

清华会计学系列英文版教材

Accounting  
Information Systems  
Eighth Edition

会计信息  
系统 (第8版)

George H. Bodnar  
William S. Hopwood

著



清华大学出版社  
<http://www.tup.tsinghua.edu.cn>



Prentice Hall  
<http://www.prenhall.com>

(京)新登字 158 号

Accounting Information Systems, 8th ed./George H. Bodnar, William S. Hopwood

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Original English Language Edition Published by Prentice Hall, Inc.

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书 名：会计信息系统(第 8 版)

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出版者：清华大学出版社(北京清华大学学研大厦，邮编 100084)

<http://www.tup.tsinghua.edu.cn>

印刷者：清华大学印刷厂

发行者：新华书店总店北京发行所

开 本：850 × 1168 1/16 印张：44.75

版 次：2001 年 9 月第 1 版 2001 年 9 月第 1 次印刷

书 号：ISBN 7-302-04715-4/F · 326

印 数：0001~5000

定 价：62.00 元

# 出 版 说 明

为了适应经济全球化的发展趋势,满足国内广大读者了解、学习和借鉴国外先进的管理经验和掌握经济理论的前沿动态,清华大学出版社与国外著名出版公司合作影印出版一系列英文版经济管理方面的图书。我们所选择的图书,基本上是已再版多次、在国外深受欢迎、并被广泛采用的优秀教材,绝大部分是该领域中较具权威性的经典之作。在选书的过程中,我们得到了很多专家、学者的支持、帮助和鼓励,在此表示谢意!清华会计学系列英文版教材由清华大学经济管理学院会计系于增彪、卢俊、许秉岩、陈晓、郝振平等老师审阅,在此一并致谢!

由于原作者所处国家的政治、经济和文化背景等与我国不同,对书中所持观点,敬请广大读者在阅读过程中注意加以分析和鉴别。

我们期望这套影印书的出版对我国经济科学的发展能有所帮助,对我国经济管理专业的教学能有所促进。

欢迎广大读者给我们提出宝贵的意见和建议;同时也欢迎有关的专业人士向我们推荐您所接触到的国外优秀图书。

清华大学出版社第三编辑室

2001.8

世纪之交,中国与世界的发展呈现最显著的两大趋势——以网络为代表的信息技术的突飞猛进,以及经济全球化的激烈挑战。无论是无远弗界的因特网,还是日益密切的政治、经济、文化等方面的国际合作,都标示着21世纪的中国是一个更加开放的中国,也面临着一个更加开放的世界。

教育,特别是管理教育总是扮演着学习与合作的先行者的角色。改革开放以来,尤其是20世纪90年代之后,为了探寻中国国情与国际上一切优秀的管理教育思想、方法和手段的完美结合,为了更好地培养高层次的“面向国际市场竞争、具备国际经营头脑”的管理者,我国的教育机构与美国、欧洲、澳洲以及亚洲一些国家和地区的大量的著名管理学院和顶尖跨国企业建立了长期密切的合作关系。以清华大学经济管理学院为例,2000年,学院顾问委员会成立,并于10月举行了第一次会议,2001年4月又举行了第二次会议。这个顾问委员会包括了世界上最大的一些跨国公司和中国几家顶尖企业的最高领导人,其阵容之大、层次之高,超过了世界上任何一所商学院。在这样高层次、多样化、重实效的管理教育国际合作中,教师和学生与国外的交流机会大幅度增加,越来越深刻地融入到全球性的教育、文化和思想观念的时代变革中,我们的管理教育工作者和经济管理学习者,更加真切地体验到这个世界正发生着深刻的变化,也更主动地探寻和把握着世界经济发展和跨国企业运作的脉搏。

我国管理教育的发展,闭关锁国、闭门造车是绝对不行的,必须同国际接轨,按照国际一流的水准来要求自己。正如朱镕基总理在清华大学经济管理学院成立十周年时所发的贺信中指出的那样:“建设有中国特色的社会主义,需要一大批掌握市场经济的一般规律,熟悉其运行规则,而又了解中国企业实情的经济管理人才。清华大学经济管理学院就要敢于借鉴、引进世界上一切优秀的经济管理学院的教学内容、方法和手段,结合中国的国情,办成世界第一流的经管学院。”作为达到世界一流的一个重要基础,朱镕基总理多次建议清华的MBA教育要加强英语教学。我体会,这不仅因为英语是当今世界交往中重要的语言工具,是连接中国与世界的重要桥梁和媒介,而且更是中国经济管理人才参与国际竞争,加强国际合作,实现中国企业的国际战略的基石。推动和实行英文教学并不是目的,真正的目的在于培养学生——这些未来的企业家——能够具备同国际竞争对手、合作伙伴沟通和对抗的能力。按照这一要求,清华大学经济管理学院正在不断推动英语教学的步伐,使得英语不仅是一门需要学习的核心

课程,而且渗透到各门专业课程的学习当中。

课堂讲授之外,课前课后的大量英文原版著作、案例的阅读对于提高学生的英文水平也是非常关键的。这不仅是积累相当的专业词汇的重要手段,而且是对学习者思维方式的有效训练。

我们知道,就阅读而言,学习和借鉴国外先进的管理经验和掌握经济理论动态,或是阅读翻译作品,或是阅读原著。前者属于间接阅读,后者属于直接阅读。直接阅读取决于读者的外文阅读能力,有较高外语水平的读者当然喜欢直接阅读原著,这样不仅可以避免因译者的疏忽或水平所限而造成的纰漏,同时也可以尽享原作者思想的真实表达。而对于那些有一定外语基础,但又不能完全独立阅读国外原著的读者来说,外文的阅读能力是需要加强培养和训练的,尤其是专业外语的阅读能力更是如此。如果一个人永远不接触专业外版图书,他在获得国外学术信息方面就永远会比别人差半年甚至一年的时间,他就会在无形中减弱自己的竞争能力。因此,我们认为,有一定外语基础的读者,都应该尝试一下阅读外文原版,只要努力并坚持,就一定能过了这道关,到那时就能体验到直接阅读的妙处了。

在掌握大量术语的同时,我们更看重读者在阅读英文原版著作时对于西方管理者或研究者的思维方式的学习和体会。我认为,原汁原味的世界级大师富有特色的表达方式背后,反映了思维习惯,反映了思想精髓,反映了文化特征,也反映了战略偏好。知己知彼,对于跨文化的管理思想、方法的学习,一定要熟悉这些思想、方法所孕育、成长的文化土壤,这样,有朝一日才能真正“具备国际战略头脑”。

以往,普通读者购买和阅读英文原版还有一个书价的障碍。一本外版书少则几十美元,多则上百美元,一般读者只能望书兴叹。随着全球经济合作步伐的加快,目前在出版行业有了一种新的合作出版的方式,即外文影印版,其价格几乎与国内同类图书持平。这样一来,读者可以不必再为书价发愁。清华大学出版社这些年在这方面一直以独特的优势领先于同行。早在1997年,清华大学出版社敢为人先,在国内最早推出一批优秀商学英文版教材,规模宏大,在企业界和管理教育界引起不小的轰动,更使国内莘莘学子受益良多。

为了配合清华大学经济管理学院推动英文授课的急需,也为了向全国更多的MBA试点院校和更多的经济管理学院的教师和学生提供学习上的支持,清华大学出版社再次隆重推出与世界著名出版集团合作的英文原版影印商学教科书,也使广大工商界人士、经济管理类学生享用到最新最好质优价廉的国际教材。

祝愿我国的管理教育事业在社会各界的大力支持和关心下不断发展、日进日新;祝愿我国的经济建设在不断涌现的大批高层次的面向国际市场竞争、具备国际经营头脑的管理者的勉力经营下早日中兴。

赵纯均 教授

清华大学经济管理学院院长  
全国工商管理硕士教育指导委员会副主任

**To Donna, Kendra, Andy, Debbie, and Zoe Bodnar**

# PREFACE

The eighth edition of *Accounting Information Systems* is suitable either for a first course in business processes or Accounting Information Systems taught at the undergraduate or graduate levels. The text's emphasis on business processes and internal controls makes it ideal for a first course in business processes, Enterprise Resource Planning (ERP), AIS, or for preparation for the auditing course.

The eighth edition stresses information, communication, and electronic commerce applied within the context of business processes, transaction cycles, and the internal control processes. Detailed material on business and internal control processes is central to the textbook's organization. The business process chapters are SAP oriented and rely heavily on SAP concepts but do not require the instructor to possess technical expertise in SAP. They are also consistent with other, non-SAP, approaches to ERP such as PeopleSoft's.

An understanding of business processes is fundamental to contemporary auditing, professional, and legal considerations relating to an organization's internal control processes. Each process is subject to loss exposures. Management should develop detailed control objectives for each process. Such control objectives provide a basis for analysis and audit of an organization's internal control processes as well as a basis for managing the loss exposures that are associated with an organization's dependence on information systems.

## NEW AND RETAINED FEATURES

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- Updated coverage of contemporary information technology including ERP, Web-based commerce, EDI, EFT paperless accounting systems, security, and disaster planning.
- Expanded coverage of electronic commerce.
- Completely rewritten and reorganized chapters 7, 8, and 9 reflect the current emphasis on business processes.
- Streamlined from 18 to 16 chapters with systems analysis and design now covered in one complete chapter.
- Complete coverage of contemporary information technology as well as comprehensive coverage of business processes and transaction cycles.
- Extensive CPA examination problem set (multiple-choice and essay questions) pertaining to business processes and internal controls contained in the text, with answers and explanations in the Instructor's Manual.

## OUTLINE OF THE TEXT

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Each chapter contains the following instructional aids:

- Learning Objectives
- Glossary
- Chapter Quiz
- Review Problem

Part I surveys information technology, electronic commerce, transaction processing, transaction cycles, internal control, and computer security.

Chapter 1 surveys the relationships between accounting and information technology and thus serves as a general introduction to the text.

Chapter 2 provides detailed coverage of flowcharting and other systems documentation techniques.

Chapter 3 provides a comprehensive survey of the Internet, electronic commerce, and information technology.

Chapter 4 discusses the basic elements of accounting system—journals, ledgers, charts of accounts, standard journal entries, coding systems, and records-retention requirements.

Chapters 5 and 6 provide a foundation in internal controls and computer security.

Part II, consisting of chapters 7–10, provides comprehensive coverage of business processes, focusing, of course, on those processes most relevant to the accountant. Each process is flowcharted and explained, with a focus on applying the relevant internal controls.

Part III provides full coverage of systems development.

Chapter 11 provides a one-chapter survey of the systems development life cycle and systems development technologies.

Chapter 12 covers systems development and analysis.

Chapter 13 covers implementation.

Part IV, consisting of chapters 14–16, includes special topics, such as applications of AIS relating to decision making, databases, and auditing.

## FACULTY AND STUDENT SUPPORT

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### **The Instructor's Resource and Solutions Manual**

The Instructor's Resource and Solutions Manual is a comprehensive resource including: chapter overviews that outline each chapter of the text and provide a strong base for planning lectures, teaching tips that introduce each chapter overview and provide helpful teaching hints, transparency masters derived from selected textbook figures, and solutions/suggested solutions for the textbook review questions, discussion questions, and problems.

### **The Test Item File**

The Test Item File includes approximately 1,600 test items that can be used as quiz and/or exam material. The Test Item File includes approximately 100 questions per chapter:

- 30 True/False questions
- 15 "Fill-in-the-Blank" completion questions
- 45 Multiple-Choice questions
- 5 Problems/Exercises
- 5 Essays

### **Prentice Hall Test Manager by Engineering Software Associates (ESA), Inc.**

This easy-to-use computerized testing program can create exams, evaluate, and track student results. The PH Test Manager also provides on-line testing capabilities. Test items are drawn from the Test Item File.

### **PowerPoint Presentations**

PowerPoint presentations are available for each chapter of the text. This resource allows instructors to offer a more interactive presentation using colorful graphics, outlines of chapter material, additional examples, and visual explanations of difficult topics. Instructors have the flexibility to add slides and/or modify the existing slides to meet the course needs. You will find an average of 45 slides per chapter, which may be downloaded from our Web site at <http://www.prenhall.com/bodnar>.

### **<http://www.prenhall.com/bodnar>**

Two great Web sites are provided. In addition to resources for students and faculty, including on-line study guide with immediate grading and feedback and downloadable supplements (all instructor supplements are password protected), you will find a link directly to author William S. Hopwood's AIS Web site.

## **SUGGESTED TEACHING APPROACHES**

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There is no one "best" approach to teaching systems. Our text is designed to allow for any one of several approaches to be followed.

### **General Coverage of Information Technology, Business Processes, Transaction Processing, Internal Controls, Systems Development, and Reporting Systems**

Although the eighth edition contains 16 chapters, it is not necessary to cover all of them to deal adequately with the areas of internal controls, reporting systems, information technology, and systems development. Each of these areas is covered in a comprehensive survey chapter designed to act as stand-alone coverage for those

not wishing to pursue a special emphasis. Instructors should assign chapters 1 and 2 as a general introduction to all major topics in the book. After this, students can complete the five functional areas in five comprehensive survey chapters:

1. Chapter 3 provides a complete foundation in information technology. Topics include the Internet, electronic commerce, and hardware and software issues relating to personal computers, midrange computers, and mainframes, as well as communication networks.
2. Chapter 4 provides a summary of transaction processing and related technology.
3. Chapter 5 provides comprehensive coverage of internal controls.
4. Chapter 11 surveys the theory and practices relating to systems development.
5. Chapter 14 surveys reporting practices as they relate to accounting information systems.

Most instructors will probably want to cover chapters 3, 4, and 5 because these chapters are essential for auditing. Many instructors will also want to cover systems development, and chapter 11 will allow them to provide their students with a one-chapter survey of this important area. Still other instructors will want to cover reporting practices as they relate to accounting information systems. This material is covered in chapter 14.

The additional chapters beyond the foundation chapters give the instructor considerable flexibility in providing concentrated coverage in a particular area. Various concentrations are discussed in the following sections.

### **An Emphasis on Business Processes, Internal Controls, and Flowcharting**

The eighth edition provides considerable support for this approach. The instructor can cover internal control in great detail by covering chapter 5. Many instructors might find that no additional coverage of controls is necessary beyond this point.

The instructor can then cover chapter 6, which provides comprehensive treatment of computer and information security, and after that chapters 7, 8, 9, and 10, which deal specifically with internal accounting controls and the basic business processes. These chapters contain extensive flowcharts and case materials. In addition, there is a rich set of CPA exam questions included in the problem materials.

### **An Emphasis on Systems Development**

Part III provides a comprehensive treatment of systems development. However, the concepts of the life cycle, structured analysis, blueprinting, and even logical data flow diagrams are introduced in chapters 1 and 2. Again, this allows the instructor great flexibility, because many will find the introductory material provides adequate coverage of systems development. However, those desiring more in-depth coverage of the systems life cycle have the option of choosing this focus right from the beginning.

Chapter 11 provides a complete introduction to systems development and discusses all major phases of the life cycle, emphasizing structured development, modularity, and documentation. This chapter should be adequate for a comprehensive introduction to the topic. Those who wish to cover the systems life cycle

and systems development more thoroughly may want to include chapters 12 and 13, which examine systems planning, analysis, design, implementation, operation, evaluation, and control. Some instructors may wish to cover only one or several of these topics, and some instructors might want to also cover IS auditing in chapter 16. All chapters relating to systems development and the life cycle include a wide variety of questions, problems, and cases.

### **An Emphasis on Information Technology**

Five chapters are devoted to computer-related technology and computer-based systems. Chapter 3 provides the basic foundation in information technology, and chapter 6 follows up with more advanced topics in information security. Chapters 10 and 15 provide more advanced topics, including distributed information systems and database systems. Chapter 16 focuses on the application of information technology to auditing.

### **An Emphasis on Decision Support and Reporting**

The introductory chapters treat the entire information system from the decision support view. Managers and other recipients of information are treated as more than just receivers of the system's output. They are integral components of the system itself. This is supported by chapter 14, which provides a thorough coverage of reporting systems from the standpoint of decision support.

Part III, relating to systems development, treats the user as the reason for the system's existence. Decision analytic techniques such as decision flow diagrams and input/output matrices are used extensively.

## **ACKNOWLEDGMENTS**

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The authors wish to acknowledge the helpful comments of the following reviewers:

Stephanie Bryant, James Madison University  
Steven Filling, California State University-Stanislaus  
David R. Fordham, James Madison University  
George Fruehan, University of California-Berkeley Extension  
Steven C. Hall, Widener University  
Grace F. Johnson-Page, Marietta College  
Mary F. Sheets, University of Central Oklahoma  
Raymond Slager, Calvin College  
Mark H. Taylor, University of South Carolina

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W. S. H.

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