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电子商务

(美) Gary P. Schneider 著
奎尼皮亚克大学

(英文精编版·第10版)

E-Business
(China Student Edition, Tenth Edition)

10th edition

E-Business

Gary Schneider

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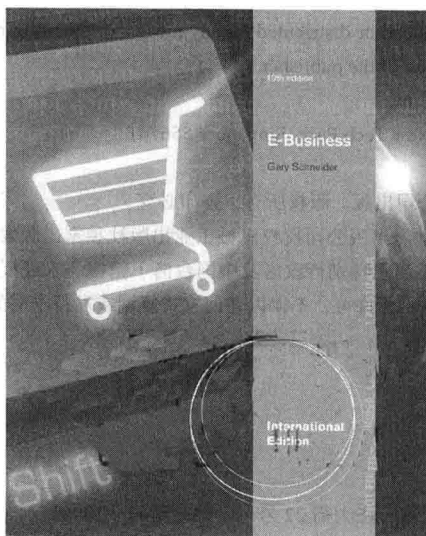
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出版者的话

文艺复兴以降,源远流长的科学精神和逐步形成的学术规范,使西方国家在自然科学的各个领域取得了垄断性的优势;也正是这样的传统,使美国在信息技术发展的六十多年间名家辈出、独领风骚。在商业化的进程中,美国的产业界与教育界越来越紧密地结合,信息学科中的许多泰山北斗同时身处科研和教学的最前线,由此而产生的经典科学著作,不仅肇划了研究的范畴,还揭示了学术的源变,既遵循学术规范,又自有学者个性,其价值并不会因年月的流逝而减退。

近年,在全球信息化大潮的推动下,我国的信息产业发展迅猛,对专业人才的需求日益迫切。这对我国教育界和出版界都既是机遇,也是挑战;而专业教材的建设在教育战略上显得举足轻重。在我国信息技术发展时间较短的现状下,美国等发达国家在其信息科学发展的几十年间积淀和发展的经典教材仍有许多值得借鉴之处。因此,引进一批国外优秀教材将对我国教育事业的发展起到积极的推动作用,也是与世界接轨、建设真正的世界一流大学的必由之路。

机械工业出版社华章公司较早意识到“出版要为教育服务”。自1998年开始,我们就将工作重点放在了遴选、移译国外优秀教材上。经过多年的不懈努力,我们与Pearson, McGraw-Hill, John Wiley & Sons, Elsevier, Cambridge等世界著名出版公司建立了良好的合作关系,从他们现有的数百种教材中甄选出《Digital Design: Principles and Practices, 4E(数字设计原理与实践,原书第4版)》(John F. Wakerly著)、《Fundamentals of Digital Logic with Verilog Design(数字逻辑基础与Verilog设计)》(Stephen Brown著)、《Electromagnetic Field Theory Fundamentals, 2E(电磁场与电磁波,原书第2版)》(Bhag Singh Guru著)、《Fundamentals of Electric Circuits, 5E(电路基础,原书第5版、英文版第5版)》(Charles K. Alexander著)、《Digital Fundamentals: A Systems Approach(数字基础:系统方法)》(Thomas L. Floyd著)、《Introductory Circuit Analysis, 12E(电路分析导论,原书第12版,本科教学版)》(Robert L. Boylestad著)、《Foundations of MEMS, 2E(微机电系统基础(原书第2版))》(Chang Liu著)等大师名家的经典教材,以“国外电子电气经典教材系列”为总称出版,供读者学习、研究及珍藏。

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PREFACE

出 版 告 白

E-Business, Tenth Edition provides complete coverage of the key business and technology elements of electronic commerce. The book does not assume that readers have any previous electronic commerce knowledge or experience.

In 1998, having spent several years doing electronic commerce research, consulting, and corporate training, I began developing undergraduate and graduate business school courses in electronic commerce. Although I had used a variety of books and other materials in my corporate training work, I was concerned that those materials would not work well in university courses because they were written at widely varying levels and did not have the organization and pedagogic features, such as review questions, that are so important to students.

After searching for a textbook that offered balanced coverage of both the business and technology elements of electronic commerce, I concluded that no such book existed. The first edition of *E-Business* was written to fill that void. Since that first edition, I have worked to improve the book and keep it current with the rapid changes in this dynamic field.

New to this Edition

This edition includes the usual updates to keep the content current with the rapidly occurring changes in electronic commerce. The tenth edition also includes new material on the following topics:

- Introduces the emergence of a third wave of electronic commerce (Chapter 1)
- Censorship issues in China (Chapter 1)
- Use of social media during the Arab Spring (Chapter 1)
- Mobile commerce using smartphones and tablet devices (Chapters 1, 4, 7)
- Rapid growth in online business in Asia driven by smartphone usage (Chapter 2)
- Cloud computing (Chapter 3)
- New online film and television programming distribution channels (Chapter 4)
- New strategies for selling luxury goods online (Chapter 4)
- Using social media to create viral marketing strategies (Chapter 5)
- Impact sourcing as an offshoring strategy (Chapter 6)
- Social commerce (Chapter 7)
- Security for mobile devices (Chapter 8)
- New major viruses and security threats (Chapter 8)
- Mobile payment-processing technologies (Chapter 9)

ORGANIZATION AND COVERAGE

E-Business: Tenth edition introduces readers to both the theory and practice of conducting business over the Internet and World Wide Web. The book is organized into four sections: an introduction, business strategies, technologies, and integration.

Introduction

The book's first section includes two chapters. Chapter 1, "The Second Wave of Global E-Business," defines electronic commerce and describes how companies use it to create new products and services, reduce the cost of existing business processes, and improve the efficiency and effectiveness of their operations. The concept of the second wave of electronic commerce is presented and developed in this chapter. Chapter 1 also describes the history of the Internet and the Web, explains the international environment in which electronic commerce exists, provides an overview of the economic structures in which businesses operate, and describes how electronic commerce fits into those structures. Two themes are introduced in this chapter and recur throughout later chapters: examining a firm's value chain can suggest opportunities for electronic commerce initiatives, and reductions in transaction costs are important elements of many electronic commerce initiatives.

Chapter 2, "E-Business Technology Basics," introduces the technologies used to conduct business online, including topics such as Internet infrastructure, protocols, and packet-switched networks. Chapter 2 also describes the markup languages used on the Web (HTML and XML) and discusses Internet connection options and tradeoffs, including wireless technologies.

Business Strategies for Electronic Commerce

The second section of the book includes five chapters that describe the business strategies that companies and other organizations are using to do business online. Chapter 3, "Web Server and E-Mail Technologies," describes the computers, operating systems, e-mail systems, utility programs, and Web server software that organizations use in the operation of their electronic commerce Web sites, including cloud computing technologies. The chapter describes the problem of unsolicited commercial e-mail (UCE, or spam) and outlines both technical and legal solutions to the problem.

Chapter 4, "E-Business Revenue Models," describes revenue models that companies are using on the Web and explains how some companies have changed their revenue models as the Web has matured. The chapter explains important concepts related to revenue models, such as cannibalization and coordinating multiple marketing channels. The chapter also describes how firms that understand the nature of communication on the Web can identify and reach the largest possible number of qualified customers.

Chapter 5, "Selling to Consumers Online," provides an introduction to Internet marketing and online advertising. It includes coverage of market segmentation, technology-enabled customer relationship management, rational branding, contextual advertising, localized advertising, viral marketing, and permission marketing. The chapter also explains how online businesses can share and transfer brand benefits through affiliate marketing and cooperative efforts among brand owners.

Chapter 6, "Selling to Businesses Online" explores the variety of methods that companies are using to improve their purchasing and logistics primary activities with Internet and Web technologies. Chapter 6 also provides an overview of EDI and describes how companies are outsourcing some of their business processes to less-developed countries. Chapter 6 describes how businesses are using technologies such as e-procurement,

radio-frequency identification, and reverse auctions in the practice of supply chain management online.

Chapter 7, “Virtual Communities,” explains how companies now use the Web to do things that they have never done before, such as creating social networks, engaging in mobile commerce, and operating auction sites. The chapter describes how businesses are developing social networks and using existing social networking Web sites to increase sales and do market research. The emergence of mobile commerce in meaningful volumes after many years of anticipation is outlined. The chapter also explains how companies are using Web auction sites to sell goods to their customers and generate advertising revenue.

Technologies for Electronic Commerce

The third section of the book includes two chapters that describe the technologies of electronic commerce and explains how they work.

Chapter 8, “Online Security,” discusses security threats and countermeasures that organizations can use to ensure the security of client computers (and smartphones and tablet devices), communications channels, and Web servers. The chapter emphasizes the importance of a written security policy and explains how encryption and digital certificates work. The chapter also includes an update on the most recent computer viruses, worms, and other threats.

Chapter 9, “Online Payment Systems,” presents a discussion of electronic payment systems, including mobile banking, electronic cash, electronic wallets, and the technologies used to make stored-value cards, credit cards, debit cards, and charge cards work. The chapter describes how payment systems operate, including approval of transactions and disbursements to merchants, and describes how banks are using Internet technologies to improve check clearing and payment-processing operations. The use of mobile technologies for making payments and doing online banking is outlined. The chapter also includes a discussion of the threats that phishing attacks and identity theft crimes pose for individuals and online businesses.

Integration

The fourth and final section of the book includes one chapter that integrates the business and technology strategies used in electronic commerce. Chapter 10, “Implementing E-Business Initiatives,” presents an overview of key elements that are typically included in business plans for electronic commerce implementations, such as the setting of objectives and estimating project costs and benefits. The chapter describes outsourcing strategies used in electronic commerce and covers the use of project management and project portfolio management as formal ways to plan and control tasks and resources used in electronic commerce implementations. This chapter includes a discussion of change management and outlines specific jobs available in organizations that conduct electronic commerce.

FEATURES

The tenth edition of *E-Business* includes a number of features and offers additional resources designed to help readers understand electronic commerce. These features and resources include:

- **Business Case Approach** The introduction to each chapter includes a real business case that provides a unifying theme for the chapter. The case provides a backdrop for the material described in the chapter. Each case illustrates an important topic from the chapter and demonstrates its relevance to the current practice of electronic commerce.

- **Learning From Failures** Not all electronic commerce initiatives have been successful. Each chapter in the book includes a short summary of an electronic commerce failure related to the content of that chapter. We all learn from our mistakes—this feature is designed to help readers understand the missteps of electronic commerce pioneers who learned their lessons the hard way.
- **Summaries** Each chapter concludes with a Summary that concisely recaps the most important concepts in the chapter.
- **Web Links** The Web Links are a set of Web pages maintained by the publisher for readers of this book. The Web Links complement the book and link to Web sites referred to in the book and to other online resources that further illustrate the concepts presented. The Web is constantly changing, and the Web Links are continually monitored and updated for those changes so that its links continue to lead to useful Web resources for each chapter. You can find the Web Links for this book by visiting the Companion Web site at www.cengagebrain.com and searching for the ISBN on the back of your book.
- **Web Links References in Text** Throughout each chapter, there are Web Links references that indicate the name of a link included in the Web Links. Text set in bold, green, sans-serif letters (**Metabot Pro**) indicates a like-named link in the Web Links. The links are organized under chapter and subchapter headings that correspond to those in the book. The Web Links also contains many supplemental links to help students explore beyond the book's content.
- **Review Questions and Exercises** Each chapter concludes with meaningful review materials including both conceptual discussion questions and hands-on exercises. The review questions are ideal for use as the basis for class discussions or as written homework assignments. The exercises give students hands-on experiences that yield computer output or a written report.
- **Cases** Each chapter concludes with two comprehensive cases. One case uses a fictitious setting to illustrate key learning objectives from that chapter. The other case gives students an opportunity to apply what they have learned from the chapter to an actual situation that a real company or organization has faced. The cases offer students a rich environment in which they can apply what they have learned and provide motivation for doing further research on the topics.
- **For Further Study and Research** A comprehensive list of the resources that were consulted during the writing of each chapter can be found at the end of the textbook. These references to publications in academic journals, books, and the IT industry and business press provide a sound starting point for readers who want to learn more about the topics contained in the chapter.
- **Key Terms and Glossary** Terms within each chapter that may be new to the student or have specific subject-related meaning are highlighted by boldface type. The end of each chapter includes a list of the chapter's key terms. All of the book's key terms are compiled, along with definitions, in a Glossary at the end of the book.

TEACHING TOOLS

When this book is used in an academic setting, instructors may obtain the following teaching tools from Course Technology:

- **Instructor's Manual** The Instructor's Manual has been carefully prepared and tested to ensure its accuracy and dependability. The Instructor's Manual is available through the Course Technology Instructor Downloads.
- **ExamView®** This textbook is accompanied by ExamView, a powerful testing software package that allows instructors to create and administer printed, computer (LAN-based), and Internet exams. ExamView includes hundreds of questions that correspond to the topics covered in this text, enabling students to generate detailed study guides that include page references for further review. The computer-based and Internet testing components allow students to take exams at their computers and also save the instructor time by grading each exam automatically.
- **PowerPoint Presentations** Microsoft PowerPoint slides are included for each chapter as a teaching aid for classroom presentations, to make available to students on a network for chapter review, or to be printed for classroom distribution. Instructors can add their own slides for additional topics they introduce to the class.

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DEDICATION

To the memory of my father, Anthony J. Schneider.

ABOUT THE AUTHOR

Gary Schneider is the William S. Perlroth Professor of Accounting at Quinnipiac University. His prior teaching appointments include the University of San Diego, the University of Tennessee, and Xavier University. He has won a number of teaching and research awards. He served as academic director of the University of San Diego's graduate programs in electronic commerce and information systems. Gary has published more than 50 books and 100 research papers on a variety of accounting, information systems, and management topics. His books have been translated into Chinese, French, Italian, Korean, and Spanish. Gary's research has been funded by the Irvine Foundation and the U.S. Office of Naval Research. His work has appeared in the *Journal of Information Systems*, *Interfaces*, *Issues in Accounting Education*, and the *Information Systems Audit & Control Journal*. He has served as editor of the *Business Studies Journal* and the *Accounting Systems and Technology Reporter*, as accounting discipline editor of *Advances in Accounting, Finance and Economics*, as associate editor of the *Journal of Global Information Management*, and on the editorial boards of the *Journal of Information Systems*, the *Journal of Electronic Commerce in Organizations*, the *Journal of Database Management*, and the *Information Systems Audit & Control Journal*. Gary has lectured on electronic commerce topics at universities and businesses in the United States, Europe, South America, and Asia. He has provided consulting and training services to a number of major clients, including Gartner, Gateway, Honeywell, the National Science Foundation, Qualcomm, and the U.S. Department of Commerce. In 1999, he was named a Fellow of the Gartner Institute. In 2003, he was awarded the Clarence L. Steber professorship by the University of San Diego. Gary is a licensed CPA in Ohio, where he practiced public accounting for 14 years. He holds a Ph.D. in accounting information systems from the University of Tennessee, an M.B.A. in accounting from Xavier University, and a B.A. in economics from the University of Cincinnati.

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