E-commerce Today

- E-commerce: 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.

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

Unique Features of E-commerce Technology

- Richness
  - Supports video, audio, and text messages
  - Effect:
    - Possible to deliver rich messages simultaneously to large numbers
    - Integrated across media
### Unique Features of E-commerce Technology

**E-commerce and the Internet**

**Interactivity**
- **Effect:**
  - Experience dynamically adjusted to the individual
  - Consumer becomes co-participant in process of delivering goods to market

**Information density**
- **Effect:**
  - Greater price transparency
  - Greater cost transparency
  - Enables merchants to engage in price discrimination

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

#### In a Global Marketplace

- **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

<table>
<thead>
<tr>
<th>Cost per Streamer</th>
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<tbody>
<tr>
<td>Manufacturer</td>
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<tr>
<td>Distributor</td>
</tr>
<tr>
<td>Retailer</td>
</tr>
<tr>
<td>Customer</td>
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</tbody>
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- $48.00
- $40.34
- $35.49

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### 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

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

Web 2.0, Social Networking, and the Wisdom of Crowds

- 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
  - 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)

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.

Networked Computing in direct Procurement

- History predates Internet
- **Electronic Data Interchange (EDI)**
  - Exchange order information between firms involved in direct procurement
  - Usually large firms who could afford proprietary communication links
  - Initially order and invoice
  - Existed since 70's
Business-to-Business Electronic Commerce: New Efficiencies and Relationships

- Electronic data interchange (EDI)
  - Major industries have EDI standards that define structure and information fields of electronic documents for that industry.
  - More companies increasingly moving away from private networks to Internet for linking to other firms.

Companies use EDI to automate transactions for B2B e-commerce and continuous inventory replenishment.

Private industrial networks (private exchanges)
- 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)

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.
M-Commerce Services and Applications

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

Figure 9-9

Consolidated Mobile Commerce Revenues

- M-commerce sales represent a small fraction of total e-commerce sales, but that percentage is steadily growing. (Totals for 2007–2008 are estimated.)

Building an E-commerce Web Site

- Customer’s demands should drive the site’s technology and design.

Business Objectives, System Functionality, And Information Requirements

- Business decisions drive the technology—not the reverse.
- Example:
  - Business objective: execute a transaction payment
  - System functionality to achieve this objective: a shopping cart or other payment system
  - Information requirements: secure credit card clearing, multiple payment options

Building the Web Site: In-house Versus Outsourcing

- Choices:
  - Completely in-house
  - Building and hosting within the company
  - Mixed responsibility
  - Building within the company, hosting outside
  - Hosting within the company, building outside
  - Completely outsourced
  - Outsourcing both building and hosting of the site
  - Co-location