

E-Business Tenth Edition

Chapter 7
Virtual Communities

Learning Objectives

In this chapter, you will learn:

- How social networking emerged from virtual communities
- How social networking tools such as blogs are used in online business activities
- About mobile technologies that are now used to do business online

From Virtual Communities to Social Networks

- Online Web communities
 - Not limited 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 (Web community, online community)
 - Gathering place for people and businesses
 - No physical existence
- Early virtual communities
 - Bulletin board systems (BBSs)
 - Revenue source: monthly fees and selling advertising
 - Usenet newsgroups
 - Message posting areas on usenets

Virtual Communities (cont'd.)

- Current forms
 - Web chat rooms
 - Sites devoted to specific topics or general exchange of information, photos, videos
 - People connect and discuss common issues, interests
 - Considerable social interaction
 - Relationship-forming activities
 - Similar to physical communities

Early Web Communities

- 1985: WELL ("whole earth 'lectronic link")
 - Monthly fee to participate in forums and conferences
 - 1999 bought by Salon.com
- 1995: Beverly Hills Internet virtual community site
 - Offered webcams, free Web site space
 - Grew into GeoCities
 - Revenue source: advertising, pop-up pages
 - 1999: purchased by Yahoo! (\$5 billion)
 - Closed in 2009

Early Web Communities (cont'd.)

- 1995: Tripod virtual community
 - Offered free Web page space, chat rooms, news, weather updates, health information pages
 - Revenue source: sold advertising
- 1995: Theglobe.com Cornell University class project
 - Included bulletin boards, chat rooms, discussion areas, personal ads
 - Added more features
 - Revenue source: sold advertising
- Most early Web community businesses closed

Social Networking Emerges

- As the Internet and Web grew:
 - Experience of sharing new online communication faded
 - New phenomenon in online communication began
 - Multiple common bonds joined people with all types of common interests

Social networking sites

 Allow individuals to create and publish a profile, create a list of other users with whom they share a connection (or connections), control that list, and monitor similar lists made by other users

- Social networking sites
 - Six Degrees (1997)
 - Friendster (2002)
 - Had features found in today's social networking sites
 - LinkedIn: devoted to business connections
 - Tribe.net
 - YouTube: popularized video inclusion
 - MySpace: popular with younger Web users
 - Twitter
 - Users can send short messages to other users who sign up to follow their messages (tweets)
 - Google+

- Basic idea behind social networking
 - People invited to join by existing members
 - Site provides directory
 - New members work through friends established in the community

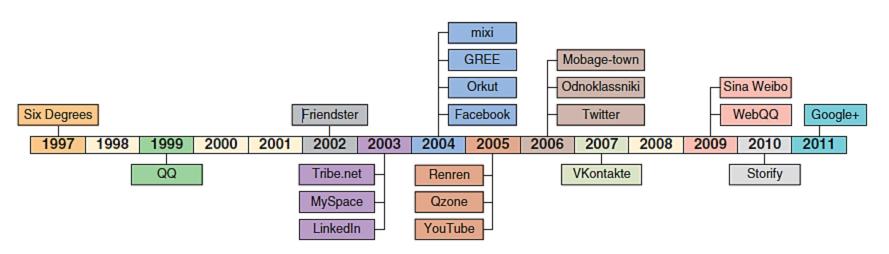


FIGURE 7-1 Social networking Web sites

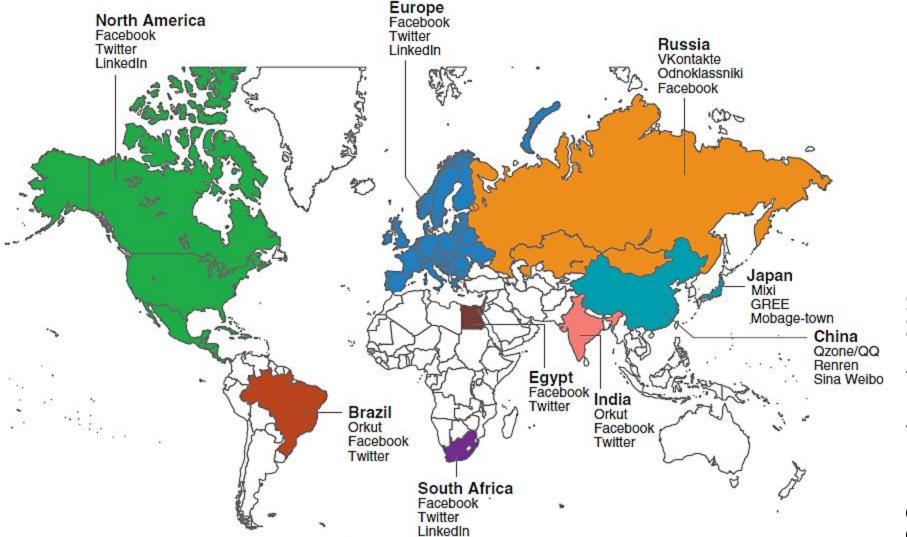


FIGURE 7-2 Leading social networking sites around the world

- Web logs (Blogs)
 - Web sites containing individual commentary on current events or specific issues
 - Form of social networking site
 - Twitter: microblog
 - Very informal; tweets limited to 140 characters
- Early blogs focused on technology topics
- 2004: blogs used as political networking tool
- 2008: all major candidates using blogs
 - Communicating messages, organizing volunteers, raising money, meetups

- Retailers embracing blogs
 - Way to engage visitors not ready to buy from site
 - Marketing and supply managers saw social networking benefits of enhancing B2B relationships
- Business uses
 - CNN
 - Blog information included in television newscasts

- Business uses (cont'd.)
 - Newspapers
 - Inviting information and opinion contributions
 - Targeting 18- to 35-year-old generation
 - Participatory journalism
 - Trend toward having readers help write the online newspaper
- Blogs can become businesses in themselves
 - Must generate financial support (fees, advertising)

- Social networking Web sites for shoppers
 - Social shopping
 - Practice of bringing buyers and sellers together in a social network to facilitate retail sales
 - Example: craigslist
 - Operated by not-for-profit foundation
 - All postings free (except help wanted ads)
 - Example: Etsy Web site
 - Marketplace for selling handmade items
 - We Love Etsy: Etsy buyers, sellers share information

- Idea-based social networking
 - Social networking sites form communities based on connections among people
 - Idea-based virtual communities
 - Communities based on connections between ideas
 - Idea-based networking
 - Participating in idea-based virtual communities
 - Examples: del.icio.us site, 43 Things site

Virtual learning networks

- Distance learning platforms for student-instructor interaction (Blackboard)
- Tools include:
 - Bulletin boards, chat rooms, drawing boards
- Moodle and uPortal
 - Open-source software projects devoted to virtual learning community development
- Open source software
 - Developed by a programmer community
 - Software available for download at no cost

Revenue Models for Social Networking Sites

- Late 1990s
 - Revenue created by selling advertising
 - Used by virtual communities, search engine sites, Web directories
- 1998
 - Purchases and mergers occurred
 - New sites still used advertising-only revenuegeneration model
 - Included features offered by virtual community sites, search engine sites, Web directories, other informationproviding and entertainment sites
 - Web portal goal: every Web surfer's doorway to Web

- Advertising-supported social networking sites
 - Smaller sites with specialized appeal
 - Can draw enough visitors to generate significant advertising revenue
 - Example: I Can Has Cheezburger site
 - Recall from Chapter 4
 - Sites with higher number of visitors can charge more
 - Stickiness: important element in site's attractiveness
 - Rough measure of stickiness
 - Time user spends at the site

Owner	Millions of unique visitors	Average time per unique visitor per month (H:MM)
Google	379	3:43
Microsoft	316	2:20
Facebook	301	6:21
Yahoo!	235	2:30
Wikimedia Foundation	156	0:13
eBay	134	1:16
InteractiveCorp	132	0:11
Amazon.com	129	:27
Apple Computer	117	1:58
AOL, Inc.	103	3:31
Adapted from reports for August 2011 published by The Nielsen Company at http://www.nielsen.com/us/en/insights/top10s/internet.html		

FIGURE 7-3 Popularity and stickiness of leading Web sites

- Advertising-supported social networking sites (cont'd.)
 - Social networking sites
 - Members provide demographic information
 - Potential for targeted marketing: very high
 - High visitor counts
 - Can yield high advertising rates
 - Second-wave advertising fees
 - Based less on up-front site sponsorship payments
 - Based more on revenue generation from continuing relationships with people who use the social networking sites

- Mixed-revenue and fee-for-service social networking sites
 - Most social networking sites use advertising
 - Some charge a fee for some services
 - Examples: Yahoo! All-Star Games package, Yahoo! premium e-mail service

Monetizing

- Converting site visitors into fee-paying subscribers or purchasers of services
- Concern: visitor backlash
- More examples: The Motley Fool and TheStreet.com

- Fee-based social networking
 - Google Answers site
 - Early attempt to monetize social networking
 - Questions answered for a fee
 - Google operated service from 2002 to 2006
 - Similar free services
 - Yahoo! Answers, Amazon (Askville)
 - Uclue (paid researchers earn 75 percent of total fee)
 - Advocates claim better quality
 - Fee-based Web sites can generate revenue by providing virtual community interaction

- Microlending sites
 - Function as clearinghouses for microlending activity
 - Microlending
 - Practice of lending very small amounts of money
 - Lend to people starting or operating small businesses (especially in developing countries)
 - Microlending key element
 - Working within social network of borrowers
 - Provide support, element of pressure to repay
 - Examples: Kiva and MicroPlace

- Internal social networking
 - Provide social interaction among organization's employees
 - Run on organization's intranet
 - Save money (less paper)
 - Provide easy access to employee information
 - Good for geographically dispersed employees
 - Adding wireless connectivity
 - Combine second-wave technology with first-wave business strategy
- Wireless communications with internal Web portals
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Mobile Commerce

- Short messaging service (SMS)
 - Allows mobile phone users to send short text messages to each other
- 2008: United States developments allowing phones as Web browsers
 - High-speed mobile telephone networks grew dramatically
 - Manufacturers offered range of smart phones with Web browser, operating system, applications
 - Potential for mobile commerce (m-commerce)

Mobile Operating Systems

- Japan and Southeast Asia mobile commerce
 - Much larger online business activity
 - Had high-capacity networks before U.S.
 - NTT DoCoMo, Japan's largest phone company
 - Pioneered mobile commerce in 2000
- U.S. mobile commerce beginning in 2008
 - Introduction of smart phones and high-capacity networks
 - Smart phone examples: Apple iPhone, Palm Pre, several BlackBerry models
 - Android operating system









FIGURE 7-4 Smart phones come in a range of different styles

Mobile Operating Systems (cont'd.)

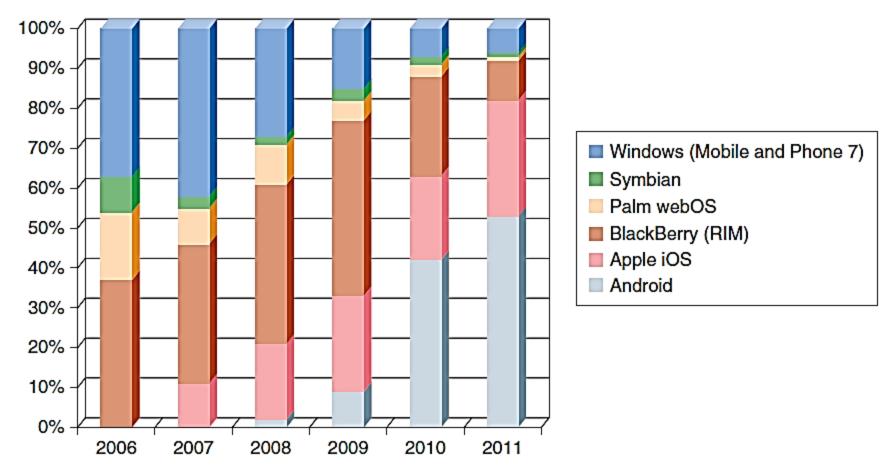
- Mobile commerce browser display options
 - Wireless Application Protocol (WAP)
 - Allows Web pages formatted in HTML to be displayed on small-screen devices
 - Display a normal Web page on the device
 - Made possible by increased screen resolution
 - Example: Apple iPhone
 - Design Web sites to match specific smart phones
 - Much more difficult to accomplish

Mobile Operating Systems (cont'd.)

- Mobile commerce browser display options (cont'd.)
 - Apple, BlackBerry, Palm
 - Use proprietary operating systems
 - HTC, Motorola, Nokia
 - At one time created their own operating systems and software applications
 - Now use a standard operating system provided by a third party
 - Most common third-party operating systems
 - Android, Windows Mobile, Symbian

Mobile Operating Systems (cont'd.)

- Android operating system
 - Most popular and fastest growing third-party operating system
 - Developed by Google
 - Open source
- Smart phone operating system
 - Cannot be deleted/switched by user
- Operating system modifications
 - Jailbreaking (Apple iphone's operating system)
 - Rooting (Android operating system)



Source: The NPG Group, Consumer Tracking Service, Mobile Phone Track at http://www.bgr.com/2011/12/13/apple-and-google-dominate-smartphone-space-while-other-vendors-scramble/

FIGURE 7-5 Smart phones operating systems: U.S. market shares

Mobile Apps

- Common operating systems emergence
 - Occurred due to a change in the way software applications developed and sold
- Old U.S. mobile phone company revenue strategy
 - Control application software (apps)
- Apple turned old revenue strategy on its head
 - AT&T agreed to be sole carrier for iPhone
 - Apple Apps for iPhone online store
 - Independent developers create apps and sell them
- BlackBerry and Palm followed Apple's lead

Mobile Apps (cont'd.)

- Recap from Chapter 6
 - Some mobile app sellers include advertising element
 - Messages displayed from advertisers
 - Part of the app screen or in a separate screen
 - Mobile apps' advertising space marketed in same way as Web sites' banner advertising
- Companies moving to mobile commerce
 - Determine suitability of Web site to mobile devices
 - May be pertinent to develop separate Web site optimized for mobile users

Mobile Apps (cont'd.)

- Mobile phones for online banking
 - In early stages in the United States
- Physicians using smart phones
 - Read EKGs, managing diabetic patients
 - Medical students: Epocrates (drug information database)
- Phones' global positioning satellite (GPS) service capabilities
 - Allow mobile business opportunities
- Apps tools/resources
 - Swebapps, App Inventor, TaskCity

Tablet Devices

Tablet devices

- 2010: Apple's iPad introduced
 - Smaller than laptop computer; larger than smart phone
- Wireless phone carrier's service or local wireless network Internet connection
- Larger screen size better suited for online consumer products purchases

Mobile Payment Apps

Mobile wallets

- Mobile phones functioning as credit cards
- Japan's NTT DoCoMo phones combined capabilities
 - Generate significant business
- Widespread credit card use in U.S. has limited use of mobile phone payments
 - 2011: Phone readers offered by American Express, Visa, MasterCard
 - Google Wallet for Android phones introduced

Summary

- Companies using the Web for entirely new things
 - Creating social networks
 - Using mobile technologies to make sales and increase operational efficiency
 - Operating auction sites
 - Conducting related businesses
- Businesses creating online communities to connect with customers and suppliers
- Individuals using social networking sites
 - Personal and business-related interactions
- Mobile commerce opportunities emerging