

Chapter 10

E-COMMERCE: DIGITAL MARKETS, DIGITAL GOODS

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Management Information System

Sources

- ◆ Management Information Systems, Ken Laudon & Jane Laudon, Prentice Hall

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Cases

- ◆ Case 1: M-Commerce: The Past, Present, and Future
- ◆ Case 2: Ford AutoXchange B2B Marketplace
- ◆ Case 3: Deals Galore at Groupon
- ◆ Case 4: Etsy: A Marketplace and Community

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Learning Objectives

- ◆ What are the unique features of e-commerce, digital markets, and digital goods?
- ◆ What are the principal e-commerce business and revenue models?
- ◆ How has e-commerce transformed marketing?
- ◆ How has e-commerce affected business-to-business transactions?
- ◆ What is the role of m-commerce in business and what are the most important m-commerce applications?
- ◆ What issues must be addressed when building an e-commerce Web site?

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4FOOD: Burgers Go Social

- ◆ Problem - Differentiate a burger restaurant's services in crowded marketplace (Manhattan)
 - ◆ Solution – Utilize social networking and crowdsourcing for marketing and services
 - Ordering via iPad, online
 - Customers can create and name own sandwiches
 - Twitter, Facebook, Foursquare integration
 - ◆ Illustrates: Use of information systems to create new products and services
 - ◆ Demonstrates: Use of social networking technologies as marketing tool
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E-commerce and the Internet

- ◆ E-commerce today:
 - Use of the Internet and Web to transact business; digitally enabled transactions
 - Began in 1995 and grew exponentially, still growing even in a recession
 - Companies that survived the dot-com bubble burst and now thrive
 - E-commerce revolution is still in its early stages
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THE GROWTH OF E-COMMERCE

E-commerce and the Internet

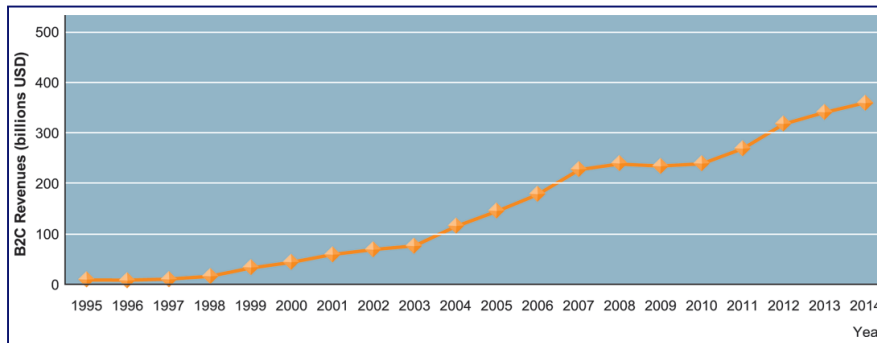


FIGURE 10-1 Retail e-commerce revenues grew 15–25 percent per year until the recession of 2008–2009, when they slowed measurably. In 2010, e-commerce revenues are growing again at an estimated 12 percent annually.

8 unique features

Why e-commerce is different – 8 unique features

1. Ubiquity

- Internet/Web technology available everywhere: work, home, etc., anytime.
- Effect:
 - Marketplace removed from temporal, geographic locations to become “marketspace”
 - Enhanced customer convenience and reduced shopping costs

8 unique features

2. Global reach

- The technology reaches across national boundaries, around Earth
- Effect:
 - Commerce enabled across cultural and national boundaries seamlessly and without modification
 - Marketspace includes, potentially, billions of consumers and millions of businesses worldwide

8 unique features

3. Universal standards

- One set of technology standards: Internet standards
- Effect:
 - Disparate computer systems easily communicate with each other
 - Lower market entry costs—costs merchants must pay to bring goods to market
 - Lower consumers' search costs—effort required to find suitable products

8 unique features

4. Richness

- Supports video, audio, and text messages
- Effect:
 - Possible to deliver rich messages with text, audio, and video simultaneously to large numbers of people
 - Video, audio, and text marketing messages can be integrated into single marketing message and consumer experience

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8 unique features

5. Interactivity

- The technology works through interaction with the user
- Effect:
 - Consumers engaged in dialog that dynamically adjusts experience to the individual
 - Consumer becomes co-participant in process of delivering goods to market

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8 unique features

6. Information density
 - Large increases in information density—the total amount and quality of information available to all market participants
 - Effect:
 - Greater price transparency
 - Greater cost transparency
 - Enables merchants to engage in price discrimination

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8 unique features

7. Personalization/Customization
 - Technology permits modification of messages, goods
 - Effect
 - Personalized messages can be sent to individuals as well as groups
 - Products and services can be customized to individual preferences

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8 unique features

8. Social technology
 - The technology promotes user content generation and social networking
 - Effect
 - New Internet social and business models enable user content creation and distribution, and support social networks

Key concepts in e-commerce

- ◆ Digital markets reduce
 - Information asymmetry
 - Search costs
 - Transaction costs
 - Menu costs
- ◆ Digital markets enable
 - Price discrimination
 - Dynamic pricing
 - Disintermediation

THE BENEFITS OF DISINTERMEDIATION TO THE CONSUMER

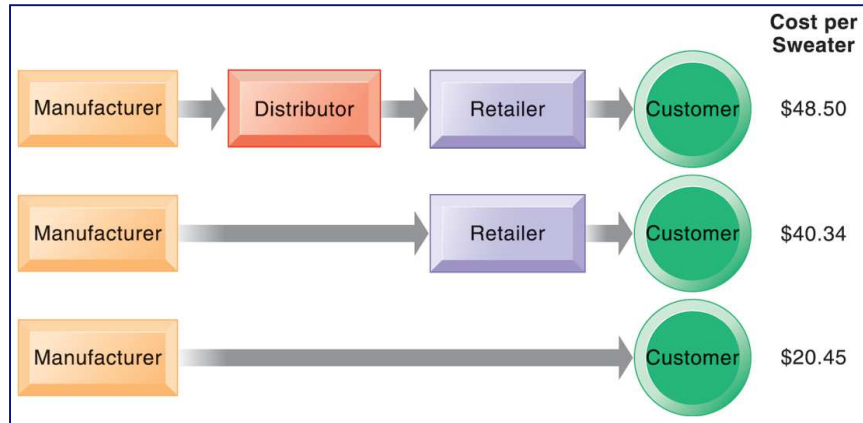


FIGURE 10-2 The typical distribution channel has several intermediary layers, each of which adds to the final cost of a product, such as a sweater. Removing layers lowers the final cost to the consumer.

Key concepts in e-commerce

◆ Digital goods

- Goods that can be delivered over a digital network
 - E.g. Music tracks, video, software, newspapers, books
- Cost of producing first unit almost entire cost of product: marginal cost of 2nd unit is about zero
- Costs of delivery over the Internet very low
- Marketing costs remain the same; pricing highly variable
- Industries with digital goods are undergoing revolutionary changes (publishers, record labels, etc.)

Types of e-commerce

- ◆ Business-to-consumer (B2C)
- ◆ Business-to-business (B2B)
- ◆ Consumer-to-consumer (C2C)
- ◆ Mobile commerce (m-commerce)

E-commerce business models

- ◆ Portal
- ◆ E-tailer
- ◆ Content Provider
- ◆ Transaction Broker
- ◆ Market Creator
- ◆ Service Provider
- ◆ Community Provider

E-commerce revenue models

1. Advertising
2. Sales
3. Subscription
4. Free/Freemium
5. Transaction Fee
6. Affiliate

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E-commerce: Business and Technology

- ◆ Most popular Web 2.0 service: social networking
 - Social networking sites sell banner ads, user preference information, and music, videos and e-books
- ◆ Social shopping sites
 - Swap shopping ideas with friends (Kaboodle, ThisNext)
- ◆ Wisdom of crowds/crowdsourcing
 - Large numbers of people can make better decisions about topics and products than a single person
- ◆ Prediction markets:
 - Peer-to-peer betting markets on specific outcomes (elections, sales figures, designs for new products)

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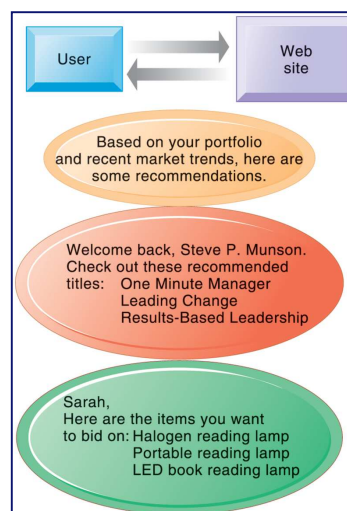
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E-commerce marketing

- ◆ Internet provides marketers with new ways of identifying and communicating with customers
- ◆ Long tail marketing: Ability to reach a large audience inexpensively
- ◆ Behavioral targeting: Tracking online behavior of individuals on thousands of Web sites
- ◆ Advertising formats include search engine marketing, display ads, rich media, and e-mail

WEB SITE PERSONALIZATION

Firms can create unique personalized Web pages that display content or ads for products or services of special interest to individual users, **improving** the customer experience and creating additional value.



Business-to-business e-commerce

- ◆ Private industrial networks (private exchanges)
 - Large firm using extranet to link to its suppliers, distributors and other key business partners
 - Owned by buyer
- ◆ Net marketplaces (e-hubs)
 - Single market for many buyers and sellers
 - Industry-owned or owned by independent intermediary
- ◆ Exchanges
 - Independently owned third-party Net marketplaces
 - Connect thousands of suppliers and buyers for spot purchasing

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A NET MARKETPLACE

◆ E-commerce: Business and Technology

Net marketplaces are online marketplaces where multiple buyers can purchase from multiple sellers.

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            graph LR
            subgraph Suppliers
            S1(( ))
            S2(( ))
            S3(( ))
            S4(( ))
            S5(( ))
            end
            subgraph Buyers
            B1(( ))
            B2(( ))
            B3(( ))
            B4(( ))
            B5(( ))
            end
            S1 --- N[Net Marketplace]
            S2 --- N
            S3 --- N
            S4 --- N
            S5 --- N
            N --- B1
            N --- B2
            N --- B3
            N --- B4
            N --- B5
            
```

- Catalogs
- Sourcing
- Automated purchasing
- Processing and fulfillment

M-commerce

- ◆ Although m-commerce represents small fraction of total e-commerce transactions, revenue has been steadily growing
 - Location-based services
 - Banking and financial services
 - Wireless advertising and retailing
 - Games and entertainment

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Location-based services

- ◆ Used by 74% of smartphone owners
- ◆ Based on GPS map services
- ◆ Types
 - Geosocial services
 - Where friends are
 - Geoadvertising
 - What shops are nearby
 - Geoinformation services
 - Price of house you are passing

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Other mobile commerce services

- ◆ Banks, credit card companies provide account management apps
- ◆ Mobile display advertising
 - iAd, AdMob, Facebook
- ◆ Games and entertainment
 - Downloadable and streamable services
 - Games
 - Video, short films, movies, TV shows
 - Music and ring tones

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