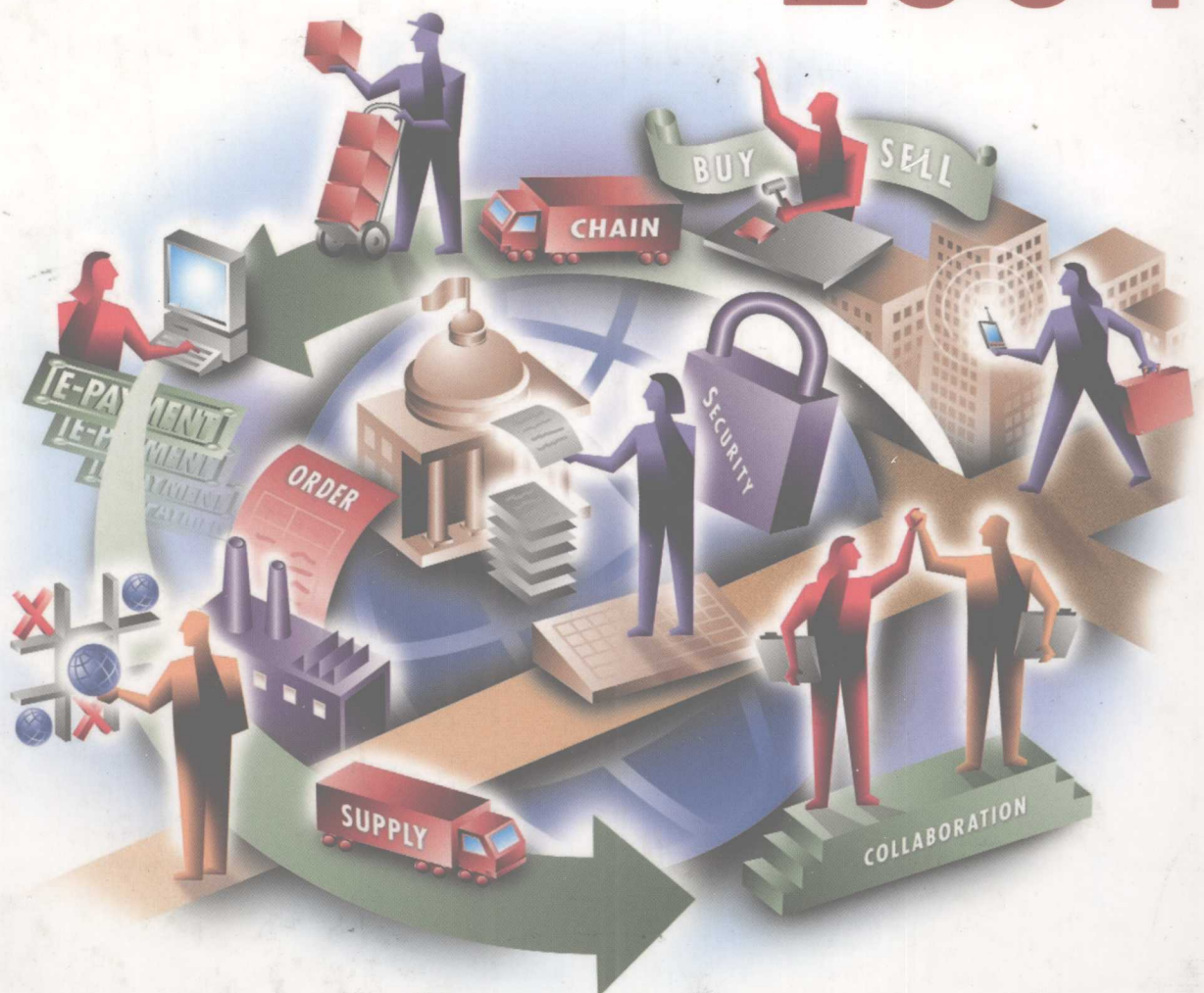


Electronic Commerce

A Managerial Perspective

2004



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David King / Jae Lee / Dennis Viehland

Electronic Commerce 2004

A Managerial Perspective

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As we enter the third millennium, we are experiencing one of the most important changes to our daily lives—the move to an Internet-based society. The U.S. Department of Commerce reported that in January 2002 more than 55 percent of all Americans (141 million) surfed the Internet. More interesting is the fact that over 90 percent of people 5 to 17 years old surf the Internet on a regular basis. It is clear that this percentage will continue to increase. Similar trends exist in most other countries. As a result, much has changed at home, school, work, and in the government—and even in our leisure activities. Some changes are already here and are spreading around the globe. Others are just beginning. One of the most significant changes is in how we conduct business, especially in how we manage marketplaces and trading. For example, the senior author of this book pays all his bills online, trades stock online, buys airline and event tickets online, purchased his computer, printer, and memory sticks online, buys books online, and much more.

Electronic commerce (EC), also known as e-business, describes the manner in which transactions take place over networks, mostly the Internet. It is the process of electronically buying and selling goods, services, and information. Certain EC applications, such as buying and selling stocks on the Internet, are growing very rapidly. But electronic commerce is not just about buying and selling; it is also about electronically communicating, collaborating, and discovering information. It is about e-learning, e-government, and much more. Electronic commerce will impact a significant portion of the world, affecting businesses, professions, and, of course, people.

The impact of EC is not just in the creation of Web-based corporations; it is the building of a new industrial order. Such a revolution brings a myriad of opportunities as well as risks. Bill Gates is aware of this, as the company he founded, Microsoft, is continually developing Internet and EC products and services. Yet, Gates has stated that Microsoft is always two years away from failure—that somewhere out there is an unknown competitor who could render their business model obsolete. Bill Gates knows that competition today is not among products or services, but among business models. What is true for Microsoft is true for just about every other company. The hottest and most dangerous new business models out there are on the Web.

The purpose of this book is to describe the essentials of EC—how it is being conducted and managed as well as assessing its major opportunities, limitations, issues, and risks. As electronic commerce is an interdisciplinary topic, it should be of interest to managers and professional people in any functional area of the business world. People in government, education, health services, and other areas will benefit from learning about EC.

Today, EC is going through a period of consolidation in which enthusiasm for new technologies and ideas is now being accompanied by careful attention to strategy, implementation, and profitability. Most of all, people recognize that e-business has two parts; it is not just about technology, it is also about business.

This book is written by experienced authors who share academic as well as real-world practices. It is a comprehensive text that can be used in one-quarter, one-semester, or two-semester courses. It also can be used to supplement a text on Internet fundamentals, MIS, or marketing.

FEATURES OF THIS BOOK

Several features are unique to this book.

MANAGERIAL ORIENTATION

Electronic commerce (e-commerce) can be approached from two major aspects: technological and managerial. This text uses the second approach. Most of the presentations are about EC applications and implementation. However, we do recognize the importance of the technology; therefore, we present the essentials of security in Chapter 12 and the essentials of infrastructure and system development in Online Chapter 18, which is located on the book's Web site (www.prenhall.com/turban). We also provide some detailed technology material in the appendices and tutorials on the book's Web site.



INTERDISCIPLINARY APPROACH

E-commerce is interdisciplinary, and we illustrate this throughout the book. Major related disciplines include accounting, finance, information systems, marketing, management, and human resources management. In addition, some nonbusiness disciplines are related, especially public administration, computer science, engineering, psychology, political science, and law. Finally, economics plays a major role in the understanding of EC.

REAL-WORLD ORIENTATION

Extensive, vivid examples from large corporations, small businesses, and government and not-for-profit agencies from all over the world make concepts come alive. These examples show students the capabilities of EC, its cost and justification, and the innovative ways real corporations are using EC in their operations.

SOLID THEORETICAL BACKGROUND

Throughout the book we present the theoretical foundations necessary for understanding EC, ranging from consumer behavior to economic theory of competition. Furthermore, we provide Web site addresses, many exercises, and extensive references to supplement the theoretical presentations. Lists of additional readings are also available on the book's Web site. Finally, the Online Research Appendix offers topics, discussion, and resources relating to emerging research issues in e-commerce.

CURRENT EC TOPICS

The book presents the most current topics of EC, as evidenced by the many 2001, 2002, and 2003 citations. Topics such as e-learning, e-government, e-strategy, Web-based supply chain systems, collaborative commerce, mobile commerce, pervasive computing, and EC economics are presented both from the theoretical point of view and from the application side.

INTEGRATED SYSTEMS

In contrast to other books that highlight isolated Internet-based systems, we emphasize those systems that support the enterprise and supply chain management. Intra- and interorganizational systems are particularly highlighted, including the latest innovations in global EC and in Web-based applications.

GLOBAL PERSPECTIVE

The importance of global competition, partnerships, and trade is rapidly increasing. E-commerce facilitates export and import, the management of multinational companies, and electronic trading around the globe. International examples are provided throughout the book.

EC FAILURES AND LESSONS LEARNED

In addition to EC success stories, we also present EC failures, and, where possible, analyze the causes of those failures.

USER-FRIENDLINESS

While covering all major EC topics, this book is clear, simple, and well organized. It provides all the basic definitions of terms as well as logical conceptual support. Furthermore, the book is easy to understand and is full of interesting real-world examples and “war stories” that keep the reader’s interest at a high level. Relevant review questions are provided at the end of each section so the reader can pause and digest the new material.

ORGANIZATION OF THE BOOK

The book is divided into 17 chapters grouped into six parts. One additional chapter, four technology appendixes, a research appendix, and tutorials are available as online supplements.

PART 1—INTRODUCTION TO E-COMMERCE AND E-MARKETPLACES

In Part 1 we provide an overview of the entire book as well as the fundamentals of EC and some of its terminology (Chapter 1) and a discussion of electronic markets and their mechanisms (Chapter 2).

PART 2—INTERNET CONSUMER RETAILING

In Part 2 we describe EC B2C applications in three chapters. Chapter 3 addresses e-tailing and electronic service industries. Chapter 4 deals with consumer behavior online and market research. Chapter 5 covers online advertising. A tutorial on building a B2C store front is available online (T2).

PART 3—BUSINESS-TO-BUSINESS E-COMMERCE

In Part 3 we examine the one-to-many B2B models (Chapter 6), including auctions, and the many-to-many models (Chapter 7), including exchanges. Chapter 8 describes the e-supply chain, intrabusiness EC, and collaborative commerce. An appendix to Chapter 6 provides discussion of the transition from traditional EDI to Internet-based EDI; an appendix to Chapter 7 provides additional material on extranets; and an appendix to Chapter 8 provides additional materials on intranets. Online tutorial T3 deals with the supply chain and its management.

PART 4—OTHER EC MODELS AND APPLICATIONS

Part 4 begins with several interesting applications such as e-government, e-learning, and consumer-to-consumer EC, as presented in Chapter 9. Chapter 10 explores the developing applications in the world of wireless EC (m-commerce, l-commerce, and pervasive computing).

PART 5—EC SUPPORT SERVICES

Chapter 11, the first chapter of Part 5, provides an overview of electronic auctions and bartering. Chapter 12 begins with a discussion of the need to protect privacy and intellectual property. It also describes various types of computer fraud and crime and discusses how to minimize these risks through appropriate security programs. Chapter 13 describes a major EC support service: electronic payments. Chapter 14 concentrates on order fulfillment and on content generation, delivery, and management.

PART 6—EC STRATEGY AND IMPLEMENTATION

Chapter 15 discusses strategic issues in implementing and deploying EC. The chapter also presents global EC and EC for small businesses. Chapter 16 is unique in any EC text; it describes how to build an Internet company from scratch. It takes you through all the necessary steps and provides you with guidelines for success. Chapter 17 deals with legal, ethical, and societal issues, and it concludes the book with an overview of future EC directions. An interactive online tutorial (T1) deals with creation of a business plan for Internet companies and a business case for EC applications. Finally, online Chapter 18 deals with EC applications development including the upcoming wave of Web services.



LEARNING AIDS

The text offers a number of learning aids to help the student.

- **Chapter outlines.** A listing of the main headings (“Content”) at the beginning of each chapter provides a quick overview of the major topics covered.
- **Learning objectives.** Learning objectives at the beginning of each chapter help students focus their efforts and alert them to the important concepts to be discussed.
- **Opening vignettes.** Each chapter opens with a real-world example that illustrates the importance of EC to modern corporations. These cases were carefully chosen to call attention to the major topics covered in the chapters. Following each vignette, a short section titled “What We Can Learn . . .” links the important issues in the vignette to the subject matter of the chapter.
- **EC Application Cases.** In-chapter cases highlight real-world problems encountered by organizations as they develop and implement EC. Questions follow each case to help direct the student’s attention to the implications of the case material.
- **Insights and Additions.** Topics sometimes require additional elaboration or demonstration. Insights and Additions boxes provide an eye-catching repository for such content.
- **Exhibits.** Numerous attractive exhibits (both illustrations and tables) extend and supplement the text discussion.
- **Review questions.** Each section ends with a series of review questions about that section. These questions are intended to help students summarize the concepts introduced and to digest the essentials of each section before moving on to another topic.
- **Marginal glossary and key terms.** Each bolded key term is defined in the margin when it first appears. In addition, an alphabetical list of key terms appears at the end of each chapter with a page reference to the location in the chapter where the term is discussed.
- **Managerial Issues.** The final section of every chapter explores some of the special concerns managers face as they adapt to doing business in cyberspace. These issues are framed as questions to maximize readers’ active engagement with them.

- ▶ **Chapter summary.** The chapter summary is linked one-to-one to the learning objectives introduced at the beginning of each chapter.
- ▶ **End-of-chapter exercises.** Different types of questions measure students' comprehension and their ability to apply knowledge. Discussion Questions are intended to promote class discussion and develop critical thinking skills. Internet Exercises are challenging assignments that require students to surf the Internet and apply what they have learned. Over 250 hands-on exercises send students to interesting Web sites to conduct research, investigate an application, download demos, or learn about state-of-the-art technology. The Team Assignment and Role Playing exercises are challenging group projects designed to foster teamwork.
- ▶ **Real-World Cases.** Each chapter ends with a real-world case, which is presented in somewhat more depth than the in-chapter EC Application Cases. Questions follow each case.

SUPPLEMENTARY MATERIALS

The following support materials are also available.

INSTRUCTOR'S RESOURCE CD-ROM

This convenient *Instructor's CD-ROM* includes all of the supplements: Instructor's Manual, Test Item File, TestGen, PowerPoint Lecture Notes, and Image Library (text art).

The Instructor's Manual, written by Professor Jon C. Outland of National American University, includes answers to all review and discussion questions, exercises, and case questions. The Test Item File (Test Bank), written by Professor James Steele of Chattanooga State Technical Community College, includes multiple-choice, true-false, and essay questions for each chapter.

The Test Bank is provided in Microsoft Word, as well as in the form of TestGen.

The PowerPoint Lecture Notes, by Judy Lang, are oriented toward text learning objectives. They are also available at the book's Web site at www.prenhall.com/turban.

MYCOMPANION WEB SITE (WWW.PRENHALL.COM/TURBAN)

The book is supported by a MyCompanion web site that includes:

- ▶ An online chapter (Chapter 18 on EC applications and infrastructure).
- ▶ Bonus EC Application Cases and Insights and Additions features.
- ▶ An online appendix that focuses on the latest research topics in e-commerce. This unique appendix identifies 10 to 15 research issues per chapter, briefly discusses the issue, and provides a supportive literative review, including research-related URLs.
- ▶ Four technology appendices (on the topics of EC infrastructure, Web page design, Web programming, and software agents).
- ▶ Three interactive tutorials, two on storefront development and one on preparation of an EC business plan.
- ▶ A password-protected faculty area where instructors can download the Instructor's Manual and Test Item File.
- ▶ PowerPoint Lecture Notes.
- ▶ Interactive Study Guide, by Professor Jon C. Outland of National American University, includes multiple-choice, true-false, and essay questions for each chapter. Each question includes a hint and coaching tip for students' reference. Students receive automatic feedback upon submitting each quiz.



- ▶ All of the Internet Exercises from the end of each chapter in the text are provided on the Web site for convenient student use.
- ▶ EC case studies, some with teaching notes.
- ▶ Links to a large number of case studies, including customer success stories and academically oriented cases.
- ▶ Links to many EC vendors' sites.

WEB STRATEGY PRO

Prentice Hall is pleased to offer this powerful educational version of Web Strategy Pro software. This Windows-based, easy-to-use program allows you to bring the entire process of planning an Internet strategy alive in your classroom in seven easy steps. Web Strategy Pro is not available as a stand-alone item but can be packaged with the Turban text at an additional charge. Contact your local Prentice Hall representative for more details.

ONLINE COURSE SUPPORT



- ▶ **WebCT** (www.prenhall.com/webct). Gold Level Customer Support, available exclusively to adopters of Prentice Hall courses, is provided free of charge upon adoption and provides you with priority assistance, training discounts, and dedicated technical support.
- ▶ **BlackBoard** (www.prenhall.com/blackboard). Prentice Hall's abundant online content combined with BlackBoard's popular tools and interface result in robust Web-based courses that are easy to implement, manage, and use—taking your courses to new heights in student interaction and learning.
- ▶ **CourseCompass** (www.prenhall.com/coursecompass). CourseCompass is a dynamic, interactive online course management tool powered exclusively for Pearson Education by BlackBoard. This exciting product allows you to teach market-leading Pearson Education content in an easy-to-use customizable format.

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