

MIS

E-COMMERCE

Defining E-Commerce

- **E-business**

- Activities a company performs for selling and buying products and services, using computers and communication technologies

- **E-commerce**

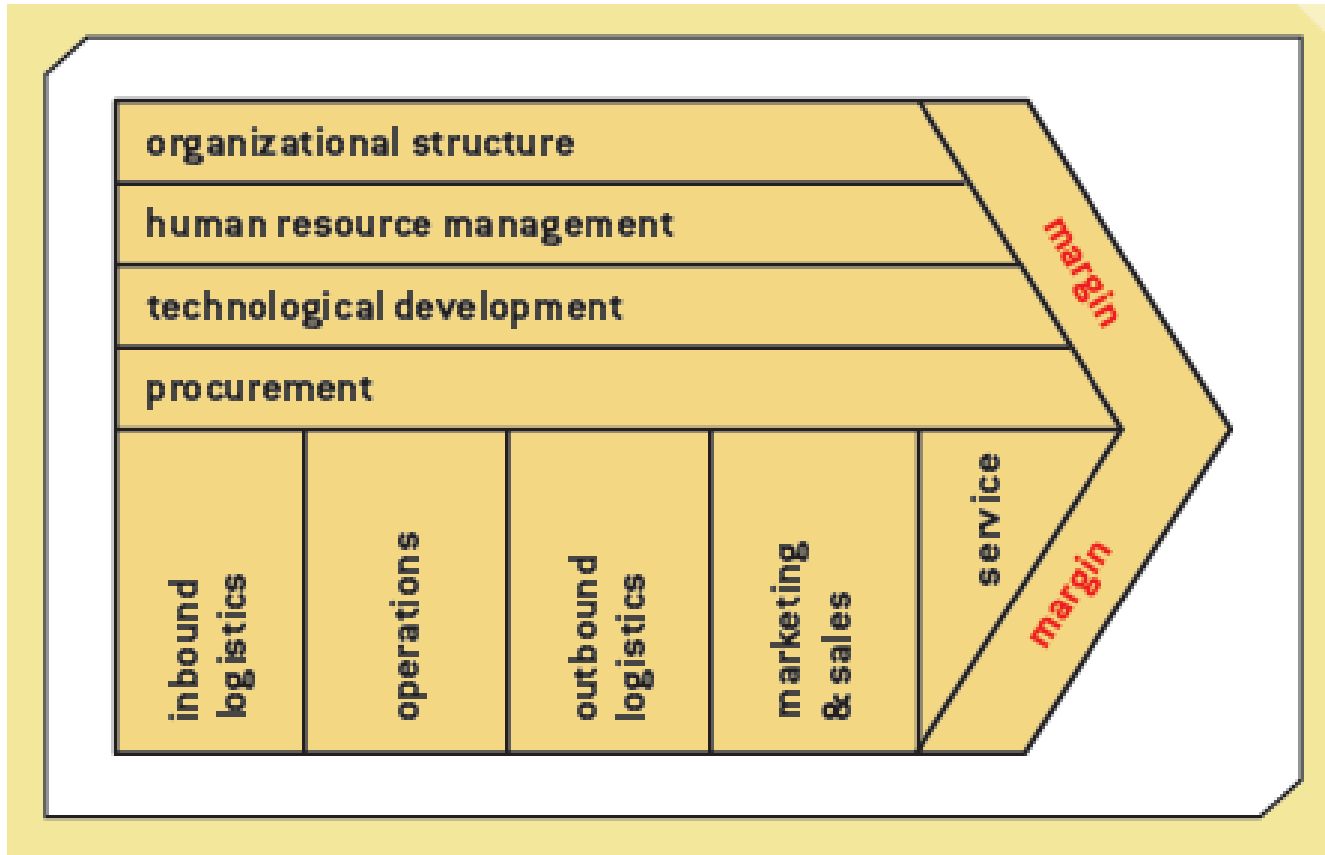
- Buying and selling goods and services over the Internet
- Builds on traditional commerce by adding the flexibility that networks offer and the availability of the Internet

Defining E-Commerce (cont'd.)

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

The Value Chain and E-Commerce

- **Value chain**
 - Michael Porter
 - 1985
 - Series of activities designed to meet business needs by adding value (or cost) in each phase of the process
- **Supporting activities:**
 - Organizational infrastructure, human resource management, technological development, and procurement



The Value Chain and E-Commerce (cont'd.)

- Primary activities:
 - Inbound logistics
 - Operations
 - Outbound logistics
 - Marketing and sales
 - Service
- 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 versus Traditional Commerce

- Internet and telecommunication technologies play major role
- No physical store
- **Click-and-brick e-commerce**
 - Mix of traditional and e-commerce

Table 8.1 *E-Commerce versus Traditional Commerce*

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, letters	E-mail, Web sites, and extranets
Order generation	Printed forms	E-mail, Web sites
Product acknowledgements	Phone calls, faxes	E-mail, Web sites, and EDI
Invoice generation	Printed forms	Web sites

Twitter Helps Businesses to Find Customers

- Twitter can be used by businesses as a promotional tool and as a way to find sales leads
- Boloco, a burrito restaurant chain, posted a photo of a coupon on Twitter and invited customers to bring in any image of the coupon -- a photocopy, a printout, or even an image on a mobile phone -- to get the discount
- The promotion was a big success, given that 900 customers redeemed the coupon (including by bringing their mobile phones) as opposed to the usual 350

Advantages and Disadvantages of E-Commerce

- **Advantages:**
 - Better relationships with suppliers, customers, business partners
 - Price transparency
 - Round the clock and globe operations
 - More information on potential customers
 - Increasing customer involvement
 - Improving customer service
 - Increasing flexibility and ease of shopping

Advantages and Disadvantages of E-Commerce (cont'd.)

- Increasing the number of customers
- Increasing opportunities for collaboration with business partners
- Increasing return on investment because inventory needs are reduced
- Offering personalized services and product customization
- Reducing administrative and transaction costs

Advantages and Disadvantages of E-Commerce (cont'd.)

- **Disadvantages:**
 - Bandwidth capacity problems
 - Security issues
 - Accessibility
 - Acceptance

Business-to-Consumer E-Commerce

Table 8.2 *Major E-Commerce Categories*

	Consumer	Business	Government
Consumer	C2C	C2B	C2G
Business	B2C	B2B	B2G
Government	G2C	G2B	G2G

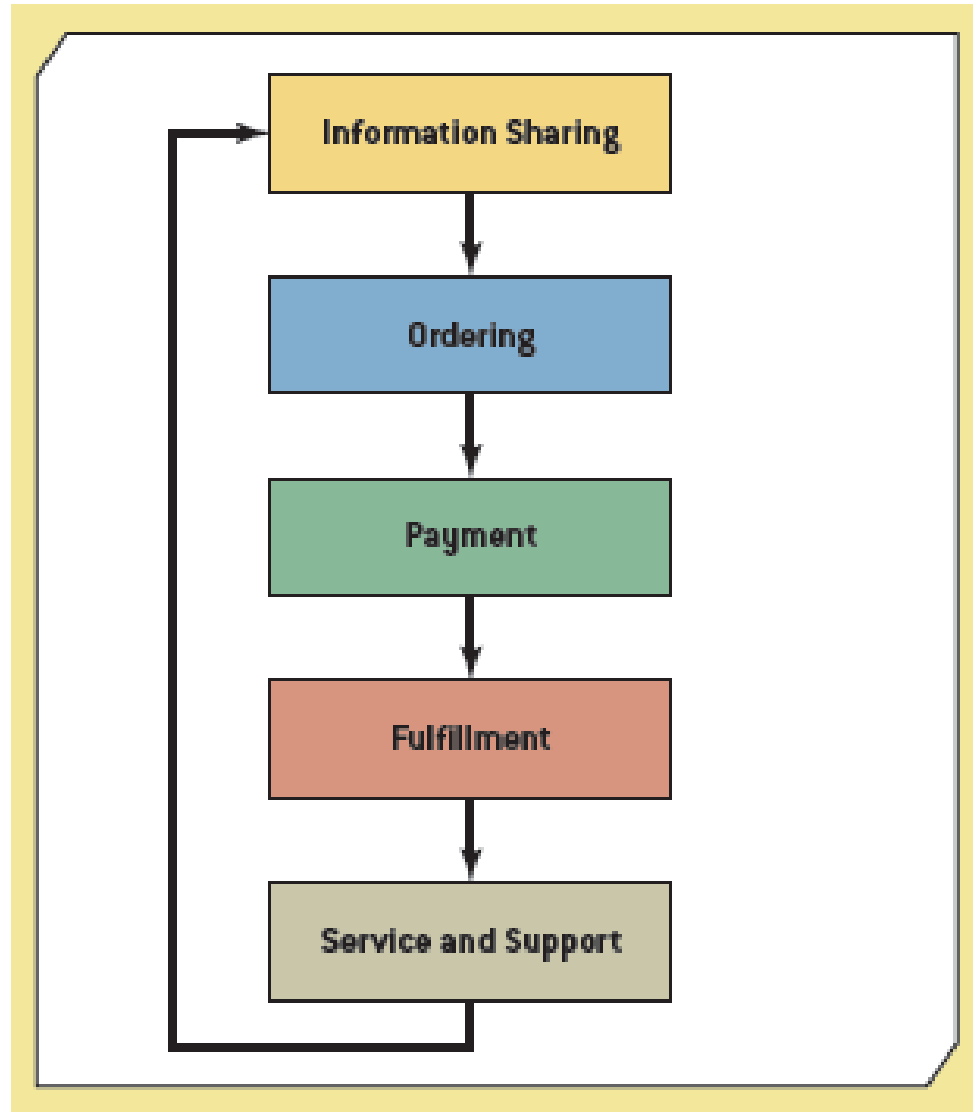
	Business	Consumer	Government
Business	<p>B2B</p> <ul style="list-style-type: none"> • Wholesalers, software and service providers • Alibaba, Nop-Templates, Spectrum Audio 	<p>B2C</p> <ul style="list-style-type: none"> • Retailers (most common category) • Amazon, Walmart 	<p>B2G</p> <ul style="list-style-type: none"> • Private-sector suppliers of services • Web-based applications, databases
Consumer	<p>C2B</p> <ul style="list-style-type: none"> • An individual who has something to offer • Bloggers, hiring websites 	<p>C2C</p> <ul style="list-style-type: none"> • Auction websites • eBay 	<p>C2G</p> <ul style="list-style-type: none"> • Public Government auctions
Government	<p>G2B</p> <ul style="list-style-type: none"> • Online collection of taxes and fees 	<p>G2C</p> <ul style="list-style-type: none"> • Online collection of taxes and fees 	<p>G2G</p> <ul style="list-style-type: none"> • Document exchange, sharing public administration registers

Organizational or Intrabusiness E-Commerce

- Involves e-commerce activities that take place inside an organization
- Can include:
 - Exchange of goods, services, or information among employees
 - Conducting training programs and offering human resource services
- Supporting activities in Porter's value chain

A B2C E-Commerce Cycle

- Major activities:
 - Information sharing
 - Ordering
 - Payment
 - Fulfillment
 - Service and support



B2B E-Commerce: A Second Look

- B2Bs use these additional technologies extensively:
 - Intranets
 - Extranets
 - Virtual private networks
 - Electronic data interchange (EDI)
 - Electronic funds transfer (EFT)
- Lowers production costs and improves accuracy
 - By eliminating many labor-intensive tasks

Major Models of B2B E-Commerce

- Three major types of B2B e-commerce models, based on who controls the marketplace:
 - Seller
 - Buyer
 - Intermediary (third-party)
- Fourth model called trading partner agreements

Seller-Side Marketplace

- Most popular B2B model
- Sellers who cater to specialized markets come together to create a common marketplace for buyers
- **E-procurement**
 - Enables employees in an organization to order and receive supplies and services directly from suppliers
 - Can also automate some buying and selling activities
- Major vendors of e-commerce and B2B solutions include I2 Technologies, IBM, Oracle, and SAP

E-Procurement at Schlumberger

- Schlumberger
 - Oil field services provider
- E-procurement system for order processing
 - Has reduced the cost per order by streamlining paperwork
 - Replaced a centralized electronic data interchange (EDI) procurement system
 - Easy-to-use interface

Buyer-Side Marketplace

- Buyer, or a group of buyers, opens an electronic marketplace
 - Invites sellers to bid on announced products or requests for quotation (RFQs)
- Buyers can:
 - Manage the procurement process more efficiently
 - Lower administrative costs
 - Implement uniform pricing
- Large corporations, such as General Electric or Boeing

Third-Party Exchange Marketplace

- Controlled by a third party
- Marketplace generates revenue from the fees charged for matching buyers and sellers
- Usually active in **vertical** or **horizontal market**
- Offers suppliers a direct channel of communication to buyers through online storefronts

Worldbid.com: A Third-Party Exchange Marketplace

- International marketplace
- Designed to help small to mid-sized companies buy and sell products or services domestically or internationally
- Provides:
 - Trade leads
 - Request for proposals for private and government organizations worldwide

Trading Partner Agreements

- Automate negotiating processes and enforce contracts between participating businesses
- Business partners can send and receive bids, contracts, and other information needed when offering and purchasing products and services
- Enables customers to submit electronic documents via the Internet that previously required hard copies with signatures
 - Using XML

Mobile and Voice-Based E-Commerce

- **Mobile commerce (m-commerce)**
 - Based on Wireless Application Protocol (WAP)
 - Using handheld devices, such as smart phones or PDAs, to conduct business transactions
- **Supporting technologies:**
 - Wireless wide-area networks and 3G networks
 - Short-range wireless communication technologies
- **Examples:**
 - iPhone apps
 - Internet Explorer Mobile
 - Google mobile

Mobile and Voice-Based E-Commerce (cont'd.)

- **Voice-based e-commerce**
 - Rely on voice recognition and text-to-speech technologies
 - Can conduct business using e-wallets
 - Security features
 - Call recognition, voice recognition, fixed shipping address

E-Commerce Supporting Technologies

- Electronic payment systems
- Web marketing
- Search engine optimization

Electronic Payment Systems

- **Electronic payment**
 - Money or scrip that is exchanged only electronically
- **Payment cards:**
 - Credit, debit, charge, and smart cards
- **Smart cards**
 - Credit card sized
 - Contain an embedded microprocessor chip storing important financial and personal information

Electronic Payment Systems (cont'd.)

- Other types of payments:
 - **E-cash**
 - **E-wallets**
 - **PayPal**
 - **Micropayments**

Web Marketing

- Uses the Web and its supporting technologies to promote goods and services
- Terms:
 - Ad impression
 - Banner ads
 - Click
 - Cost per thousand (CPM)
 - Cost per click (CPC)
 - Click-through rate (CTR)
 - Cookie

Web Marketing (cont'd.)

- Hit
- Meta tag
- Page view (PV)
- Pop-up ads
- Pop-under ads
- Splash screen
- Spot leasing

Search Engine Optimization

- Method for improving the volume or quality of traffic to a Web site
- Some companies offer SEO service
 - Editing a site's contents and HTML code to increase its relevance to specific keywords
- Recommendations for optimizing a Web site:
 - Keywords
 - Page title
 - Inbound links

Summary

- Michael Porter's value chain, compared e-commerce with traditional commerce
- Major e-commerce business models
- Main categories of e-commerce
- B2C e-commerce business cycle
- B2B e-commerce business models
- Mobile and voice e-commerce
- Supporting technologies