

Second Edition



# E-Commerce Economics

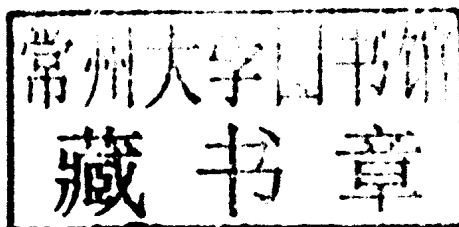
David D. VanHoose



# **E-Commerce Economics**

Second edition

**David D. VanHoose**



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**To Carol**



# Preface to the second edition

## TO THE INSTRUCTOR

Electronic commerce remains one of the most fascinating topics in economics. I wrote the first edition of *E-Commerce Economics* with the intent of providing students with a sophisticated, yet accessible, understanding of the subject matter while simultaneously presenting instructors with a well-organized presentation of the full range of appropriate topics. I attempted to achieve this two-part objective by including complete coverage of the implications of electronic commerce within the various areas of the discipline—ranging from industrial organization and public economics to monetary economics and international economics. In addition, I sought to offer balanced examinations of how traditional economic principles continue to apply to the electronic marketplace and of how features of certain products sold in this marketplace have required rethinking some of those principles. These remain my aims in this new, second edition of *E-Commerce Economics*.

Since publication of the first edition, two key topics have attained such prominence within the realm of e-commerce economics that they justified the inclusion of entirely new chapters. One of these topics, *two-sided markets*, is covered in depth in the new Chapter 6, entitled “E-Commerce Intermediaries and Two-Sided Markets.” The other, proposed *network neutrality* rules, is addressed in the new Chapter 10, entitled “Internet Regulation and Net Neutrality.” Of course, the remaining chapters of the text have been considerably revised to reflect various developments in e-commerce economics, including topics such as the following:

- The global spread of electronic commerce (Chapter 1)
- The applicability of the theory of oligopoly, including basic game theory, to analysis of the electronic marketplace (Chapter 3)
- Increased relevance of issues relating to vertical integration and vertical restraints (Chapter 4)
- Open source software (Chapters 6 and 11)
- Privacy and electronic commerce (Chapter 9)
- Digital bundling and antitrust policy (Chapter 9)
- Online consumer communities (Chapter 11)
- The development of online banking (Chapter 13).



Of course, crucial aspects of the first edition have been retained, which include the following:

- Current-interest features in each chapter that demonstrate the real-world relevance of e-commerce economics
- Frequent margin references to Internet resources, along with end-of-chapter Online Application questions
- More than 85 diagrams with full explanations appearing beneath or alongside all diagrams
- A Web-based *Study Guide* for students, including interactive questions for practice
- A Web-based *Instructor's Manual*, plus a Test Bank, available for use by instructors who adopt the text.

### **COMPLETE COVERAGE OF THE ECONOMICS OF ELECTRONIC COMMERCE**

All of the essential elements of e-commerce economics are covered in the pages that follow. These include:

- The extent to which basic principles of perfect competition and monopoly can be applied to analysis of e-commerce issues
- The economics of virtual products and network industries
- Strategic pricing and price discrimination in electronic commerce
- Imperfect consumer information about prices and quality and the role of e-commerce intermediaries and two-sided markets
- The economics of Web advertising
- Intellectual property and the Internet
- Web-based financial market trading and online banking
- Expanded regulatory and antitrust issues in the electronic marketplace
- Public goods, club goods, and the Internet
- Taxes and e-commerce
- Digital cash and electronic payments
- Monetary policy with electronic money
- Macroeconomic implications of electronic commerce.

### **ALTERNATIVE USES OF THIS TEXT**

Electronic commerce is an appropriate subject of study in a variety of contexts. This second edition of *E-Commerce Economics* can be utilized in any of the following environments:

1. **An e-commerce economics course:** The text can be used as the primary text for a stand-alone economics course. It has been written with an aim to be readily accessible to a student who has completed principles of economics. Although an instructor can choose chapters to emphasize in light of specific course

goals, the 14 chapters of the text provide a complete foundation for a one-semester economics course.

2. **A general business or public policy course in electronic commerce:** *E-Commerce Economics* can be used as a core text within a general survey course in electronic commerce. Instructors teaching students who have little or no background in economics can allocate extra time to the material in Chapters 2 and 3, which together provide students with a sufficient foundation in economics to apply throughout the remainder of the text.
3. **Other courses in economics:** Electronic commerce is one of the more fascinating current subjects for discussion in courses in principles of economics, intermediate economic theory, industrial organization, and money and banking. Electronic-commerce-related issues also are gaining increased prominence in public economics, international trade, and international finance. Whereas core texts in these various areas contain at most only a few pages here and there examining e-commerce topics, the economics of electronic commerce is the sole focus of this book. Instructors can weave selected chapters of *E-Commerce Economics* into their courses to reinforce student understanding of essential course concepts by relating them to issues in electronic commerce that are of interest to students.

## FEATURES THAT TEACH AND REINFORCE

The study of e-commerce provides abundant opportunities to apply fundamental economic concepts.

### Applying economics to the electronic marketplace

To motivate student learning, *E-Commerce Economics* includes more than 70 real-world examples within three categories of features that are incorporated and referenced throughout the text:

**Globalization online:** Because electronic commerce is a global issue, international applications receive considerable coverage in *E-Commerce Economics*. In addition to addressing international topics directly at various points throughout the text, features such as the following provide international applications of concepts in e-commerce economics:

- An industry expands to handle the world's data explosion
- In China, Baidu beats Google
- Even orangutans are meeting up on the Web
- Adgets help prevent Canadian newspaper advertising earnings from plummeting
- Non-U.S. companies are becoming U.S. patent leaders
- In Europe, dominant firms' intellectual property rights now may have less value
- Geographic proximity, gravity, and international trade on the Internet
- Day trading at Mumbai's Internet cafés.



**Policymaking online:** Electronic commerce raises a host of public policy issues, and these and a number of other features explore a variety of those issues:

- Should concert promoters and entertainers be able to charge higher online ticket prices for choice seats?
- Some consumers unexpectedly arrange for their friends to be tagged by Tagged.com
- FTC to bloggers—reveal freebies when endorsing products, or else!
- Are fines of hundreds of millions of dollars sufficient to stop spam?
- Antitrust authorities to Intel—those microprocessor prices are too low!
- Once again, the U.S. Justice Department wonders if IBM violates the Sherman Act
- Patent vigilantes challenge the U.S. Patent and Trademark Office
- Eliminating an intended e-commerce tax base.

**Management online:** Business applications of electronic commerce provide perhaps the greatest motivation for student learning of economic concepts. For this reason, *E-Commerce Economics* includes many features focusing on management issues that arise in the electronic marketplace, including the following:

- Is the Internet running out of numbers?
- Cutting computing costs with virtualization software
- Online eyes are watching you
- Reducing the pricing power of the press
- In a Web 2.0 world, page hits and views become imperfect measures of the benefit from advertising online
- Evidence of the value of information at Netflix
- Blending two-sided market forms boosts competition among Internet dating sites
- Videogame ads aim to reach an elusive group of consumers
- Marketing online with targeted behavioral advertising
- Can robots hold patents?
- Hollywood uses an online prediction market to find new talent.

### **Critical thinking exercises**

Critical thinking is an important aspect of every college student's education. The text ensures that students are introduced to critical-thinking activities by ending each feature with critical-thinking questions called "For Critical Analysis." The suggested answers to these critical-thinking questions are included in the *Instructor's Manual*.

### **WEB APPLICATIONS**

In addition to the online supplements at the book's Web site ([www.routledge.com/textbooks/vanhoose](http://www.routledge.com/textbooks/vanhoose)) that are discussed in more detail below, the text provides two other features that direct both students and instructors to helpful Internet resources.



## Margin URLs

“On the Web” margin features presenting relevant URLs appear in appropriate locations throughout the text.

## Chapter-ending online applications

Online Applications, which are located at the end of every chapter, provide students with Web pages at which they can engage in directed exercises. Because URLs change from time to time, each Online Application provides navigation instructions as well as specific URLs.

## KEY PEDAGOGY

Learning cannot occur in a vacuum. Students using this text will encounter an ample number of pedagogical devices that will help them master the material.

## Fundamental issues and answers within the text of each chapter

Each chapter of *E-Commerce Economics* opens with five to seven fundamental issues. Within the text itself, the fundamental issues are repeated with the appropriate answers. Students will find these questions and answers invaluable when reviewing the readings and studying for quizzes and examinations.

## Emphasizing vocabulary

Vocabulary can be a stumbling block in e-commerce economics, so key vocabulary terms are **boldfaced** within the text. Definitions appear immediately in the margin beside the first appearance of a key term, and all vocabulary terms are further defined in the end-of-text glossary.

## Chapter summary

The chapter summary is presented in numbered point-by-point formatting that corresponds to the chapter-opening fundamental issues, further reinforcing the full circular nature of the learning process for each chapter.

## Questions and problems

Each chapter ends with several questions and problems. Suggested answers are provided in the *Instructor's Manual*.

## Selected references and further reading

Appropriate references for materials in the chapter are given in this section.

## WEB-BASED SUPPLEMENTS

*E-Commerce Economics* is supported by a full set of supplementary materials, which are available at the text's support Web site: [www.routledge.com/textbooks/vanhoose](http://www.routledge.com/textbooks/vanhoose).

### Study guide

The online *Study Guide* is designed to facilitate active learning by students. It provides outline summaries of chapter contents, along with lists of the key terms for students to look for and define in their own words as they read the text. To assist students in testing their understanding of the material, the *Study Guide* also includes interactive true/false and multiple-choice questions.

### Instructor's manual

The *Instructor's Manual*, available to qualifying adopters in the form of downloadable PDF files, is designed to simplify the teaching tasks that instructors face. It offers an overview of key concepts and objectives of each chapter, an outline built upon chapter headings in the text, and answers to end-of-chapter questions.

### Test bank

One of the most challenging aspects of teaching is evaluation of student performance. To assist instructors in this endeavor, a *Test Bank* is available to all adopters of *E-Commerce Economics*.

### Author blog and RSS feed

To help adopters of *E-Commerce Economics* keep up to date on the latest issues relating to the electronic marketplace, also available via the text's support Web site will be an author blog on current topics as well as an RSS feed providing links to recent articles covering e-commerce subjects. This can be found at <https://ecommerceeconomics.wordpress.com>.

## ACKNOWLEDGMENTS

This second edition of *E-Commerce Economics* benefited from an extremely active and conscientious group of reviewers. They were tough and demanding, but the rewrites of the manuscript improved accordingly. To the following reviewers, I express my sincere appreciation for the critical nature of your comments, which helped make this a better text: Brendan Cunningham, Associate Professor of Economics, United States Naval Academy; John Forster, School of Business and Management, the American University of Sharjah; Gennadi Kazakevitch, Deputy Head of Department, Department of Economics, Faculty of Business and Economics, Monash University, Australia; Norbert Mundorf, University of Rhode Island, USA.

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I am looking forward to continuing to revise this text as the electronic marketplace evolves during the years to come. Consequently, I welcome comments and criticism from both students and instructors.

D.D.V.



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