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#### **E-Commerce**

## **Learning Objectives (1 of 2)**

- Define e-commerce and describe its advantages, disadvantages, and business models
- Explain the major categories of ecommerce
- Describe the business-to-consumer ecommerce cycle
- Summarize the major models of business-to-business e-commerce

### **Learning Objectives (2 of 2)**

- Describe mobile-based and voice-based e-commerce
- Explain four supporting technologies for e-commerce
- Explain social commerce and the reasons for its popularity
- Explain hyper-social organizations and their growing popularity
- Explain social media information systems

### **Defining E-Commerce (1 of 2)**

#### E-business

 All activities a company performs for selling and buying products and services using computers and communication technologies

#### E-commerce

- Buying and selling goods and services over the Internet
- Builds on traditional commerce by adding the flexibility that networks offer and the availability of the Internet

#### **Defining E-Commerce (2 of 2)**

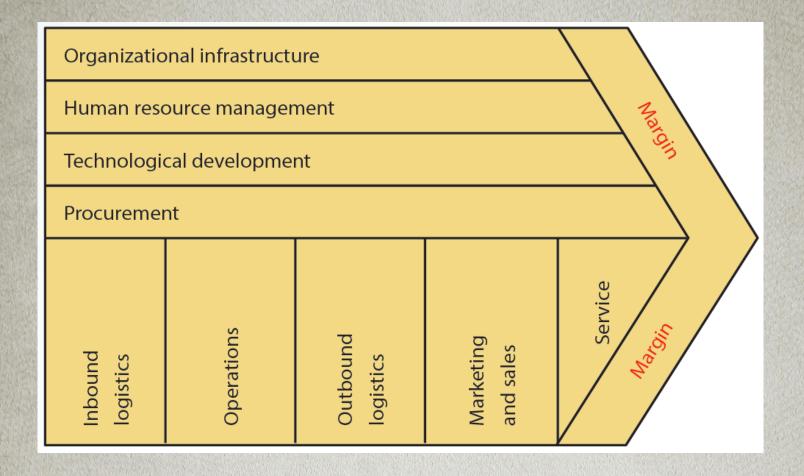
- Business applications
  - Buying and selling products and services
  - Collaborating with other companies
  - Communicating with business partners
  - Gathering business intelligence on customers and competitors
  - Providing customer service
  - Suppling software updates and patches
  - Offering vendor support
  - Publishing and disseminating information

#### The Value Chain and E-Commerce (1 of 2)

- Value chain
  - Series of activities designed to meet business needs by adding value or cost in each phase of the process
- Primary activities
  - Inbound logistics
  - Operations
  - Outbound logistics
  - Marketing and sales
  - Service

#### **Exhibit**

#### 8.1 Michael Porter's Value Chain



#### The Value Chain and E-Commerce (2 of 2)

#### The Internet

- Increases the speed and accuracy of communication between suppliers, distributors, and customers
- Low cost means companies of any size can participate in value chain integration
- E-commerce enhances a value chain
  - Offers new ways to reduce costs or improve operations

# E-Commerce vs. Traditional Commerce (1 of 2)

- Click-and-brick e-commerce: mixes traditional commerce and e-commerce
  - Capitalizes on the advantages of online interaction with customers
    - Retains the benefits of having a physical store location

**Table** 

## 8.1 E-Commerce vs. Traditional Commerce (2 of 2)

Activity	Traditional Commerce	E-Commerce
Product information	Magazines, flyers	Web sites, online catalogs
Business communication	Regular mail, phone calls	E-mail
Check product availability	Phone calls, faxes, and letters	E-mail, Web sites, and extranets
Order generation	Printed forms	E-mail, Web sites
Product acknowledgments	Phone calls, faxes	E-mail, Web sites, and electronic data interchange (EDI)
Invoice generation	Printed forms	Web sites

# Advantages and Disadvantages of E-Commerce (1 of 3)

#### Advantages

- Enhances relationships with suppliers, customers, and business partners
- Creates price transparency
- Operates around the clock and globe
- Gathers more information on potential customers
- Increases customer involvement
- Improves customer service

# Advantages and Disadvantages of E-Commerce (2 of 3)

- Increases flexibility, ease of shopping, number of customers, opportunities for collaboration with business partners, and return on investment
- Offers personalized services and product customization
- Reduces administrative and transaction costs

# Advantages and Disadvantages of E-Commerce (3 of 3)

- Disadvantages
  - Bandwidth capacity problems
  - Security and privacy issues
  - Accessibility
  - Acceptance

### E-Commerce Business Models (1 of 4)

- E-commerce companies focus their operations in different parts of the value chain to achieve profitability
  - Traditional e-commerce models are an extension or revision of traditional business models

#### E-Commerce Business Models (2 of 4)

- Merchant model
  - Transfers the old retail model to the ecommerce world by using the Internet
- Brokerage model
  - Brings sellers and buyers together on the Web and collects commissions on transactions between them

#### E-Commerce Business Models (3 of 4)

- Advertising model
  - Extension of traditional advertising media
  - Directories such as Yahoo! provide content to users for free
- Mixed model
  - Generating revenue from more than one source

#### E-Commerce Business Models (4 of 4)

- Infomediary model
  - E-commerce sites collect information on consumers and businesses and then sell this information to other companies for marketing purpose
- Subscription model
  - E-commerce sites sell digital products or services to customers

#### **Major Categories of E-Commerce (1 of 4)**

- Business-to-consumer (B2C)
  - Companies sell directly to consumers and supplement traditional commerce with ecommerce
- Business-to-business (B2B)
  - Involves electronic transactions between businesses, such as electronic data interchange (EDI) and electronic funds transfer (EFT)

### **Major Categories of E-Commerce (2 of 4)**

- Consumer-to-consumer (C2C)
  - Involves business transactions between users
  - Includes the use of online classified ads or online auction sites
- Consumer-to-business (C2B)
  - Involves people selling products or services to businesses

#### **Major Categories of E-Commerce (3 of 4)**

- Government and nonbusiness ecommerce
  - Government-to-citizen (G2C): tax filing
  - Government-to-business (G2B): license applications and renewals
  - Government-to-government (G2G): disaster assistance
  - Government-to-employee (G2E): e-training

### Major Categories of E-Commerce (4 of 4)

- Nonbusiness organizations that use ecommerce applications
  - Universities
  - Nonprofit organizations
  - Political and social organizations

## Organizational or Intrabusiness E-Commerce

- Involves e-commerce activities that take place inside an organization via the organization's intranet
  - Exchange of goods, services, or information among employees
  - Conducting training programs and offering human resource services

#### **B2C E-Commerce Cycle**

- Five major activities
  - Information sharing
  - Ordering
  - Payment
  - Fulfillment
  - Service and support

#### **B2B E-Commerce: A Second Look**

- Technologies use
  - Intranets and extranets
  - Virtual private networks
  - Electronic data interchange (EDI)
  - Electronic funds transfer (EFT)
- Advantages
  - Reduces delivery time and costs
  - Improves communication

#### **Major Models of B2B E-Commerce**

- Models based on who controls the marketplace
  - Seller
  - Buyer
  - Intermediary (third party)
  - Trading partner agreements

#### Seller-Side Marketplace

- Sellers who cater to specialized markets come together to create a common marketplace for buyers
- E-procurement
  - Enables employees to order and receive supplies and services directly from suppliers
  - Prevents purchases from suppliers that are not on the approved list of sellers
  - Eliminates the processing costs of purchases

#### **Buyer-Side Marketplace**

- Buyer, or a group of buyers, opens an electronic marketplace and invites sellers to bid
  - Helps buyers manage the procurement process more efficiently, lower administrative costs, and implement uniform pricing
  - Involves the goal of establishing new sales channels

### **Third-Party Exchange Marketplace**

- Marketplace generates revenue from the fees charged for matching buyers and sellers
  - Vertical market: concentrates on a specific industry or market
  - Horizontal market: concentrates on a specific function or business process and automates it for different industries
- Offers suppliers a direct channel of communication to buyers

#### **Trading Partner Agreements**

- Automate negotiating processes and enforce contracts between participating businesses
  - Allow business partners to send and receive bids, contracts, and information needed
  - Enable customers to submit documents via the Internet

# Mobile and Voice-Based E-Commerce (1 of 2)

- Mobile commerce (m-commerce): using handheld devices to conduct business transactions
  - Based on the Wireless Application Protocol (WAP)
- Technologies supported
  - Wireless wide-area networks and 3G and 4G networks
  - Short-range wireless communication technologies

## Mobile and Voice-Based E-Commerce (2 of 2)

- Voice-based e-commerce: relies on voice recognition and text-to-speech technologies
  - Method involves using e-wallets
    - Virtual wallets
  - Security features
    - Call and voice recognition
    - Shipping to a set address that cannot be changed by voice commands

#### **E-Commerce Supporting Technologies**

- Several technologies and applications support e-commerce activities
  - Electronic payment systems
  - Web marketing
  - Mobile marketing
  - Search engine optimization

### **Electronic Payment Systems (1 of 4)**

- Electronic payment
  - Money or script that is exchanged only electronically
  - Includes credit cards, debit cards, charge cards, and smart cards
- Smart cards
  - Contain an embedded microprocessor chip
  - Store important financial and personal information

### **Electronic Payment Systems (2 of 4)**

- E-cash: secure and convenient alternative to bills and coins
  - Complements credit, debit, and charge cards
  - Adds convenience and control to everyday cash transactions
- E-check: electronic version of a paper check
  - Offers security, speed, and convenience for online transactions

### **Electronic Payment Systems (3 of 4)**

- E-wallets: available for most handheld devices
  - Offer a secure, convenient, and portable tool for online shopping
  - Store personal and financial information
- Paypal: popular online payment system used for many online transactions
  - Users with valid e-mail addresses can set up accounts and make secure payments

#### **Electronic Payment Systems (4 of 4)**

- Micropayments: transactions on the web involving very small amounts of money
  - Began as a method for advertisers to pay for cost per view or cost per click

#### **Web Marketing**

- Uses the Web and its supporting technologies to promote goods and services
- Examples of web-marketing tools
  - Intelligent agents
  - Push technology

#### **Mobile Marketing**

- Popular mobile marketing strategies
  - App-based marketing
  - In-game mobile marketing
  - Location-based marketing
  - QR codes
  - Mobile search ads
  - Mobile image ads
  - SMS (Short Message Service) and MMS (Multimedia Messaging Service)

#### **Search Engine Optimization**

- Method for improving the volume or quality of traffic to a Web site
  - Higher ranking in search results generates more revenue for a website
  - Includes techniques facilitating search engines to find and index a site for certain keywords

# E-Commerce and Beyond: Social Commerce (1 of 2)

- Social media concentrates on insight and product discovery by providing a community of people with similar interests
  - Social commerce: subset of e-commerce that is influenced by social networks and other online media

# E-Commerce and Beyond: Social Commerce (2 of 2)

- Categories of social networks and online media that collectively constitute social commerce
  - Social networking sites
  - Group buying platforms
  - Peer-to-peer e-commerce platforms
  - Recommendation Web sites
  - Participatory e-commerce
  - Social advice
  - User-curated shopping

## **Hyper-Social Organizations (1 of 3)**

- Companies that leverage social media to better connect with customers and sell products and services
  - Share information through:
    - Direct social media interaction
    - Blogs
    - Videos on YouTube
    - Company Web sites

## **Hyper-Social Organizations (2 of 3)**

- Key elements for a successful online community
  - Members
  - Content
  - Member profiles
  - Transactions

### **Hyper-Social Organizations (3 of 3)**

- Pillars of hyper-sociality
  - Tribe versus market segment
  - Human-centric versus company-centric
  - Information channels versus network channels
  - Social messiness versus process hierarchy

## Social Media Information Systems (1 of 3)

- Include all the components like other information systems
  - Hardware, software, people, and procedures that support content sharing among its members or users
  - Application (app) providers
  - User communities
  - Sponsors

## Social Media Information Systems (2 of 3)

- Play a major role in fostering hypersocial organizations
  - Enable communities, tribes, or hives that are related by a common interest
  - Facilitate business activities and help the sponsors establish bonds and loyalties with their customers

## Social Media Information Systems (3 of 3)

- An organization's social media policy should:
  - Protect the company's reputation
  - Eliminate legal issues
  - Protect the privacy of all the impacted individuals
  - Raise brand awareness

## Summary (1 of 2)

- E-commerce is buying and selling goods and services over the internet
  - E-commerce transactions occur among consumers, businesses, and government
- B2B e-commerce lowers production costs and improves accuracy by eliminating many labor-intensive tasks

## Summary (2 of 2)

- A number of technologies and applications support e-commerce activities
  - Social commerce is a subset of ecommerce that is influenced by social networks and other online media
  - Hyper-social organizations leverage the power of online communities
  - SMISs enable business activities such as sales and marketing for the sponsors

