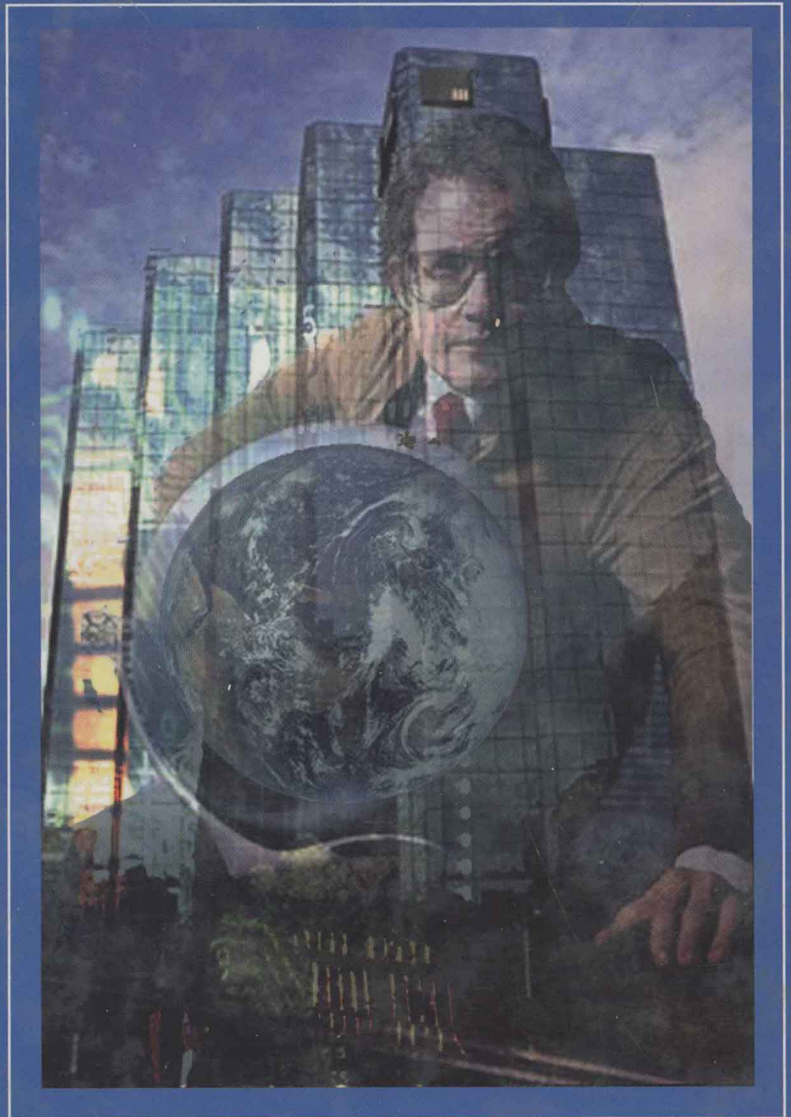


Schneider  
Sollenberger

2  
Second  
Edition



# Managerial Accounting:

## Manufacturing and Service Applications

2  
Second  
Edition

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# Managerial Accounting: Manufacturing and Service Applications

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by Arnold Schneider and Harold Sollenberger

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## PREFACE

**T**he service sector of the economy (including merchandising) accounts for over 75 percent of employment in the U.S. Also, about 70 percent of the GNP of the world's leading economies come from the service sector. In addition to the dominance of the service sector in the economy, students (and probably instructors as well) can relate more easily to service organizations. Most students have never been in a factory, but they have had interactions with banks, airlines, restaurants, etc.

This textbook places service organizations on equal footing with manufacturing organizations. Applications involving the service sector are at least as numerous as those involving manufacturing. These applications include opening chapter vignettes, chapter examples, contemporary practice illustrations, review problems, and end-of-chapter exercises, problems, and cases.

## THE BASIC PREMISES OF THE TEXT

The text's core question is: How do managers use management accounting information? The answer is: To make decisions. Every page of this text is devoted to help managers make the best decisions to achieve the goals of their organizations. All decisions concern the future. Today's decisions affect future results. Much more time is given to managing future costs and revenues, and less time is devoted to historical reporting. In today's environment, the emphasis is on customer service, throughput, higher quality, reduced waste, continuous improvement, and global sourcing and marketing.

While managerial accounting is changing dramatically, many fundamentals are still key underpinnings of today's and tomorrow's decision making. The text integrates relevant traditional and leading edge topics into a flow that teaches basic cost analysis, decision definition, relevant information formatting, and decision making itself.

Students must understand that questions cannot be answered "yes" or "no" and that problems cannot be solved merely by calculations. The words "why," "explain," and "justify" appear frequently in exercises, problems, and cases. The student is lead from definition and concept, to mechanical demonstration, to managerial analysis, and to strategy and policy development. Our writing approaches and teaching philosophies are aimed at users of managerial accounting information -- future managers. The manager must use all quantitative tools and techniques available but must also apply logic, insight, judgment, and common sense.

Learning should be fun. We attempt to include subtle humor, interesting examples, real-world cases, and student-oriented concerns.

## NOTEWORTHY FEATURES IN THE TEXTBOOK

We have incorporated the latest developments in management and management accounting into this textbook. Among the key features are:

### Service Applications

While most managerial accounting concepts are transferable across manufacturing and service organizations, unique requirements and special adaptations must be recognized and discussed. Each chapter includes a wide variety of service applications, including merchandising and non-profit settings.



## Activity-Based Costing (ABC), Just-in-Time, (JIT) and Activity-Based Management

In addition to Chapter 6 that focuses on ABC and JIT costing, we discuss in nearly every chapter the ramifications that these ideas and other new manufacturing and service developments have on decision making and cost management.

## International Dimensions

Because doing business in Europe, Asia, Africa, South America, and Australia is almost as common as operating on the North American continent, we must be able to think, deal, and calculate in foreign currencies, understand the impacts of European quality standards for example, and make decisions in increasingly complex global markets. We have included international sections in numerous chapters and have several international-based exercises and problems at the end of every chapter.

## Ethics and Ethical Issues

Chapter 1 sets the stage for emphasis on ethical issues. Virtually every chapter has a special section to highlight particular ethical concerns. Each chapter also has end-of-chapter exercises and problems that have a strong ethical base and require students to evaluate ethical dilemmas.

## Critical Thinking Requirements in End-of-Chapter Materials

As we attempt to challenge the student with qualitative and policy issues, we have included numerous exercises, problems, and cases that require the student to think critically. We challenge the student to explain, to justify a viewpoint, to present arguments on both sides of an issue, to provide support for quantitative answers, and to question the basic assumptions and data provided in the exercise, problem, or case. We are convinced that students will understand better and retain more from these challenges.

## Leading Edge Topics

Chapter 14 addresses recent costing developments. These include the costs of quality, target and kaizen costing, value-added and nonvalue-added activities, nonfinancial performance measures, and strategies to enhance productivity. Elsewhere, we discuss benchmarking, economic value-added, and life-cycle costing.

## End-of-Chapter Materials

The end of each chapter has questions for review and discussion, exercises, problems, and cases. Icons indicate applications relating to:

service



Service

international



ethics



computer



## Contemporary Practice Applications and Illustrations

In every chapter, we present live examples from real-world settings or from recent literature. Our intent is to show how concepts we discuss in the text are applied directly in real settings. We also use these Contemporary Practice examples to show the variety of practices that currently do exist.

## THE STRUCTURE OF THE BOOK

The text is divided into five parts. **Part One, Management Accounting Framework**, includes Chapters 1, 2, and 3. Chapter 1 sets the stage for managerial uses of accounting data, business environment changes, decision-making steps, organizational structure, and ethical conduct. Chapter 2 presents the basic definitional material needed for managerial accounting. This is a critical chapter for students in establishing a firm base for moving into costing and decision-making areas. Chapter 3 expands cost behavior into cost estimation and cost/volume/profit relationships.

**Part Two, Product Cost Framework**, includes Chapters 4, 5, and 6. Chapter 4 sets the cost determination stage by explaining how costs are attached to products and services. Chapter 5 discusses both job and process costing, using the new manufacturing environment as a base. Chapter 6 presents activity-based costing and management and extends the discussion in JIT and automated manufacturing processes.

**Part Three, Planning and Control Framework**, brings the planning and evaluation tools together in Chapters 7, 8, and 9. Chapter 7 focuses on budgeting and the planning and control system. Chapters 8 and 9 emphasize variance analysis to measure performance by explaining standard costs, contribution margin analysis, and absorption and variable costing.

**Part Four, Decision-Making Framework**, includes Chapters 10, 11, 12, and 13. Incremental decision-making (Chapter 10) is perhaps the core of decision-making in managerial accounting. Capital investments decisions (Chapters 11 and 12) are important to the complete understanding of incremental decisions but are sometimes covered in other courses. Chapter 13 looks at segmental performance evaluation and internal transactions.

**Part Five, Extension in Managerial Analysis**, includes Chapters 14 and 15. Chapter 14 is devoted to leading-edge management accounting topics such as costs of quality, target and kaizen costing, activity analysis, and nonfinancial performance measurement. Chapter 15 involves financial statement analysis, a topic that overlaps both financial and managerial accounting. Inclusion of this topic in this course depends on curriculum and course designs.

Within each chapter, the sequence of presentation reflects the extensive testing in large enrollment principles courses, stand-alone managerial accounting courses, MBA-level managerial accounting courses, and executive-MBA managerial accounting courses. Examples, illustrations, and end-of-chapter materials have largely come from in-class use by the authors and other managerial accounting professors or from real-world examples provided by working managers or adapted from recent business articles.

## CHAPTER FORMAT

Each chapter follows a format or pattern to assist in learning and teaching.

**Learning Objectives.** Learning objectives identify what the student should be able to do upon completing the end-of-chapter materials. They provide a guide to the study of each chapter and a teaching outline.

**Vignette.** We start each chapter with a realistic business situation or problem that focuses on topics covered in the chapter. These vignettes provide a framework for why the chapter topics are important to managers. Many of the vignettes are bases for discussion in the chapter or in end-of-chapter materials.

**Contemporary Practice.** These are examples inserted carefully in each chapter to illustrate current practices, either in survey or summary form from a newspaper, business periodical, or academic journal.

**Chapter Summary.** A brief synopsis of each chapter helps the student organize, review, and integrate key concepts. We have structured the summary around the learning objectives so the student can ascertain if all learning objectives were covered.

**Review Problems.** Problems with suggested solutions enable the student to test the level of understanding of chapter material and obtain immediate feedback about appropriate answers.

**Terminology Review.** Important terminology, definitions, and concepts appear in bold type throughout each chapter. These key terms and concepts are listed at the end of the chapter.

**Questions for Review and Discussion.** Approximately 20 questions are framed to spark class discussion and to help students confirm their understanding of the text materials.

**Exercises.** Exercises usually emphasize one or two simple concepts with basic computations and straightforward "why" or "explain" questions. Each chapter has between 15 and 20 exercises.

**Problems.** Problems have either more than one issue, challenging situations, complex computations, and/or interpretative issues. Each problem is based on a real-life setting. Each chapter contains between 15 and 20 problems.

**Cases.** Most chapters have two cases. Cases have greater depth and complexity than problems. They are designed to help students integrate various concepts within the chapter and across several chapters. The complexity and comprehensiveness help students to develop analytical skills.

The lead-in materials, the chapter contents, and the end-of-chapter materials combine to create a powerful learning and teaching package.

## WHERE AND HOW TO USE THE TEXT

*Managerial Accounting: Manufacturing and Service Applications* is structured with a great deal of flexibility. This text can easily be used in a number of settings: a second semester principles course, a junior-level course between principles and cost accounting, a junior-level non-accounting major managerial course, and MBA-level managerial accounting courses. The variety of chapters and the mix of materials within chapters allow a course to be structured around a plan for student learning consistent with specific curriculum and course needs.

While we believe that the chapter order as presented is the strongest teaching and learning sequence, many other models can be selected. Most chapters are designed so that they are partially or completely independent of other chapters. Consequently, you have an opportunity to design a unique course for different types or levels of students. Also, we have consciously applied illustrations and end-of-chapter materials to both manufacturing and service organizations.

The material within each chapter has a mix of conceptual, analytical, interpretative, and management behavioral issues. The text attempts to balance the fine edge of providing a solid reference of what, how, and why, while challenging students to think for themselves. Extensive end-of-chapter materials allow the selection of simple exercises for beginning students and for in-class teaching examples. More difficult problems and cases should challenge students to interrelate concepts, pragmatic issues, and real-world common sense. These materials are easily adapted to both undergraduate and graduate students.

## LEARNING AND TEACHING AIDS

### For the Instructor

**Solutions Manual.** The solutions manual contains answers to all review and discussion questions and detailed solutions for every exercise, problem, and case. Additional clarifying notes and suggestions are presented where appropriate.

**Solutions Transparencies.** A set of transparencies includes solutions to selected exercises, problems, and cases.

**Test Bank.** A test bank includes a variety of questions and short problems that are compatible and consistent with the text material. The questions provide multiple choice, true-false, and short problem options. Solutions to all questions and problems are included.

### For the Student

**Study Guide.** A study guide assists you in reviewing each chapter's content, in checking your understanding of concepts, and in preparing for examinations. It provides a means to reexamine the concepts and applications in each chapter from different perspectives. The study guide includes detailed chapter summaries, a glossary, self-assessment questions, such as matching, true-false, and multiple choice, and computational exercises. Solutions for all questions and exercises are included.

**Check Figures.** Key figures for solutions to the majority of exercises and problems are provided at the end of the text as an aid to students as they prepare their answers.

## ACKNOWLEDGMENTS

This book was completed with the input and assistance of many people. Of special note is Lois Sollenberger, who edited many drafts of all chapters. We also wish to thank Sheryl New of Dame Thomson Learning, who has helped make this a high-quality textbook.

Arnold Schneider  
Harold M. Sollenberger



# ABOUT

**Arnold Schneider** is Professor and Area Coordinator of Accounting at Georgia Institute of Technology, where he teaches and does research in auditing, managerial accounting and cost accounting. Professor Schneider is a bachelor's graduate of Case Western Reserve University and holds masters and doctoral degrees from Ohio State University. He was an auditor with the U.S. General Accounting Office in Washington, D.C. He is a CPA and is a member of the American Accounting Association.

Professor Schneider has also served as a Visiting Fellow in Accounting at Macquarie University in Australia and as a Visiting Associate Professor at Emory University. He has published over 30 articles in various journals such as *Journal of Accounting Research*, *Accounting Review*, *Decision Sciences*, and *Contemporary Accounting Research*. Professor Schneider has served on the editorial boards of the *Accounting Review*, *Behavioral Research in Accounting*, *Advances in Accounting*, *Issues in Accounting Education*, and *Southwest Business Review*. In 1986, Georgia Tech's College of Management gave Professor Schneider the Young Investigator Award for his research.

Professor Schneider has taught undergraduate, masters, and doctoral courses. In addition, he has taught financial and managerial accounting courses to working managers. For several years, he lectured to Chinese executives in the China/U.S. Professional Exchange Program at Georgia Tech. Professor Schneider has served as a consultant with various organizations, including as an expert witness for court cases. He has also held officer and board of director positions for several nonprofit organizations.

**Harold M. Sollenberger** is Professor of Accounting at Michigan State University. He holds MBA and DBA degrees from Indiana University and a bachelor's degree from Shippensburg University. He is a CPA and a member of the Financial Executives Institute, the Institute of Management Accounting, and the American Accounting Association.

At Michigan State University, Professor Sollenberger has served as Chairperson of the accounting and finance faculties and as Associate Dean for MBA Programs. Over the years, he has served as a consultant to CPA firms, governmental units, professional associations, and industrial firms. He has taught at Indiana University, University of Southern California, and in the People's Republic of China. He has led numerous management study groups to Europe, Japan, Korea, and the PRC.

His teaching experience spans all levels of accounting instruction from introductory courses, to doctoral research seminars, and to executive manager seminars. He taught managerial accounting to executive MBA students and to undergraduates in large lectures and via live instructional television. Outside the university, Professor Sollenberger has taught for over twenty years in a wide variety of banking and credit union financial management schools. He has taught many continuing education programs. Known for his energetic, humorous, and participatory teaching style, he has received numerous awards for his teaching at both the undergraduate and graduate levels. He has also served as treasurer for several state-wide political campaigns.

Professor Sollenberger has written 10 books and over 20 articles dealing with management information systems, cost analysis, financial institution management, and management reporting systems.

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