

SECOND EDITION

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MANAGEMENT
ACCOUNTING

A Strategic Approach

MORSE, DAVIS, HARTGRAVES

ANAGEMENT ACCOUNTING

A Strategic Approach

SECOND EDITION

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Strategic position analysis, value chain, value added, virtual integration, process mapping, upstream, downstream, internal failure, external failure, structural cost drivers, cost hierarchy . . . What in the world? Can this be management accounting? Yes! These are just some of the cutting edge topics you will discover as you read the new millenium edition of *Management Accounting*. While there are plenty of traditional topics, it's the big-picture, decision oriented, integrated presentation of new and traditional topics required for success in the competitive environment of the twenty-first century that make this, page for page, the most complete text in the market. So get ready for the most exciting entry into management accounting ever developed. Much awaits you as you read the 13 chapters that follow.

Management accounting is concerned with the use of financial and related information, by managers and other persons inside specific organizations, to make strategic, organizational, and operational decisions. It provides a framework for identifying and analyzing decision alternatives and for evaluating success in accomplishing organizational goals. Although accountants play an important role in the management accounting process, management accounting is more of a managerial tool than an accounting process. Furthermore, in an era of global competition, continuous improvement, process reengineering, and employee empowerment, management accounting is used by decision makers at all levels, rather than just by personnel traditionally classified as "managers." **The purpose of this book is to introduce students to management accounting as it is practiced today.**

Because this is an introductory text, we have elected to provide a survey of many topics, carefully relating them to each other. Whereas this book is written for a general business audience, we have strived to place management accounting in a broad context, relating management accounting to other subject areas. We have left the in-depth coverage of many topics to more specialized books on cost accounting, finance, production, statistics, marketing, policy, and so forth. We hope this book, like the trunk of a tree, will serve as a strong base for the future growth of knowledge and as a means of unifying the branches of management.

We emphasized the use of management accounting information for decision making within the context of an organization's strategy. The organization and content of *Management Accounting, 2e*, reflects our belief that students who understand the big picture have a better basis for learning, are better decision makers, and are better able to apply what they learn to new situations. If you have or know how to develop a map of the forest, you are less apt to get lost among the many individual trees. The following points illustrate the big picture and decision orientation of *Management Accounting, 2e*.

- **Strategic Position Analysis.** *Management Accounting, 2e*, is based on concepts in the management literature originally developed by Michael Porter, such as strategic position analysis. Strategic position analysis concerns a fundamental choice regarding how a business plans to compete in the market place, e.g. low price/cost, product differentiation/innovation, or market niche. This choice affects management's need for and use of accounting information. See Chapter 1 pages 10–12 for an example of this feature and approach.
- **Structural, Organizational, and Activity Cost Drivers.** Most management accounting texts consider only activity cost drivers. *Management Accounting, 2e*, is based on a more comprehensive set of cost driver concepts first developed in the management literature and introduced into the accounting literature by John Shank. These concepts recognize *decisions* regarding size, location, and target customers as structural cost drivers, *decisions* regarding the organization of processes and design of products or services as organizational cost drivers, and the *performance of tasks* as activity cost drivers. This broader framework facilitates learning that costs must be managed when making structural and

organizational decisions rather than when performing activities. See Chapter 1 pages 16–18 and Chapter 5 pages 175–176 for an example of this approach.

- **Activity-Cost Concepts Emphasize Decisions.** Activity cost concepts are first introduced within the context of cost analysis/planning, profitability analysis/planning, and decision making rather than as an alternative approach to product costing. This *decision* orientation within the framework of core management accounting topics provides a broader framework for understanding the usefulness of activity-cost concepts for activity-based management. It also assists students in thinking outside the product costing box. We believe that introducing ABC as an alternative approach to product costing is flawed in that it places students in a product costing box that instructors must then help them get out of. See Chapter 2 pages 52–53, Chapter 3 pages 95–99, and Chapter 4 pages 116–121 for examples of this approach.
- **Deemphasize Product Costs vs. Period Costs.** *Management Accounting, 2e*, is based on a belief that the accounting distinction between product and nonproduct costs (introduced early in virtually all management accounting texts) should not be the central theme of a management accounting text, is misleading, diverts attention from the analysis of the complete value chain, and forces an unnecessary distinction between manufacturing and nonmanufacturing organizations.
- **Unit Level-Hierarchical Framework for Analysis.** *Management Accounting, 2e*, uses a unit level-hierarchical framework to show how activity-based approaches to cost estimation, profitability analysis, and budgeting relate to, yet differ from, approaches based on the variable–fixed cost dichotomy. This text indicates when each is appropriate and the dangers of the unit level approach in situations involving variations in the complexity or volume of products or services. See Chapter 2 pages 37–50 & 52–57, Chapter 3 pages 81–85 & 95–99, and Chapter 11 pages 478–480 for examples of this approach.
- **Value Chain, Internal Processes, Activities within Processes.** *Management Accounting, 2e*, places activities within the broader context of internal processes and the external value chain for a product or service. This big picture orientation, first introduced into the accounting literature by John Shank, provides a broad context for learning and applying activity concepts. It also helps students retain a frame of reference while immersed in the details of activity management. To foster big-picture learning, the first example of ABC is extended across all internal processes, rather than being limited to product costing. See Chapter 5 pages 170–174 for an example of the value chain orientation and pages 182–194 (end of review problem) for an example of ABC across all internal processes.
- **Activity-Based Costing and Organizational-Based Costing.** *Management Accounting, 2e*, relates product costing applications of ABC to traditional costing concepts, which are identified as organizational-based costing. Our belief is that context and reference points foster learning and retention, as well as provide a basis for the extension of concepts to new situations. See Chapter 6 pages 229–231 for an example of obtaining information for financial reporting from full activity-based costs, Chapter 7 pages 290–292 for a discussion of organizational-based costing and the product costing continuum, and Chapter 8 pages 340–342 for inventory valuation comparisons from the Theory of Constraints to full ABC.

As the above comments suggest, we take a cost driver approach within the context of an organization's entire value chain. We believe the result is a book that is more relevant, interesting, and usable for students whose primary concerns are something other than financial reporting. Traditional financial reporting issues related to inventory costing are deferred until after students have studied cost drivers, the value chain, activity-based management, and activity-based costing. Students use the knowledge gained in the early chapters to critically examine inventory cost system alternatives, rather than using basic "product costing" concepts (originally developed for financial reporting) as a foundation for learning. By taking this approach, the instructor also avoids the need to explain the shortcomings of traditional approaches to product costing to students who have just completed their first few weeks of studying management accounting.

ORGANIZATION

The book contains 13 chapters:

1. Management Accounting: A Tool for Decision Making
2. Activity Cost Analysis and Planning
3. Profitability Analysis and Planning
4. Contribution Analysis for Decision Making
5. Value Chain Analysis and Activity-Based Management
6. Product Costing and the Manufacturing Environment
7. Designing Product Cost Systems
8. Inventory Valuation Approaches and Just-in-Time Inventory Management
9. Strategic Management of Price, Cost, and Quality
10. Strategic Management of Capital Expenditures
11. Operational Budgeting
12. Performance Assessment
13. Profitability Analysis of Strategic Business Segments

Two additional chapters are available in a supplement, *An Introduction to Financial Statement and Cash Flow Analysis*, prepared by the authors:

1. Financial Statement Analysis
2. Statement of Cash Flows

Developing a book that can be used in a single semester, while integrating many new concepts, required careful attention to organization. Chapters build on each other, and issues raised in early chapters are revisited in later chapters. Although some chapters (such as Chapters 8 and 10) or portions of some chapters (such as portions of Chapters 12 or 13) and appendix materials may be omitted, we recommend assigning chapters in numerical order. Chapter 1 is important and worthy of study, rather than being a light overview that may be lectured on but not assigned. In most management accounting texts, Chapter 2 is primarily concerned with terminology. To limit the number of chapters, we avoided the use of a terminology chapter and, instead, introduced terms where needed.

All chapters contain learning objectives linked to major chapter headings. Key terms are in bold type when they are first introduced, listed at the end of each chapter, and defined in a comprehensive glossary at the end of the text. Many chapters contain suggested readings that may be used by students interested in learning more about chapter materials, as an initial reading list for papers, or as additional assignment material.

Global business activities, employee empowerment, the value chain, process management, activity-based costing, and competition on the basis of cost, quality, and service are so woven into the text that it is difficult to single out examples of these topics. Ethics also receives extensive coverage. Ethics is introduced within the context of measurement and management in Chapter 1 and discussed further in Chapters 4, 9, and 11. “What’s Happening” features in Chapters 1, 10, 11, and 12 also highlight the importance of ethics in management accounting. Assignment material dealing with ethics are included in Chapters 1, 2, 3, 4, 5, 9, and 11.

NEW TO THIS EDITION

- **Welcome to Management Accounting** was added immediately before Chapter 1. This feature is intended to orient students to the text and its various features.
- **Opening scenarios**, discussing how managers of real organizations apply text materials, have been added at the beginning of each chapter.
- **“What’s Happening”** features have replaced Management Accounting Practices. This new feature illustrates how real companies utilize management accounting concepts.
- **“Research Shows”** report on applied management accounting research.
- **John Shank Cases**, ten strategic cost management cases developed by John Shank, have been added. Two of these cases, dealing with the value chain, are in a text appendix because of their complexity and length.

CHANGES AND REORGANIZATION

In addition to the normal fine tuning, revising, and updating of text and assignment materials that are part of every new edition, there are numerous major changes:

- The cost behavior material was moved from Chapter 1 to Chapter 2.
- Former Chapter 2 has been split into two chapters: Chapter 2, Activity Cost Analysis and Planning, and Chapter 3, Profitability Analysis and Planning.
- The new Chapters 2 and 3 have been reorganized to start with a unit level approach to cost behavior analysis in Chapter 2 and profitability analysis with unit cost drivers in Chapter 3. Their parallel structures conclude with an examination of unit and nonunit cost drivers for cost estimation in Chapter 2 and profitability analysis with unit and nonunit cost drivers in Chapter 3.
- Chapter 4 (previously Chapter 3), Contribution Analysis for Decision Making, contains a new appendix illustrating how an activity cost hierarchy can be incorporated into optimizing models.
- Chapter 5 (previously Chapter 4), Value Chain Analysis and Activity-Based Management, contains expanded coverage of process mapping.
- Former Chapters 10 and 11 have been combined into Chapter 6, Product Costing and the Manufacturing Environment. The coverage of journal entries has been replaced with an emphasis on cost flows, the coverage of process costing has been reduced, and the material on cost system design has been moved to new Chapter 7. There is now a discussion of how companywide activity costs for products may be modified for financial reporting. Note: The starting point is determining costs and revenues for management accounting which are then adjusted as necessary to arrive at numbers for external reporting. This is the opposite of the way materials are presented in other management accounting texts.
- Chapter 7, Designing Product Cost Systems, contains the service department cost allocation materials from former Chapter 12, the material on cost system design from former Chapter 11, and activity-based product costing from former Chapter 13. The illustration of the product costing continuum has been revised to build on the illustration of service department cost allocation. Traditional approaches to product costing are now referred to as “organizational-based costing.”
- Chapter 8, Inventory Valuation and Just-in-Time Inventory Management, contains materials from former Chapters 12 and 13. A new integrative feature compares absorption and variable costing with the Theory of Constraints and activity-based costing.
- Chapter 9, Strategic Management of Price, Cost, and Quality, contains materials formerly found in Chapter 5.
- Chapter 10, Strategic Management of Capital Budgeting Expenditures, contains the material formerly found in Chapter 6. A new feature in Chapters 2 and 10 is the illustration of spreadsheets for computations.
- Chapter 11, Operating Budgets, replaces former Chapter 7. It has been reorganized in a manner that parallels Chapters 2 and 3 to distinguish between (1) budgeting with unit-level cost drivers and (2) budgeting with unit and nonunit level cost drivers.
- Chapter 12, Performance Assessment, replaces former Chapter 8. The allowed costs in a flexible budget are now determined using a cost hierarchy. All detailed overhead variances are now covered in appendices.
- Chapter 13, Profitability Analysis of Strategic Business Segments, contains materials from former Chapter 9. The chapter now has material on performance assessment systems, including the balanced scorecard.

ASSIGNMENT MATERIALS

A variety of assignment materials accompany *Management Accounting, 2e*. Each chapter contains one or two review problems. Solutions to review problems are at the end of each chapter's assignment materials (rather than immediately following the review problem) to encourage students to solve the problems before reviewing the solutions. Chapters contain a

range of assignment materials in the form of review questions, exercises, problems, discussion questions, and cases. Although many assignment materials deal with new concepts, there are ample materials dealing with important traditional topics.

- **Review questions**, sequenced in the order of materials presented in the chapter, focus on the recall of basic chapter materials.
- **Exercises** are relatively short and straightforward applications of individual chapter topics. They focus on recall and application.
- **Problems** contain more rigorous and comprehensive applications of chapter materials, often requiring the ability to organize and present information. Many problems also contain straightforward requirements calling for decisions, interpretation, or “what if” analysis.
- **Discussion questions** typically require students to conceptualize chapter materials and, sometimes, relate them to materials in previous chapters. They focus on comprehension, synthesis, and evaluation. Discussion questions can be used as written assignments or, with relatively limited amounts of advanced student preparation, as a basis of classroom or group discussion.
- **Cases** involve rigorous analysis, synthesis, and evaluation. They often integrate materials contained in several chapters and require students to extend their thought processes to new situations. While the coverage of cases, especially at the undergraduate level, will likely require the guidance of the instructor, the selective use of case materials helps prepare students for the difficult transition from the classroom to the business world. The cases are also excellent for group assignments.
- **Cases prepared by Professor John Shank** focus on strategic cost management issues. These clearly identified cases concern complex real-world situations that are often unstructured and lack complete information. They are most appropriately used in upper division or graduate courses where students have a higher tolerance for ambiguity. Use of these cases requires significant preparation time on the part of the student and the instructor.

ANCILLARY MATERIALS

This textbook is part of a comprehensive and carefully prepared educational package that offers various forms of assistance to both instructors and students. A variety of ancillary materials is available.

- A **solutions manual**, prepared by the authors, contains detailed solutions to all assignment materials.
- **Transparency acetates** for the solutions to assignments requiring extensive computations are available to adopters.
- **Power Point Slides**, prepared by Douglas Cloud of Pepperdine University, enhances the classroom presentation of text materials.
- A **test bank**, prepared by Professor Charles Kile of Emory University, is available in printed and microcomputer (MicroExam III) versions. A collection of problems, questions, and exercises, the test bank is designed to save time in preparing and grading periodic and final exams.
- A **study guide**, prepared by Professor Stephen V. Senge of Western Washington University, reemphasizes and reinforces basic concepts and techniques.
- **An Introduction to Financial Statement and Cash Flow Analysis**, a soft-cover supplement covering financial statement analysis and cash flows in management accounting, has been prepared by the authors in recognition of the fact that some schools find it necessary to cover these topics in management accounting courses. The materials in this supplement, Financial Statement Analysis, Chapter 1, and Statement of Cash Flows, Chapter 2, may be used before or after the other text materials. Solutions to the supplement assignments are available on our website at: <http://morse.swcollege.com>.

ACKNOWLEDGMENTS

We were motivated in our approach to organizing this book by speakers at numerous meetings, conversations with businesspeople, returning graduate students with professional experience, participants in executive development programs, colleagues in accounting and other disciplines, and researchers working on the cutting edge of management accounting. The writings of many of these people are included in the suggested readings. We were especially influenced by Peter Drucker's numerous writings on management, Robert Kaplan's and Robin Cooper's work in the areas of activity-based costing and activity-based management, John Shank's and Vijay Govindarajan's writings on the value chain and strategic cost management, and Michael Porter's writings on strategic position analysis and the value chain.

Six books that influenced our conceptual framework for thinking about management accounting are: *Megatrends* by John Naisbitt, published by Warner Books; *The Third Wave* by Alvin Toffler, published by William Morrow & Co.; *Relevance Lost: The Rise and Fall of Management Accounting* by H. Thomas Johnson and Robert S. Kaplan, published by the HBS Press; *Strategic Cost Management* by John K. Shank and Vijay Govindarajan, published by The Free Press; *Reengineering the Corporation* by Michael Hammer and James Champy, published by Harper Business; and *Cost and Effect* by Robin Cooper and Robert Kaplan, published by HBS Press. These books helped us put management accounting within the context of the broad sweep of events affecting business and society at the start of the twenty-first century.

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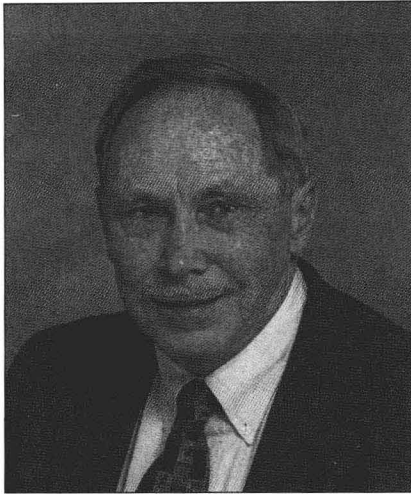
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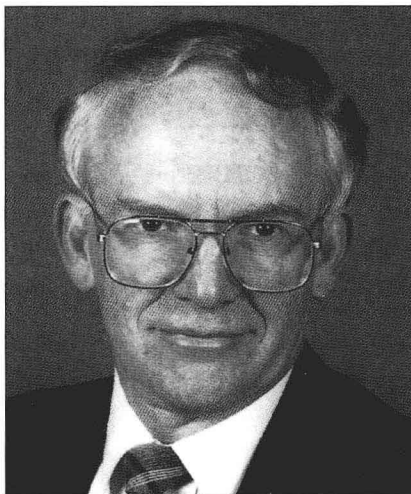
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Despite the efforts of the many people who assisted in this project, there is always room for further improvement. To assist us in continuously improving this product so that it better fits your needs and the needs of your students, comments and suggestions are most welcome. Users wishing to contact us with comments, suggestions, or questions, may send us correspondence via our Web site in the **Instructor's Resource** under **Comments & Feedback**.

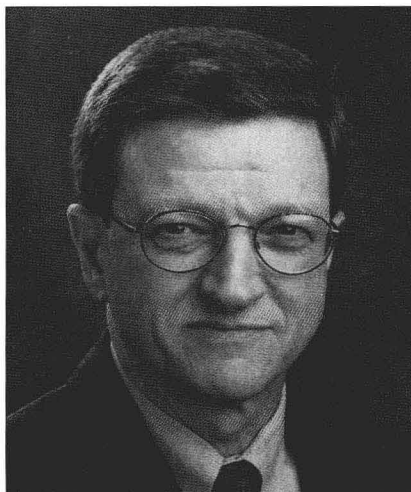
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