



E-commerce

business. technology. society.

Fifth Edition

Kenneth C. Laudon
Carol Guercio Traver



Chapter 1

The Revolution Is Just Beginning

MySpace and Facebook: It's All About You

Class Discussion

- What was the idea behind the creation of MySpace?
- How is Facebook different from MySpace?
- Have you used MySpace or Facebook, and if so, how often? What was your experience?
- Do you think Facebook will overtake MySpace as the most popular social networking site in the United States?

E-commerce Trends: 2008-2009

- New business models based on social technologies and user-generated content
- Search engine marketing challenges traditional marketing
- More and more people/businesses use Internet to conduct commerce
- Broadband and wireless Internet access growing
- Continued conflict over copyrights, content regulation, taxation, privacy, Internet fraud and abuse.

What is E-commerce?

- Involves *digitally enabled commercial transactions* between and among organizations and individuals
 - *Digitally enabled transactions* include all transactions mediated by digital technology
 - *Commercial transactions* involve the exchange of value across organizational or individual boundaries in return for products or services

E-commerce vs. E-business

- E-business:

- Digital enablement of transactions and processes *within* a firm, involving information systems under firm's control
- Does not include commercial transactions involving an exchange of value across organizational boundaries

Why Study E-commerce?

- Technology is different and more powerful than other technologies
- Has challenged much traditional business thinking
- Has a number of unique features that help explain why we have so much interest in e-commerce

Unique Features of E-commerce Technology

- Ubiquity
- Global reach
- Universal standards
- Information richness
- Interactivity
- Information density
- Personalization/customization
- Social technology

Web 2.0

- The “new” Web
- Applications and technologies that allow users to:
 - create, edit, and distribute content
 - share preferences, bookmarks, and online personas
 - participate in virtual lives
 - Build online communities
- Examples
 - YouTube, Photobucket, Flickr
 - MySpace, Facebook, LinkedIn
 - Second Life
 - Wikipedia

Types of E-commerce

- Classified by nature of market relationship
 - Business-to-Consumer (B2C)
 - Business-to-Business (B2B)
 - Consumer-to-Consumer (C2C)
- Classified by type of technology used
 - Peer-to-Peer (P2P)
 - Mobile commerce (M-commerce)

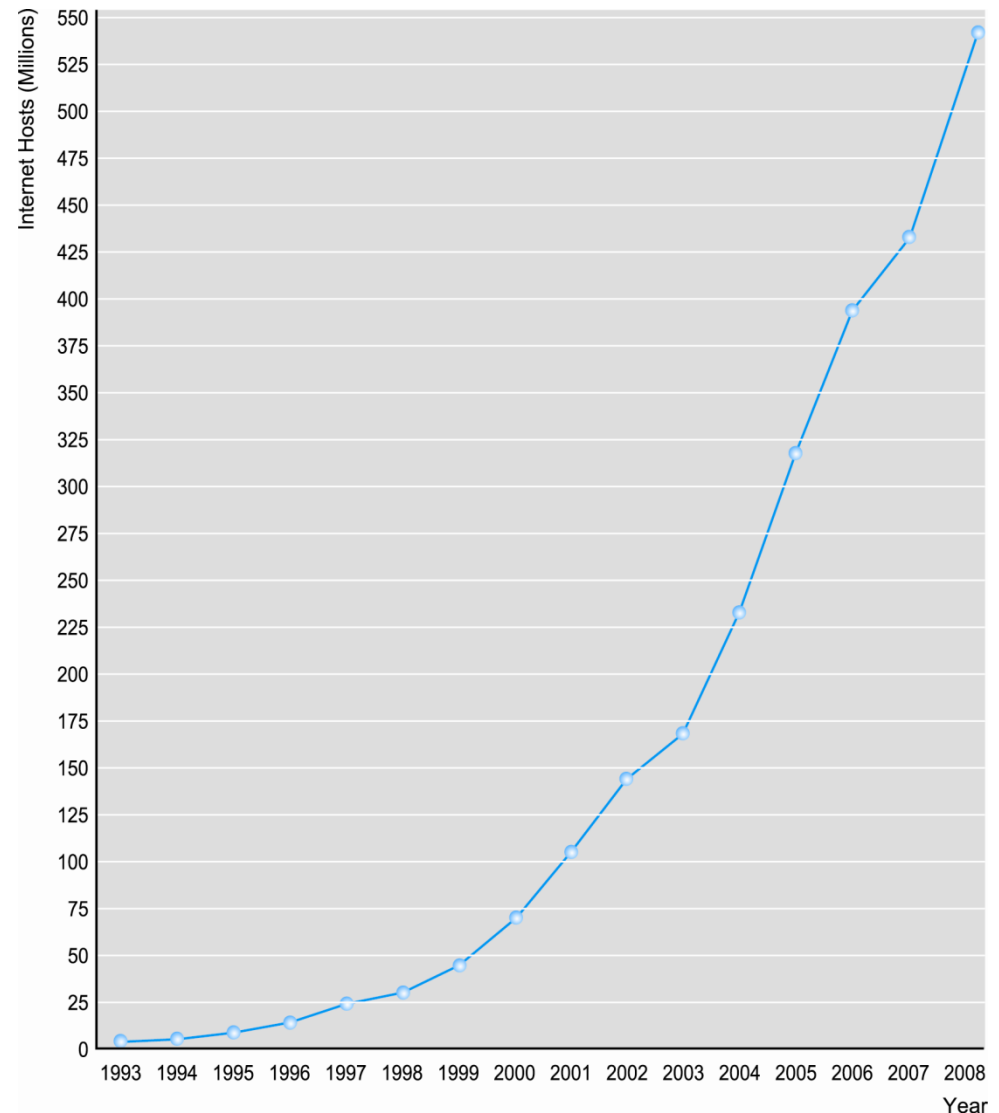
The Internet

- Worldwide network of computer networks built on common standards
- Created in late 1960s
- Services include the Web, e-mail, file transfers, etc.
- Can measure growth by looking at number of Internet hosts with domain names

The Growth of the Internet, Measured by Number of Internet Hosts with Domain Names

Figure 1.3, Page 23

SOURCE: Internet Systems Consortium, Inc. , 2008.



The Web

- Most popular service on the Internet
- Developed in early 1990s
- Provides access to Web pages (HTML documents)
- Can include text, graphics, animations, music, videos
- Web content has grown exponentially, from around 2 billion Web pages in 2000 to around 40 - 50 billion today

The Growth of Web Content

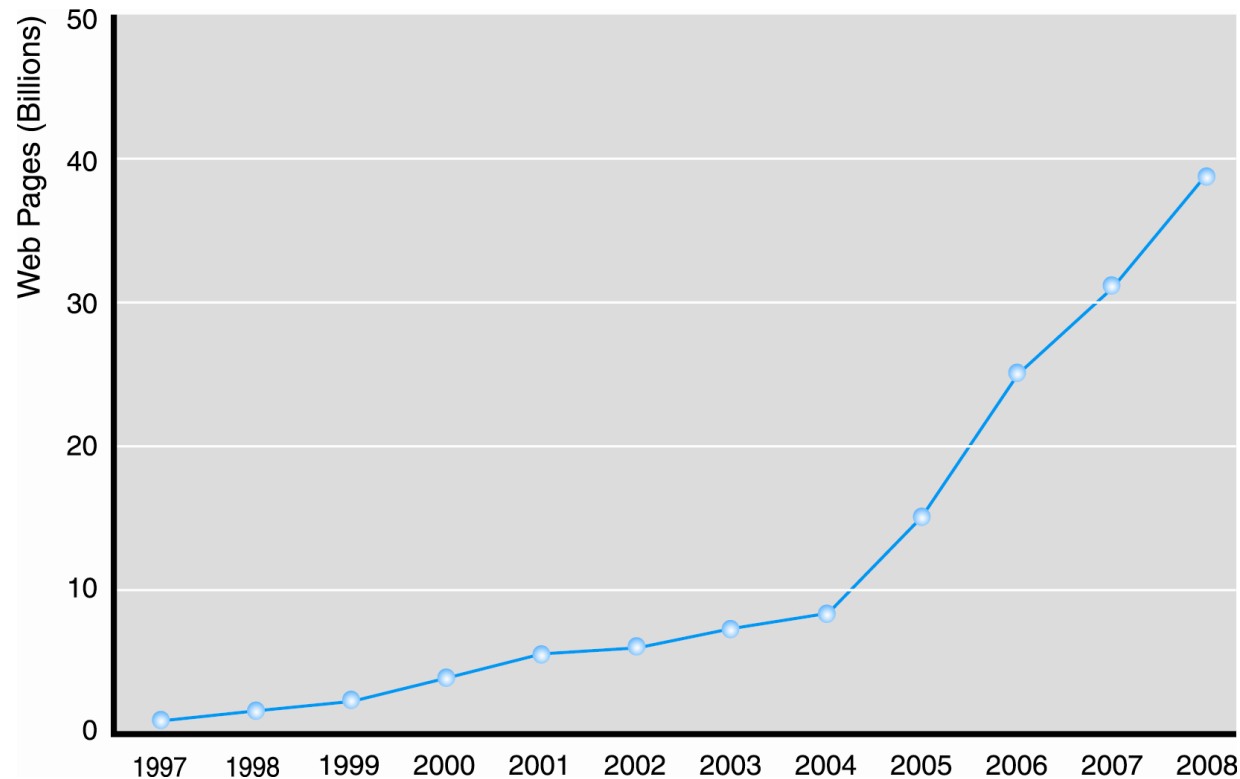


Figure 1.4, Page 24

SOURCE: Google Inc., 2008; authors' estimates



Insight on Technology:
**Spider Webs, Bow Ties, Scale-Free
Networks, and the Deep Web**
Class Discussion

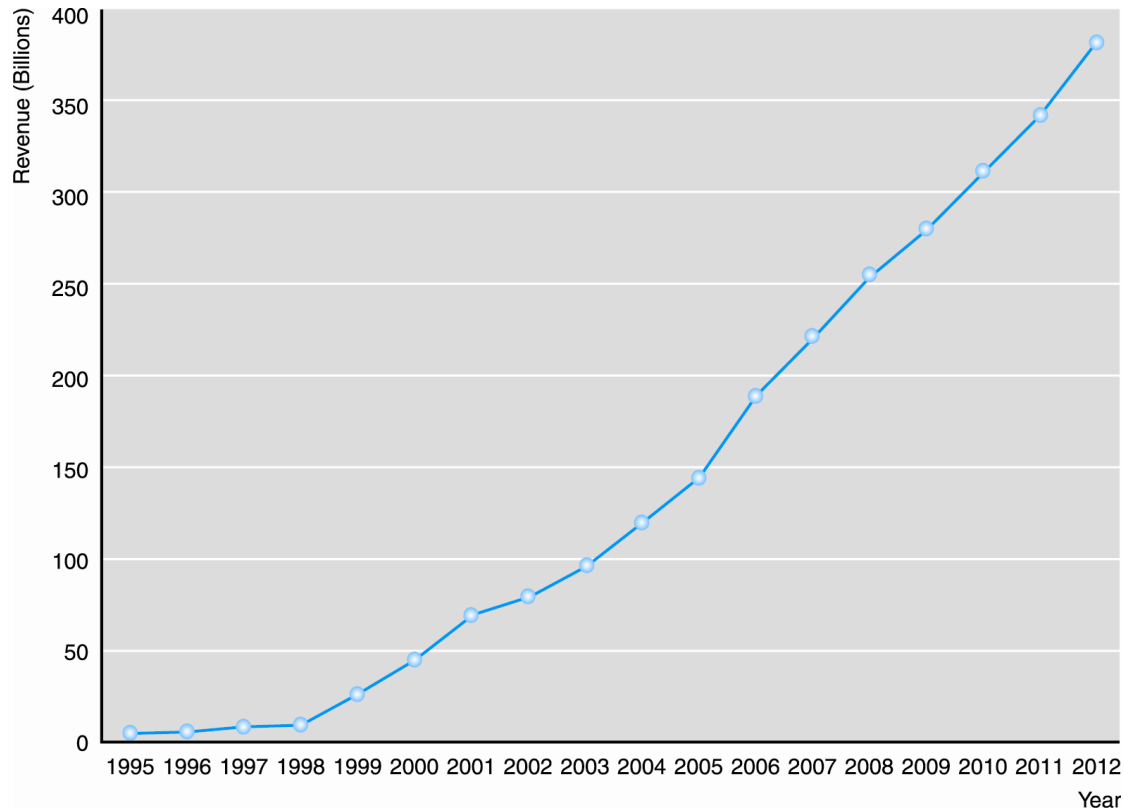
- What is the “small world” theory of the Web?
- What is the significance of the “bow-tie” form of the Web?
- Why does Barabasi call the Web a “scale-free network” with “very connected super nodes”?

Origins and Growth of E-commerce

- Precursors:
 - Baxter Healthcare
 - Electronic Data Interchange (EDI)
 - French Minitel (1980s videotext system)
- None had functionality of Internet
- 1995: Beginning of e-commerce
 - First sales of banner advertisements
- Since then, e-commerce fastest growing form of commerce in U.S.

The Growth of B2C E-commerce

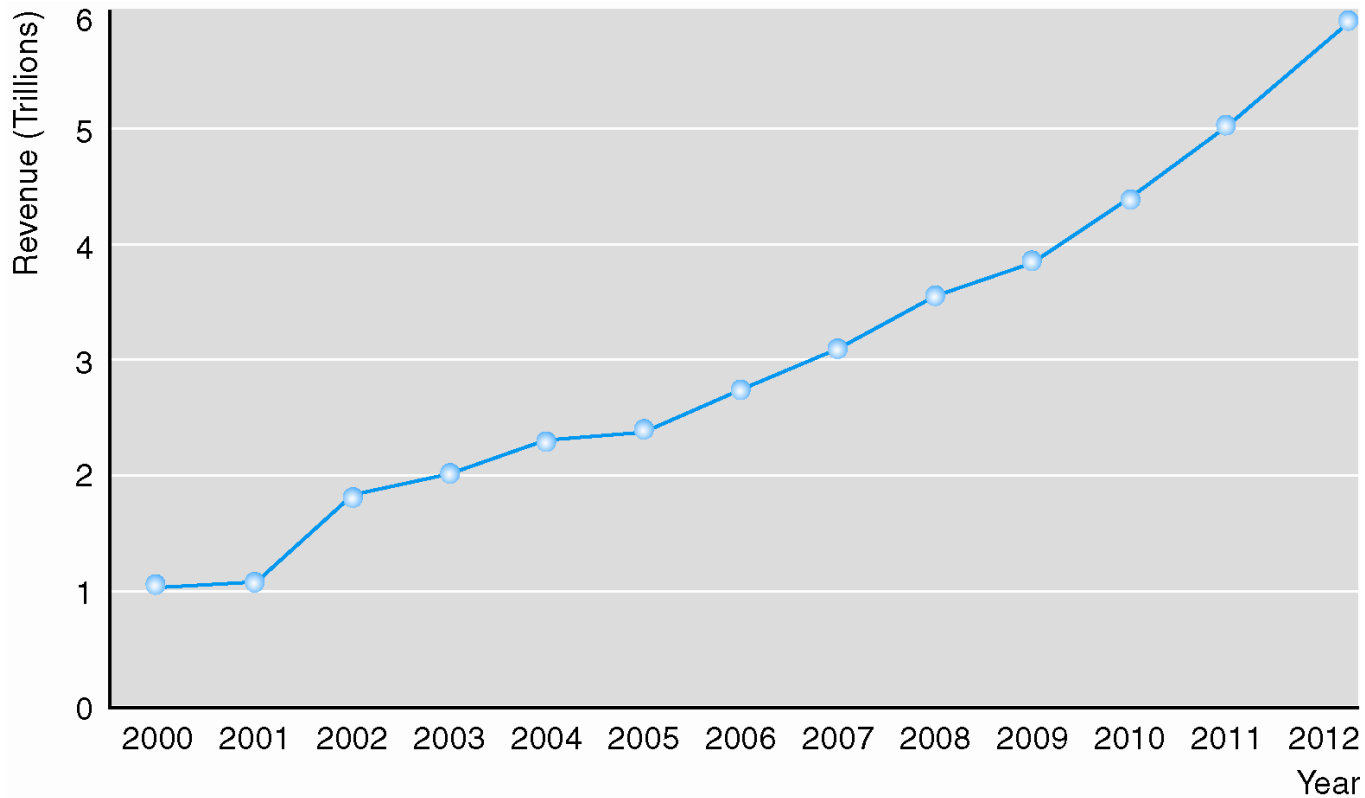
Figure 1.5, Page 25



SOURCES: eMarketer, Inc., 2008d; U.S. Census Bureau, 2008; authors' estimates.

The Growth of B2B E-commerce

Figure 1.6, Page 28



SOURCES: U.S. Census Bureau, 2008; authors' estimates.

Technology and E-commerce in Perspective

- The Internet and Web are just two of a long list of technologies, such as automobiles and radio, that have followed a similar historical path.
- Although e-commerce has grown explosively, eventually its growth will cap as it confronts its own fundamental limitations.

Potential Limitations on the Growth of B2C E-commerce

- Expensive technology
- Sophisticated skill set
- Persistent cultural attraction of physical markets and traditional shopping experiences
- Persistent global inequality limiting access to telephones and computers
- Saturation and ceiling effects

The Visions and Forces Behind E-commerce: 1995–2000

- Computer scientists: Envisioned an inexpensive, universal communications and computing environment accessible by all
- Economists: A nearly perfect competitive market and friction-free commerce
- For entrepreneurs, financial backers and marketing professionals: An extraordinary opportunity to earn far above normal returns on investment



Insight on Business
Dot-com Déjà Vu
Class Discussion

- What explains the rapid growth in private investment in e-commerce firms in the period 1998–2000? Was this investment irrational?
- Why do you think investors today would be interested in investing in or purchasing e-commerce companies? Would you invest in an e-commerce company today?
- What's happening today? Go to the PricewaterhouseCoopers MoneyTree Web site for the latest information:
<http://www.pwcmoneytree.com/moneytree/index.jsp>

Assessing E-commerce: Successes, Surprises and Failures

- Stunning technological success
- A mixed success from business perspective
- Many early visions not fulfilled
 - Friction-free commerce
 - Consumers less price-sensitive than expected
 - Considerable price dispersion remains
 - Perfect competition
 - Transaction costs still high
 - Intermediaries remain

Predictions for the Future

- E-commerce technology will continue to propagate through all commercial activity
- E-commerce prices will rise to cover the real cost of doing business on the Web and pay investors reasonable rate of return
- E-commerce margins and profits will rise to levels more typical of all retailers
- Traditional Fortune 500 companies will play growing and dominant role
- Number of successful pure online companies will decline; most successful e-commerce firms will adopt mixed “clicks and bricks” strategies
- Growth of regulatory activity worldwide

Understanding E-commerce: Organizing Themes

■ Technology:

- Development and mastery of digital computing and communications technology

■ Business:

- New technologies present businesses with new ways of organizing production and transacting business

■ Society:

- Intellectual property, individual privacy, public policy

The Internet and the Evolution of Corporate Computing

Figure 1.10, Page 44

COMPUTER TECHNOLOGY

Mainframe Computers
1950 – 1975



Minicomputers
1970 – 1980



Personal Computers
1980 – Present



Local Area Networks
Client/Server Computing
1980 – Present



Enterprise - Wide Computing
1990 – Present



Internet and World
Wide Web
1995 – Present



Mobile digital platform
and Cloud Computing
2006 – Present



BUSINESS APPLICATION

Transaction automation
Payroll
Accounts receivable

Business function automation
Marketing
Human Resources
Design

Desktop automation
Word processing
Spreadsheets
Databases

Workgroup automation
Document sharing
Project management
Messaging, e-mail

Enterprise-wide automation
Resource planning systems
Integrated finance-manufacturing systems
Human resource planning

Industrial system automation
Supply chain management
Customer relationship management
Channel management systems
Web services

Software and
Hardware services
Collaboration
Social networking
Integration of devices

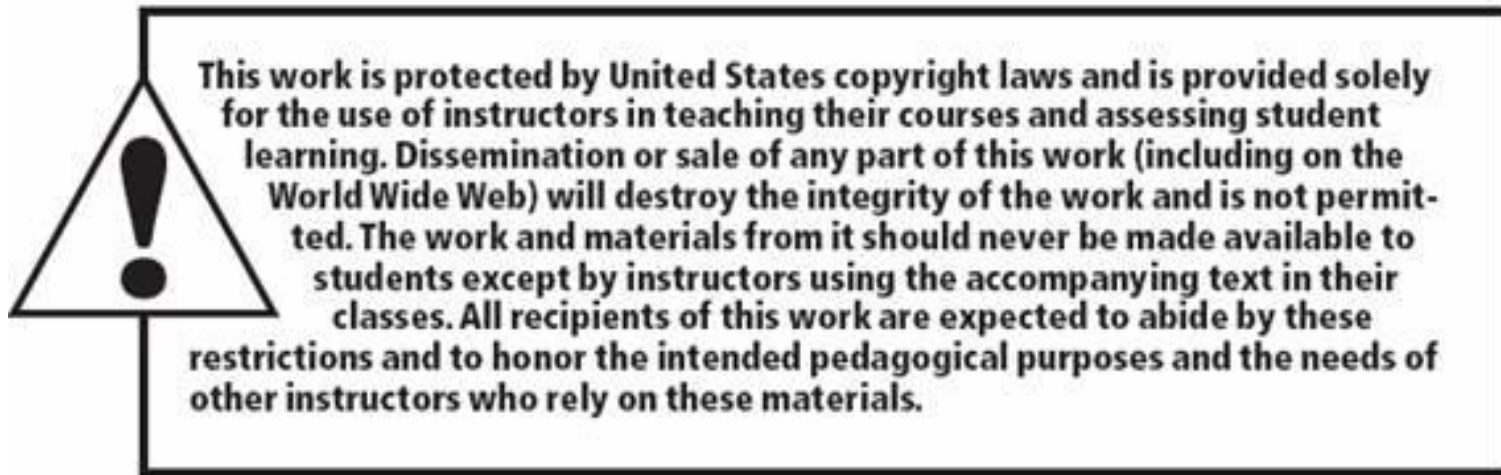


Insight on Society

Holding On to Your Privacy Online

Class Discussion

- What techniques of privacy invasion are described in the case?
- Which of these techniques is the most privacy-invading? Why?
- Is the Internet and e-commerce any different than traditional markets with respect to privacy? Don't merchants always want to know their customer?
- How do you protect your privacy on the Web?



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