Chapter 9

E-Commerce: Digital Markets, Digital Goods

- **Describe the unique features of e-commerce, digital markets, and digital goods.**

- **Analyze how Internet technology has changed value propositions and business models.**

- **Describe the various types of e-commerce and how e-commerce has changed consumer retailing and business-to-business transactions**

STUDENT OBJECTIVES

- **Evaluate the role of m-commerce, digital markets, and digital goods.**

- **Compare the principal payment systems for electronic commerce.**

Gap Remodels Its Web Sites

- **Problem:** Multiple competitors, unwieldy Web site.

- **Solutions: Set up Web sales channel and rebuild Web site using custom software** to provide seamless Web shopping experience.

- **New Web site running on custom-built, proprietary software** increases sales and adds flexibility.

- Demonstrates IT's role in gaining an advantage in a competitive industry.

- Illustrates digital technology as a major factor in modern commerce.

Interactive Session: Gap

- **What experiences have you had with shopping online?**

  - **Describe a good experience. What did you like about the online store you used?**

  - **Describe a bad experience. What problems did you have with the online store?**

  - **What features make an online store more appealing? Less appealing?**

E-Commerce Today

- **E-commerce: the use of the Internet and Web to transact business; digitally enabled transactions**

- **Began in 1995 and grew exponentially; still growing at an annual rate of 25 percent**

- **Companies that survived the dot-com bubble burst and now thrive**

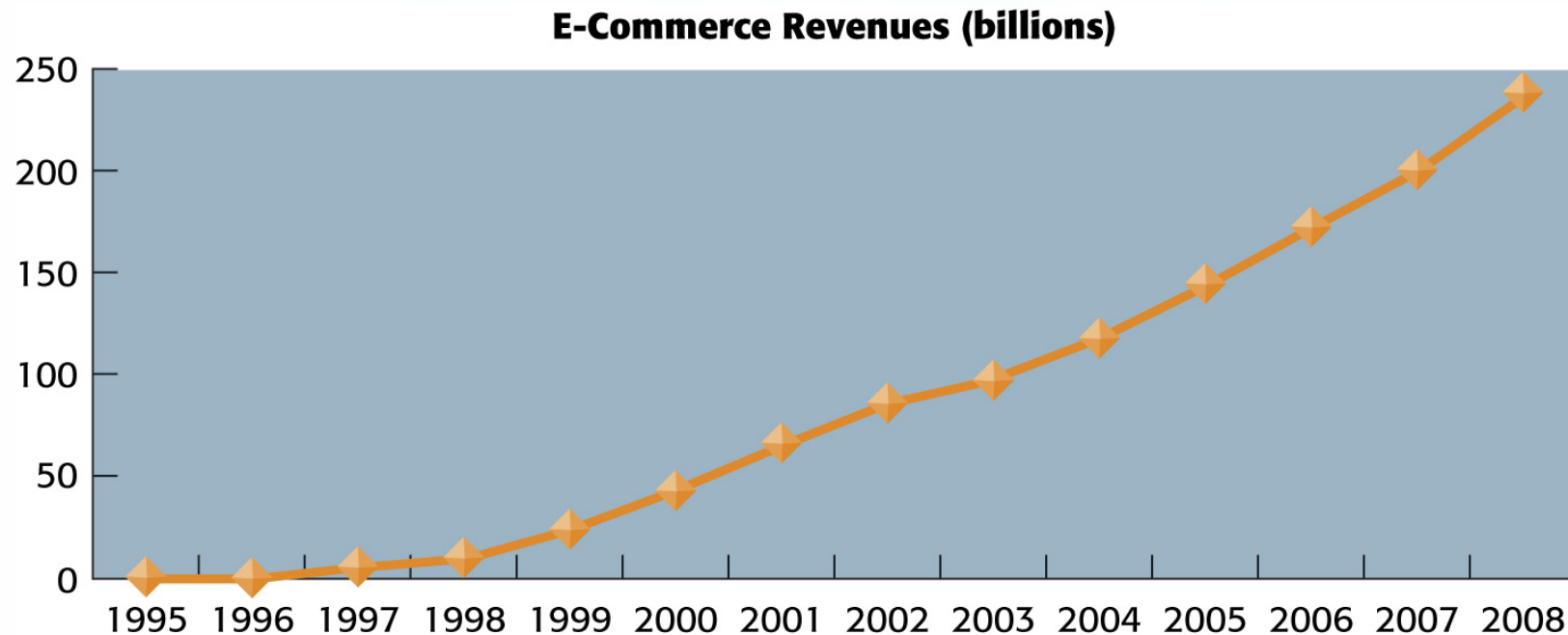- **The e-commerce revolution is still in its early stages**

The Growth of E-Commerce

E-Commerce Revenues (billions)

Retail e-commerce revenues have grown exponentially since 1995 and have only recently "slowed" to a very rapid 25 percent annual increase, which is projected to remain the same until 2008.

Figure 9-1

Why E-commerce Is Different

- **Ubiquity (market space, transaction costs)**
- **Global reach**
- **Universal standards (market entry costs, search costs)**
- **Richness**
- **Interactivity**
- **Information density (price transparency, cost transparency, price discrimination)**
- **Personalization/Customization**

Electronic Commerce and the Internet

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.

Figure 9-4

Key Concepts in E-commerce: Digital Markets and Digital Goods

- **Information symmetry**

- **Menu costs**

- **Dynamic pricing**

- **Disintermediation**

Key Concepts in E-commerce: Digital Markets and Digital Goods

- **Digital goods: delivered over a digital network**

- **Internet business models (pure-play, clicks-and-mortar)**

- **Communication and community (banner ads, pop-up ads, social networking sites)**

- **Digital content, entertainment, and services (podcasting, syndicators)**

Categories of Electronic Commerce

- **Business-to-consumer (B2C)**

- **Business-to-business (B2B)**

- **Consumer-to-consumer (C2C)**

- **Mobile commerce (m-commerce)**

Electronic Commerce

Achieving Customer Intimacy: Interactive Marketing, Personalization, and Self-Service

- **Interactive marketing and personalization**
    - **Clickstream tracking**
    - **Collaborative filtering**

- **Blogs**

- **Customer self-service**

Stonyfield Farm Blogs for Organic Communication

- **Read the Focus on People and then discuss the following questions:**

  - **What are Stonyfield Farm's business model and business strategy?**

  - **What challenges and problems does the company face?**

  - **How do blogs help the company solve these problems and compete in the industry?**

  - **How successful is this solution? Explain your answer.**

Business-to-Business Electronic Commerce: New Efficiencies and Relationships

- **Electronic data interchange (EDI)**

- **Procurement/E-procurement**

- **Private industrial networks**

- **Private exchanges**
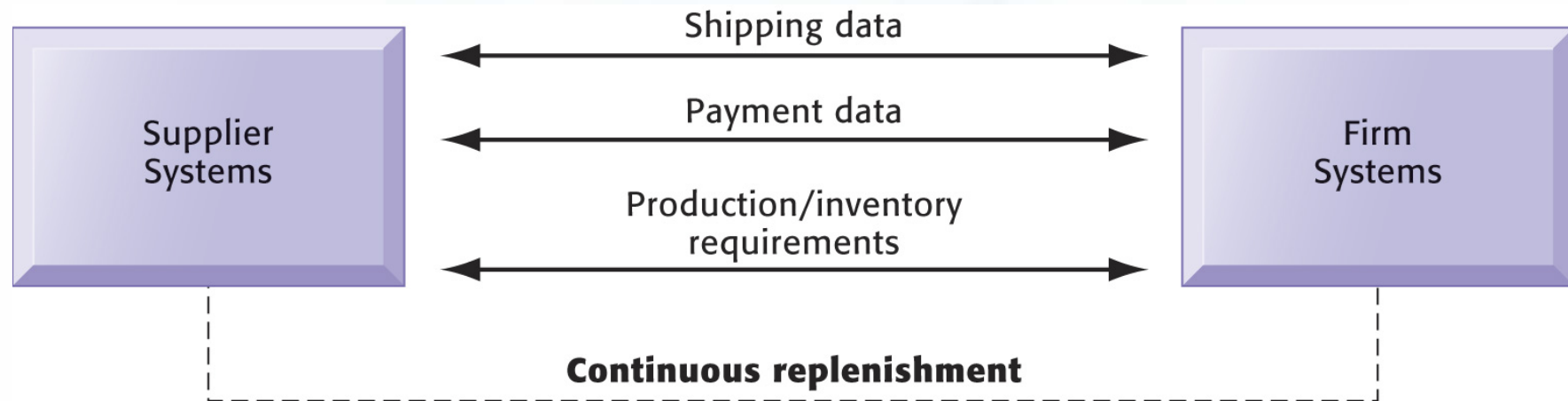
- **Net marketplaces**

- **Exchanges**

Electronic Data Interchange (EDI)

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.

Figure 9-5

M-Commerce Services and Applications

- **Mobile bill payment**

- **Content and products**

- **Banking and financial services**

- **Wireless advertising**

- **Location-based services**

- **Games and entertainment**

Interactive Session: M-Commerce

- **What types of m-commerce services does your cell phone provider offer?**

- **Which of these services do you use?**

- **What types of transactions do you perform through your cell phone or other wireless device?**

- **What types of transactions would you like to perform, but are currently unable to?**

- **What is your opinion of wireless advertising/mobile marketing?**

Customer Personalization with the Ubiquitous Internet

Target	Platform	When	Content and Service
Traveler	Computer-equipped car	Whenever car is moving	Provide maps, driving directions, weather reports, ads for nearby restaurants and hotels.
Parent	Cell phone	During school days	Notify about school-related closings: Hello, Caroline. Your children's school is closing early. Press 1 for closure reason. Press 2 for weather reports. Press 3 for traffic reports
Stockbroker	Pager	During trading days. Notify if unusually high trading volume.	Summary portfolio analysis showing changes in positions for each holding.

Companies can use mobile wireless devices to deliver new value-added services directly to customers at any time and in any place, extending personalization and deepening their relationships.

Figure 9-9

Accessing Information from the Wireless Web

- **Data limitations**

- **Display size**

- **3G broadband service**

- **Wireless portals (mobile portals)**

M-Commerce Challenges

- **Awkwardness of keyboards and screens**

- **Data transfer speeds**

- **Cost**

- **Limited memory and power supplies on devices**

- **Content**

Types of Electronic Payment Systems

- **Digital credit card payment systems**

- **Digital wallet**

- **Micropayment**

- **Accumulated balance digital payment systems**

- **Stored value payment systems**

- **Digital cash**

- **Peer-to-peer payment systems**

- **Digital checking payment systems**

- **Electronic billing presentment and payment systems**

Electronic Commerce Payment Systems

Digital Payment Systems for M-Commerce

- **M-commerce purchases are often micropayments**

- **Micropayment systems successful in Europe, Asia**

- **"Walled garden" model**

- **Interoperability**

- **Universal m-commerce payment system**

Can NTT DoCoMo Turn a Cell Phone into a Credit Card?

- **Read the Focus on Organizations and then discuss the following questions:**
  - **What problem is DoCoMo facing?**
  - **What strategy has the company chosen to address this problem?**
  - **Is this a good strategy? Why or why not?**
  - **Are there any other strategies that DoCoMo might have considered?**
  - **What outside forces have contributed to the challenges DoCoMo faces?**