been set by transitional paragraphs between topic headings. These paragraphs provide students with the reasons for proceeding to the new material and explain the progression of topics within the chapter.
- Each chapter has an "Understanding the Learning Objectives" section. These "summaries" enable the student to determine how well the Learning Objectives were accomplished. We were the first authors (1974) to ever include Learning Objectives in an accounting text. These objectives have been included at the beginning of the chapter, as marginal notes within the chapter, at the end of the chapter, and in supplements such as the Test Bank, Instructors' Resource Guide, Computerized Test Bank, and Study Guide. The objectives are also indicated for each exercise and problem.

Accounting Education Change Commission, Position Statement No. Two, "The First Course in Accounting" (Torrance, CA, June 1992), pp. 1–2.

- Demonstration problems and solutions are included for each chapter, and a different one appears for each chapter in the Study Guide. These demonstration problems help students to assess their own progress by showing them how problems that focus on the topic(s) covered in the chapter are worked before students do assigned homework problems.
- Key terms are printed in another color for emphasis.
   End-of-chapter glossaries contain the definition and the page number where the new term was first introduced and defined. Students can easily turn back to the original discussion and study the term's significance in context with the chapter material.
- Each chapter includes a "Self-Test" consisting of truefalse and multiple-choice questions. The answers and explanations appear at the end of the chapter. These selftests are designed to determine whether the student has learned the essential information in each chapter.
- In the margin beside each exercise and problem, we have included a description of the requirements and the related Learning Objective(s). These descriptions let students know what they are expected to do in the problem.
- Throughout the text we use examples taken from everyday life to relate an accounting concept being introduced or discussed to students' experiences.

#### **Ethics**

There is no better time to emphasize high ethical standards to students. This text includes many items throughout the text entitled, "An Ethical Perspective." These items present situations in which students are likely to find themselves throughout their careers. They range from resisting pressure by a superior or a client to do the wrong thing to deciding between alternative corporate behaviors that have environmental and profit consequences.

#### **End-of-Chapter Materials**

Describing teaching methods, the AECC stated, "Teachers ... should place a priority on their interaction with students and on interaction among students. Students' involvement should be promoted by methods such as cases, simulations, and group projects. . . ." A section entitled "Beyond the Numbers—Critical Thinking" at the end of every chapter is designed to implement these recommendations. Business Decision Cases require critical thinking in complex situations often based on real companies. The Ethics Cases require students to respond in writing to situations they are

likely to encounter in their careers. These cases do not necessarily have one right answer. The **Group Projects** for each chapter teach students how to work effectively in teams, a skill that was stressed by the AECC and is becoming increasingly necessary for success in business. The **Internet Projects** teach students how to retrieve useful information from the Internet.

A team approach can also be introduced in the classroom using the regular exercises and problems in the text. Teams can be assigned the task of presenting their solutions to exercises or problems to the rest of the class. Using this team approach in class can help reenergize the classroom by creating an active, informal environment in which students learn from each other. (Two additional group projects are described in the Instructor's Resource Guide. These projects are designed to be used throughout the semester or quarter.)

We have included a vast amount of other resource materials for each chapter *within* the text from which the instructor may draw: (1) one of the largest selections of end-of-chapter questions, exercises, and problems available; and (2) from one to three business decision cases per chapter. Other key features regarding end-of-chapter material follow.

- Some of the end-of-chapter problem materials (questions, exercises, problems, business decision cases, other "Beyond the Numbers" items, and comprehensive review problems) have been updated. Each exercise and problem is identified with the learning objective(s) to which it relates.
- All end-of-chapter exercises and problems have been traced back to the chapters to ensure that nothing is asked of a student that does not appear in the book. This feature was a strength of previous editions, ensuring that instructors could confidently assign problems without having to check for applicability. Also, we took notes while teaching from the text and clarified problem and exercise instructions that seemed confusing to our students.

#### **Supplements for the Instructor**

A complete package of supplemental teaching aids contains all you need to efficiently and effectively teach the course.

**Instructor's Resource Guide, Chapters 1–12** This guide contains sample syllabi for both semester- and quarter-based courses. Each chapter contains: (1) a summary of major concepts; (2) learning objectives from the text; (3) space for the instructor's own notes; (4) an outline of the

chapter with an indication of when each exercise can be worked; and (5) detailed lecture notes that also refer to specific end-of-chapter exercise and problem materials illustrating these concepts. Also included are (6) a summary of the estimated time, learning objective(s), level of difficulty, and content of each exercise and problem that is useful in deciding which items to cover in class or to assign as homework; and (7) teaching transparencies masters. The Instructor's Resource Guide for Chapter 12 contains a case study based on Hasbro, Inc. This company is the world's leading manufacturer and marketer of toys, games, puzzles, and infant care products. You may want to assign this case as a special project to individuals or to teams. The results of the analysis, with recommendations, could then be presented to the class. The Instructor's Resource Guide is provided to adopters in both Word and PDF formats.

Solutions Manual, Chapters 1–12 The solutions manual contains suggested discussion points for each ethics case as well as detailed answers to questions, exercises, two series of problems, business decision cases, most "Beyond the Numbers" items, and some group projects. The Solutions Manual is provided to adopters in both Word and PDF files.

**Solutions Transparencies** Acetate transparencies of solutions to all exercises and *all* problems with excellent clarity can be prepared from the Solutions Manual. These transparencies, while useful in many situations, are especially helpful when covering problems in large classroom settings.

**Test Bank, Chapters 1–12** The test bank contains approximately 1,300 questions and problems to choose from ,in preparing examinations. This test bank contains truefalse questions, multiple-choice questions, and short problems for each chapter (except there are no short problems for Chapter 1). Questions and problems are *classified by the learning objective* to which they relate. The Test Bank is provided to adopters in both Word and PDF files. A computer test bank version is also available for selecting questions and printing exams.

**PowerPoint Slides, Chapters 1–12** An average of 26 PowerPoint slides exist for each chapter. These slides illustrate the most important points in the chapter. They can be used as a basis for classroom lectures and/or discussions. The PowerPoint slides are provided to adopters in PDF format.

#### **Supplements for the Student**

In addition to the text, the package of support items for the student includes the following:

**Study Guides, Chapters 1–12** Included for each chapter are learning objectives, a reference outline, a chapter review, and an additional demonstration problem and solution. If students use the study guide throughout the course, their knowledge of accounting will be enhanced significantly. The study guide is a valuable learning tool in that it includes matching, true-false, and multiple-choice questions, completion questions, and exercises. Solutions to all exercises and questions are also included. The Study Guide is available to students in PDF format. It can be downloaded from the publisher's website (<a href="www.freeloadpress.com">www.freeloadpress.com</a>).

**Check Figures, Chapters 1–12** Check figures are available in a separate file at the end of the text. They show key amounts that students can check to see if they are on the right track when working the Exercises and Problems.

Working Papers, Chapters 1–12 A set of working papers is available for completing assigned exercises, problems, business decision cases, other "Beyond the Numbers" items, and comprehensive review problems. The Working Papers are customized for each exercise and problem in each chapter. They can be downloaded from the publisher's website (<a href="www.freeloadpress.com">www.freeloadpress.com</a>).

Normally publishers provide the Study Guide and Working Papers in hard copy format which the students are required or encouraged to buy. We provide these items free of charge to students. We see this feature as a significant cost savings to students.

We are indebted to all our previous coauthors who have contributed to the project in the past, especially R. F. "Sully" Salmonson who worked on many of the early editions.

Roger H. Hermanson James Don Edwards Susan D. Ivancevich



## Need more money for college expenses?

The CLC Private Loan<sup>™</sup> can get you up to \$40,000 a year for college-related expenses.

#### Here's why the CLC Private Loan™ is a smart choice:

- Approved borrowers are sent a check within four business days
- ☑ Get \$1000 \$40,000 each year
- ✓ Interest rates as low as prime + 0% (8.66% APR)
- ☑ Quick and easy approval process
- No payments until after graduating or leaving school



#### **Acknowledgments**

The development of all eight editions of *Accounting: A Business Perspective* was an evolving and challenging process. Significant changes have taken place in the first course in accounting in schools across the country, and the authors and publisher worked hard throughout the development of this text to stay on top of those changes.

We are grateful to the following individuals for their valuable contributions and suggestions which we have incorporated in the various editions of this text. The affiliations shown for all individuals are as of the time of their contributions.

#### **Survey Participants**

Diane Adcox

University of North Florida-Jacksonville

Sue Atkinson

Tarleton State University

Ed Bader

Holy Family College

Keith Baker

Oglethorpe University

C. Richard Baker Fordham University

Audrie Beck

The American University

Joe Bentley

Bunker Hill Community College

Lucille Berry
Webster University

Robert Bricker

Case Western Reserve

William Brosi Delhi College

Doug Brown

Eastern Montana College

Stuart Brown

Bristol Community College

Janice Buddinseck Wagner College

Kurt Buerger

Anglo State University

Robert Cantwell

University of Phoenix-Utah

Bruce Cassel

**Dutchess Community College** 

Stan Chu

Borough of Manhattan Community College

Bruce Collier

University of Texas-El Paso

Rosalind Cranor

Virginia Polytech Institute

James Crockett

University of Southern Mississippi

Lee Daugherty

Lorain County Community College

Mary Davis

University of Maryland

Frances Engel Niagra University

J. Michael Erwin *University of Tennessee* 

Ali Fekrat

Georgetown University

Bill Felty

Lindenwood College

Clyde J. Galbraith West Chester University

Susan D. Garr

Wayne State University

John Gercio Loyola College

Martin Ginsberg

Rockland Community College

Earl Godfrey

Gardner-Webb College

Thomas Grant Kutztown University Paul W. Greenough Assumption College

**Roy Gross** 

**Dutchess Community College** 

Vincent D. R. Guide *Clemson University* 

Pat Haggerty

Lansing Community College

Paul Hajja *Rivier College* 

Joh Haney

Lansing Community College

Thomas D. Harris *Indiana State University* 

Dennis Hart

Manchester Community College

Tomball College Mary Hatch Thomas College

Brenda Hartman

Margaret Hicks Howard University Patricia H. Holmes

Des Moines Area Community College

Anita Hope

Tarrant County Junior College

Andrew Jackson

Central State University

Donald W. Johnson, Sr.

Siena College

Glenn L. Johnson

Washington State University

Richard W. Jones *Lamar University* 

Ed Kerr

Bunker Hill Community College

David Kleinerman Roosevelt University

Jane Konditi

Northwood University Nathan J. Kranowski Radford University

Michael Kulper

Santa Barbara Community College

Michael R. Lane

Nassau Community College

Judy Laux Colorado College

Linda Lessing SUNY–Farmingdale

Bruce McClane
Hartnell College
Melvin T. McClure
University of Maine

T. J. McCoy

Middlesex Community College

J. Harrison McCraw West Georgia College James E. McKinney Valdosta State

B. J. Michalek *La Roche College*Andrew Miller

Hudson Valley Community College

Cheryl E. Mitchum Virginia State University

Susan Moncada

Indiana State University

Susan Mulhern *Rivier College* 

Lee H. Nicholas

University of Southern Iowa

Kristine N. Palmer Longwood College Lynn M. Paluska

Nassau Community College

Seong Park

University of Tennessee-Chattanooga

Vikki Passikoff

**Dutchess Community College** 

Barb Pauer

W. Wisconsin Tech Institute

Doug Pfister

Lansing Community College

Sharyll A. Plato

University of Central Oklahoma

Patricia P. Polk

University of Southern Mississippi

Harry Purcell

Ulster Community College

T. J. Regan

Middlesex County College

Ruthie G. Reynolds *Howard University* 

E. Barry Rice

Loyola College in Maryland

Cheryl Rumler

Monroe County Community College

Francis Sake

Mercer County Community College

Jackie Sanders

Mercer County Community College

Alex J. Sannella Rutgers University

Thomas Sears Hartwich College

John Sedensky Newbury College Sarah H. Smith Cedarville College

John Snyder

Mohawk Valley Community College

Leonard E. Stokes Siena College

Janice Stoudemire

Midlands Technical College-Airport Campus

Marty Stub

DeVry Institute-Chicago

Barbara Sturdevant *Delhi College* William N. Sullivan

Assumption College
Norman A. Sunderman

Angelo State University

Janice M. Swanson

Southern Oregon State College

Norman Swanson Greenville College Audrey G. Taylor Wayne State University

Kayla Tessler

Oklahoma City Community College

Julia Tiernan Merrimack College

John Vaccaro

Bunker Hill Community College

Al Veragraziano

Santa Barbara Community College

David Wagaman
Kutztown University

Karen Walton

John Carroll University

Linda Wanacott

Portland Community College

Jim Weglin

North Seattle Community College

David P. Weiner

University of San Francisco

L.K. Williams

Morehead State University

Marge Zolldi Husson College

Reviewers

Lucille Berry
Webster University

Elizabeth L. Boudreau *Newbury College* 

Wayne G. Bremser *Villanova University* 

Fred Dial

Stephen F. Austin State University

Larry Falcetto

Emporia State University

Katherine Beal Frazier

North Carolina State University

Al L. Hartgraves *Emory University* 

Martin G. Jagels

University of South Carolina

Emel Kahya
Rutgers University
Emogene W. King
Tyler Junior College

Jane Konditi

Northwood University

Charles Konkol

University of Wisconsin-Milwaukee

William Lawler Tomball College

Keith R. Leeseberg

Manatee Junior College-Bradenton

Susan Moncada

Indiana State University

Lee H. Nicholas

University of Northern Iowa

Douglas R. Pfister

Lansing Community College

Patricia P. Polk

University of Southern Mississippi

Richard Rand

Tennessee Technical University

Ruthie G. Reynolds *Howard University* 

Marilyn Rholl

Lane Community College

E. Berry Rice

Loyola College in Maryland

William Richardson *University of Phoenix* 

Douglas Sharp

Wichita State University

Janet Stoudemire

Midlands Technical College-Airport Campus

Marilyn Young

Tulsa Junior College-Southeast

#### **Annotations Authors**

Diane Adcox

Instructor of Accounting

University of North Florida–Jacksonville

C. Sue Cook

Tulsa Junior College

Alan B. Cryzewski *Indiana State University* 

Patricia H. Holmes, CPA (Coordinator)

Des Moines Area Community College

Donald W. Johnson, Sr.

Siena College

Linda Lessing

SUNY at Farmingdale

Cheryl E. Mitchem (Coordinator)

Virginia State University

Lee H. Nicholas

University of Northern Iowa

Lynn Mazzola Paluska

Nassau Community College

Benjamin Shlaes, CPA (Coordinator)

Des Moines Area Community College

Margaret Skinner

SUNY at New Paltz

Leonard F. Stokes III, CPA

Siena College

Kathy J. Tam, CPA

Tulsa Junior College

#### **Other Contributors**

Donald R. Herrmann *Baylor University* 

Keith F. Sellers

Fort Lewis College

Wayne B. Thomas

University of Oklahoma

T. Sterling Wetzel

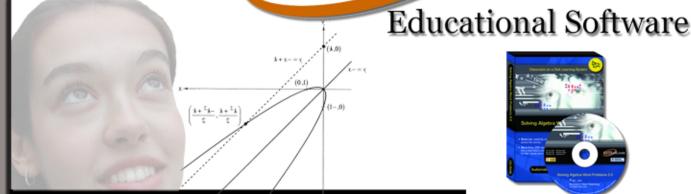
Oklahoma State University-Stillwater

#### **Former Coauthor**

R. F. Salmonson (Deceased)

Michigan State University







## We help students get math. It's just that simple.

If you are afraid of math, think you cannot do math, go blank on math tests, our 5.0 learning system will help you get math.

**Audio/Video Lectures On Every Page** – No other learning system is enhanced with audio/video lectures embedded throughout the material. As you are studying, there are video lectures next to the material explaining the concepts, procedures, and examples as they appear. Within the exercise sets and chapter review material, you will find video lectures next to the appropriate problems, which reinforce and solidify the learning experience.

Step-by-step solutions to all problems – Instead of just an answer, every problem has a step-bystep solution, which allows you to verify that you are doing the problems correctly. Should you make an error, there is no wondering, "where did I go wrong", the step-by-step solution will pinpoint the step in which the error occurred.

GetMath Educational Software is your link to success in mathematics – Wherever you are in the material, you are just a click away from all of the support features of a learning system that has been developed and fine-tuned over the last two decades.

GetMath.com Educational Software has joined forces with Freeload Press in helping liberate the textbook so students from all financial backgrounds can use these important learning tools. GetMath is bringing more than 30 textbooks and ancillaries to the FreeLoad site for free download. Several million students have purchased at least one of our textbooks, but you will now be able to start using those same textbooks along with the resource material for free.

Your path to success is made easy – with video lectures, quick reference examples, notes to the student, quick check problems, concept boxes, trial problems, real-life applications, mastery points, core exercises, procedure boxes, review exercises, explore-to-learn problems, functional use of color as a guide, and over 20 years of in-the- classroom refinements.

## Contents in Brief

#### Part I The Managerial Environment

**1** An Introduction to Managerial Accounting 3

#### **PART II** Product Costing

- **2** Managerial Accounting Concepts/Job Costing 29
- **3** Process Cost Systems 67
- **4** Using Accounting for Quality and Cost Management 99

## PART III Using Cost Information for Decision-Making

- **5** Cost-Volume-Profit Analysis 135
- **6** Short-Term Decision Making: Differential Analysis 165

## PART IV Planning and Control

- **7** Budgeting for Planning and Control 189
- 8 Control Through Standard Costs 225
- **9** Responsibility Accounting: Segmental Analysis 255
- **10** Capital Budgeting: Long-Range Planning 289

## PART V Analysis of Financial Statements: Using the Statement of Cash Flows

- **11** Analysis Using the Statement of Cash Flows 319
- **12** Analysis and Interpretation of Financial Statements 365

#### **Check Figures 417**

Annual Report Appendix: The Limited, Inc. A-1

Appendix: Compound Interest and Annuity Tables A-17

**New Terms Index I-1** 

Subject Matter Index I-3





## Extra Credit Rocks

#### Sign up for a Discover® Student Card today and enjoy:

- 0% Intro APR\* on Purchases for 6 Months
- No Annual Fee
- Easiest Online Account Management Options
- Full 5% Cashback Bonus®\* on Get More purchases in popular categories all year
- Up to 1% Cashback Bonus®\* on all your other purchases
- Unlimited cash rewards that never expire as long as you use your Card

**APPLY NOW** 



## Table of Contents

## Part I The Managerial Environment

#### **Careers in Accounting:**

Entrepreneurship 2

#### **Chapter One**

An Introduction to Managerial Accounting 3

#### Organizations 3

The Nature of Organizations 3
Setting Objectives or Goals 4
Strategic Planning 4
What Products and Services? 4
What Marketing Strategy? 4

## Organizing to Achieve Objectives 4 The Basic Management Functions 6

Organizations—Their Differences and Similarities 9

## Accounting, Information, and Management Action 9

Sources of Accounting Information 10 Uses of Management Accounting Information 10

## Management, Accounting, and Financial Accounting 12

Management Accounting and Financial Accounting Similarities 12

## Management Accounting and Financial Differnces 13

Management Accounting as a Recognized Discipline 14

The Certificate in Management Accounting (CMA) 14

Understanding the Learning Objectives 15

**Demonstration Problem 16** 

Solution to Demonstration Problem 17

New Terms 18 Self-Test 19 Questions 21
Problems 21
Alternate Problems 24
Beyond the Numbers—Critical Thinking 26
Using the Internet—

A View of the Real World 27
Answers to Self-Test 27

#### **PART II** Product Costing

#### **Careers in Accounting:**

A Manager's Perspective 28

#### **Chapter Two**

Managerial Accounting Concepts/Job Costing 29

## Compare Mangerial Accounting with Financial Accounting 29

Ethical Issues 30

## Merchandiser and Manufacturer: Differences in Cost Concepts 30

Basic Product Cost Components 30 Product and Period Costs 32

## Financial Reporting by Manufacturing Companies 33

The Statement of Cost of Goods Manufactured 34 The Income Statement 35 The Balance Sheet 36

#### The General Cost Accumulation Model 36

Product and Cost Flows 36 Cost Accounting Systems for Different Types of Production 37

#### Job Costing 38

Managerial Uses of Cost Information 43

**Predetermined Overhead Rates 43** 

Understanding the Learning
Objectives 45

Appendix: Variable versus Absorption Costing 46

Demonstration Problem 18–A 48 Solution to Demonstration Problem 18–A 49 Demonstration Problem 18–B 50	Chapter Four Using Accounting for Quality and Cost Management 99
Solution to Demonstration Problem 18–B 50  New Terms 51  Self-Test 52  Questions 53  Exercises 54	Importance of Good Accounting Information 99 Quality and the New Production Environment 99 Improving Quality 100 The Quality is Free Concept 101 Methods to Identify Quality 101
Problems 56 Alternate Problems 59 Beyond the Numbers 61 Using the Internet 64 Answers to Self-Test 65	Quality and Customer Satisfaction Measures 103 Nonfinancial Performance Measures 103 Motivation Effects 104 Strategic Advantages of High Quality 104 Benchmarking 104 Balanced Scorecard 105
Chapter Three Process Cost Systems 67  Nature of a Process Cost System 67	Just-in-Time Method 106 Just-in-Time and Quality 106 Flexible Manufacturing 107 Lean Production 107 Effect of Just-in-Time on Accounting 107
Process Costing Illustration 68 Equivalent Units of Production 71 Journal Entry Analysis 73 Production Cost Report 74 FIFO Method 76	Advantages of Just-in-Time Systems 109  Activity-Based Costing and  Management 110  Activity-Based Costing 110  Activity-Based Management 110
Process Costing in Service Organizations 77  Spoilage 77 Spoilage and Total Quality Management 78  Understanding the Learning Objectives 78  Appendix 19A: The FIFO Process Cost Method 79	Methods Used for Activity-Based Costing 113 Step 1: Identifying the Activities that Consume Resources 113 Step 2: Choosing Cost Drivers 113 Step 3: Computing a Cost Rate per Cost Driver 114 Step 4: Assigning Costs to Products 114 Activity-Based Costing Illustrated 114 Assigning Costs Using Activity-Based
Appendix 19B: Allocation of Joint Product Costs 84  Demonstration Problem 86  Solution to Demonstration Problem 87  New Terms 87  Self-Test 88  Questions 89  Exercises 90	Costing 115  Impact of New Production Environment on Cost Drivers 117  Activity-Based Costing in Marketing 118  Strategic Use of Activity-Based Management 118  Behavioral and Implementation Issues 118
Problems 91 Alternate Problems 94 Beyond the Numbers 94 Using the Internet 96 Answers to Self-Test 96 Comprehensive Review Problem 96	Opportunities to Improve Activity-Based Costing in Practice 119 Understanding the Learning Objectives 119 Demonstration Problem 121 Solution to Demonstration Problem 122 New Terms 122

Self-Test 123 Questions 124 Exercises 125	Demonstration Problem 21-A 151 Solution to Demonstration Problem 21-A 151 Demonstration Problem 21-B 152
Problems 127 Alternate Problems 129 Beyond the Numbers 131	Solution to Demonstration to Problem 21-B 152 New Terms 153
Using the Internet 133 Answers to Self-Test 133	Self-Test 153 Questions 154 Exercises 155
PART III Using Cost Information for Decision-Making	Problems 156 Alternate Problems 159 Beyond the Numbers 161 Using the Internet 163
Careers in Accounting: A Manager's Perspective 134	Answers to Self-Test 164  Chapter Six
Chapter Five Cost-Volume-Profit Analysis 135	Short-Term Decision Making: Differential Analysis 165
Cost Behavior Patterns 136 Curvilinear Cost Patterns 138	Contribution Margin Income Statements 165 Differential Analysis 167
Methods for Analyzing Costs 139 Scatter Diagram 139 High-Low Method 140	Nature of Fixed Costs 168 Opportunity Costs 169  Applications of Differential Analysis 169
Cost-Volume-Profit (CVP) Analysis 141 Cost-Volume-Profit Chart 141 Finding the Break-Even Point 142	Pricing Decisions 169 Accepting or Rejecting Special Orders: Providing Discounts 170
Calculating Break-Even for a Multiproduct Company 144  Margin of Safety 145	Adding or Eliminating Products, Segments, or Customers 172 Processing or Selling Joint Products 172
Cost-Volume-Profit Analysis Illustrated 145 Calculating the Break-Even Point 145	Deciding to Make or Buy 173  Applying Differential Analysis to  Quality 174
Calculating the Break-Even Form 143  Calculating Sales Volume Needed for Desired  Net Income 146  Calculating the Effect of Changing the Sales  Price on Net Income 147  Other Uses of Cost-Volume-Profit  Analysis 147	Understanding the Learning Objectives 175 Demonstration Problem 177 Solution to Demonstration Problem 177 New Terms 177
Assumptions Made in Cost-Volume-Profit Analysis 147	Self-Test 178  Questions 178  Exercises 179
Using Computer Spreadsheets for CVP Analysis 147 Effect of Automation on	Problems 181
Effect of Automation on Cost-Volume-Profit Analysis 149	Alternate Problems 183 Beyond the Numbers 185
Understanding the Learning Objectives 150	Using the Internet 187

**Answers to Self-Test 187** 

#### **PART IV** Planning and Control

#### **Careers in Accounting:**

A Manager's Perspective 188

#### **Chapter Seven**

Budgeting for Planning and Control 189

#### The Budget-for Planning and Control 189

Purposes of Budgets 190
Considerations in Preparing a Budget 190
Some General Principles of Budgeting 191
Behavioral Implications of Budgets 191
The Master Budget Concept 192
Preparing the Planned Operating Budget at the Expected Level of Operations 193
Preparing the Financial Budget 194

#### The Master Budget Illustrated 194

Preparing the Planned Operating Budget in Units for Leed Company 194 Preparing the Planned Operating Budget in Dollars 195 Planned Operating Budget Illustrated 196 Flexible Operating Budgets 197 Preparing the Financial Budget for Leed Company 201 The Financial Budget Illustrated 206

## Budgeting in Merchandising Companies 207

Purchases Budget for a Merchandising Company 207

## Budgeting in Service Companies 208 Additional Concepts Related to Budgeting 208

Just-in-Time Inventory 208 Zero-Based Budgeting 208

Understand the Learning Objectives 209

Demonstration Problem 210

Solution to Demonstration Problem 211

New Terms 211
Self-Test 212
Questions 212
Exercises 213

Problems 214

Alternate Problems 217
Beyond the Numbers 219
Using the Internet 220
Comprehensive Problems 221
Answers to Self-Test 223

#### **Chapter Eight**

#### **Control Through Standard Costs 225**

#### **Uses of Standard Costs 225**

Nature of Standard Costs 225
Use of Standard Costs in Developing
Budgets 226
Management by Exception 227
Ideal versus Practical Standards 227
Other Uses of Standard Costs 227

#### Advantages and Disadvantages of Using Standard Costs 227

Advantages of Using Standard Costs 227 Disadvantages of Using Standard Costs 229

#### **Computing Variance 229**

Materials Variances 230
Labor Variances 232
Labor Variances in Nonmanufacturing
Organizations 235
Overhead Variances 236

#### **Goods Completed and Sold 240**

### Investigating Variances from Standard 240

Performance Reports 241

### Disposing of Variances from Standard 241

Nonfinancial Performance Measures 242
Activity-Based Costing, Standards, and
Variances 242

Understanding the Learning
Objectives 243

**Demonstration Problem 245** 

Solution to Demonstration Problem 245

New Terms 246
Self-Test 246
Questions 248
Exercises 248
Problems 249

Alternate Problems 251
Beyond the Numbers 252
Using the Internet 253
Answers to Self-Test 254

#### **Chapter Nine**

Responsibility Accounting: Segmental Analysis 255

## Responsibility Accounting 255 Responsibility Reports 257

Features of Responsibility Reports 258

Responsibilty Reports-An Illustration 258 **Responsibilty Centers 259** Expense Centers 261 Profit Centers 261 Investment Centers 261 Transfer Prices 262 **Use of Segmental Analysis 263** Concepts Used in Segmental Analysis 263 Direct Cost and Indirect Cost 263 Net Income of a Segment–Evaluation Criteria for a Profit Center 264 **Investment Center Analysis 266** Return on Investment (ROI) 266 **Economic Value Added and Residual** Income 268 Using Judgment in Performance Evaluation 271 Segmental Reporting in External Financial Statements 271 **Understanding the Learning Objectives 272** Appendix: Allocation of Service **Department Costs 272 Demonstration Problem 274** Solution to Demonstration Problem 275 New Terms 276 Self-Test 277 **Questions 278 Exercises 278 Problems 280** Alternate Problems 283 **Beyond the Numbers 285** 

**PART V** Analysis of Financial **Statements: Using the** Statement of Cash Flows

#### **Chapter Ten**

Using the Internet 287

**Answers to Self-Test 288** 

**Capital Budgeting: Long-Range** Planning 289

Capital Budgeting Defined 290

**Project Selection: A General View 290** 

Time Value of Money 290 Net Cash Inflow 291

**Project Selection: Payback Period 293 Project Selection: Unadjusted Rate of** Return 295

**Project Selection: Net Present Value** 

Method 297

**Profitability Index 298** 

**Project Selection: The Time-Adjusted Rate of Return (or Internal Rate** of Return) 299

Investments in Working Capital 301

The Postaudit 302

**Investing in High Technology Projects 303** 

**Capital Budgeting in Not-for-Profit** Organizations 303

Epilogue 303

Understanding the Learning **Objectives 304** 

Demonstration Problem 305

Solution to Demonstration Problem 306

New Terms 307 Self-Test 307 Questions 309 Exercises 309 Problems 310

Alternate Problems 313 **Beyond the Numbers 315** Using the Internet 317 Answers to Self-Test 317

#### **Careers in Accounting:**

A Manager's Perspective 318

#### **Chapter Eleven**

**Analysis Using the Statement of** Cash Flows 319

**Purposes of the Statement of Cash** Flows 319

Uses of the Statement of Cash Flows 320

Management Uses 320 Investor and Creditor Uses 320

**Information in the Statement of Cash** Flows 320

A Separate Schedule for Significant Noncash Investing and Financing Activities 322

Cash Flows from Operating Activities 322

## Steps in Preparing Statement of Cash Flows 324

Step 1: Determining Cash Flows from
Operating Activities—Direct Method 324
Alternate Step 1: Determining Cash Flows
from Operating Activities—Indirect
Method 326

Step 2: Analyzing the Noncurrent Accounts and Additional Data 327

Step 3: Arranging Information in the Statement of Cash Flows 328

### Analysis of the Statement of Cash Flows 330

Synotech's Consolidated Statement of Cash Flows 330

Management's Discussion and Analysis 330 Explanation of Items in Synotech's Consolidated Statements of Cash Flows 332

Use of the Cash Flow Information for Decision Making 333

#### Analyzing and Using the Financial Results—Cash Flow per Share of Common Stock, Cash Flow Margin, and Cash Flow Liquidity Ratios 335

Understanding the Learning Objectives 336

#### Appendix: Use of a Working Paper to Prepare a Statement of Cash Flows 337

Completing the Working Paper 338
Preparing the Statement of Cash Flows 340

#### **Demonstration Problem 340**

**Solution to Demonstration Problem 341** 

New Terms 342 Self-Test 343 Questions 344

Exercises 344

Problems 346

Alternate Problems 351
Beyond the Numbers—
Critical Thinking 358

Using the Internet—A View of the Real World 361

**Answers to Self-Test 361** 

#### **Careers in Accounting:**

A Manager's Perspective 364

#### **Chapter Twelve**

**Analysis and Interpretation of Financial Statements** 365

## Objectives of Financial Statement Analysis 365

Financial Statement Analysis 366

#### **Sources of Information 367**

Published Reports 367 Government Reports 368 Financial Service Information, Business Publications, Newspapers, and Periodicals 368

### Horizontal Analysis and Vertical Analysis: an Illustration 369

Analysis of a Balance Sheet 369
Analysis of Statement of Income and Retained
Earnings 370

#### **Trend Percentages 372**

#### Ratio Analysis 373

Liquidity Ratios 373
Equity, or Long-Term Solvency, Ratios 378
Profitability Tests 379
Market Tests 385

## Final Considerations in Financial Statement Analysis 387

Need for Comparable Data 389 Influence of External Factors 389 Need for Standards of Comparison 389 The Future 390

## Understanding the Learning Objectives 392

Demonstration Problem 17–A 394

Solution to Demonstration Problem 17–A 395

**Demonstration Problem 17-B** 396

Solution to Demonstration Problem 17–B 397

New Terms 398 Self-Test 399 Questions 400
Exercises 400
Problems 402
Alternate Problems 407
Beyond the Numbers—
 Critical Thinking 412
Using the Internet—
 A View of the Real World 414
Answers to Self-Test 415

Check Figures 417

Annual Report Appendix:
 The Limited, Inc. A-1

Appendix: Compound Interest and Annuity Tables A-17

New Terms Index I-1

Subject Index I-3

## **GMAC** Bank



## Student Loans for up to \$40,000 per year\*

Defer payments until after graduation.\*\*
Fast preliminary approval, usually in minutes.



### Apply online in as little as 15 minutes

- Loans up to \$40,000 per academic year\*
- Good for tuition and other educational expenses: books, fees, a laptop, room and board, travel home, etc.
- Get a check in as few as 5 business days
- Start payments now or up to six months after graduation\*\*
  - Reduce your interest rate by as much as 0.50% with automatic payments\*\*\*

All loans are subject to application and credit approval.

э

\*\*\* A 0.25% interest rate reduction is available for borrowers who elect to have monthly principal and interest payments transferred electronically from a savings or checking account. The interest rate reduction will begin when automatic principal and interest payments start, and will remain in effect as long as automatic payments continue without interest payments are cancelled, rejected or returned for any reason. Upon request, borrowers are also entitled to an additional 0.25% interest rate will return to contract rate if automatic payments are paid on time. and (2) at any time prior to the 36th on time payment, the borrower who receives the monthly bill elects to have monthly principal and interest payments transferred electronically from a savings or checking account, and continues to make such automatic payments through the 36th payment. This reduced interest rate will not be returned to contract rate if after receiving the benefit, the borrower discontinues automatic electronic payment. The lender and servicer reserve the right to modify or discontinue borrower benefit programs (other than the co-signer release benefit) at any time without notice.

GMAC Bank Member FDIC

<sup>\*</sup> Undergraduate and graduate borrowers may borrow annually up to the lesser of the cost of attendance or \$30,000 (\$40,000 for certain schools where it has been determined that the annual cost of attendance exceeds \$30,000). Borrowers in the Continuing Education loan program may borrow annually up to \$30,000.

<sup>\*\*</sup> Undergraduate students may choose to defer repayment until aix months after graduation or ceasing to be enrolled at least half time in school. Interest only and immediate repayment options also available

## Careers in Accounting

#### A Career as an Entrepreneur

When today's college students are polled about their long-term career choice, a surprisingly large number respond that they wish to someday own and manage their own business. In fact, the aspiration to start a business, to be an entrepreneur, is nearly universal. It is widely acknowledged that a degree in accounting offers many advantages to a would-be entrepreneur. In fact, if you ask owners of small businesses which skill they wish they had more expertise in, they will very frequently reply "accounting." No matter what the business may be, the owner and/or manager must be able to understand the accounting and financial consequences of business decisions.

Most successful entrepreneurs have learned that it takes a lot more than a great marketing idea or product innovation to make a successful business. There are many steps involved before an idea becomes a successful and rewarding business. Entrepreneurs must be able to raise capital, either from banks or investors. Once a business has been launched, the entrepreneur must be a manager – a manager of people, inventory, facilities, customer relationships, and relationships with the very banks and investors that provided the capital. Business owners quickly learn that in order to survive they need to be well-rounded, savvy individuals who can successfully manage these diverse relationships. An accounting education is ideal for providing this versatile background.

In addition to providing a good foundation for entrepreneurship in any business, an accounting degree offers other ways of building your own business. For example, a large percentage of public accountants work as sole proprietors – building and managing their own professional practice. This can be a very rewarding career, working closely with individuals and small businesses. One advantage of this career is that you can establish your practice in virtually any location ranging from large cities to rural settings. Finally, many accountants who have gained specialized expertise and experience in a particular field start their own practice as consultants. Expertise such as this, which may be in a field outside of traditional accounting practice, can generate billing rates well in excess of \$100 an hour.

Campfire queen Cycling champion Sentimental geologist\*

Learn more about Marjon Walrod and tell us more about you. Visit pwc.com/bringit.

Your life. You can bring it with you.



#### \*connectedthinking





# An Introduction to Managerial Accounting

The objective of financial accounting is to provide useful information to stockholders, creditors, and other interested persons *outside* the organization. The objective of managerial (or management) accounting is to provide useful information to managers, that is, to individuals *inside* the organization. Most of our discussion of managerial accounting is set in a profit-seeking business environment; however, much of the material presented is also relevant to not-for-profit organizations, such as universities, hospitals, and governmental agencies.

Because managerial accounting seeks to aid managers in their work, the study of managerial accounting requires some knowledge of what managers do and of the organizations in which they work. For this reason, we will first examine the management process and the characteristics, goals, structure, and operations of the organizations in which it is applied.

#### **Organizations**

#### The Nature of Organizations

An **organization** is a group of people joined together in seeking some common goal(s) or objective(s). An airline providing passenger and freight transportation is an organization, as is a hospital providing a wide variety of health-related services. The General Motors Corporation, producing and selling automobiles and other products and services, is an organization. And although an organization typically holds and uses physical and intangible assets, it is the people, not these assets, which make up the organization. Thus, a hospital, in the sense of a physical structure, is not an organization. But with people added, it is an organization.

#### Learning Objectives

After studying this chapter, you should be able to:

- Describe the nature of organizations and their objectives & strategies.
- **2.** Explain how organizations are structured to achieve their objectives.
- **3.** Describe the basic management functions: Planning, Organizing, Directing, and Controlling (And the decision-making process carried out in each of these functions).
- **4.** Assess the differences and similarities between organizations.
- **5.** Describe the nature, sources, and management uses of accounting information.

(continued)

#### Objectives

- **6.** Identify the differences and similarities between managerial and financial accounting.
- **7.** Discuss the emergence of managerial accounting as a recognized discipline.

#### **Setting Objectives or Goals**

Not all organizations will have the same objectives or goals. Business firms have a profit objective because their owners expect a return or a reward for investing their money in the firm. Thus, a primary objective of every business firm is to provide goods or services or both at a profit, and its management will be held responsible for generating profits. Certainly a business firm may have other objectives such as gaining a reputation for providing quality products at fair prices or being a good place to work, but the realization of these other objectives is apt to depend upon the firm's ability to generate adequate profits.

Many organizations, of course, do not have a profit objective. A city- owned electric utility may have a voter-determined goal of providing electricity "at cost." A local playhouse group may seek to provide a cultural dimension to the community. Churches seek, in part, to improve the moral and ethical standards of the community. But, whatever they may be, every organization will have its objectives—many often expressed in only broad terms.

#### **Strategic Planning**

#### Objective 1:

Describe the nature of organizations and their objectives & strategies.

What Products and Services?

What Marketing Strategy?

Within the broad guidelines of the objectives, the management of an organization will find that it can pursue its objectives in different ways. Therefore, it must choose between competing alternatives. Making such a choice (the "big" decision) is called **strategic planning**. For a business firm, strategic planning usually involves (a) determining what goods and services are to be provided and (b) how the goods are to be acquired (purchased or manufactured) and how the goods and services are to be marketed. Consider, for example, the strategies that must be developed even after the objective of earning a satisfactory profit from the operation of a retail store has been established.

A strategy must be developed for the product and service lines that will be handled. The management of one retail department store might decide that the store should handle a full line of merchandise similar to that handled by other major department stores. In this case, departments would include apparel, garden, electronics, appliances, hardware, automotive, furniture, and linens for kitchen and baths. Alternatively, another retailer might develop the strategy of focusing its efforts primarily on apparel and linens.

A second strategy must deal with what segment of the general public is to be cultivated as the major source of the store's customers. Here the classic example is that of a discount versus a quality approach. That is, are adequate profits to be sought from selling huge volumes of merchandise at low margins? Or is the strategy to be one of selling a low volume of high-margin merchandise? Or are prices and volume to be targeted at some intermediate level? Which strategies are adopted is a matter of management judgment. In some cases, the bankruptcy of a business firm constitutes clear evidence that the wrong strategies were chosen. But every business, because it cannot do all things, will have its own strategies. Although often not expressed in writing, these strategies guide an organization's activities and shape its informational needs.

#### **Organizing to Achieve Objectives**

#### Objective 2:

Explain how organizations are structured to achieve their objectives.

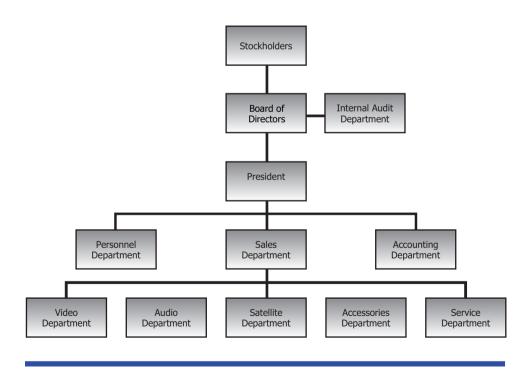
In only the smallest of organizations can the president personally supervise the activities of all employees. Consequently, in most organizations, management responsibilities are shared by a number of individuals, that is, decision making is decentralized. **Decentralization** is achieved by organizing the employees into groups, often called departments or divisions, with each group headed by a manager. It is the manager's

responsibility to see that the group completes its assigned tasks efficiently and effectively. The departments are typically described as either line departments or staff departments.

A line department is directly engaged in activities designed to achieve the basic objectives of the organization. A staff department provides services to other departments or units. Thus, a staff department is only indirectly involved in achieving an organization's objectives. Illustration 1.1 is an organization chart showing how the persons involved in the retailing of electronic equipment might be organized along lines of authority and responsibility. The chart shows the existence of six line departments: (1) a sales department, the head of which has line authority over the other line departments; (2) a video department that sells televisions, DVD players and VCRs; (3) an audio department that sells stereos; (4) a satellite department that sells and installs satellite radio and satellite television equipment; (5) an accessories and parts department; and (6) a service department that services makes of equipment similar to those sold. There are three staff departments: (1) the internal audit department or staff; (2) the personnel department which sees that all of the other departments are staffed with qualified employees; and (3) the accounting department which is responsible for collecting, reporting, and analyzing much of the quantitative information needed by internal and external users.

Each of the boxes below the president in Illustration 1.1 depicts an organizational unit which consists of a group of persons, headed by a manager, and which has been given a specific task. Each person in the lower groups reports to the unit's manager, who, in turn, reports to someone higher in the organizational structure. When so structured, the organizational unit can be called a **responsibility center**. Because of its importance, much more will be said about responsibility centers later.

**Illustration 1.1** Organization Chart



The lines running between the boxes show the formal accountability or responsibility relationships between managers. They show who reports to whom or who is held accountable by whom. For example, the chart shows that the managers of

the five revenue-producing line departments report to and are held accountable for their activities by the head of the sales department. The heads of the personnel, sales, and accounting departments are responsible to the president who, in turn, is responsible to and reports to the board of directors. The internal audit department typically reports directly to the Audit Committee of the Board of Directors on any aspects of the company's operations. It helps an organization accomplish its objectives by improving its operations. The board's responsibility, of course, is to the stockholders.

The chart does not show informal relationships or lines of communication. These must exist if an organization is to achieve its objectives. The managers of the video and satellite departments must work together. For instance, the chances of making a substantial sale in the video department may be ruined if the satellite department will not agree to install a new satellite by a stated date.

The organization chart in Illustration 1.1 shows only six line and three staff departments. In many organizations, there may be scores of line departments structured into layers of departments and sub departments. There also may be many other staff departments providing services such as advertising, finance, cafeteria, medical, legal, and purchasing. Some organization charts show the name of the head of the unit in the box rather than the name of the department.

The Chief Financial Officer (CFO) or Controller. In many large corporations, the top accounting officer is called the Chief Financial Officer (CFO) and the accounting department manager is called the *controller*. Sometimes there is a CFO for the entire company and a controller in the accounting department of each division of the company. The **Chief Financial Officer** is the top accounting person and is often a member of top-level management. It is through the provision, interpretation, and analysis of information that the Chief Financial Officer of an organization influences its decisions.

The **Controller** is manager of the accounting department and generally reports to the Chief Financial Officer if both positions exist. Despite the implications of the title, the controller actually controls only the operations of the accounting department and does not directly control line department operations. Accounting is a staff function. It provides informational services. Much of this book is devoted to a discussion and analysis of the information supplied by the accounting department and the way it is used for decision making by other departments.

An Accounting
Perspective
ERP Systems;
Improving
Efficiencies of
Managers

**Business Insight** Sometimes the various departments and responsibility centers in an organization over time develop their own information systems to meet their own needs. However, these departmental systems can often be incompatible with one another and make it difficult to conveniently share information between departments. Recent improvements in information technology have allowed these incompatible systems to be replaced by one uniform all-encompassing system for the entire organization. These uniform systems allow managers of different departments and other individuals to access the system and obtain and share needed information on various parts of the organization on a real-time basis. Certain software companies have produced off-the-shelf software versions of uniform systems which they call enterprise resource planning (ERP) systems. Based on author's research

#### **The Basic Management Functions**

#### **Objective 3:**

Describe the basic management functions: Planning, Organizing, Directing, and Controlling The primary task of every manager is to administer or manage the resources of a responsibility center so that the center's work gets done. Note that the work itself is not done by the manager. It is not an act of management for managers to do the work themselves, even though they may on occasion "pitch in" and help complete difficult tasks. However, to say that managers manage is not enough. Further identification of

the functions of management is needed for a better understanding. While authors of texts on management often disagree, the functions of management noted generally include: (1) planning, (2) organizing, (3) directing, and (4) controlling. Some would combine (2) and (3) and consider it a single function, while others would add assembling (resources and processes) and motivating (employees).

**Planning** In **planning**, the manager sets forth the actions needed to assist the organization to achieve its objectives. As already noted, planning at the highest levels of management is called strategic planning. It results in the development of a set of strategies or policies. These broad policies must be broken down into more specific, detailed plans before they can be put into effect. This involves planning at all levels of management. Both short-run and long-range plans are needed. With planning taking place at all levels of management, the need for coordination arises. **Coordination** involves the meshing or fitting together of the plans of the various individual departments or responsibility centers into an integrated plan for the entire organization. For instance, the plans for the Lincoln Division of the Ford Motor Company would be coordinated if they called for the manufacture of 500,000 Navigator engines when the division expected to produce 500,000 Navigator SUVs.

**Business Insight** Planning has been enhanced by the development of Target Costing—where a selling price and desired profit margin are determined relative to a potential product's quality. Then, "value engineering" is preformed in order to determine the target cost of the product of such quality. Target Costing involves cooperation between individuals in that managers and workers from diverse departments share information (research and development, accounting, and engineering for instance) in order to determine the product's target cost.

Accounting
Perspective
Targeting Costing
in Planning

Based on author's research

**Organizing** When **organizing**, the manager determines how the resources of a center should be arranged in order to achieve its planned objectives. This involves relating human activities with physical things. A retail store, for example, should have, among other factors, a pleasant and knowledgeable sales force and a stock of appealing merchandise ready for customers. However, organizing should also involve factors not so readily observable such as the procedures to be followed when a sale is made, including delivery of the goods sold to persons at remote locations. It should be obvious that good organization is not accidental, but is the result of deliberate actions taken by a manager seeking to get a job done.

**Directing** When **directing**, the manager monitors or supervises the routine, regular, day-to-day operations of the organization. The actions taken by the manager will include assigning employees to certain tasks, adjusting workloads and hours, authorizing variations from standard procedures, and "troubleshooting" in general. The latter category includes aiding an employee who is unable to solve a problem, settling disputes between employees or departments, and making special concessions to dissatisfied customers. In each instance, the goal is to keep the responsibility center functioning smoothly in its daily activity.

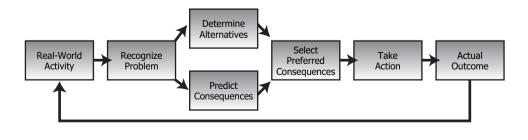
**Controlling** In **controlling**, the manager takes actions to keep the responsibility center operating according to plan. Whether or not a center is operating according to plan will be determined by a study of accounting and other reports and quality measures

on a center's activities and by a comparison of these results with planned goals. Here the principle of **management by exception** comes into play. These comparisons will draw management's attention to those centers and employees that appear not to be operating according to plan. Further study may lead to corrective action in the center's operations and the activities of its employees. Or such study may show that the plans are defective and need to be redrawn. Establishing control over an organization depends heavily on **feedback** information on how well an organization is achieving its objectives. As noted, such information may lead to new plans or new strategies. But it is more likely to be used in two other areas: (1) appraisal of activities or operations which may lead to a better way of doing things, and (2) appraisal of the performance of individuals, which may lead to praise, promotion, criticism, and so on. For the above reasons, feedback is a vital element in the successful management of an organization.

**Decision Making** Briefly stated, **decision making** consists of choosing between alternatives. All managers, whether involved in planning, organizing, directing, or controlling, face the task of deciding which alternative course of action to adopt. Thus, all managers make decisions, and decision-making is the action common to all levels of management. A manager may, for example, be involved in choosing between competing strategies in strategic planning. Or a decision of lesser significance may be involved, such as assigning employees to tasks in the maintenance department.

But it would be misleading to leave the impression that decision making consists solely of choosing between alternatives. Choosing between alternatives is but one step in what could be an extensive and difficult complete process. The entire decision-making process is shown in Illustration 1.2. Basically, it consists of (1) recognizing that a problem exists; (2) determining the alternatives considered as solutions to the problem; (3) predicting the consequences of each alternative; (4) selecting the preferred consequence, which automatically indicates the course of action chosen; and (5) taking action to implement the alternative chosen. The taking of action causes real-world activity, which is *continually* measured and evaluated. This evaluation, together with other information, may indicate the existence of another problem, bringing about a recycling of the decision-making process. One of the major objectives of this text is to indicate the role played by accounting information in management's decision making.

**Illustration 1.2** A Model of the Decision-Making Process



## **Organizations—Their Differences and Similarities**

Organizations can be classified broadly into two major groups: (1) profit-seeking, privately owned business firms legally structured as corporations, partnerships, or single proprietorships; and (2) not-for-profit entities that have diverse objectives, vary in their legal form, and differ significantly in size both as to number of individuals considered members and the amounts of economic resources controlled. These not-for-profit organizations can be further subdivided into governmental and nongovernmental organizations. Examples of governmental organizations include cities, states, counties, departments such as the Department of Defense, and agencies such as the Securities and Exchange Commission. Examples of not-for-profit, nongovernmental organizations include the Ford Foundation, trade associations such as the Professional Golfers Association of America (PGA), the National Association of Purchasing Agents, the Red Cross, individual bowling or golf leagues, chess clubs, and church memberships.

Organizations are like human beings—each is unique. Yet they all possess common characteristics, which have been discussed above. These common traits lead to a sameness in the types of accounting and other information needed. Their differences prevent their informational needs from being identical. Our goal in this text is to discuss the accounting information needed by all types of organizations, although primary attention will be devoted to profit-seeking business firms.

## **Accounting Information and Management Action**

Profits, it is often claimed, are the lifeblood of a business firm. Without debating the point, it would seem that an equal degree of importance can be attached to information. Modern businesses are so huge, complex, and varied in their activities that an individual manager can have personal knowledge of only a small part of the organization. Informed decision-making would not be possible without a steady flow of information. And informed decision making leads to profits and to survival of the organization. What happens when information is faulty or lacking?

Briefly, defined, **information** is simply added knowledge. That is, any advice, datum, fact, or perception that relates to a circumstance or thing and that adds to one's store of knowledge is information. Note the requirement of being related to a thing. To say that someone is a good golfer is not information until that someone is identified. Similarly, the number 7 by itself is not information. But knowing, for the first time, that it is my hat size is information.

Information can be classified as *quantitative* or *nonquantitative*. Quantitative information consists of added knowledge expressed in numbers. The numbers indicate the quantity of a unit of measure of a property of the thing measured, such as dollars of market value or cost, kilometers of distance, pounds of weight, cubic feet of capacity, and so on. All other information is nonquantitative and consists of added knowledge of events, such as a news report of a new landing on the moon or on Mars or an advertisement of a new product. It consists of impressions or perceptions gained from one's senses, such as a loud noise, a beautiful painting, an excellent speech, and so on.

Information may be further classified in many ways, the most important of which is distinguishing between relevant and nonrelevant information. **Relevant information** is pertinent to, or bears upon, some decision that must be made. Knowing that I wear a size 7 hat is not relevant information unless you intend to buy me a hat. The importance of relevant information to management should be

#### Objective 4:

Assess the differences and similarities between organizations.

#### Note to the student

In recent years a number of businesses have been organized as LLCs (Limited Liability Companies) or LLPs (Limited Liability Partnerships). The purpose is to limit the liability of the owners. All 50 states allow some form of this designation.

#### **Objective 5:**

Describe the nature, sources, and management uses of a ccounting information.

The Nature of Information

obvious—informed decision making is impossible without it. And it should be apparent that the wrong decision may result from using nonrelevant information. Purchasing a hat knowing only shoe size is likely to lead to the purchase of the wrong size hat.

The managers of an organization receive and use information provided by many sources, both internal and external to the firm. These include economists, statisticians, marketing specialists, engineers, purchasing agents, accountants, and many others. But it is the accountant who is the major source of quantitative, relevant information for management's use.

Sources of Accounting Information

Most of the accounting information used internally by management or reported externally to outsiders comes from the data recorded relating to the events and transactions in which the organization engages. Thus, the information is related to operations and includes records and reports on items such as payrolls, sales, accounts receivable, purchases, production, plant and equipment, cash receipts and disbursements, financing and cash balances, and costs incurred and revenues generated by responsibility centers. The information recorded on the above items may be interrelated as, for example, payroll costs may be used to determine the cost of production by responsibility center. Also, data on purchases may be used in determining cash disbursements when suppliers are paid and in determining product costs when the materials are used in production.

Note also that both financial accounting and management accounting are based heavily upon operating information. Thus, information on revenues and expenses by segments (product lines or departments) may be useful to both outsiders and to management. This suggests that in a broad sense, management accounting includes at least some aspects of financial accounting. The information found useful by management is almost always in *summary* form. Management will not be concerned, unless something goes wrong, with the mass of detail typically recorded in an accounting system. For example, the amount owed a small individual vendor is not likely to be useful information in making managerial decisions.

Uses of Management Accounting Information As stated earlier, management finds accounting information useful in (1) planning, (2) organizing, (3) directing, and (4) controlling the activities of an organization. How accounting information is specifically useful in these functions is briefly illustrated below.

**Planning** Managements engage in planning that extends over varying future periods. Three categories with rather blurred limits can be noted: (1) capital budgeting—planning the acquisition and financing of a new plant; (2) annual budgeting—setting profit and financial position targets for next year; and (3) short-range planning—solving problems of a more immediate nature. These categories are not distinct because solving a short-range problem may involve a capital budgeting solution.

Capital Budgeting involves choosing between alternative investments in long-lived resources, such as a building with a 50-year -life. For such decisions, accountants are often asked to provide estimates of the expected revenues, costs, and net benefits, given various levels of use and expected sales volumes. Obviously, the amounts provided are often imprecise.

In *Annual Budgeting*, accountants are asked to express management's plans for the coming year in a complete set of financial statements called *pro forma* statements or a **budget** (**profit plan**) often called a master budget. Supporting budgets and schedules would be provided showing sales and production by months by

department. The preparation of these annual financial plans requires a complete understanding on the part of the accountants of costs and how costs change as output changes or varies.

The Short-Range Planning, problem-solving activities of management often involve accountants in providing information on alternative uses of resources. Each of these alternatives has specific costs and benefits, which are used in deciding which alternative is preferred. Accountants are generally involved in gathering and communicating such information. If proper information is provided, the organization's limited resources will be used in the best way to achieve its objectives. The types of problems to be solved vary but include deciding whether to manufacture a product or buy it, add a new product to inventory, increase the amount of money spent for advertising, or to accept a quantity order for a product at a price less than normally charged. Much of the information needed to solve such problems will be special purpose in nature. That is, it will not be routinely gathered in the accounting system. Rather it will be developed in special analyses and may involve forecasts.

**Organizing** Management seeks to structure, arrange, or schedule the use of an organization's resources in the best possible way to achieve its objectives. This may involve determining how long a production run is to be scheduled; through what combination of machines, human resources, and production processes; and when it is to be run in order to meet planned needs for 10,000 units. The problem is essentially one of minimizing costs while achieving planned goals.

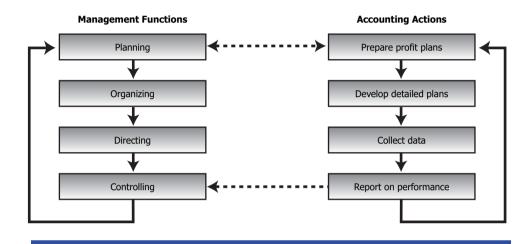
**Directing** In overseeing the daily activities of a firm, managers have an almost constant need for accounting information. For example, in a retail department, information will be needed as to which merchandise is selling and which is not so that prices, advertising expenditures, and new orders may be adjusted. In service departments, the prices charged customers are often based on "time and materials." Thus, costs of such factors must be known. The list of examples could be expanded indefinitely and would illustrate a central fact: managers need accounting information to make decisions in their daily activities.

**Controlling** As already noted, control is achieved by comparing actual results against what was planned. Accountants provide this information, this feedback, by means of performance reports. These reports may draw management's attention to the existence of a problem, which may be easy to resolve. Or, as discussed above, it may require extensive study, allocation of new resources, or restructuring of existing resources. Or, it may be that plans were too optimistic and need to be redrawn. In any event, the accounting information provided may trigger further management action. For example, accounting reports may show that a department failed to meet its production quota last month. Further study may indicate that the quota can best be met by rearranging the machines in the department. Subsequent accounting reports will be closely watched to see whether the problem was solved.

The above discussion is summarized in Illustration 1.3. It shows how the management functions beginning with overall profit planning are undertaken successively and how they are related to accounting actions to provide information. Management engages in decisions regarding planning and organizing, establishing profit and financial position targets and how the organization is to be structured to reach targeted goals. Accountants then express management's goals in formal profit plans in a master budget and in supporting detailed plans and budgets for the various responsibility centers. These plans are communicated throughout the organization

to the appropriate managers who direct their department's activities toward achieving planned objectives. Data on actual activities are gathered by accountants and reported to management in **performance reports**, which also show planned amounts. Deviations from planned results may be investigated and lead to corrective action or plan revisions. If plan revisions are called for, we are back at planning and the preparation of revised profit plans—the beginning steps in both the management action and accounting action cycles.

**Illustration 1.3** Management Functions and Accounting Actions



## Management Accounting and Financial Accounting

#### Objective 6:

Identify the differences and similarities between managerial and financial accounting. The financial accounting text you used may have briefly compared management and financial accounting. Now, to highlight the switch of attention from financial to management accounting, these comparisons are repeated, added to, illustrated, and discussed more fully below.

Management Accounting and Financial Accounting Similarities One would expect to find some similarities between management accounting and financial accounting since the primary data for both are accumulated in the same accounting system. Thus, both use the same measurements of changes in assets and equities, in expenses and revenues, and cash flows. But since the data accumulated in an accounting system are used primarily for financial reporting, their entry into the system is guided by certain generally accepted accounting principles. Some management accounting information, such as the earnings of a division, is consequently as verifiable as the financial accounting information reported externally.

Financial accounting and management accounting are both concerned with managerial responsibility. In financial accounting this is frequently referred to as stewardship. That is, financial statements are reports on management's stewardship over the resources of the organization as a whole. Internal accounting reports, on the other hand, are more likely to reflect management responsibility or stewardship over the parts of an organization. Such reports are apt to be prepared for all levels of management given the authority to incur costs.

Management accounting and financial accounting differ in many respects, the more important of which are presented below:

In most firms financial accounting is mandatory; that is, in order to meet legal, regulatory agency (Securities and Exchange Commission) or stock exchange requirements, business firms must publish financial statements. This means that financial accounting records must be maintained. On the other hand, management accounting is completely optional. Management accounting information need not be accumulated; or it may be accumulated only if its value to management exceeds its cost.

Financial accounting and reporting are controlled and guided by generally accepted accounting principles. Internal comparability and reliability of financial statements is increased when users know that they have been prepared in accordance with such principles. Also, the Sarbanes-Oxley Act of 2002 was enacted as a result of accounting frauds including Enron, World Com., Inc., and others. It requires that CEOs and CFOs certify as to the fairness of financial statements filed with the SEC. Criminal and civil penalties can be imposed on those individuals not complying with the requirements of this Act.

Financial statements provide general-purpose information that is believed useful by investors, creditors, some governmental agencies, and so on. Management accounting information, on the other hand, is often special-purpose information for specific managers, such as sales by product line by district for district sales managers. Management can specify any rules or principles it wishes in developing information it considers useful. Thus, it may find market values or replacement costs useful in measuring the investment in assets devoted to accomplishing a stated objective. The primary guide is simply: "Is it useful?"

Even though often used as a basis for predicting the future, financial accounting information is typically historical in nature. It is based upon past events, even though occasional use is made of estimates, such as estimates of useful life for depreciation purposes. Management accounting, because of the importance of planning by managers, is future oriented. Estimates of future costs, revenues, and so on are indispensable to planning. And these estimates are built into the formal management accounting structure through their inclusion in profit plans and budgets.

Although often including information on costs and revenues by product lines or divisions, financial statements generally relate to the firm as a whole. External users can make decisions relating only to the entire firm. They cannot, for example, sell that part of each share of common stock owned that only relates to Division Y. While not ignoring the firm as a whole, management accounting is more directly involved in providing information on the various parts of a firm. The reason is that most managers have the authority to make decisions on only a part of the firm.

Because its basic data are found in economic events, financial accounting and economics are closely related. Management accounting information is used in a wider range of decisions. It therefore draws from disciplines in addition to economics, such as finance, statistics, and the behavioral sciences. Management accounting is very much concerned, for example, with how individuals react to the information it provides or with how an organization secures adequate financing.

Because of management's need for timely information, management accounting is more likely to deal with approximations rather than the verifiably precise measures often found in financial accounting. Management is willing to give up some precision for timeliness in making many decisions.

Because they are needed by managers, management accounting reports often include nonmonetary quantities. For example, the reports may indicate the number of units sold, produced, and on hand and the number of labor hours used so far in working on a given job. Managerial accounting also includes many qualitative measurements. By way of contrast, most financial accounting amounts are expressed in money terms.

Management Accounting and Financial Accounting Differences Financial accountants usually find their task is completed for an accounting period when financial statements have been prepared. But management accounting information is not the end product; it is a means to an end. The end consists of aiding management as it seeks to achieve the organization's objectives. The numbers are not an end in themselves.

## Management Accounting as a Recognized Discipline

Objective 7: Discuss the emergence of managerial accounting as a recognized discipline. Management accounting is widely recognized as a discipline in its own right and has cast aside its image as a stepchild of financial accounting. Its primary activity no longer consists of recording and determining product costs, although such cost information is still provided. Rather, management accounting seeks to provide the ever-increasing amount of information needed by management in carrying out its functions. And management's information needs now extend far beyond that found in income statements and balance sheets. There are many reasons for this including:

- 1. Severe cost-price squeezes brought about by periods of inflation, in general, and by other factors such as rapidly rising oil prices and the heavy costs incurred to install and operate pollution control equipment.
- 2. The use of computers to control huge-scale production processes.
- 3. The accelerating rate of technological development which renders many products quickly obsolete and causes substantial price declines.
- 4. A growing awareness on the part of management of the capability of the computer to accumulate and store vast amounts of information never before economically feasible.
- 5. A trend toward the use by management of sophisticated, mathematically and statistically based decision models requiring unique information.

It seems likely that many of the above factors will continue to influence management's actions. This means that the demand for management accounting information will continue to grow.

## The Certificate in Management Accounting (CMA)

An important step leading to recognition of the management accountant as a professional person was the institution of a program leading to the awarding of a Certificate in Management Accounting by the National Association of Accountants (now the Institute of Management Accountants, IMA). The certificate is awarded to persons who meet certain educational and professional standards and who pass the CMA examination, which was first given in 1972. The scope of the knowledge expected of a professional management accountant is indicated by the titles of its four parts: Business Analysis, Management Accounting and Reporting, Strategic Management, and Business Applications.

In future chapters you will be learning about cost accumulation systems such as job order and process systems used in manufacturing companies, including concepts such as variable costing versus absorption costing. Next you will learn about the move toward increasing quality in the new production equipment. The balanced scorecard and activity-based costing and management are some of the tools used to increase quality.

Cost-volume-profit analysis, often called break-even analysis, is then discussed and illustrated with numerous examples. Short-term decision making (differential analysis) then provides a framework for making decisions such as whether to make or

buy a product, pricing decisions, and whether to add or eliminate products, segments, or customers. Then annual budgeting for planning and control is discussed and illustrated. Next, a discussion of how control is further strengthened by use of a standard cost system is presented.

The control function is further strengthened by the use of responsibility accounting reports showing results of operations and who is responsible in expense centers, profit centers, and investment centers within an organization. Then, capital budgeting or long-range planning are discussed. The final two chapters cover the statement of cash flows and financial statement analysis.

## **Understanding the Learning Objectives**

- Some knowledge of organizations and of the management process is helpful in the study of management accounting. An organization consists of people pursuing a common goal. All organizations have objectives and strategies for achieving them.
- Top-level management planning is called strategic planning. Management
  responsibility is usually decentralized and shared by the managers of line and
  staff departments. The responsibility relationships between managers are shown
  in an organization chart.
- Essentially, managers engage in planning, organizing, directing, and controlling an
  organization's activities. The plans of the various departments or responsibility
  centers must be coordinated if goals are to be reached. Decision-making is an
  action engaged in by all managers.
- Organizations may be classified as profit seeking or not for profit, with the latter being either governmental or nongovernmental. But all have similar traits: objectives, strategies, managers, and an organizational structure.
- Information is added or newly acquired knowledge and may be quantitative or nonquantitative and relevant or irrelevant. While managers receive information from many sources, accounting is the primary source of relevant, quantified information of a financial nature. To a large extent, accounting information comes from the recording of an entity's events and transactions. Management accounting information helps management plan and organize a firm's activities and resources, direct its day-to-day operations, and solve problems of both a short-run and long-range nature. It helps management control an organization's activities by directing attention to deviations from plans. It provides feedback that is useful in evaluating the performance of departments and individuals and that may lead to plan revisions.

#### Objective 1:

Describe the nature of organizations and their objectives & strategies.

#### Objective 2:

Explain how organizations are structured to achieve their objectives.

#### **Objective 3:**

Describe the basic management functions: Planning, Organizing, Directing, and Controlling.

#### **Objective 4:**

Assess the differences and similarities between organizations.

#### **Objective 5:**

Describe the nature, sources, and management uses of accounting information.



www.TotalRecallLearning.com

#### Objective 6:

Identify the differences and similarities between managerial and financial accounting.

#### Objective 7:

Discuss the emergence of managerial accounting as a recognized discipline.

- Managerial accounting and financial accounting are both concerned with reporting on managerial responsibility. Both are based on common data—the amounts recorded for the transactions and events engaged in. They differ in that management accounting is optional and is not guided by generally accepted accounting principles. Management accounting information is gathered only if it is useful. It is forward looking, uses approximations, and often relates to segments of an entity. It may contain more nonmonetary quantitative information than financial accounting. It is not an end in itself, but a means to an end. It draws upon other disciplines, especially the behavioral sciences.
- Management accounting has gained recognition as a separate discipline. This was achieved through its ability to provide useful information to managements facing difficult decisions. The institution of a program to award the certificate in management accounting (CMA) confirms the recognition gained.

#### **Demonstration Problem**

This problem illustrates some of the basic financial statements covered in financial accounting. Studying this problem may be helpful in doing some of the financial accounting review problems at the end of this chapter.

The adjusted trial balance for Jackson Insurance Consultants, Inc., follows:

# JACKSON INSURANCE CONSULTANTS, INC. Adjusted Trial Balance December 31, 2007

	Debits	Credits
Cash	\$107,200	
Accounts Receivable	68,000	
Interest Receivable	400	
Notes Receivable	20,000	
Prepaid Insurance	2,400	
Supplies on Hand	1,800	
Land	32,000	
Buildings	190,000	
Accumulated Depreciation- Buildings	•	\$ 40,000
Office Equipment	28,000	
Accumulated Depreciation- Office Equipment	•	8,000
Accounts Payable		48,000
Salaries Payable		8,500
Interest Payable		900
Notes Payable (due 2008)		64,000
Capital Stock		120,000
Retained Earnings, January 1, 2007		42,800
Dividends	40,000	
Commissions Revenue		392,520
Advertising Expense	24,000	
Commissions Expense	75, <del>44</del> 0	
Travel Expense	12,880	
Depreciation Expense- Buildings	8,500	
Salaries Expense	98,400	
Depreciation Expense- Office Equipment	2,800	
Supplies	3,800	
Insurance Expense	3,600	
Repairs Expense	1,900	
Utilities Expense	3,400	
Interest Expense	1,800	
Interest Revenue		1,600
	\$726,320	\$726,320

a. Prepare an income statement for the year ended December 31, 2007.

C Required

- **b.** Prepare a statement of retained earnings.
- c. Prepare a classified balance sheet.

## **Solution to the Demonstration Problem**

a.	JACKSON INSURANCE CONSULTANTS, INC.
	Income Statement
	For the Year Ended December 31, 2007

Revenues:			
Commissions revenue		\$392,520	
Interest revenue		1,600	\$394,120
Expenses:			
Advertising expense		\$ 24,000	
Commissions expense		75,440	
Travel expense		12,880	
Depreciation expense	- Buildings	8,500	
Salaries expense	-	98,400	
Depreciation expense	- Office Equipment	2,800	
Supplies expense		3,800	
Insurance expense		3,600	
Repairs expense		1,900	
Utilities expense		3,400	
Interest expense		1,800	236,520
Net income			\$157,600
_			
b.	JACKSON INSURANCE CONSULTANTS, INC.		

# Statement of Retained Earnings For the Year Ended December 31, 2007

Retained earnings, January 1, 2007 Add:	\$ 42,800
Net income for 2007	_157,600
Total	\$200,400
Less:	
Dividends	40,000
Retained earnings, December 31, 2007	\$160,400



# Need more money for college expenses?

The CLC Private Loan<sup>™</sup> can get you up to \$40,000 a year for college-related expenses.

## Here's why the CLC Private Loan™ is a smart choice:

- ☑ Get \$1000 \$40,000 each year
- ✓ Interest rates as low as prime + 0% (8.66% APR)
- ☑ Quick and easy approval process
- No payments until after graduating or leaving school



# c. JACKSON INSURANCE CONSULTANTS, INC. Balance Sheet December 31, 2007

#### **Assets**

Current assets:			
Cash Accounts receivable		\$107,200 68,000	
Interest receivable Notes receivable		400 20,000	
Prepaid insurance		2,400	
Supplies on hand		1,800	
Total current assets Property, plant, and equipment:			\$199,800
Land		\$ 32,000	
Buildings	\$190,000	150,000	
Less: Accumulated depreciation	40,000	150,000	
Office equipment Less: Accumulated depreciation	\$ 28,000 8,000	20,000	
Total property, plant, and equipment		20,000	202,000
Total assets			
Total assets			\$401,800
Liabilities and Stockholders' Equity			
Current liabilities:			
Accounts payable		\$ 48,000	
Salaries payable		8,500	
Interest payable Notes payable		900 64,000	
Total current liabilities			¢121 400
Stockholders' equity:			\$121,400
Capital stock		\$120,000	
Retained earnings		160,400	280,400
Total liabilities and stockholders' equity			\$401,800
. otal masmaco ama otosmiolació equity			4 .01/000

#### **New Terms**

**Budget (Profit Plan)** A plan, usually in writing, showing objectives sought and how they are to be obtained; planned earnings or profits and financial position are shown in projected financial statements called *Pro Forma Statements*. 10

**Controller** The title often given to the manager of the accounting department. 6

**Chief Financial Officer** The top accounting person who is often a member of top-level management. The controller normally reports to the chief financial officer when both positions exist. 6

**Controlling** Action taken by a manager to keep a responsibility center operating in the best possible way, which usually involves comparing actual results with planned goals. 7

**Coordination** Meshing or fitting together the plans of various responsibility centers into an integrated, consistent plan for the entire organization. 7

**Decentralization** Shared managerial or management responsibility and decision making among an organization's managers. 4

**Decision Making** Choosing between competing alternatives. 8

**Directing** The manager monitors or supervises the routine, regular day-to-day operations of the organization. 7

**Feedback** Information developed in the controlling process showing how well an organization is achieving its objectives. 8

**Information** Any advice, datum, fact, or perception relating to a circumstance or thing that adds to one's store of knowledge. Information may be *quantitative* (expressed in numbers measuring the amount of a property of an object) or *nonquantitative*; it may also be *relevant* (pertinent to or bearing upon a decision that must be made) or *nonrelevant*. 9

**Line Department** An organizational unit or responsibility center directly engaged in achieving the organization's overall objectives. 5

**Organization** A group of people joined together in seeking some common goals or objectives. An organization chart shows the authority and responsibility relationships among the managers in an organization. *3* 

Management by exception Comparisons that draw management's attention to those centers and employees that are not operating according to plan. 8

**Organization Chart** Shows how the persons involved in a company or other entity might be organized along lines of authority and responsibility. 5

**Organizing** The structuring or arranging of the resources of a responsibility center to achieve its objectives. 7

**Performance reports** Reports on the activities of individuals and responsibility centers showing actual and planned results. 12

Planning The setting forth of the actions to be taken by an organization to achieve its objectives. 7
Relevant information Information that is pertinent or bearing upon a decision that must be made. 9
Responsibility Center An organizational unit with a specified responsibility and headed by a manager. 5
Staff Department An organizational unit or responsibility center that provides services to other units or centers; thus, it is indirectly associated with achieving an organization's objectives. 5
Strategic Planning Top-level management planning leading to the development of strategies or policies that seem to be the best way for the organization as a whole to achieve its objectives. 4

#### **Self-Test**

#### True-False

Indicate whether each of the following statements is true or false

- 1. Strategic planning in a business is essentially top-level management planning with regard to the products and services to be offered and how they are to be marketed or distributed.
- 2. In a corporation organized to earn profits, a staff department may be a revenue-generating department.
- **3.** A manager helping a service department employee repair a customer's television set is not engaging in a management function.
- **4.** Most management activity consists of decision-making.
- 5. Every organization will have one or more managers engaged in decision making with regard to the planning, organizing, directing, and controlling of its activities.

#### **Multiple-Choice**

Select the best answer for each of the following questions.

- 1. Which of the following is a necessary characteristic that must be present before an organization exists?
  - a. An objective.
  - **b.** A collection of resources.
  - **c.** A group of people seeking a common objective.
  - **d.** A combination of people and things.
- **2.** Which of the following is *false?* Typically, every organization will have:
  - a. A set of strategies or policies.
  - **b.** One or more managers directing its activities.
  - c. A profit objective.
  - **d.** A collection of owned economic resources.
- 3. An action probably engaged in by every manager is;
  - a. Decision making.
  - b. Organizing.
  - c. Directing.
  - d. Controlling.
- **4.** For a fact or datum to be considered useful information, it must relate to a thing or circumstance (relevant) and be:
  - a. Quantitative.
  - **b.** Added knowledge.
  - c. Qualitative.
  - d. Objective.
- **5**. As contrasted with financial accounting information, management accounting information is (choose the *false* statement):
  - a. More timely.
  - **b.** More future oriented.
  - c. More precise.
  - d. More nonmonetary.
- **6.** Generally, the accumulation of management accounting information:
  - **a.** Is required by law or by governmental agencies.
  - **b.** Is guided by generally accepted accounting principles.
  - **c.** Is undertaken only if its value exceeds its cost.
  - d. Is an end in itself.
- 7. The information used to evaluate how successful a manager is in achieving planned objectives is included in:
  - a. Profit plans or budgets.
  - **b.** Performance reports.

- c. Pro forma statements.
- d. Financial statements.
- **8.** The primary purpose of management accounting is:
  - **a.** To prepare budgets and profit plans.
  - **b.** To provide managers with relevant information.
  - **c.** To provide information needed to control an organization's activities.
  - **d.** To provide a written record of the activities of an organization.
- **9.** Choose the *false* statement from the following:
  - **a.** An organization chart shows the responsibility relationships among managers of an organization.
  - **b.** An organization chart shows the formal and informal channels of communication between an organization's managers.
  - **c.** A line manager is directly involved in helping an organization achieve its objectives.
  - **d.** A staff department is basically a service department.
- **10.** Estimates or predictions are probably most indispensable in;
  - a. Planning.
  - b. Organizing.
  - c. Directing.
  - d. Controlling.
- 11. As indicated by the major sections of the CMA examination, a professional management accountant is expected to be knowledgeable in each of the following areas, except:
  - a. Business analysis.
  - **b.** Management accounting and reporting.
  - c. Strategic management.
  - **d.** Legal responsibility of certified public accountants.
- **12.** The principle of management by exception is most likely to be applied in the management function of:
  - a. Planning.
  - **b.** Organizing.
  - c. Directing.
  - d. Controlling.

Now turn to page 27 to check your answers.

## **Ouestions**

- 1. What are some of the strategies available to a firm in the restaurant industry?
- 2. With regard to organizational characteristics, how are a university and a garden equipment sales and service firm similar? How do they differ?
- 3. Give some examples of the use of estimates in financial accounting. Then give examples of estimates used in managerial accounting.
- **4.** What is meant by coordination? Using any organization you prefer, give some examples of its application.
- 5. What is information? Does a televised program contain information? Does a book contain information? Explain. Are either likely to contain management information? Please explain.
- **6.** Describe a professional football team in terms of its objectives, strategies, organizational structure, and management functions.
- 7. Do generally accepted accounting principles affect management accounting? Please explain.
- **8.** Accounting information can be classified as financial accounting or management accounting information. Explain the relationship between these categories.

- 9. Summarize some of the differences between financial and management accounting.
- 10. What objectives, other than earning a profit, might a business firm have?
- 11. What is feedback? How might a manager in a business firm use it?
- 12. Why not leave management to managers and accounting to accountants? Would not greater efficiency result from such specialization? Please explain.
- 13. What relationship exists, if any, between information and decision-making?
- 14. Do annual budgetary planning and strategic planning differ? If so, how?
- 15. Can you name some functions or activities in a business organization that a controller actually controls?
- **16.** Give an example of information properly accumulated for one purpose being used improperly for another purpose.

### **Problems**

The U. B. Goode Company is organized into two merchandising divisions—a retail division and a wholesale division—each headed by a manager who reports, along with the manager of the advertising department, to the vice president in charge of sales, who heads the sales department. This vice president, the controller, and the manager of the legal and personnel department report to the president. The Internal Audit Department reports directly to the Audit Committee of the Board of Directors. The retail division is organized into three departments: office equipment and furniture, office supplies, and a service department. The wholesale division has two departments: (1) office equipment and furniture and (2) office supplies.

Problem 1-1 Prepare an organization chart (L.0.2)

Prepare an organization chart for the Goode Company that shows clearly the formal line and \*\*Company\*\* Required\*\* staff relationships between managers.



#### Problem 1-2 Financial Accounting Review Problem.

The following income statement was delivered to the president of the Carson Company::

#### Carson Company **Income Statement** For the month Ended April 30, 2007

Sales and service revenues Expenses:		\$600,000
Cost of goods sold and parts used	\$ 354,000	
Commissions, salaries, and wages	135,000	
Advertising	21,000	
Depreciation	12,000	
Other expense	8,000	\$530,000
Earnings before income taxes		\$ 70,000
Income Taxes		32,000
Net Income		\$ 38,000

The president notes that the net income is about \$4,000 less than expected. Carson Company operates three departments: equipment sales, supplies, and a service department. Sales revenue and merchandise and parts costs by departments for April were:

	Revenues	Cost of merchandise sold or parts used
Equipment department	310,000	186,000
Supplies department	220,000	154,000
Service department	70,000	14,000

In addition, the \$135,000 of commissions, salaries, and wages in the above statement includes \$35,000 of service department labor costs on jobs worked on.

#### Required



- Recast the above income statement including the additional information.
- If Carson Company attempts to earn gross margins by department of 42 percent, 30 percent and 30 percent (in the service department, after deducting service department labor costs) for the equipment, supplies, and service departments respectively, what appears to be the major reason for the lower than expected earnings?
- What additional information would you as president of Carson Company like to have in reviewing operations for April?

#### Problem 1-3 Matching of responsibilities (L.O.3)

The organization chart of a large manufacturing company shows five vice presidents reporting to an executive vice president. These five include a vice president and controller and vice presidents responsible for finance, production, purchasing, and sales, Listed below are selected accounts from the company's general ledger which can be viewed as representing an area of responsibility:

#### **Title of Account**

## U.S. Treasury Notes

Factory Labor Accounts Receivable Inventory-Finished Goods Depreciation-Accounting Equipment

#### **Title of Account**

Sales Salaries and Commissions **Inventory-Raw Materials** Federal Income Taxes Wages Expense-Receiving Department **Delivery Expense** 

#### Required



Match the areas of responsibility indicated by the account titles given above with the appropriate officer.

The Gomez Company uses perpetual inventory procedure. Given below is the balance sheet for **Problem 1-4** the Gomez Company as of December 31, 2006:

Financial Accounting Review Problem

#### **GOMEZ COMPANY Balance Sheet** 12/31/2006

#### **Assets**

	\$ 30,000
	70,000
	100,000
	10,000
	\$ 210,000
\$ 30,000	
160 000	100 000
	190,000
	\$ 400,000
	·
wity	
laity	
	\$ 40,000
	30,000
	15,000
	\$ 85,000
	100,000
	\$ 185,000
\$150,000	
65,000	
65,000	\$ 215,000
	160,000 quity

The summarized transactions of the Gomez Company for 2007 are below:

- **a.** Sales on account, \$520,000.
- **b.** Purchases of merchandise on account, \$250,000. (Debit Inventory account)
- c. Cost of goods sold for the year, \$260,000.
- **d.** Collections from customers on account, \$510,000.
- e. Paid vendors on account, \$240,000.
- f. Expenses prepaid during year, \$8,000. Of the prepaid expenses, \$11,000 became miscellaneous expenses during the year.
- g. Bond interest expense paid in cash, \$9,000.
- **h.** Payroll expenses accrued during year, \$150,000.
- i. Paid accrued operating expenses, \$155,000.
- **j.** Accrued income taxes paid, \$30,000.
- **k.** Depreciation expense, \$30,000.

- 1. New equipment purchased for cash, \$40,000.
- **m.** Income taxes are to be accrued at a rate of 40 percent.
- **n.** Dividends declared and paid, \$5,000.

Required =

- **a.** Prepare T-accounts for all balance sheet, income statement, and statement of retained earnings accounts and record the year's activities in them. Continue this process far enough so you can prepare parts (b) and (c).
- **b.** Prepare an income statement and **a** statement of retained earnings for the Gomez Company for the year ending December 31, 2007. (You may find that reviewing the Demonstration Problem for this chapter is helpful in preparing these statements.)
- **c.** Prepare a balance sheet as of December 31, 2007.

## **Alternate Problems**

# **Problem 1-1A**Organization Chart (L.O.2)

The Green Machine, Inc., sells lawn and garden equipment through two stores that it owns and operates in Castle City. Each store, called Store No.1 and Store No.2, is headed by a manager who reports to the Vice President—Sales, who heads the Sales Department. Each store has three departments -Equipment Sales, Parts Sales, and Service Sales—each headed by a manager who reports to the store manager. A Central Receiving and Shipping Department receives all incoming merchandise, stores it until sold, and then delivers the merchandise to customers. This department is headed by a manager who reports to the Vice President—Sales, as does the manager of the company's advertising department. The Accounting Department, headed by the controller, and the Personnel Department, headed by a vice president, together with the Vice President—Sales report directly to the president. The Internal Audit Department reports to the Audit Committee of the Board of Directors.

Required



Prepare an organization chart for the company that shows clearly the formal line and staff relationships between managers.

## **Problem 1-2A**Financial Accounting Review Problem

Kurtz Company operates a store that sells farm equipment and farm supplies, and maintains an equipment servicing department in a large western city. The company's accountant has just handed the president of Kurtz Company the following income statement for the month of May 2007:

Sales and service revenues		\$640,000
Cost of goods sold (or parts used in Service Dept.)	\$343,000	
Service department labor	84,000	
Selling and administrative expenses	143,000	
Depreciation	15,000	585,000
Net income before income taxes		\$ 55,000
Income taxes (40%)		22,000
Net income		\$ 33,000

The president is not pleased with the report, noting that net income is about \$8,000 less than expected. This expectation is based upon the relationship of May to April of prior years. It is company policy to price goods and services to yield gross margins of 40 percent on equipment, 35 percent on supplies, and 30 percent (after deducting labor) on services. The president asks the controller for additional information. Although the company does not prepare detailed internal reports, the controller is able to obtain the following additional data:

	Equipment	Supplies	Service
Sales Revenue	\$300,000	\$200,000	\$140,000
Cost of goods sold or parts used	180,000	135,000	28,000

a. Recast the above income statement incorporating as much of the additional data as



- **b.** To the extent that data are available, explain the apparent cause of the poor showing in May.
- What additional information does the president need to know to determine why May earnings were below expectations?

Five officers report directly to the president of the Ames Manufacturing Company. These are **Problem 1-3A** the controller and vice presidents for finance, marketing, production, and purchasing. Given below are selected accounts from the company's general ledger which can be viewed as areas of responsibility:

Matching of Responsibilities (L.O.3)

#### **Title of Account**

Short-Term Investments Work in Process Inventory Buyers' Salaries Cost Accountants' Salaries Machinery Depreciation

Current Accets:

#### **Title of Account**

Finished Goods Inventory Receiving Department Wages Advertising Expense Notes Payable—Bank Raw Materials Inventory

Match the areas of responsibility indicated by the accounts with the appropriate officer. Be sure Required to consider areas where responsibility may be shared.



The Homer Company uses perpetual inventory procedure. The balance sheet of the Homer **Problem 1-4A** Company is as follows:

Financial Accounting **Review Problem** 

#### **HOMER COMPANY Balance Sheet December 31, 2006** Assets

Current Assets:		
Cash		\$ 60,000
Accounts receivable, net	130,000	
Inventory	210,000	262.000
Prepaid expenses	20,000	360,000
Property, Plant, and Equipment		
Land	\$ 50,000	
Buildings and equipment		
(net of accumulated depreciation of \$150,000)	350,000	400,000
Total Assets		\$820,000
Liabilities and Owner's Equity	,	
Current Liabilities:		
Accounts payable		\$ 70,000
Accrued income taxes payable		50,000
Accrued expenses payable		30,000
		\$150,000
Long- Term Liabilities:		
Bonds payable, 9%, due 2040		200,000
Total Liabilities		\$350,000
10141 21421111100		4000,000
Stockholder's Equity:		
Capital Stock	\$300,000	
(\$30 par value, 10,000 shares outstanding)	, ,	
Retained earnings	170,000	
Total Equity		470,000
Total Liabilities and Stockholders' Equity		\$820,000
		,

Summarized, the activities of the Homer Company for 2007 were:

- Purchased merchandise on account, \$480,000 (debit Inventory).
- Sold merchandise on account, \$980,000.
- Cost of goods sold, \$500.000.
- Collections from customers on account, \$1,000.000.
- Payments to vendors on account. \$500.000.
- Expenses prepaid during year. \$16.000.
- Of the prepaid expenses, \$22,000 became miscellaneous expenses during the year.
- Bond interest paid, \$18.000.
- Salaries and wages accrued during year, \$300,000.
- Accrued expenses paid, \$310,000.
- Accrued income taxes paid, \$50,000.
- Depreciation expense, \$50,000.
- Estimated bad debts, \$10,000.
- New equipment purchased for cash, \$70,000.
- Dividends declared and paid, \$10,000.
- Income taxes are to be accrued at a rate of 40 percent.

#### Required =



- Prepare T-accounts for all balance sheet, income statement, and statement of retained earnings accounts and record the year's transactions in them. Continue this process far enough so you can prepare parts (b) and (c).
- b. Prepare an income statement and a statement of retained earnings for the year ended December 31, 2007, for the Homer Company. (You may find that reviewing the Demonstration Problem for this chapter is helpful in preparing these statements.)
- Prepare the Homer Company's December 31, 2007, balance sheet.

## **Beyond the Numbers—Critical Thinking**

#### **Group Project 1-1**

Interview a management aaccountant

In a group of two or three students visit a company in your area and arrange a meeting with a management accountant. Inquire about the organization chart and then ask about the informal organization and how they might differ. Also ask about other topics covered in this chapter.

## Using the Internet—A View of the Real World

#### **Internet Project** 1-2

Check out the IMA site

Visit the Institute of Management Accountants' site at:

#### www.imanet.org

Investigate the information provided and write a brief report to your instructor detailing your findings.



## "Don't mess this up..."

No publisher has used advertising to deliver free textbooks. Until now. The quote above sums up what customers are telling us about this opportunity.

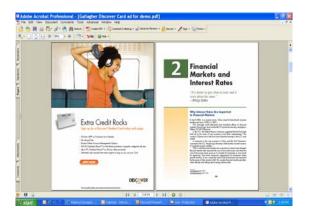
Students and instructors love our "freeload" model. And they know that advertisers are paying the textbook bill.

They just want us to be smart about how ads are placed in textbooks.

A collaboration of academics and advertisers developed **StudyBreak Ads™** --a patent-pending system that places advertising in textbooks in a manner that works for students, instructors and advertisers.

feature an academic approval process with quidelines for:

- ✓ Which industries/products
- ✓ Types/size of ads
- ✓ Where ads are placed
- ✓ How frequently ads appear



StudyBreak Ads<sup>™</sup> protect the scholarship and the flow of a textbook, assuring that we "don't mess this up."



To learn more, write us at <a href="mailto:info@freeloadpress.com">info@freeloadpress.com</a>

Visit the Coca-Cola site at:

## **Internet Project**

Coca-Cola and the Sarbanes-Oxley

#### www.cocacola.com

For each of the following questions, write one paragraph explaining your findings.

- **a.** What does Coca Cola's management letter have to say regarding the company's actions towards Sarbanes Oxley compliance?
- **b.** Do external auditors refer to Sarbanes Oxley in the footnotes?
- **c.** If so, what do they have to say about it?

Visit the Microsoft site at:

## Internet Project

Microsoft and the Sarbanes-Oxley Act

#### www.microsoft.com

For each of the following questions, write one paragraph explaining your findings.

- **a.** What does Microsoft's management letter have to say regarding the company's actions towards Sarbanes Oxley compliance?
- **b.** Do external auditors refer to Sarbanes Oxley in the footnotes?
- c. If so, what do they have to say about it?
- **d.** In what ways does the information presented in Microsoft's financial statements differ with Coca Cola's financial statements in regards to Sarbanes Oxley compliance and why?

## **Answers to Self Test**

#### **True-False**

- 1. True. Strategic planning for a business organization could be defined in this way.
- **2. False**. If it generates revenue, it is a line department. The generation of revenue is the first step toward earning a profit.
- **3. True.** Unless there is an instructional aspect to the assistance, it is not a management act.
- **4. True.** It is difficult to conceive of much that does not involve decision making in the broadest sense.
- **5. True.** Organizations will have this trait.

## **Multiple-Choice**

- **1. c** There must be people with a common objective.
- **2. c** Some organizations do not have a profit objective (e.g., The Red Cross).
- **3. a** In fact, every person makes decisions in their daily lives.
- **4. b** Only relevant information that provides added knowledge is useful information.
- **5. c** Management information does not have to be as precise.
- **6. c** Its cost must not exceed its value.

- **7. b** Performance reports generally compare budgeted and actual performance.
- **8. b** Relevant information is used in decision making.
- **9. b** It shows only the formal channels of communication.
- **10. a** Planning involves many estimates of future events.
- **11. d** The first three answers are major sections of the exam.
- **12. d** Management by exception often determines which differences from planned operations to investigate.