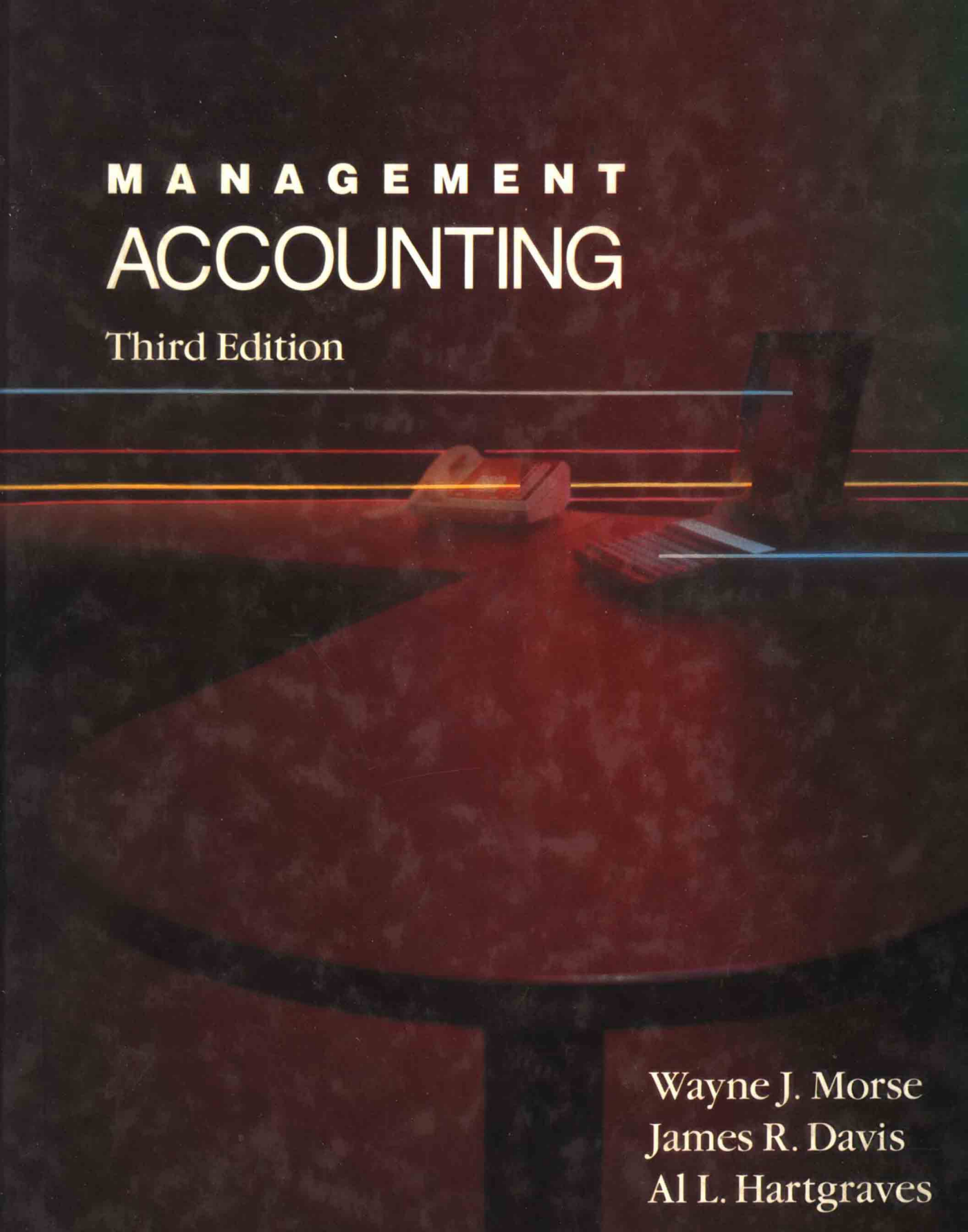


# MANAGEMENT ACCOUNTING

Third Edition



Wayne J. Morse  
James R. Davis  
Al L. Hartgraves

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Third Edition

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# M

*anagement Accounting* is addressed to aspiring managers who must know how to use accounting information effectively to achieve their career goals. The third edition of *Management Accounting* is concerned with the development and use of accounting information within specific organizations for the purposes of planning, control, and analysis of special decisions. We had four primary goals in revising *Management Accounting*:

- to improve the usefulness of the text as a tool for student learning;
- to incorporate important new manufacturing environment topics such as just-in-time inventory management and activity-based costing;
- to further strengthen the coverage of nonmanufacturing organizations;
- to respond to requests for separate chapters on job costing, process costing, financial statement analysis, and the statement of cash flows.

As in the previous editions we continue to emphasize the “big picture” before discussing the details of a particular topic. (Examples of this focus on the big picture are found on pages 27–31, 222–230, 474–485, and 705–707.) We believe a solid conceptual understanding of management accounting is necessary before students can truly understand and apply the many technical details of the subject.

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## PROVEN, CLEAR, FLEXIBLE

As a third edition, *Management Accounting* is a well tested and proven pedagogical tool. Materials retained from previous editions have met the most rigorous test possible—the successful use by thousands of students and their instructors. New material has been thoroughly reviewed and class-tested, and all problems and solutions have been carefully checked and rechecked for accuracy.

A number of steps have been taken to help clarify materials for students. Learning objectives, presented at the start of each chapter, inform students of

expectations. New terms are highlighted when first introduced, listed again at the back of each chapter, and defined again in the glossary, thus focusing the student's attention and providing for easy review. Review problems at the end of all but Chapter 1 allow students to receive immediate feedback on their mastery of technical material. The solutions to review problems are also contained in the book.

Alternative sequencing of material can provide a product costing emphasis, a planning and control emphasis, or a broad survey. Advanced topics are placed in appendices and optional chapters. Redundant assignment material makes it possible to vary assignments between sections and subsequent course offerings. Instructors desiring to introduce spreadsheets may use the optional software supplement (developed using Lotus® 1-2-3®). Details on course sequences are included in the *Solutions Manual*.

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## NEW MOTIVATIONAL MATERIALS

One of the most significant changes in the third edition is the inclusion of new motivational materials designed to show students the relevance of management accounting to real world situations.

- Part openers describe how key concepts within that part are utilized by MCI Communications Corporation, thus giving students a sense of real world application.
- A series of Managerial Practices is included in each chapter. These inserts provide additional insights into text material and describe the importance of the material to a specific company or real world situation.
- An appendix written to the student provides an overview of careers in management accounting as described by the Financial Vice President of a medium sized manufacturing company.

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## MANUFACTURING ENVIRONMENT TOPICS

A major goal of the third edition is to incorporate important new manufacturing environment topics. As we go to press, this book is unique in the number of manufacturing environment topics covered. It is even more unique in *presenting them within the context of management accounting topics and issues*. This helps students understand the relevance of management accounting and how it relates to other areas.

New manufacturing environment topics are as follows:

- Job costing issues are *introduced within the context* of the manufacturing environment. Contextual topics include world class manufacturing, pro-

duction planning and control procedures, the impact of computers on manufacturing (AIS, CAD, CAM, FMS, and CIM), and just-in-time inventory management. (See pages 474 and 482–484.)

- Just-in-time inventory management is given thorough coverage and integrated into the discussion of relevant accounting issues rather than being completely relegated to a separate chapter. (See pages 483–485, 539–541, 546–549, 657–665, 724, and 812.)
- New cases, based on plant layouts and intended to encourage students to think about the design of product costing systems without having to perform numerical analysis, are included. (See pages 530–535, and 583.)
- Backflush costing is introduced as an appropriate technique when JIT results in major reductions of inventory. (See pages 546–549, 556, and 665.)
- Activity-based costing is given thorough coverage and integrated into the discussion of the reassignment of indirect costs. (See pages 605–612.)
- The problem of cross-subsidization is discussed within the context of job costing in Chapter 11 and examined further in Chapter 13. (See pages 499–501 and 606–612.)
- “Cost drivers” are defined in Chapter 11 and examined further in Chapter 13. (See pages 499–501, 590, and 606–612.)

Other important new topics included in an appendix to Chapter 14 are “quality costs,” “life cycle costs,” “productivity,” and “design for manufacture.” All have received significant attention in recent professional literature.

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## **MANAGEMENT ACCOUNTING IN SERVICE AND NOT-FOR-PROFIT ORGANIZATIONS**

As in previous editions, *Management Accounting* includes extensive coverage of service organizations. Every chapter that discusses product costing issues also discusses service costing. (See pages 31, 502–504, 558–561, and 612–615.)

Other major illustrations or discussions of nonmanufacturing situations are included throughout the book. Chapter 1 uses a department store to introduce basic concepts. (See pages 6–12.) A section in Chapter 4 deals with “Not-for-Profit Applications” of cost-volume-profit analysis (see pages 135–136), and a major appendix to Chapter 6 considers budgeting in not-for-profit organizations. (See pages 245–253.) Care is taken in Chapter 7 to provide examples of cost centers for nonmanufacturing activities. (See pages 287–288.) Assignment materials dealing with the use of management accounting in merchandising, service, manufacturing, not-for-profit, and government organizations are presented throughout. (See pages 62–63, 204–206, 309–312, 513–514, 581–582, and 753–754.)

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## IMPORTANT ORGANIZATIONAL CHANGES AND NEW FEATURES

A number of organizational changes were made in response to suggestions received from accounting instructors. For example, old Chapter 11, *Product Costing*, was split into two chapters: Chapter 11, *Job Costing and the Manufacturing Environment*, and Chapter 12, *Process Costing*. The material on FIFO process costing was moved from an appendix to the body of Chapter 12. Old Chapter 16, *Financial Statement Analysis and the Statement of Resource Flows*, was split into two chapters: Chapter 17, *Financial Statement Analysis*, and Chapter 18, *Statement of Cash Flows*. Care was taken to present the material in these chapters in a manner that emphasized their relevance to managers. The emphasis is on concepts and interpretation rather than procedures. Finally, a discussion of vertical and horizontal financial statement analysis was added to Chapter 17.

Chapter 16 provides an overview of different types of taxes and considers the impact of taxes on a wide variety of management decisions. This material is of particular value to nonaccounting majors, most of whom will not enroll in a tax course.

Other important changes include the development of additional assignment materials, the further classification of assignment materials into review questions, exercises, problems, and cases, and the addition of suggested readings to the end of most chapters.

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## SUPPLEMENTS

A variety of supplementary materials accompany the text:

- The *Solutions Manual* contains alternative course outlines, solutions to all review questions, exercises, problems, cases, and check figures.
- *Transparency Acetates* for the solutions to all exercises, problems, and cases are available to adoptors.
- An *Instructor's Resource Guide*, prepared by Professor Barry Nab of the University of Minnesota-Duluth, contains useful information for instructors new to teaching Management Accounting.
- A *Test Bank*, prepared by Professor Marvin Bouillon of Iowa State University, is available in hardcopy or disk for use on the IBM® personal computer or compatibles.
- A *Student Study Guide*, prepared by Professor Al Hartgraves, reemphasizes and reinforces basic concepts and techniques. For each chapter it contains: a list of learning objectives; a chapter review outline; a self test with multiple choice questions, completion questions, and up to four exercises, as well as solutions to the self test.

- A *Data Disk* for use with Lotus 1-2-3 software, if not included in the back of this book, is available separately. This data disk was prepared by Professor Linda Dening of Jefferson Community College, and contains additional assignment material designed for solution with Lotus 1-2-3 student or professional versions on the IBM personal computer or compatibles.

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Appreciation is extended to the Institute of Certified Management Accountants of the National Association of Accountants for permission to use adaptations of problem materials from past Certified Management Accounting examinations; these materials are identified as "CMA Adapted." We are also indebted to the American Institute of Certified Public Accountants and the Institute for Internal Auditors for permission to use adaptations of materials from their professional examinations; these materials are identified as "CPA Adapted" or "IIA Adapted."

Comments or suggestions from users are most welcome.

*Potsdam, NY*  
*Clemson, SC*  
*Atlanta, GA*

W.J.M.  
J.R.D.  
A.L.H.



# About Our Profile Company

*Bob Perkins likes to think of himself as a businessman on the cutting edge of communications technology. Whenever he travels, he carries a cellular phone to keep in touch with the home office and a notebook-size Sinclair Z88 mini-laptop to write and store letters or memos on the plane. Back at the New York offices of his Perkins, Butler ad agency, where his secretary downloads the letters from his Sinclair onto her Apple® Macintosh® to polish them up, Perkins uses his own Apple to comb through the memos that have piled up on the company's Wang E-mail system. Those memos might come from colleagues in any of the fast-growing agency's six North American offices or its recently opened London outpost.\**

For this edition of *Management Accounting*, we are profiling the type of company responsible for Bob Perkins's becoming a manager of the nineties. You will thus find examples from MCI Communications Corporation (MCI) acting as real-world counterpoints to our previews of each major part of the text.

A world leader in fiber optics and global telecommunications, MCI provides a full range of the type of telecommunications services Perkins uses—integrating telephone, television, and computer media—around the world. It is one of the largest companies in the telecommunications industry, with 1989 revenues exceeding \$6 billion. It also boasts some of the industry's most advanced technologies. One integrated network control and data center alone can conduct over 1 million telephone or computer transactions per hour, with as many as 300,000 transactions going on simultaneously. MCI's focus for the 1990s will be on its network capabilities, because it believes that instant access to real-time information will be one of the most important goals in the competitive global business environment of this decade. This goal will allow customers to concentrate on business opportunities rather than on worries about how the technology works.

We selected telecommunications as our profile industry for several reasons. First, like management accounting, the field of telecommunications is in the business of *communication*. Whereas management accounting focuses on communicating the organization's financial information to its users (management), telecommunications focuses on communicating all types of information from every corner of the world for its users. As a future business professional, you

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\* Jeffrey Ferry, "The Wired World," *Continental Profiles*, May 1990, 19–22.

will be on either the sending or the receiving end of accounting information, and you and your organization will also be players in the worldwide communications scheme of the next century.

Additionally, telecommunications is one of the most technologically advanced industries in the world—and one that plays a key role in the increasingly important service sector of the global economy. Spurred on by customer demand, the industry's competition is generating more and better solutions to customer needs. As solutions create even more advanced technologies, they give rise to new possibilities, driving still greater customer demands in an ongoing cycle of progress. Innovative diversity of customer choice and value—as defined by a combination of price and service—are the new standards for having a service market advantage. These are also MCI's standards of performance evaluation, defining the way the company operates across all its markets.

MCI is at the forefront of its industry and thus provides us with a fine model of management accounting at the cutting edge, adapting and growing to meet the challenges of the nineties: succeeding amid global competition, anticipating and meeting customers' service demands, and pushing out the frontier of value.

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