

MIS 14e Ch10



Chapter 10

E-commerce: Digital Markets, Digital Goods

Video Cases
Video Case 1: Deals Galore at Groupon
Video Case 2: Etsy: A Marketplace and Community
Video Case 3: Ford Manufacturing Supply Chain: B2B Marketplace



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Chapter 10: E-commerce: Digital Markets, Digital Goods

LEARNING OBJECTIVES

1. What are the **unique features of e-commerce**, digital markets, and digital goods?
2. What are the principal **e-commerce business and revenue models**?
3. How has **e-commerce transformed marketing**?
4. How has **e-commerce affected business-to-business transactions**?
5. What is the role of **m-commerce** in business and what are the most important m-commerce applications?
6. What issues must be addressed when building an **e-commerce presence**?

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 Pinterest: How Much Is a Picture Worth?

- **Problem:** How to derive profits from large and desirable user base
- **Solution:**
 - Enable businesses to promote brand awareness and refer back to retail sites for purchasing
 - “Promoted pins”: Paid advertising with fees charged if user clicks through to firm’s Web site
- Demonstrates use of social networking technologies in generating new business models

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 1. Unique Features of E-commerce, Digital Markets, and Digital Goods

- **E-commerce: Use of the Internet and Web to transact business.**
- **Began in 1995 and grew exponentially; still stable even in a recession.**
- **Companies that survived the dot-com bubble now thrive.**
- **The new e-commerce: social, mobile, local**

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 The Growth of E-commerce

Figure 10-1 Retail e-commerce revenues grew 15–25 percent per year until the recession of 2008–2009, when they slowed measurably. In 2014, e-commerce revenues are growing again at an estimated 12 percent annually.

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1. Unique Features of E-commerce, Digital Markets, and Digital Goods

- **Eight unique features of Internet and Web as commercial medium**
 - Ubiquity
 - Global reach
 - Universal standards
 - Richness
 - Interactivity
 - Information density
 - Personalization/customization
 - Social technology

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1. Unique Features of E-commerce, Digital Markets, and Digital Goods

- **Ubiquity**
 - Internet/Web technology available everywhere: work, home, and so on, anytime
 - Effect:
 - Marketplace removed from temporal, geographic locations to become “marketspace”
 - Enhanced customer convenience and reduced shopping costs
 - Reduces transaction costs
 - Costs of participating in market

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1. Unique Features of E-commerce, Digital Markets, and Digital Goods

- **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.

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1. Unique Features of E-commerce, Digital Markets, and Digital Goods

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

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- **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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- **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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1. Unique Features of E-commerce, Digital Markets, and Digital Goods

- **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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- **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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- **Social technology**
 - The technology promotes user content generation and social networking
 - Effect:
 - New Internet social and business models enable user content creation and distribution, support social networks
 - Many-to-many model

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1. Unique Features of E-commerce, Digital Markets, and Digital Goods

- **Effect of the Internet on the marketplace:**
 - Reduces information asymmetry
 - Offers greater flexibility and efficiency because of:
 - Reduced search costs and transaction costs
 - Lower menu costs
 - Greater price discrimination
 - Dynamic pricing
 - May reduce or increase switching costs
 - May delay gratification: effects dependent on product
 - Increased market segmentation
 - Stronger network effects
 - More disintermediation

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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.

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1. Unique Features of E-commerce, Digital Markets, and Digital Goods

- **Digital goods**
 - Goods that can be delivered over a digital network
 - For example: music tracks, video, software, newspapers, books
 - Cost of producing first unit is almost entire cost of product
 - 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.)


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2. LEARNING OBJECTIVES

1. What are the unique features of e-commerce, digital markets, and digital goods?
- 2. What are the principal e-commerce business and revenue models?**
3. How has e-commerce transformed marketing?
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5. What is the role of m-commerce in business and what are the most important m-commerce applications?
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2. E-commerce Business and Revenue Models

- **Three major types of e-commerce**
 - **Business-to-consumer (B2C)**
 - Example: BarnesandNoble.com
 - **Business-to-business (B2B)**
 - Example: ChemConnect
 - **Consumer-to-consumer (C2C)**
 - Example: eBay
- **E-commerce can be categorized by platform**
 - **Mobile commerce (m-commerce)**

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2. E-commerce Business and Revenue Models

- **E-commerce business models**
 - Portal
 - E-tailer
 - Content provider
 - Transaction broker
 - Market creator
 - Service provider
 - Community provider

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2. E-commerce Business and Revenue Models

- **E-commerce revenue models**
 - Advertising
 - Sales
 - Subscription
 - Free/Freemium
 - Transaction fee
 - Affiliate

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Interactive Session: Organizations

Can Pandora Succeed with Freemium? p432
Read the Interactive Session and discuss the following questions

1. Analyze Pandora using the value chain and competitive forces models. What competitive forces does the company have to deal with? What is its customer value proposition?
2. Explain how Pandora's "freemium" business model works. How does the company generate revenue?
3. Can Pandora succeed with its "freemium" model? Why or why not? What people, organization, and technology factors affect its success with this business model?

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2. E-commerce Business and Revenue Models

- **Social e-commerce:**
 - Based on digital social graph
- **Features of social e-commerce driving its growth**
 - Newsfeed
 - Timelines
 - Social sign-on
 - Collaborative shopping
 - Network notification
 - Social search (recommendations)

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2. E-commerce Business and Revenue Models

- **Social media:**
 - Fastest growing media for branding and marketing
- **Social network marketing:**
 - Seeks to leverage individuals influence over others in social graph
 - The target is a social network of people sharing interests and advice
 - Facebook’s “Like button”
 - Social networks have huge audiences
 - Facebook: 137 million U.S. visitors monthly

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3. LEARNING OBJECTIVES

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3. How Has E-commerce Transformed Marketing?

- **E-commerce marketing**
 - Internet provides new ways to identify and communicate with customers.
 - **Long tail marketing:**
 - Ability to reach a large audience inexpensively
 - **Internet advertising formats**
 - **Behavioral targeting:**
 - Tracking online behavior of individuals on thousands of Web sites and within apps
 - Privacy concerns

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3. How Has E-commerce Transformed Marketing?

- **Social shopping sites**
- **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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4. LEARNING OBJECTIVES

1. What are the unique features of e-commerce, digital markets, and digital goods?
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4. E-commerce and Business-to-Business Transactions

- **B2B e-commerce**
 - U.S. B2B trade in 2014 is \$13.8 trillion
 - U.S. B2B e-commerce in 2014 is \$5.7 trillion
 - Procurement requires significant overhead costs, which Internet and networking helps automate
 - Variety of Internet-enabled technologies used in B2B
 - Electronic data interchange (EDI)
 - Private industrial networks (private exchanges)
 - Net marketplaces
 - Exchanges

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4. E-commerce and Business-to-Business Transactions

- **Electronic data interchange (EDI)**
 - Computer-to-computer exchange of standard transactions such as invoices, purchase orders.
 - Major industries have EDI standards that define structure and information fields of electronic documents.
 - More companies are increasingly moving toward private networks that allow them to link to a wider variety of firms than EDI allows and share a wider range of information in a single system.

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Electronic Data Interchange

Supplier Systems ↔ Firm Systems

Shipping data (Supplier to Firm)

Payment data (Firm to Supplier)

Production/inventory requirements (Firm to Supplier)

Continuous replenishment (dashed line)

Figure 10-6 Companies use EDI to automate transactions for B2B e-commerce and continuous inventory replenishment. Suppliers can automatically send data about shipments to purchasing firms. The purchasing firms can use EDI to provide production and inventory requirements and payment data to suppliers.

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4. E-commerce and Business-to-Business Transactions

- **Private industrial network (private exchange)**
 - Large firm using extranet to link to its suppliers, distributors, and other key business partners
 - Owned by buyer
 - Permits sharing of:
 - Product design and development
 - Marketing
 - Production scheduling and inventory management
 - Unstructured communication (graphics and e-mail)

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A Private Industrial Network

A private industrial network, also known as a private exchange, links a firm to its suppliers, distributors, and other key business partners for efficient supply chain management and other collaborative commerce activities.

Figure 10-7

The diagram shows a central orange box labeled 'Firm'. To its left, a group of purple circles represents 'Suppliers', and to its right, a group of purple circles represents 'Distributors'. Dashed lines connect the Firm to each of these circles, indicating a networked relationship.

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4. E-commerce and Business-to-Business Transactions

- **Net marketplaces (e-hubs)**
 - Single market for many buyers and sellers
 - Industry-owned or owned by independent intermediary
 - Generate revenue from transaction fees, other services
 - Use prices established through negotiation, auction, RFQs, or fixed prices
 - May focus on direct or indirect goods
 - May be vertical or horizontal marketplaces

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A Net Marketplace

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

Figure 10-8

The diagram shows a central orange box labeled 'Net Marketplace'. To its left, a group of purple circles represents 'Suppliers', and to its right, a group of purple circles represents 'Buyers'. Solid lines connect each circle to the central box. Below the central box, a list of activities is provided: Catalogs, Sourcing, Automated purchasing, and Processing and fulfillment.

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4. E-commerce and Business-to-Business Transactions

- **Exchanges**
 - Independently owned third-party Net marketplaces
 - Connect thousands of suppliers and buyers for spot purchasing
 - Typically provide vertical markets for direct goods for single industry (food, electronics)
 - Proliferated during early years of e-commerce; many have failed
 - Competitive bidding drove prices down and did not offer long-term relationships with buyers or services to make lowering prices worthwhile.

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5. LEARNING OBJECTIVES

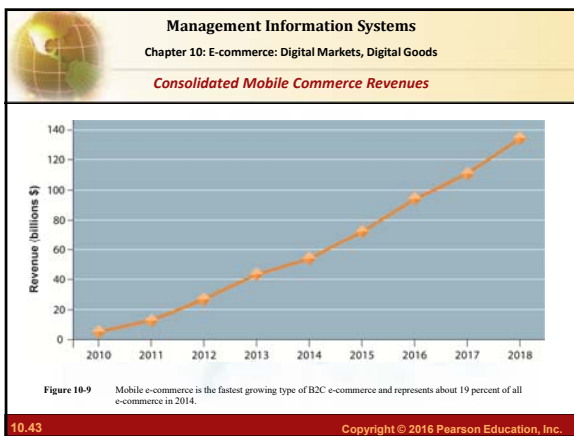
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5. M-commerce and M-commerce Applications

- **M-commerce**
 - In 2014 is 19 percent of all e-commerce
 - **Fastest growing form of e-commerce**
 - Some areas growing at 50 percent or more
 - **Main areas of growth (exclusive of location-based services)**
 - Retail sales at top Mobile 400 (Amazon, eBay, etc.)
 - Sales of digital content (music, TV, etc.)

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5. M-commerce and M-commerce Applications

- **Location-based services**
 - Used by 74 percent 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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Interactive Session: Management

Will Mobile Technology Put Orbitz in the Lead? p446
Read the Interactive Session and discuss the following questions

1. How important is mobile technology in Orbitz's business strategy? Why?
2. What management, organization, and technology issues did Orbitz need to address in its mobile strategy?
3. Why are mobile phone users much more likely to book same-day hotel room or airline reservations?
4. What role does Orbitz for Business play in the company's business strategy?
5. How successful is Orbitz's mobile strategy? Explain your answer.

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5. M-commerce and M-commerce Applications

- **Other mobile commerce services**
 - Banks, credit card companies provide account management apps
 - Mobile display advertising
 - iAd, AdMob, Millennial Media, Facebook
 - Ads embedded in games, videos, and mobile apps
 - 55 percent of online retailers have m-commerce Web sites

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6. LEARNING OBJECTIVES

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6. Building an E-commerce Presence

- **Most important management challenges**
 - Developing clear understanding of business objectives
 - Knowing how to choose the right technology to achieve those objectives
- **Develop an e-commerce presence map**
 - Four areas: Web sites, e-mail, social media, offline media
- **Develop a timeline: milestones**
 - Breaking a project into discrete phases

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