# Enabling Business to Consumer Electronic Commerce

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Managing Information Technology
L4-FIST3UIT

# Topics

- E-commerce

- E-government

# Types of e-commerce

**TABLE 4.1**   Types of EC

| Type of EC | Description | Example |
|---|---|---|
| Business-to-consumer (B2C) | Transactions between businesses and their customers | A person buys a book from Amazon.com. |
| Business-to-business (B2B) | Transactions among businesses | A manufacturer conducts business over the web with its suppliers. |
| Consumer-to-business (C2B) | Transactions between customers and businesses | A person offers his or her photography at shutterstock.com. |
| Consumer-to-consumer (C2C) | Transactions between people not necessarily working together | A person purchases some memorabilia from another person via eBay. |

# E-commerce growth
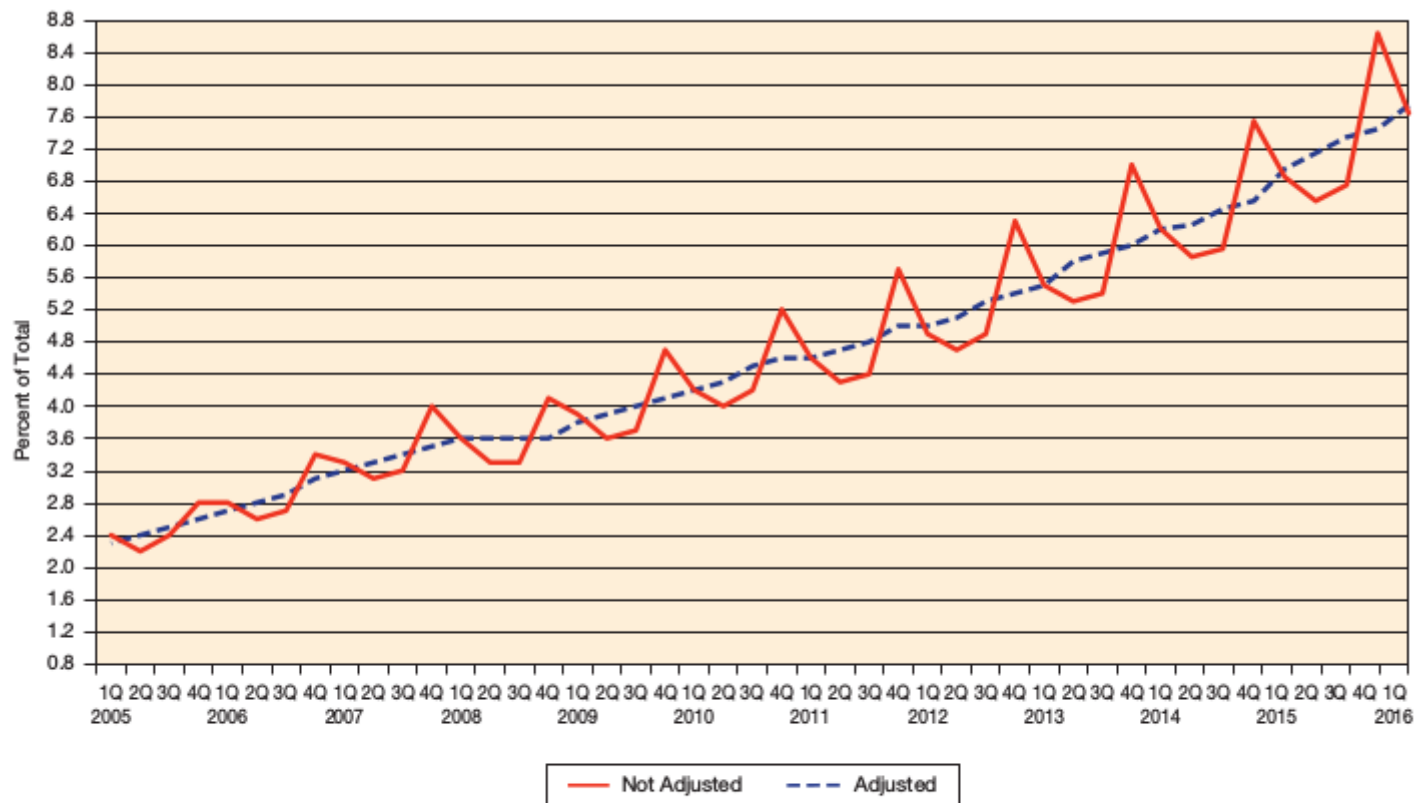


**FIGURE 4.2**

Online retailing continues to grow rapidly.

Source: U.S. Census Bureau News, U.S. Department of Commerce.
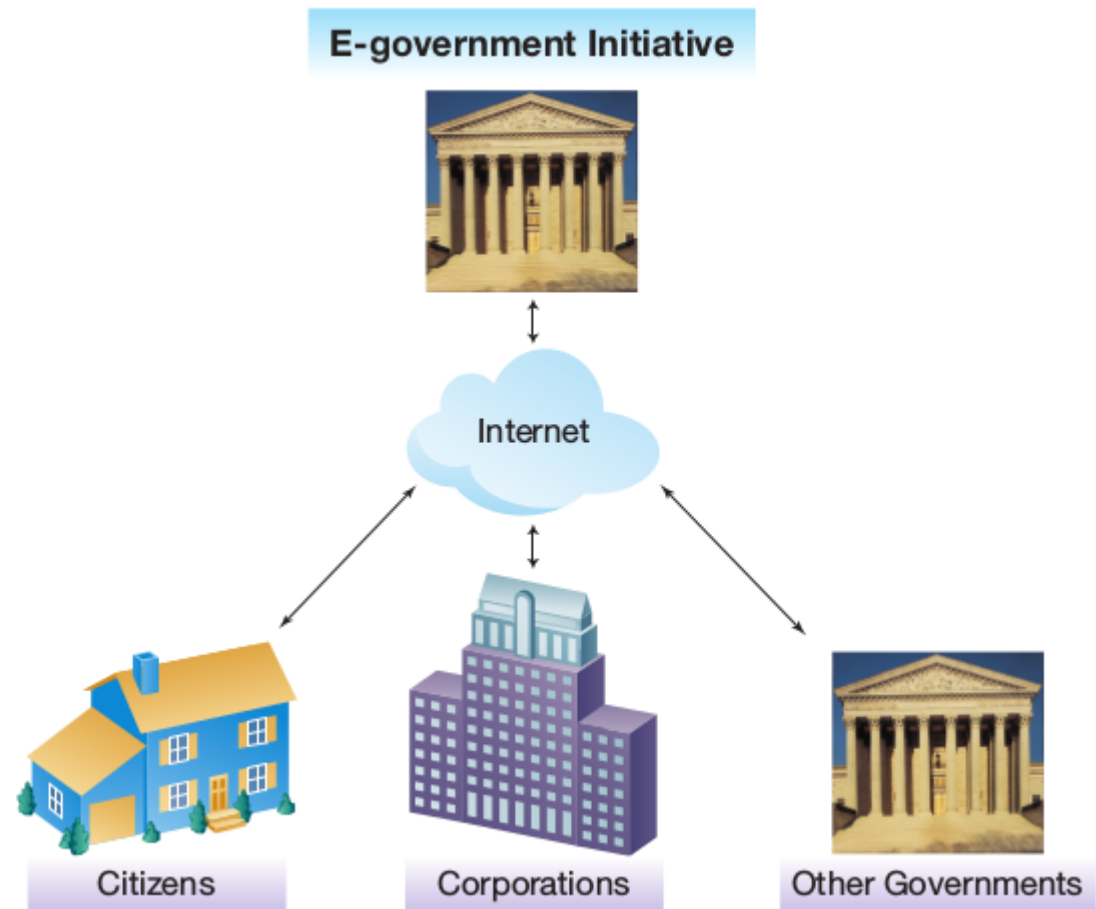
# Examples

- United States
  - Amazon.com
  - Ebay.com

- China
  - Taobao.com (Alibaba), C2C
  - Jd.com

# E-government



**FIGURE 4.3**

E-government initiatives include interaction with citizens, corporations, and other governments.

Source: Photographs in the Carol M. Highsmith Archive, Library of Congress, Prints and Photographs Division.

# E-government services

- G2C Government-to-Citizen

- G2B Government-to-Business

- G2G Government-to-Government

# E-finance

- E-banking and online brokerage

- Fintech
  - Startups
  - Disruptive innovation in financial sector

# Digital ID card

- Mobile phone as digital ID document



https://www.thalesgroup.com/en/markets/digital-identity-and-security/government/driving-licence/digital-driver-license

# Business-to-Consumer

- Brick and mortar

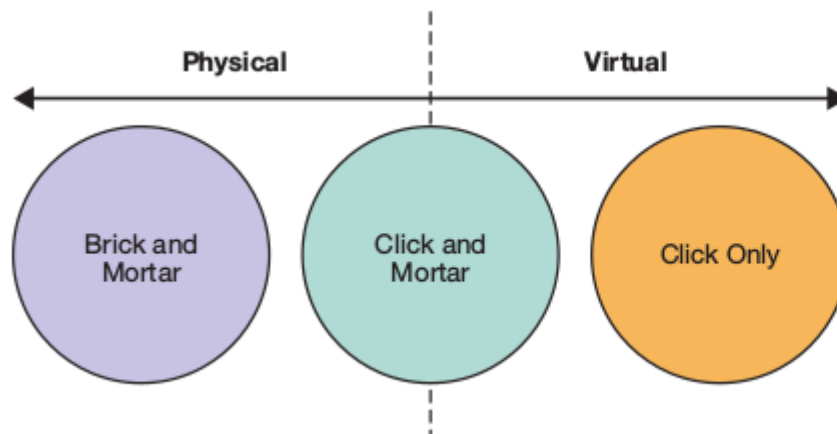- Click and mortar

- Click-only strategy



**FIGURE 4.4**

General approaches to conducting commerce.
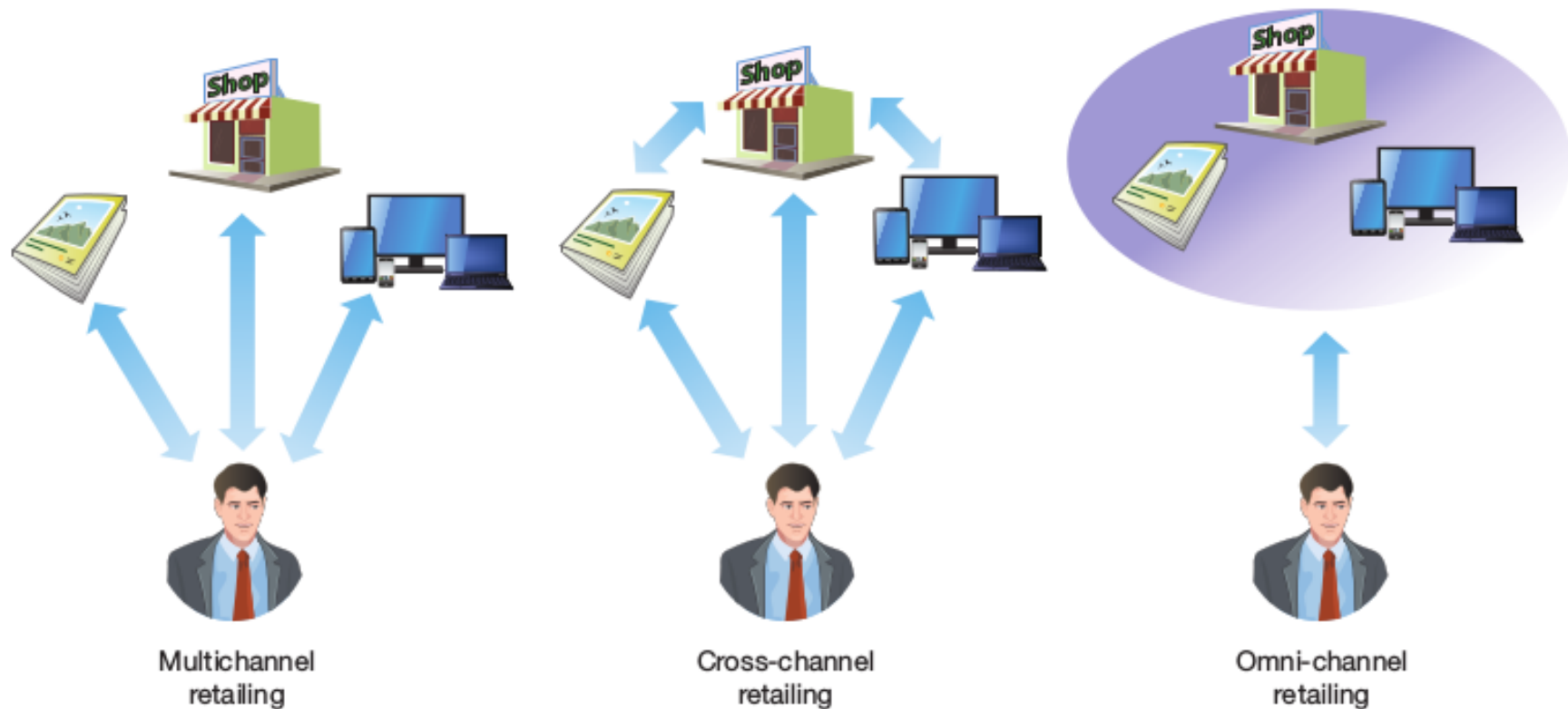
# IS supported retailing



**FIGURE 4.5**

Supported by information systems, companies can interact with their customers using various touchpoints.

# E-Tailing: Opportunities and Capabilities

- Disintermediation and reintermediation
  - Cutting the "middle" man
- The long tail
  - Niche markets
- Mass-customization
- Group buying
- New revenue and pricing models
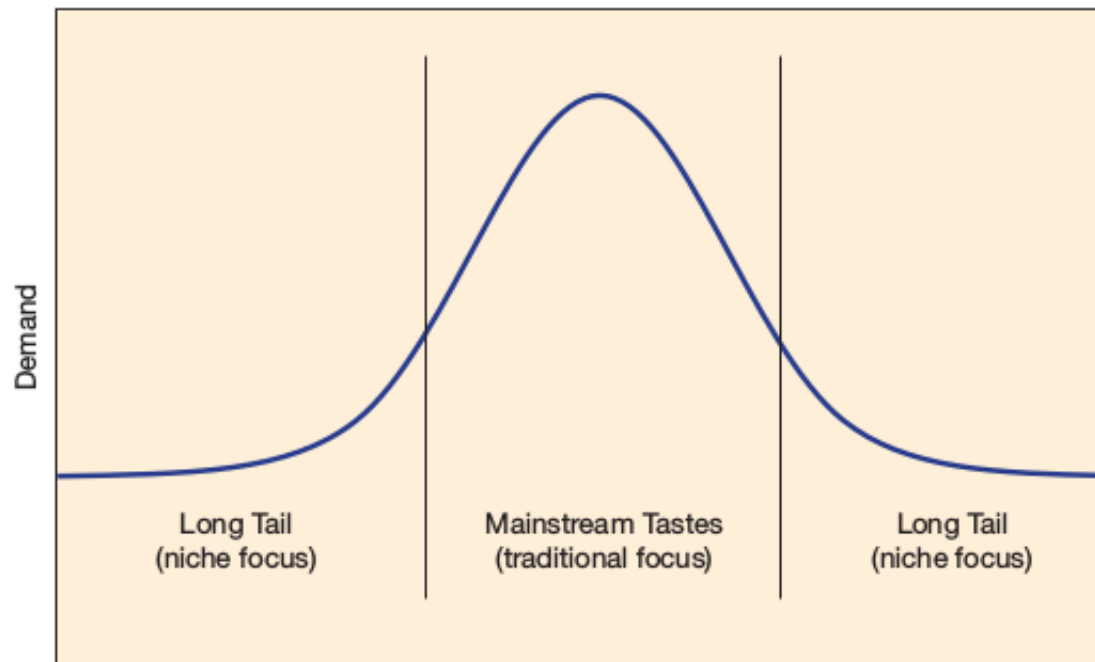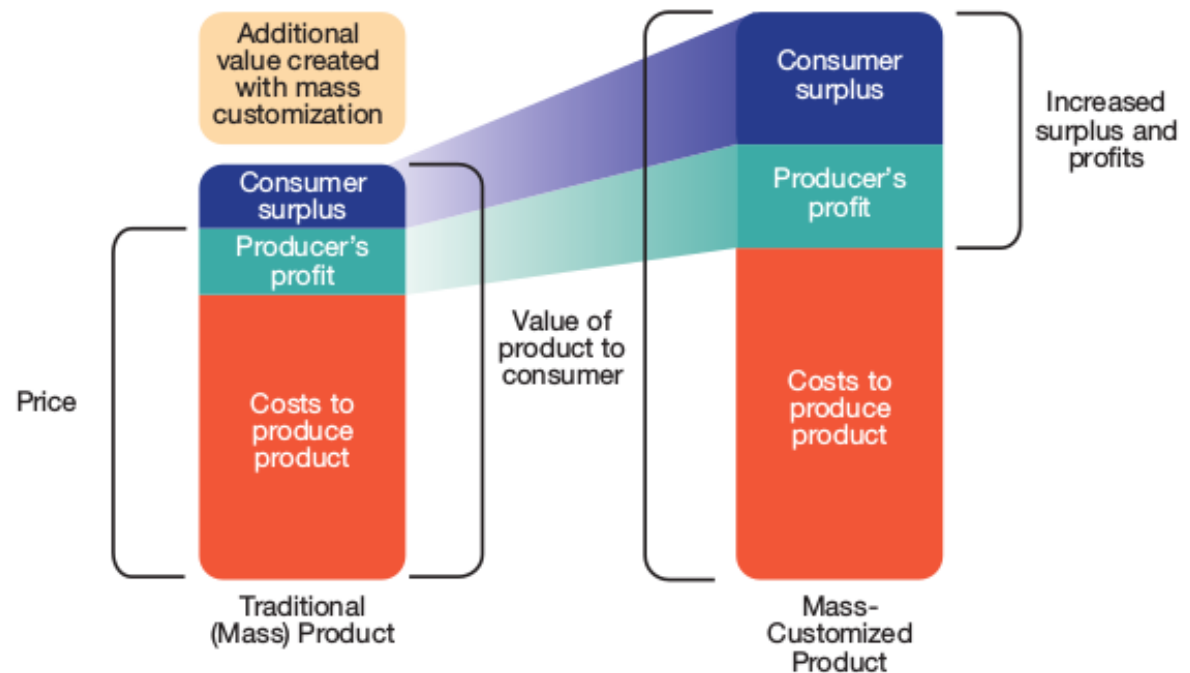- Social commerce

# Focus on long tails



**FIGURE 4.6**

The long tails.

# IS supported mass customization



**FIGURE 4.7**

Mass customization generates additional value for customers and profits for producers.

# IS supported mass customization
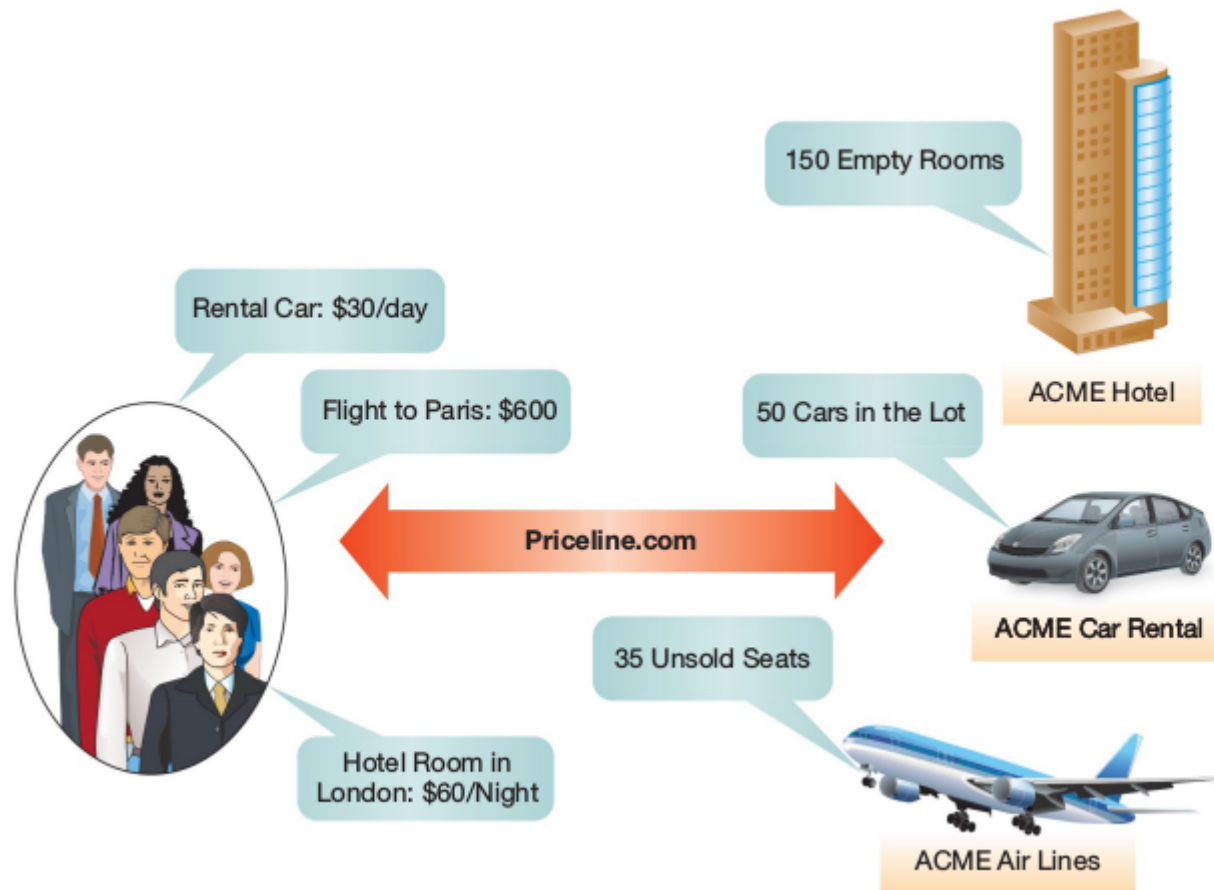
# New revenue and pricing models



**FIGURE 4.8**

Priceline.com lets consumers name their own price for travel-related services.

# Internet marketing

**FIGURE 4.10**

Scanning a QR code can trigger certain actions, such as opening a web page.

Source: Scanrail1/Shutterstock.

# Internet marketing

- Search

- Display ads

- Email

- Social media

- Mobile

# Internet marketing

- Search marketing



**Share in US$ million**

- E-mail marketing — 3,067
- Social media — 17,342
- Display advertising — 37,574
- Search marketing — 45,386
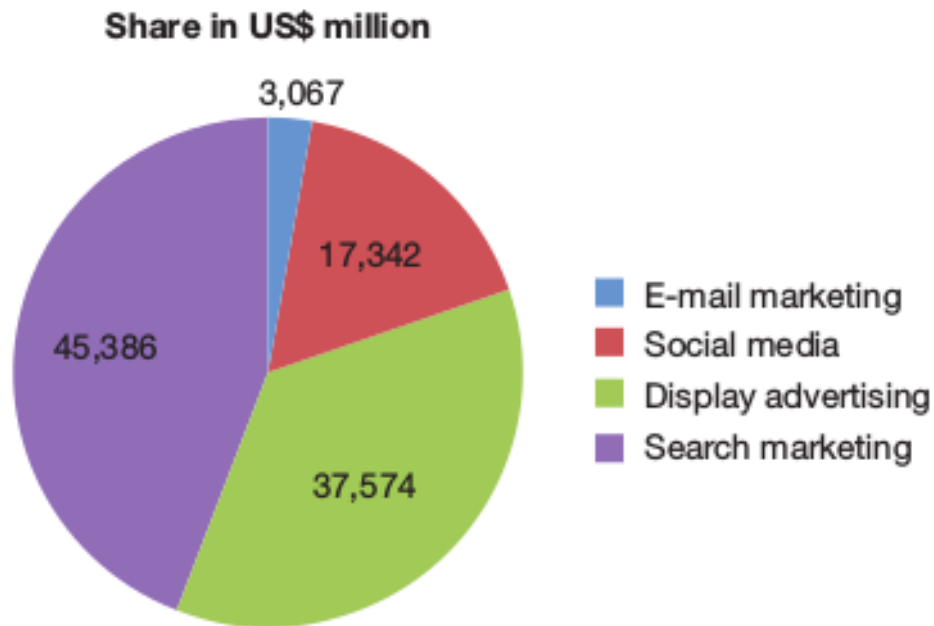
**FIGURE 4.11**

Search marketing is forecast to have the largest share of interactive marketing by 2019.

Source: Based on VanBoskirk, S. (2014, November 18). *US Digital Marketing Forecast, 2014 to 2019*. Cambridge, MA: Forrester Research.

# Internet marketing

- Organic vs. Pay per click search results



**FIGURE 4.13**

Companies pay per click for being included in the sponsored listings. Source: 2016 Google Inc. All rights reserved. Google and the Google Logo are registered trademarks of Google Inc.
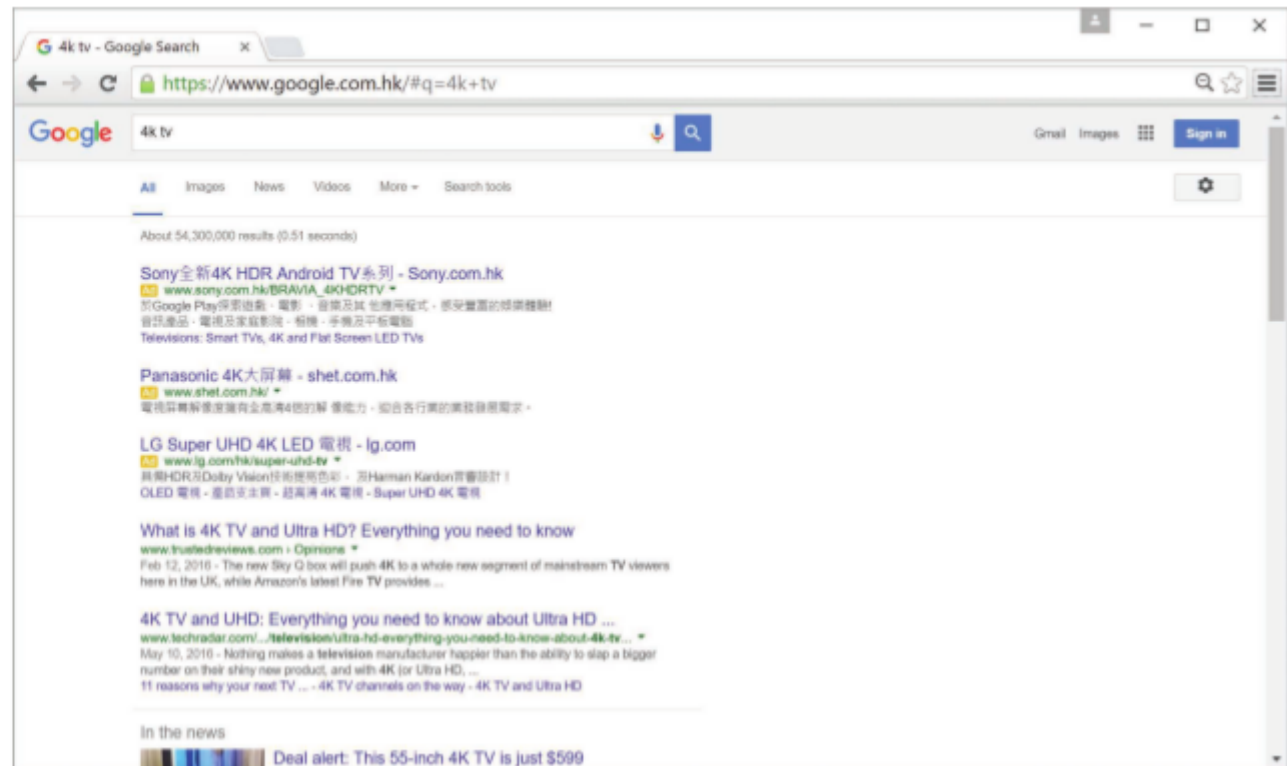
# Mobile commerce

- Location based M-commerce

- Information on the go

# GPS location feature

- Location based M-commerce

**TABLE 4.2** GPS-Enabled Location-Based Services

| Service | Example |
| --- | --- |
| Location | Determining the basic geographic position of the cell phone |
| Mapping | Capturing specific locations to be viewed on the phone |
| Navigation | The ability to give route directions from one point to another |
| Tracking | The ability to see another person's location |

# Mobile version of websites

- Information on the go



**FIGURE 4.14**

Tablets are often used as "couch computers."
Source: Diego Cervo/Shutterstock.

# Consumer-to-Consumer C2C EC

- E-auctions

- Online classifieds

- Platform based C2C
    - Uber
    - Airbnb

# C2C E-Commerce

**TABLE 4.3** Opportunities and Threats of C2C EC

| Opportunities | Threats |
|---|---|
| Consumers can buy and sell to broader markets | No quality control |
| Eliminates the middleman that increases the final price of products and services | Higher risk of fraud |
| Always available for consumers, 24/7/365 | Harder to use traditional payment methods (checks, cash, ATM cards) |
| Market demand is an efficient mechanism for setting prices in the electronic environment | |
| Increases the numbers of buyers and sellers who can find each other | |

# Consumer-to-Business C2B EC

- Reversing B2C model



**FIGURE 4.17**

Amateur and professional photographers can sell their creations through microstock photo sites such as shutterstock.com.
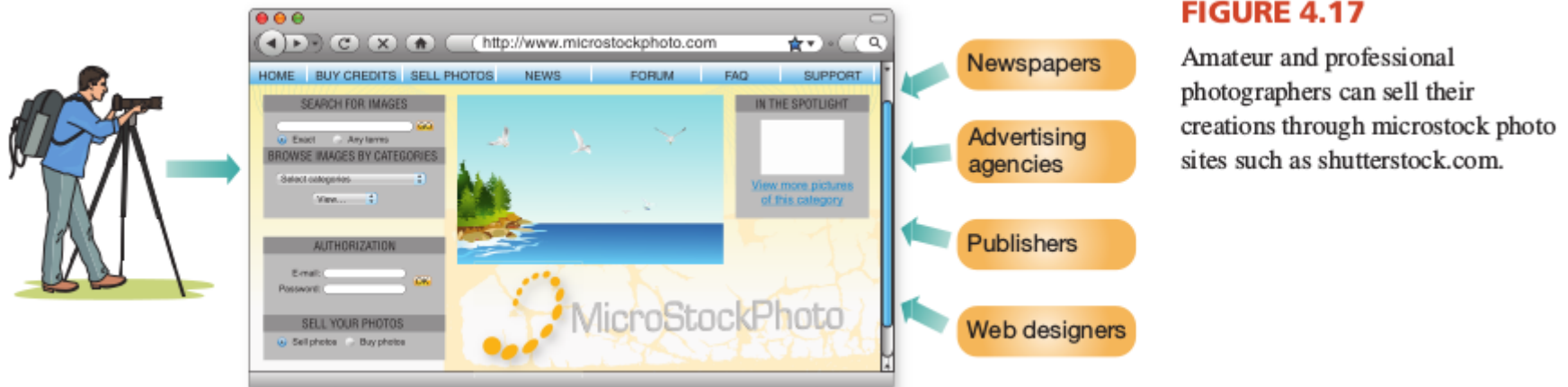
# Challenges in EC

- Securing payments

- Navigating legal issues

# Securing payments

- B2C, C2C, M-Commerce transactions  have to be secure
  - Identity theft
  - Credit card use online
  - Lengthy checkouts

# Securing payments

- Payment services
  - Paypal (owned by eBay)
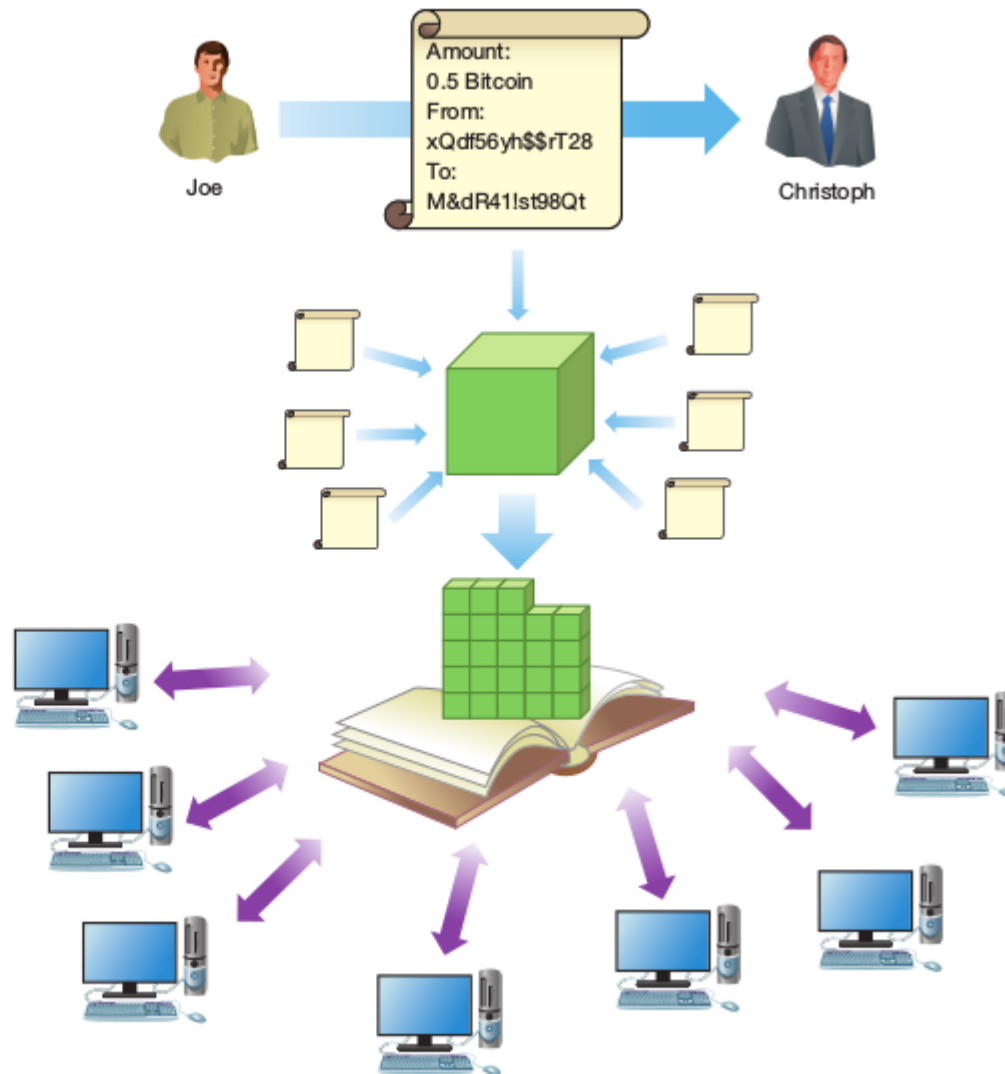  - Apple Pay
  - Square
  - Google wallet

# Securing payments

- Cryptocurrency
  - BitCoin, no trusted middleman

# Securing payments



**FIGURE 4.18**

In the Bitcoin network, transactions are stored on a public ledger in form of a blockchain.

# Risk management

**TABLE 4.4**  Ways to Protect Yourself When Shopping Online

| Tip | Example |
|-----|---------|
| Use a secure browser | Make sure that your browser has the latest encryption capabilities; also, always look for the padlock icon in your browser's status bar before transmitting sensitive information |
| Check the site's privacy policy | Make sure that the company you're about to do business with does not share any information you would prefer not to be shared |
| Read and understand the refund and shipping policies | Make sure that you can return unwanted/defective products for a refund |
| Keep your personal information private | Make sure that you don't give out sensitive information, such as your Social Security number, unless you know what the other entity is going to do with it |
| Give payment information only to businesses you know and trust | Make sure that you don't provide your payment information to fly-by-night operations |
| Keep records of your online transactions and check your e-mail | Make sure that you don't miss important notifications about your purchases |
| Review your monthly credit card and bank statements | Make sure to check for any erroneous or unauthorized transactions |

*Source:* Based on Privacy Rights Clearinghouse (2016).

# Risk management



**FIGURE 4.19**

Various indicators can signal potential e-commerce fraud.
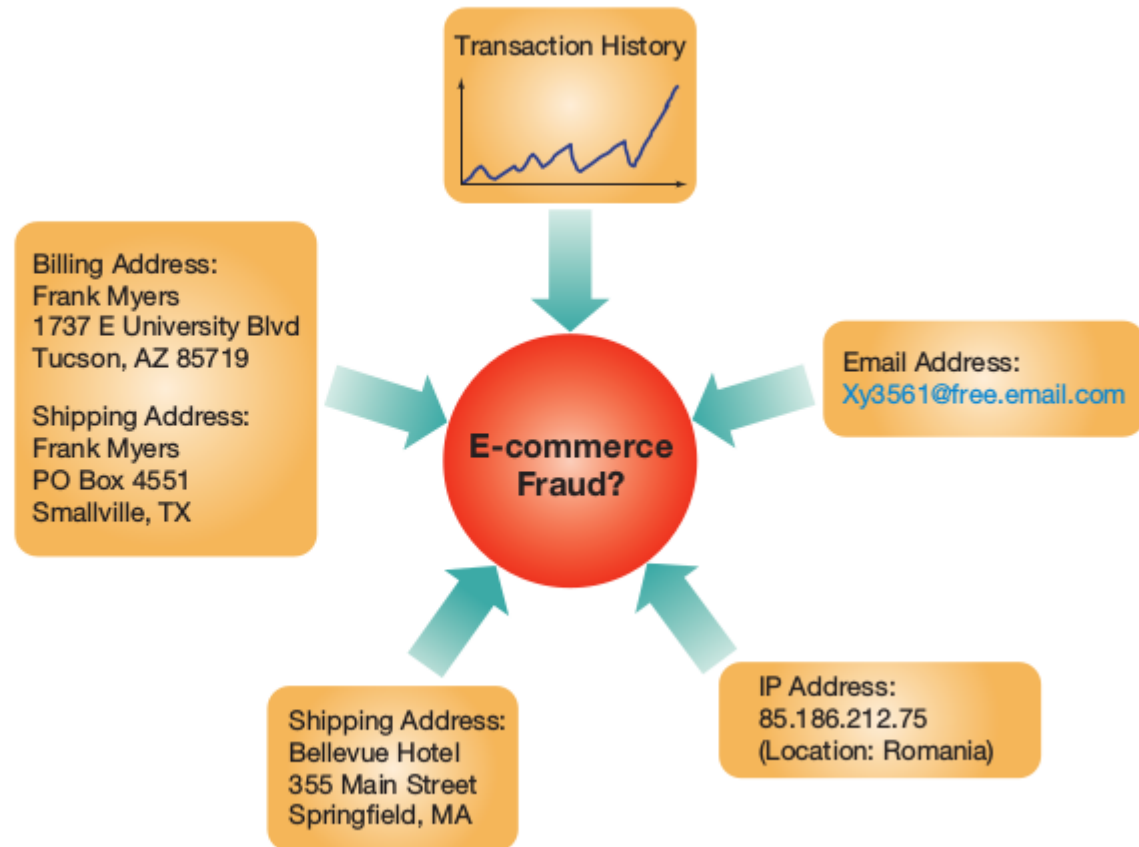
# Legal issues

- Taxation
- Clear terms and conditions
- Terms of website use
- Liability disclaimers
- Ownership of content and trademarks
- ...

# Legal issues

**TABLE 4.5** Arguments For and Against Taxation of EC Transactions

| For | Against |
|-----|---------|
| Increases tax income of local, state, and federal governments | Slows EC growth and opportunity |
| Removes unfair advantage for e-tailers over brick-and-mortar stores | Creates additional compliance burden for e-tailers |
| | E-tailers located in one state would subsidize other states or jurisdictions |
| Increases accountability for e-tailers | Drives EC businesses to other countries |

# Digital Rights Management DRM

- The use of digital watermarks

- DRM-free content

- "Digital restriction management" and potential inconvenience for legal users

**FIGURE 4.20**

Digital watermarks are used to trace illegal copies of digital media to the original purchaser.
Source: Notepad 2016, Windows 10, Microsoft Corporation.
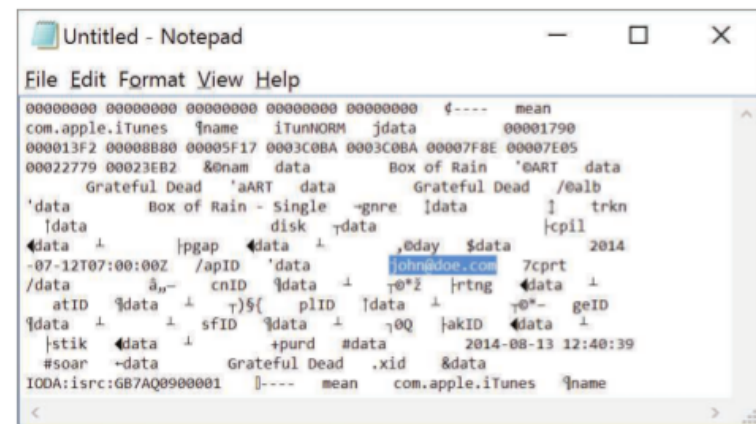
# **Essay** assignment: IT Megatrends

- Write a 1-2 pages essay on IT Megatrends
  - Social challenges of modern world?
  - Correlate the discussion with IT Megatrends.
  - What about Montenegro?

# **Essay** assignment: Digital ID card

- Write a 1-2 pages essay on Digital ID card
  - What is it?
  - How does it work? What do you think?
  - Can we use biometric readers (fingerprint, iris)?
  - Do we have to have a mobile device?
  - What do you think about it?

# Key Points

- Competing in cyberspace

- Business-to-Consumer E-commerce strategies

- Internet marketing

- Mobile commerce

- Financial transactions and legal issues

# References/Acknowledgements

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