



# CHAPTER SIX

Social Networking, Mobile Commerce,  
and Online Auctions

# Introduction



- Case study: Starbucks
  - Views social media as an extension of the customer relationship
  - Integrates mobile technology by accepting payments from mobile phones
  - Provides mobile device app to let customers manage loyalty program benefits
  - Serves as a social media observer rather than actively advertising

# From Virtual Communities to Social Networks

- Online Web communities are by geography
  - Individuals and companies with common interests meet online and discuss issues, share information, generate ideas, and develop valuable relationships
- Companies make money by serving as **relationship facilitators**
  - Combine Internet's transaction cost-reduction potential with a communication facilitator role

# Virtual Communities

- **Virtual community** is a gathering place for people and businesses with no physical existence
- Began online even **before** the Internet was in use
  - **Bulletin board systems (BBSs)** allowed users to connect via phone lines to read and post messages
    - Mostly free, but some charged a fee
  - **Usenet newsgroups** were a similar form of virtual community
    - Were message posting areas on a set of interconnected computers devoted to storing information on specific topics
- Substantial social interaction with communication and relationships similar to physical communities

# Early Web Communities

- 1985: [WELL](#) (“whole earth ‘lectronic link” predates the Web)
  - Bought by Salon.com in 1999 and continues to operate as a monthly subscription service
- 1995: [Beverly Hills Internet](#) opened a virtual community site
  - Offered webcams, free Web site space and links
  - Grew into GeoCities and purchased by Yahoo! in 1999 for \$5 billion but closed in 2009
- 1995-2001: Other companies offered similar [advertising-supported virtual communities](#)
- These early communities evolved into [social networking sites](#) that emerged in the late 1990s

# Social Networking Emerges

- As the Internet and Web grew, many communities found their purpose as a place to share online communication began to **fade**
- Instead of a single bond of using the Internet, users finding **a variety of common interests** for interaction
- **Social networking sites** allow individuals to:
  - **Create and publish** a profile and a list of other users with whom they share a connection (or connections)
  - **Control** the list and **monitor** similar lists made by other users

# Social Networking Emerges (cont'd.)

- Early social networking sites included Six Degrees (1997), Friendster (2002), Tribe.net and MySpace
- Facebook emerged in 2006 and overtook MySpace as the leading social network site worldwide
  - More than a billion users and \$6 billion in revenues
- Other sites include Google+, GREE (Japan), and Renren and QQ (China)
- LinkedIn dedicated to facilitating business contacts
- Twitter allows users send short messages (tweets) to other users who sign up to follow their messages

# Social Networking Emerges (cont'd.)

- **Basic idea** behind many social networking sites is that people are invited to join by existing members
  - Site provides directory (without contact information)
  - Communication does not occur until intended recipient approves the contact
- Some social networks focused around specific interests or capabilities
  - Flickr, Pinterest, Instagram, CafeMom, Snapchat
- The expansion of social networking sites into all corners of the world with successful sites in local languages emerging in many countries



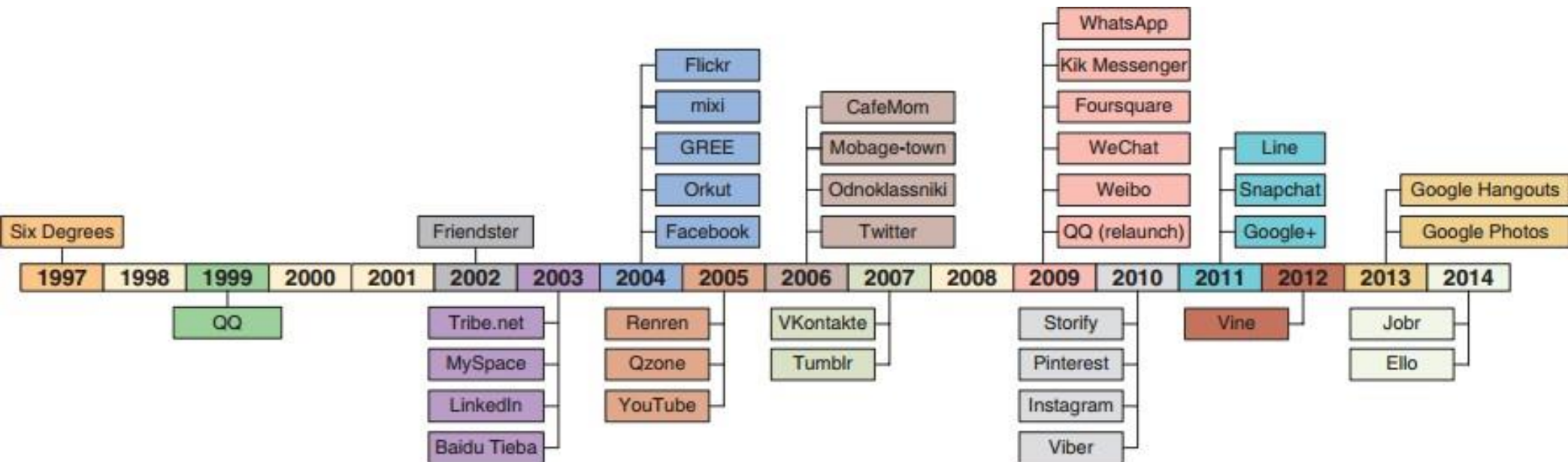
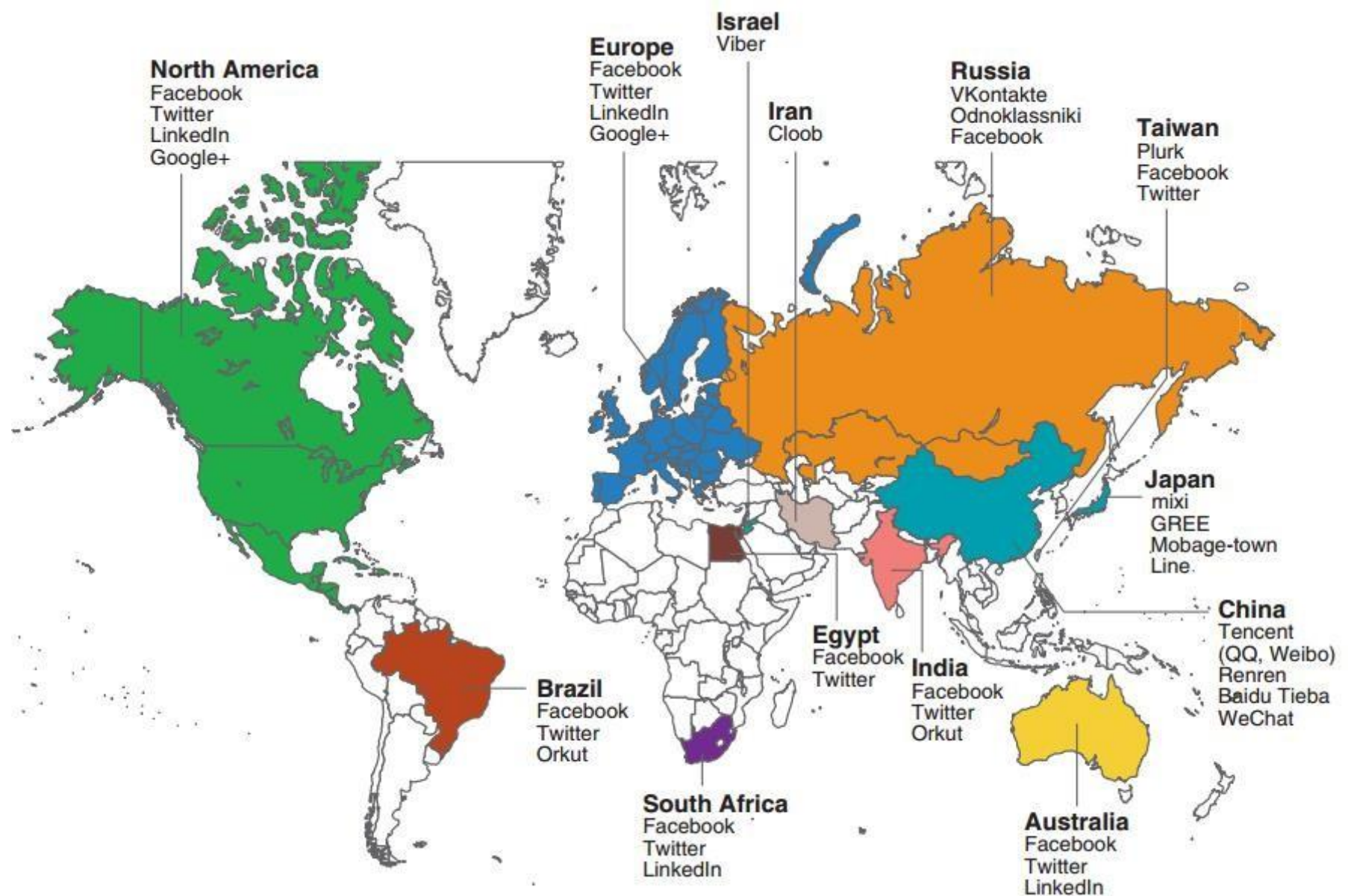


FIGURE 6-1 Social networking Web sites



**FIGURE 6-2 Leading social networking sites around the world**

# Web Logs (Blogs), Microblogs and Participatory Journalism

- Web sites containing **individual commentary** on current events or specific issues
  - Form of social networking site
- **Twitter** is a very informal **microblog** with tweets limited to 140 characters
- **Early blogs** focused on technology topics or topics on which people had strong beliefs
- The 2004 election saw blogs used as a political networking tool
  - Communicating messages, organizing volunteers, raising money, meetups

# Web Logs (Blogs), Microblogs and Participatory Journalism (cont'd.)

- Based on success of social media, **retailers embraced** blogs to engage visitors not ready to buy
  - Marketing and supply managers saw social networking benefits of enhancing B2B relationships
- **Participatory journalism** is the trend towards having readers help write their own news
- **Blogs** can become businesses in themselves if they can generate financial support through fees or advertising

# Location-Aware Mobile Social Networks

- Traveling Internet connection opens up social media possibilities that integrate with a user's specific location
  - Mobile devices transmit their location to Web sites
  - Sites use location information to provide customized advertising and other services
- In 2015, about 35% of social media users tagged their posts with location info and 82% of mobile users obtained directions or other location information
- Examples: [Foursquare](#), [Facebook](#), [Google+](#)

# Business Uses of Social Networking

- Businesses **criticized** for using social media interactions into thinly-disguised advertising
- Experts agree social media should be managed differently than advertising efforts
  - Managed effectively, social media engagement can provide **much more info** about customers
- Brooks Running contributes to social media discussions dedicated to fitness and does not sell products directly
- Campbell's Soup discussion areas focusing on what soup can do for the family



	<b>Convey Information to Customers</b>	<b>Receive Information from Customers</b>	<b>Facilitate and Monitor Communications among Customers</b>
Social networking sites	Purchase advertising, post offers and promotions, post information about products/services	Collect information from and summarize customer posts for analysis	Collect a body of shared knowledge from customer posts and use it to build customer loyalty
Blogs	Publish updates on forthcoming products, provide service information on existing products	Encourage customers to submit new ideas, purchase intentions, and reservations about existing products/services	Monitor and summarize customer discussions about products/services and the overall brand for analysis
Microblogs	Answer questions about products/services, respond to customer messages with specific answers	Actively solicit customer input on current products/services and ideas for improvements and new products/services	Monitor carefully customer messages and summarize for analysis to identify new trends in their perceptions and thinking
Location-aware mobile social networks	Post information about new retail locations, specific promotions at particular locations	Encourage customers to contribute tips and comments regarding specific locations	Connect geographically disparate customers to each other and collect information about differences in customer experiences and perceptions at different locations

Source: Adapted from Table 1 in Chua and Banerjee (2013, p. 240), "Customer Knowledge Management Via Social Media: The Case of Starbucks," *Journal of Knowledge Management*, 17(2), 237–249.

**Figure 6-3 Social media strategies for business**

# Revenue Models for Social Networking Sites

- Late 1990s revenue created by selling advertising
  - Used by virtual communities, search engine sites, Web directories
- In 1998 a wave of purchases and mergers occurred
  - New sites used advertising-only revenue model
    - Included features offered by virtual community sites, search engine sites, Web directories, other information- providing and entertainment sites
  - Web portal goal: every Web user's doorway to Web





Figure 6-4 Popularity of leading Web sites

Source: <http://www.alexa.com/topsites>

# Advertising-Supported Social Networking Sites

- Visitors spend a greater amount of time at portal sites than they do at most other types of Web sites, which is attractive to advertisers.
- Other types of social networking sites also draw visitors who spend considerable time at the site
  - Smaller sites with specialized appeal can draw enough visitors to generate significant advertising revenue
  - Example: “I Can Has Cheezburger” site

<b>Feature</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
North America	4940	7710	10,100	12,670	15,150
Asia-Pacific	3250	5180	7400	9660	11,910
Western Europe	2340	3680	4740	5820	6850
Latin America	350	540	680	850	1000
Central and Eastern Europe	410	520	610	700	790
Middle East and Africa	70	110	160	220	280
Worldwide totals	11,360	17,740	23,680	29,920	35,980

Source: eMarketer, April, 2015.

**Figure 6-5 Worldwide social network spending, recent years and projects (in millions of U.S. dollars)**

# Mixed-Revenue and Fee-For-Service Social Networking Sites

- [Most](#) social networking sites use advertising but [some](#) charge a fee for some services
  - Examples: Yahoo! All-Star Games package, Yahoo! premium e-mail service
- [Monetizing](#) is converting site visitors into fee-paying subscribers or purchasers of services
  - Concern: visitor backlash
- Examples of sites that used a mixed-revenue model are the financial information sites [The Motley Fool](#) and [TheStreet.com](#)

# Fee-Based Social Networking

- Google Answers site was an early attempt to monetize social networking by charging a fee for a specific service
  - Questions answered for a fee from 2002 to 2006
- Similar free services such as Yahoo! Answers, Amazon (Askville) generate advertising revenue
- Uclue (paid researchers earn 75% of total fee)
  - Advocates claim better quality of questions and answers
- Both approaches show how Web sites can generate revenue by providing virtual community interaction

# Microlending Sites

- Function as clearinghouses for microlending activity
- **Microlending** is lending small amounts of money to people starting or operating small businesses (especially in developing countries)
- **Key element** is working within a social network of borrowers who support each other, and an element of pressure to repay
  - Examples: Kiva and MicroPlace
- Business start-ups in prosperous economies are now using this technique

# Crowdfunding Sites

- Small businesses can sell partial ownership in ventures to investors around the world
- Social networking sites that provide exactly this opportunity, called **crowdfunding**
  - Examples: Kickstarter, IndieGoGo
- Relies on many people investing a small amount
  - Reduces risk to individual investors while providing substantial equity for new ventures
- Reward-based crowdfunding investors pay in advance for products and services to be delivered after they are made with invested funds
  - Used by artists and charitable organizations to help complete a specific project

# Internal Social Networking

- Provide social interaction among organization's employees
- Also includes important information for employees
- Run on organization's intranet
- Saves money by replacing printed distribution
- Provided easy access to employee information
- Good for geographically dispersed employees
- Many companies are now adding wireless connectivity for employees who are traveling



# Mobile Commerce

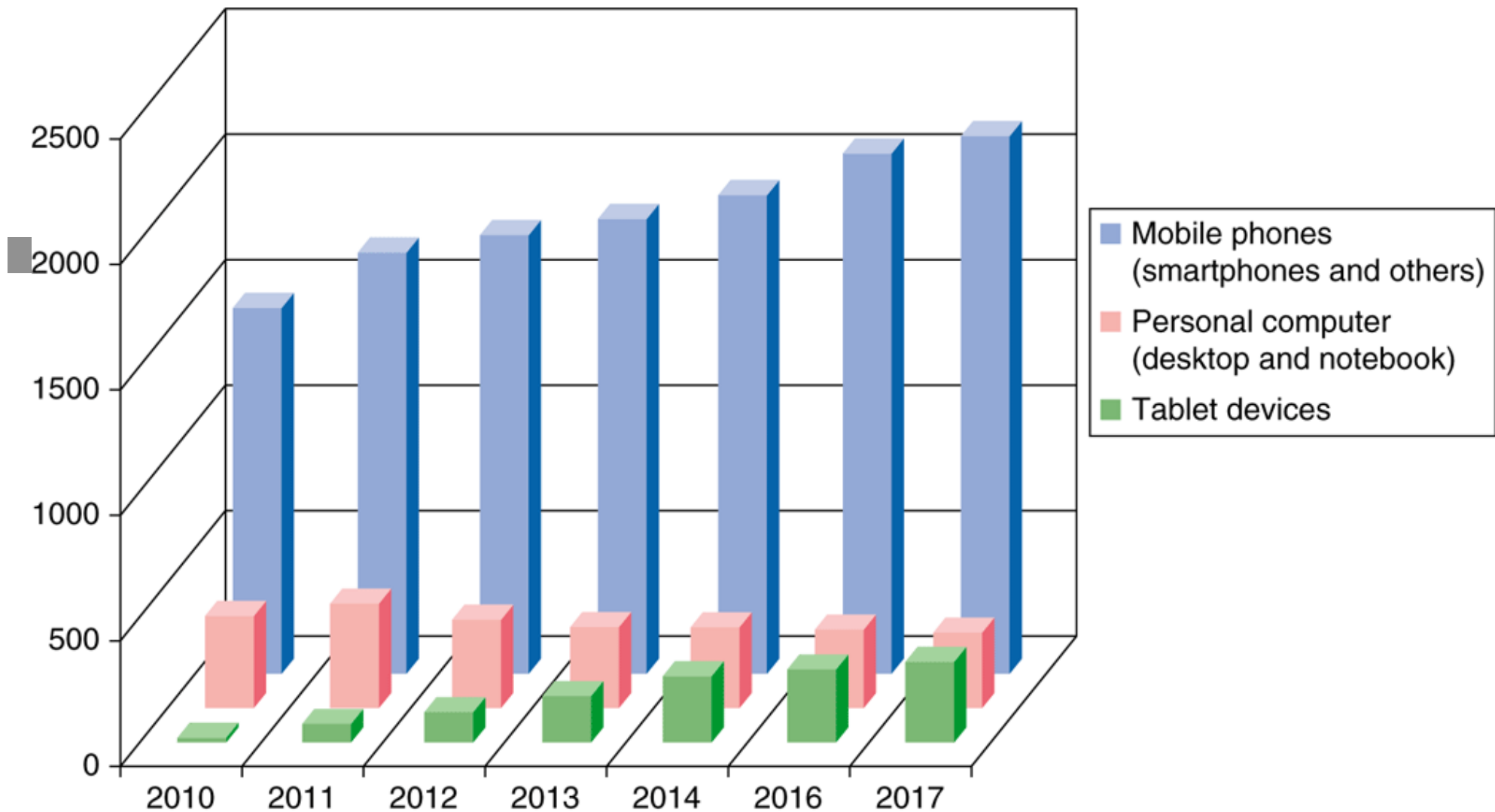
- **Short messaging service (SMS)** is usually called texting and allows mobile phone users to send short text messages to each other
- United States developments allowing phones to be used as Web browsers occurred in 2008
  - High-speed mobile telephone network availability grew dramatically
  - Manufacturers offered range of smart phones with Web browser, large screens, operating system, ability to run applications
    - Potential for mobile commerce (m-commerce)

# Mobile Phones

- Internet-capable phones first caught on in Japan and Southeast Asia
  - Telecommunication companies there offered high-capacity mobile phone networks before U.S.
  - NTT DoCoMo, Japan's largest phone company, pioneered mobile commerce in 2000
- In the U.S. the introduction of smart phones and high-capacity networks began appearing in 2008
  - Apple iPhone and Android phones opened the door for serious U.S. mobile commerce for the first time

# Tablet Devices

- Smaller than laptop computer, larger than phone
- Connect to the Internet wirelessly through phone carrier service or local network
- Phablets: large phones with high-resolution screens
  - By 2015 more tablets sold than personal computers
- Wireless Application Protocol (WAP) allows HTML Web pages to be displayed on small-screen devices
  - Has become optional due to larger, high resolution screens and phablets where normal pages can be displayed
- Touchscreen controls now prevalent



Sources: Research reports and projections by Gartner, NPD Display Search, and BGR.

**FIGURE 6-6 Actual and projected sales of personal computers, tablet devices, and mobile phones (in millions of units)**



**FIGURE 6-7** Mobile devices, including smartphones, tablets and phablets

# Auction Basics

- Auctions date from Babylon in 500 B.C.
- Common activity in 17th century England
- Seller offers item for sale and provides information to potential buyers, but does not establish a price
  - Potential buyers (**bidders**) offer the price they are willing to pay (**bids**)
  - **Private valuations** are the amounts buyers are willing to pay
- **Auctioneer** manages auction process
  - **Shill bidders** make bids on behalf of the seller and may artificially inflate the price

# English Auctions

- **English auctions:** bidders publicly announce successively higher bids until no higher bid is forthcoming
  - Item sold to **highest bidder** (at bidder's price)
- **Called** ascending-price auction, open auction or open-outcry auction as bids are publicly announced
- Minimum bid is the beginning price
  - If no bidders willing to pay, item is not sold
- **Reserve price** is seller's minimum price
  - If not met, item is not sold

# Dutch Auctions

- **Dutch auctions**: a form of open auction where bidding starts at a high price and drops until bidder accepts price
- Also called descending-price auctions
- Seller offers a number of similar items for sale
- One common implementation of a Dutch auction uses a clock that drops the price with each tick
  - First bidders to stop the clock becomes the winning bidder
  - The winning bidder can take all or any part of the auctioned items at that price and if items remain, the clock is restarted
- Often better for the seller because buyer will not let bid drop much below valuation for fear of losing



# First-Price Sealed Bid Auctions

- Sealed-bid auction bidders submit bids independently
- Are usually prohibited from sharing information with each other
- **First-price sealed-bid auction:** the highest bidder wins
  - If multiple items auctioned, next highest bidders awarded remaining items at their bid price

# Second-Price Sealed-Bid Auctions

- **Second-price sealed-bid auction** is the same as first-price sealed-bid auction **except** that the highest bidder is awarded item at the price bid by the **second-highest bidder**
  - Commonly called Vickrey auctions
    - Yields higher seller returns
    - Encourages bidders to bid private valuation amounts
    - Reduces tendency for bidder collusion

# Open-Outcry Double Auctions / Double Auctions

- Open-outcry double auctions
  - Buy and sell offers shouted by traders in trading pit
    - Each commodity, stock option traded in own pit which can become quite frenzied
- **Double auction:** buyer and sellers each submit combined price-quantity bids to auctioneer
  - Either sealed-bid or open-outcry
  - Auctioneer matches offers (starting with the lowest seller's offer and highest buyer's offer)
  - Used by New York Stock Exchange but now mostly via an electronic system

# Reverse (Seller-Bid) Auctions

- Multiple sellers submit price bids to an auctioneer who represents single buyer
  - Bids for given amount of specific item to purchase
  - Prices go down as bidding continues until no seller willing to bid lower
  - Most involve businesses as buyers and sellers
- In many business reverse auctions, buyer acts as auctioneer and screens sellers before they can participate

Auction Type	Key Characteristics
English auction	Starting from a low price, bidding increases until no bidder is willing to bid higher.
Dutch auction	Starting from a high price, bidding automatically decreases until the bidder accepts the price.
First-price sealed-bid auction	Secret bidding process; the highest bidder pays the amount of the highest bid.
Second-price sealed-bid auction (Vickrey auction)	Secret bidding process; the highest bidder pays the amount of the <i>second</i> -highest bid.
Double auction (open-outcry)	Buyers and sellers declare combined price–quantity bids. The auctioneer matches seller offers (lowest to highest) with buyer offers (highest to lowest). Buyers and sellers can modify bids based on knowledge gained from other bids.
Double auction (sealed-bid)	Buyers and sellers declare combined price–quantity bids. The auctioneer (specialist) matches seller offers (lowest to highest) with buyer offers (highest to lowest). Buyers and sellers cannot modify their bids.
Reverse auction (seller-bid)	Multiple sellers submit price bids to an auctioneer that represents a single buyer. The bids are for a given amount of a specific item that the buyer wants to purchase. Prices go down as the bidding continues until no seller is willing to bid lower.

**FIGURE 6-9 Key characteristics of seven major auction types**