

### Chapter 10

# E-Commerce: Digital Markets, Digital Goods



#### STUDENT LEARNING OBJECTIVES

- What are the unique features of ecommerce, digital markets, and digital goods?
- What are the principal e-commerce business and revenue models?
- How has e-commerce transformed marketing?



#### STUDENT LEARNING OBJECTIVES

- 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 presence?



# Essentials of Management Information Systems Chapter 8 Telecommunications, the Internet, and Wireless Technology

#### LEARNING TRACKS AND VIDEO CASES

### **Learning Tracks**

- 1. E-Commerce Challenges: The Story of Online Groceries
- 2. Build an E-Commerce Business Plan
- 3. Hot New Careers in E-Commerce
- 4. E-commerce Payment Systems

#### **Video Cases**

Case 1: Groupon: Deals Galore

Case 2: Etsy: A Marketplace and Community

Case 3: Ford AutoXchange B2B Marketplace



**Uber Storms Europe: Europe Strikes Back** 

 Challenge: use smartphone platform for a new profitable business: moving people

 Solution? Build an on-demand platform for taxi services



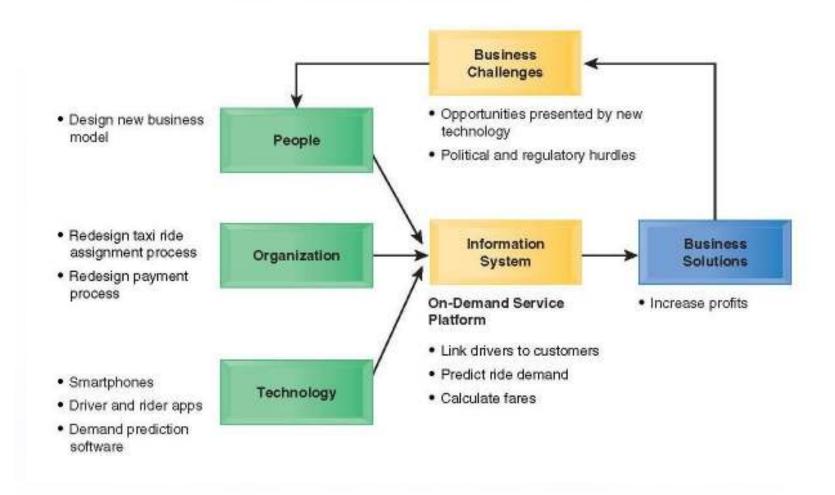
**Uber Storms Europe: Europe Strikes Back** 

#### **Uber:**

- Implements an on-demand business model based on the smartphone platform
- Builds ride-hailing service based on driver and customer apps
- Builds centralized database of riders and customers
- Uses weather and history to predict demand for services
- Implements demand surge pricing
- Flouts laws and regulations



**Uber Storms Europe: Europe Strikes Back** 



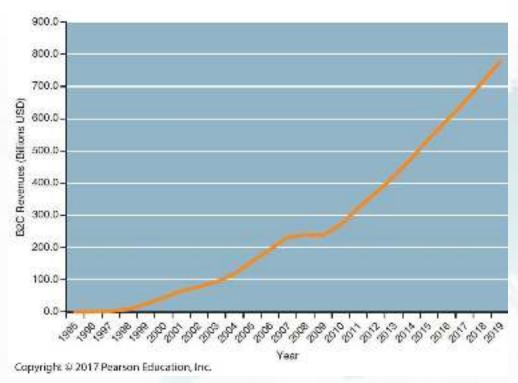
What are the unique features of e-commerce, digital markets, and digital goods?

### **E-Commerce Today**

- E-commerce: use of the Internet and Web to transact business; digitally enabled transactions.
- Began in 1995 and grew exponentially; still stable even in a recession.
- Companies that survived the dot-com bubble burst now thrive.
- E-commerce revolution is still in its early stages.

What are the unique features of e-commerce, digital markets, and digital goods?

#### The Growth of E-Commerce



Retail e-commerce revenues grew 15–25 percent per year until the recession of 2008–2009, when they slowed measurably. In 2015, e-commerce revenues are growing again at an estimated 15 percent annually, to a total of \$531 billion.

Figure 10-1

What are the unique features of e-commerce, digital markets, and digital goods?

#### The New E-commerce: Social, Mobile, Local

- Original e-commerce marketing:
  - Web sites
  - Display ads
  - Measures "eyeballs" and impressions of display ads
- Social, mobile, local e-commerce marketing:
  - Social media: Facebook, Twitter, Pinterest
  - Mobile, localized ads and apps, geo-location
  - Measures "conversations" and "engagement"

What are the unique features of e-commerce, digital markets, and digital goods?

### Why E-Commerce Is Different

- 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

What are the 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.

What are the 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.

What are the unique features of e-commerce, digital markets, and digital goods?

- 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.

What are the unique features of e-commerce, digital markets, and digital goods?

- 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.

What are the 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

What are the unique features of e-commerce, digital markets, and digital goods?

- 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.

What are the unique features of e-commerce, digital markets, and digital goods?

- 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.
    - Many-to-many model

What are the unique features of e-commerce, digital markets, and digital goods?

### **Key Concepts: Digital Markets and Digital Goods**

- Digital market effects:
  - Decreased information asymmetry
  - Reduced search costs and transaction costs
  - Delayed gratification: effects dependent on product
  - Reduced menu costs
  - Increased dynamic pricing
  - Increased price discrimination
  - Increased market segmentation
  - Switching costs: effects dependent on product
  - Stronger network effects
  - More disintermediation

### **Essentials of Management Information Systems**

Chapter 10 E-Commerce: Digital Markets, Digital Goods

What are the unique features of e-commerce, digital markets, and digital goods?

#### The Benefits of Disintermediation to the Consumer

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.

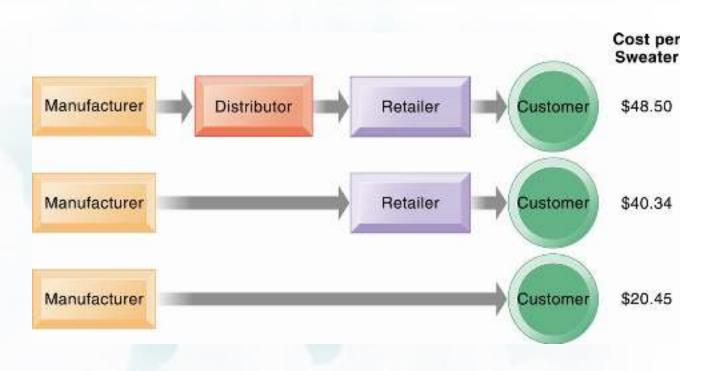


Figure 10.2

What are the unique features of e-commerce, digital markets, and digital goods?

#### 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 producing 2<sup>nd</sup> 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.)

What are the unique features of e-commerce, digital markets, and digital goods?

#### **Types of E-commerce**

- Business-to-consumer (B2C)
  - BarnesandNoble.com
- Business-to-business (B2B)
  - ChemConnect
- Consumer-to-consumer (C2C)
  - eBay



What are the principal e-commerce business and revenue models?

#### **E-commerce Business Models**

- Portal
- E-tailer
- Content provider
- Transaction broker
- Market creator
- Service provider
- Community provider (social networks)



What are the principal e-commerce business and revenue models?

#### **E-commerce Revenue Models**

- Advertising
- Sales
- Subscription
- Free/Freemium
- Transaction fee
- Affiliate

What are the principal e-commerce business and revenue models?

### Social Networking and the Wisdom of Crowds

- Social networks
  - Fastest growing area of e-commerce revenues
  - Social shopping sites: Pinterest, 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)

What is the role of m-commerce in business, and what are the most important m-commerce applications?

#### **M-Commerce**

- Represents 10% of all e-commerce
- Fastest growing form of e-commerce
  - Especially popular in online travel industry
  - Main areas of growth:
    - Retail sales at top Mobile 400 companies
      - · Amazon, Apple
    - Sales of digital content
      - Music, TV and movies

What is the role of m-commerce in business, and what are the most important m-commerce applications?

#### **Consolidated Mobile Commerce Revenues**

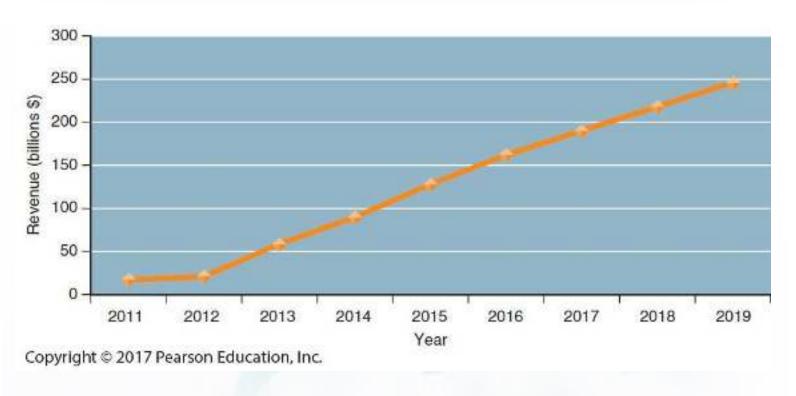


Figure 10.9 Mobile e-commerce is the fastest growing type of B2C e-commerce, representing about 20% of all e-commerce in 2015 (\$74 billion).



**Can Instacart Deliver?** 

# Interactive Session: Organizations Can Instacart Deliver?

- Read the Interactive Session and then discuss the following questions:
- Analyze Instacart using the value chain and competitive forces models.
   What competitive forces does the company have to deal with? What is its value proposition?
- Explain how Instacart's business model works. How does the company generate revenue?
- What is the role of information technology in Instacart's business model?
- Is Instacart's model for selling online groceries viable? Why or why not?

What is the role of m-commerce in business, and what are the most important m-commerce applications?

### Location-based services and applications

- Geosocial services
- Geoadvertising
  - Economic foundation for m-commerce
- Geoinformation
- Other mobile commerce services
  - Mobile banking
  - Mobile display advertising
  - Coupon services