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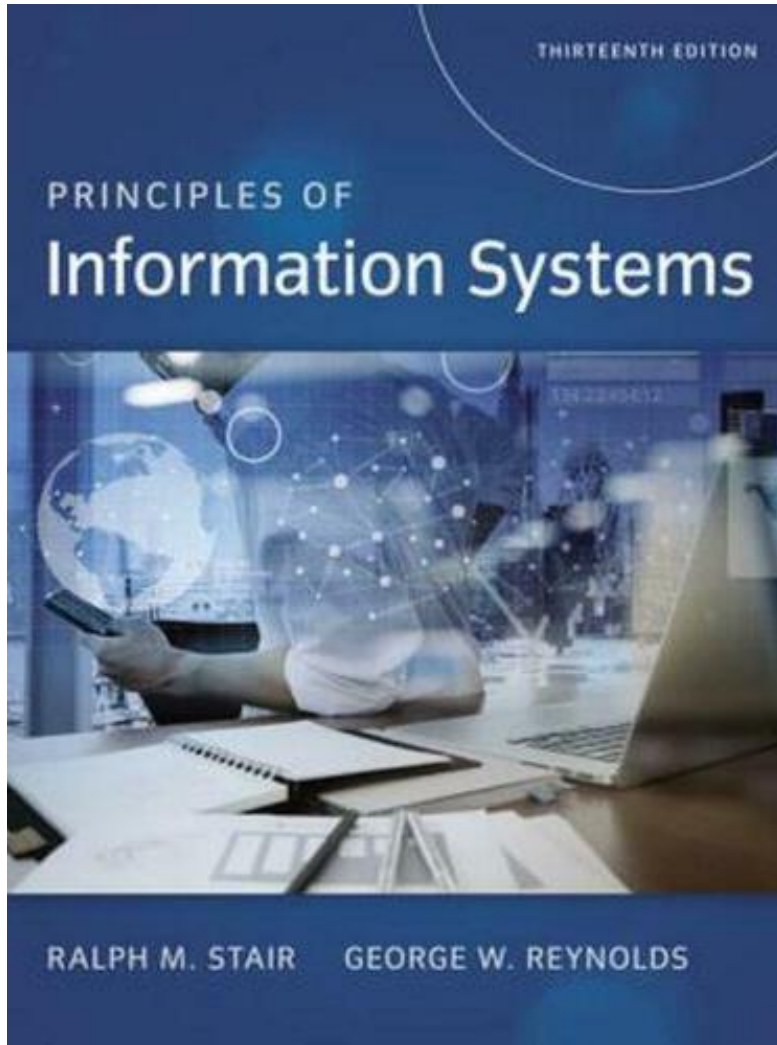
# IS101 Principles of Information Systems

*Electronic and Mobile Commerce*

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Lecturer: Dr Maya Krayneva

Textbook: Stair, R., & Reynolds, G. (2016).  
*Principles of information systems* (13th ed.).  
Cengage Learning.



# Chapter 7: Electronic and Mobile Commerce

## Principles of information systems

*Thirteen Edition*

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# Electronic Commerce

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Electronic commerce (e-commerce): conducting **business activities electronically** over computer networks

Business activities that are strong candidates for conversion to e-commerce are:

- Paper based
- Time-consuming
- Inconvenient for customers

# E-Commerce vs. Traditional Commerce

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

# Business-to-Business E-Commerce

B2B e-commerce : all the participants are organizations

Useful tool for **connecting business partners** in a virtual supply chain to cut resupply times and reduce costs

Many organizations use both:

- Buy-side e-commerce to purchase goods and services from suppliers
- Sell-side e-commerce to sell products to their customers

Example: *GRAINGER* (Fig. 7.1; p.299)



# Business-to-Consumer E-Commerce

B2C e-commerce: **Customers** deal directly with an **organization** and avoid intermediaries; this is called disintermediation

Reasons for steady growth

- **Cheaper** goods and services via the Web
- The use of **social media** networks to promote products and reach customers
- Online shoppers can design a **personalized product**

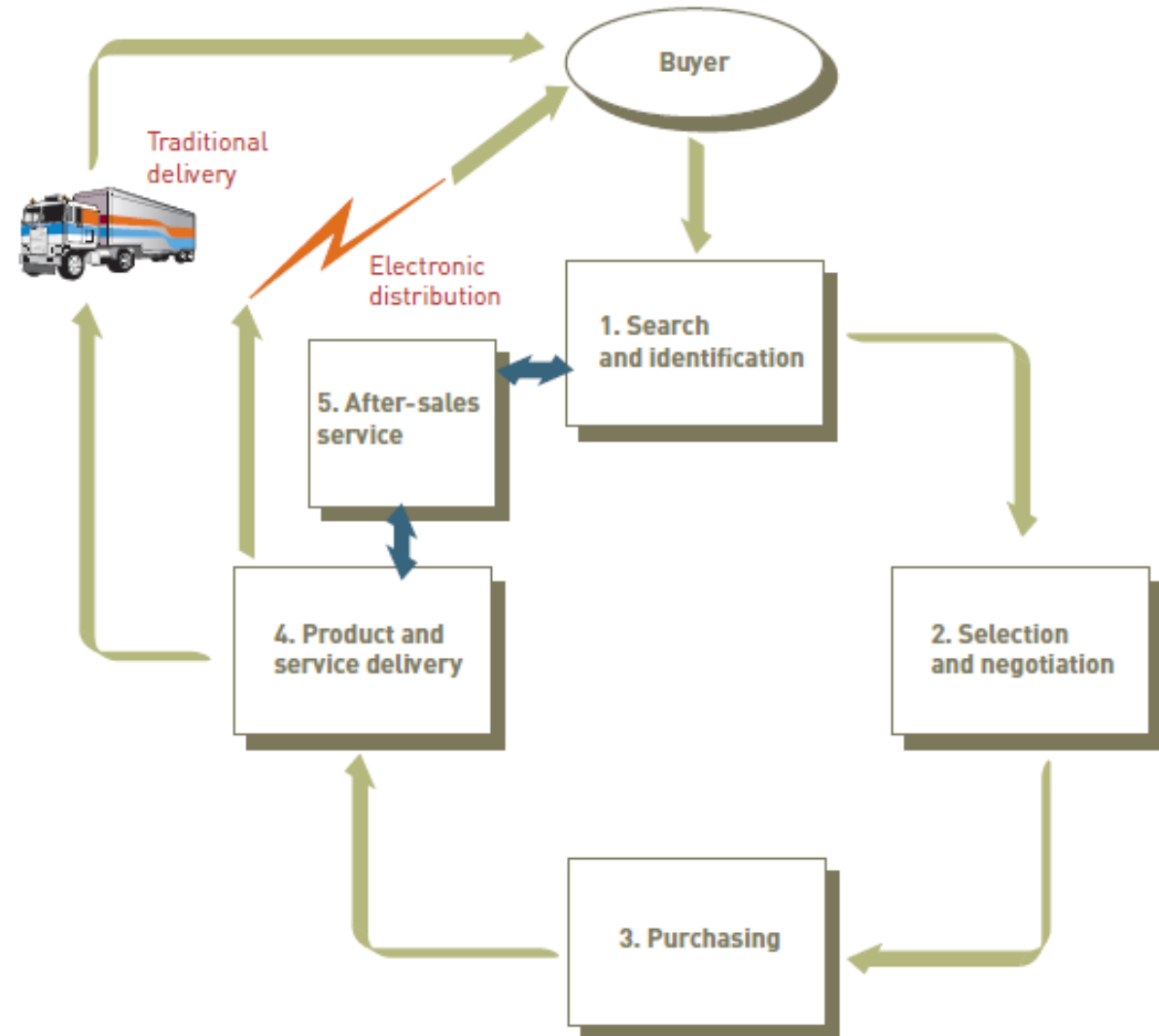
Example: NIKEiD (p. 300-301)



## Comparing the world's two largest B2C retailers

	<b>Alibaba</b>	<b>Amazon</b>
Annual Sales	\$39.8 billion	\$232.8 billion
Annual net profit	\$10.2 billion	\$10.0 billion
Domestic e-commerce as percentage of total e-commerce	about 80%	about 60%

# Multistage Model for E-Commerce

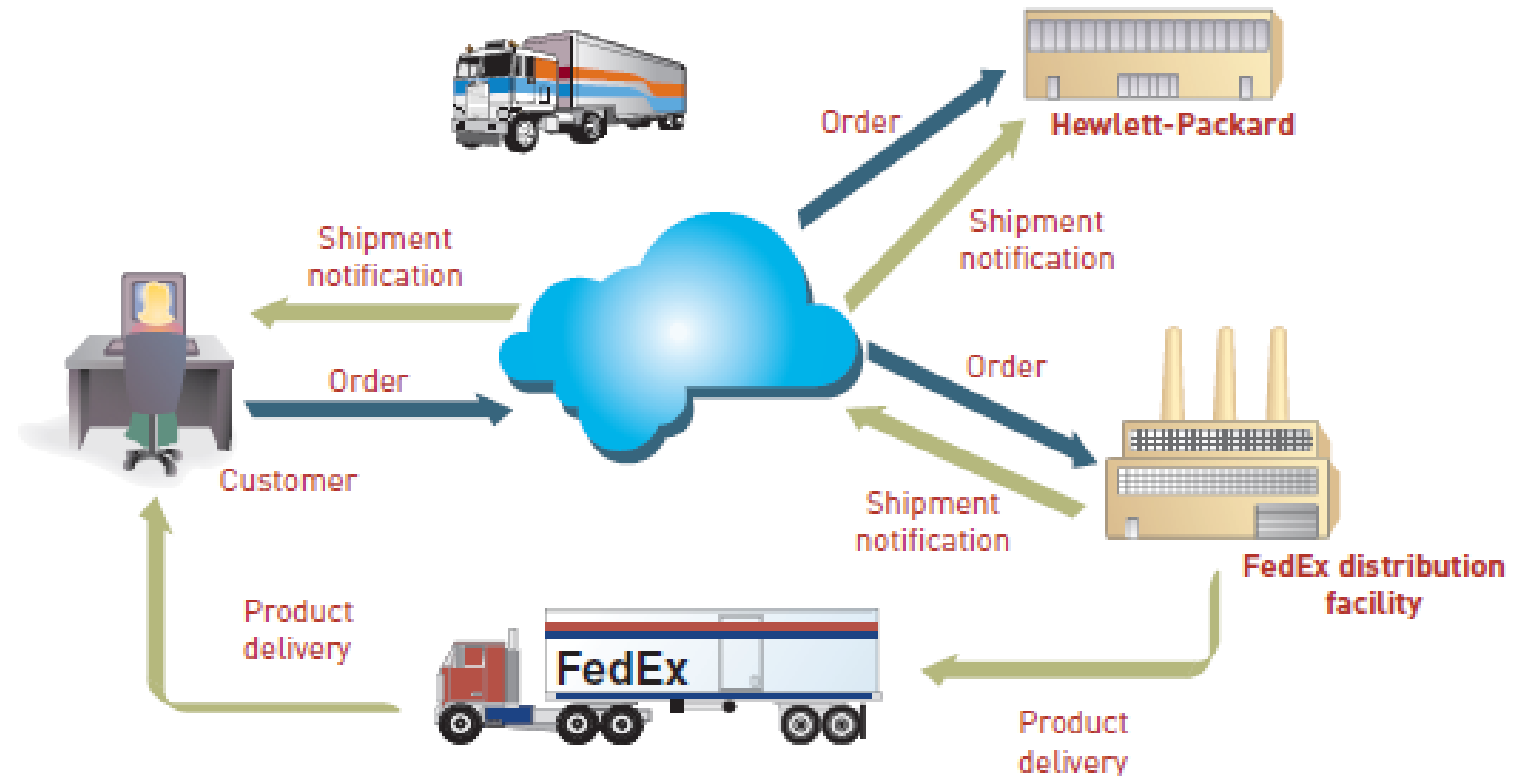


**FIGURE 7.2**

## Multistage model for e-commerce (B2B and B2C)

A successful e-commerce system addresses the stages that consumers experience in the sales life cycle.

# Multistage Model for E-Commerce



**FIGURE 7.3**

## Product and information flow

When a customer orders an HP printer online, the order goes first to FedEx, which ships the order, triggering an email notification to the customer and an inventory notice to HP.

# Consumer- to-Consumer E-Commerce

**C2C e-commerce:** Involves electronic transactions **between consumers**; facilitated by a third party

Example: eBay, eBid, Etsy, Fiverr, Ibidfree, Kijiji, Ubid, Facebook Marketplace, and Taobao



Are you using B2B,  
B2C or C2C in your  
project?

**TABLE 7.3** Differences among B2B, B2C, and C2C

Factors	B2B	B2C	C2C
Typical value of sale	Thousands or millions of dollars	Tens or hundreds of dollars	Tens of dollars
Length of sales process	Days to months	Days to weeks	Hours to days
Number of decision makers involved	Several people to a dozen or more	One or two	One or two
Uniformity of offer	Typically a uniform product offering	More customized product offering	Single product offering, one of a kind
Complexity of buying process	Extremely complex; much room for negotiation on quantity, quality, options and features, price, payment, and delivery options	Relatively simple; limited negotiation on price, payment, and delivery options	Relatively simple; limited negotiation on payment and delivery options; negotiations focus on price
Motivation for sale	Driven by a business decision or need	Driven by an individual consumer's need or emotion	Driven by an individual consumer's need or emotion



# E-Government

**E-government** is the use of information and communications technology to:

- Simplify the **sharing** of information
- **Speed** formerly paper-based processes
- Improve the **relationship** between citizens and government

Forms of e-Government:

- Government-to-consumer (G2C)
- Government-to-business (G2B)
- Government-to-government (G2G)

Are you  
using G2B,  
G2C or G2G  
in your  
project?



# Mobile Commerce

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Mobile commerce (m-commerce) relies on the use of **wireless devices**

The number of mobile Web sites worldwide is growing rapidly

- Because of advances in wireless broadband technologies

# Mobile Commerce

**Limitations** of handheld devices that complicate their use:

- Screens are small
- Input capabilities are limited to a few buttons
- Less processing power and less bandwidth than desktop or laptop computers
- Operate on limited-life batteries

For these reasons Web developers must **often rewrite Web applications** so users with mobile devices can access them

# Your Web Site



Will your project have a Web Site?

- Decide which **tasks** the site must accomplish
- Create an **attractive presence** for the company
- Meet the **needs of its visitors**
  - Example: obtaining information about the organization and its products
- Building **Traffic** to Your Web Site
- Redefine the site's basic business model as needed to capture **new opportunities**
- **Maintaining** and **Improving** e.g. Personalization: the process of tailoring Web pages to specifically target individual consumers

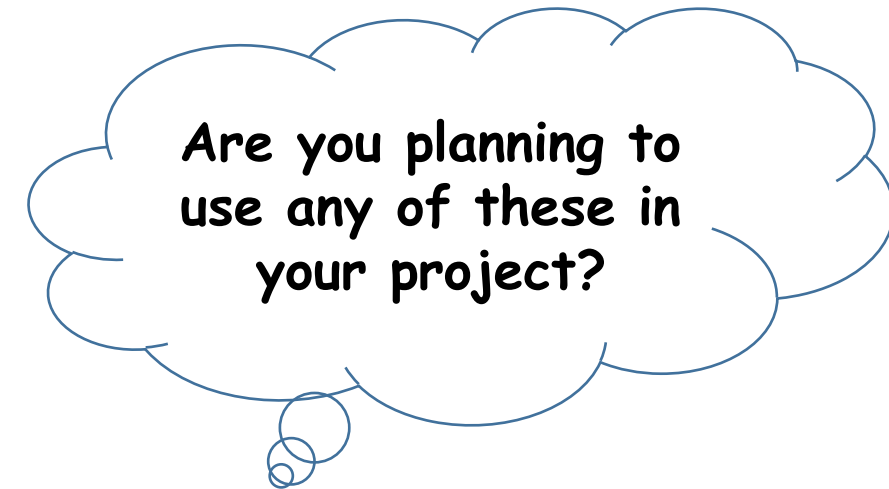
Are you going to use wireless devices to conduct your business electronically?

[Watch VIDEO: Search Engine Optimization](#)

# E-Commerce Software

Five **core tasks** that must be supported by e-commerce software

- Product configuration
- Shopping cart facilities
- E-commerce transaction processing
- Catalog management
- Web traffic data analysis



Electric Payment Systems

**Authentication technologies** are used by many organizations to confirm the identity of a user requesting access to information or assets



# Advantages of Electronic and Mobile Commerce

- Reach **new** customers
- Reduce the **cost** of doing business
- **Speed** the flow of goods and information
- Increase the **accuracy** of order-processing
- Improve the level of **customer service**

[Watch VIDEO: Social Commerce](#)

[Watch VIDEO: 3D Commerce](#)

[Watch VIDEO: Virtual Reality Shopping](#)



## Group exercises

*Form groups and let every group focus on resolving one case*

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**Building a Successful B2B Web Site (p.304)**

**Extreme Sports Web Site (p.313)**

**Door-to-Dorm Laundry Service (p.321)**

**Third Party Operation of Web Site (p.333)**

