CHAPTER 7
Social Media, Peer Production, and Web 2.0

1. INTRODUCTION

LEARNING OBJECTIVES

1. Recognize the unexpected rise and impact of social media and peer production systems, and understand how these services differ from prior generation tools.
2. List the major classifications of social media services.

Over the past few years, a fundamentally different class of Internet services has attracted users, made headlines, and increasingly garnered breathtaking market valuations. Often referred to under the poorly defined umbrella term "**Web 2.0**," these new services are targeted at harnessing the power of the Internet to empower users to collaborate, create resources, and share information in a distinctly different way than the static Web sites and transaction-focused storefronts that characterized so many failures in the dot-com bubble. Techies often joust over the precise definition of Web 2.0, but these arguments aren't really all that important. What is significant is how quickly the Web 2.0 revolution came about, how unexpected it was, and how deeply impactful these efforts have become for individuals, businesses, and society. Consider the following:

- Six of the world's top ten most heavily trafficked Internet sites are social: Facebook, YouTube, Blogger.com (considered separately from parent Google), Wikipedia, Twitter, and QQ.com (China).[1] Via Alexa.com, June 1, 2011. U.S. users now spend more time with social media than on any other category of Internet use.[2]

- It took just three years for the number of social sites in the top ten to grow from one to six. However, the list is volatile, and half of the top social sites from three years ago (MySpace, Hi5, Orkut) are no longer ranked in the top ten.[3] Morgan Stanley, *Internet Trends Report*, March 2008.

- With only seven full-time employees and an operating budget of less than $1 million, Wikipedia has become the fifth most visited site on the Internet.[4] G. Kane and R. Fichman, "The Shoemaker's Children: Using Wikis for Information Systems Teaching, Research, and Publication," *MIS Quarterly*, March 2009. The site boasts well over eighteen million articles in over 260 different languages, all of them contributed, edited, and fact-checked by volunteers.

- Just twenty months after its founding, YouTube was purchased by Google for $1.65 billion. While Google struggles to figure out how to make profitable what is currently a money-losing resource hog (over forty-eight hours of video are uploaded to YouTube each minute),[5] J. Roettgers, "YouTube Users Upload 48 Hours of Video Every Minute," *GigaOM*, May 25, 2011. the site has emerged as the Web's leading destination for video, hosting everything from apologies from CEOs for service gaffes to questions submitted as part of presidential debates. Fifty percent of YouTube's roughly three hundred million users visit the site at least once a week,[6] and the site serves over three billion videos each day,[7] with an increasing number watching from non-PC devices, including mobile phones and televisions.

- The population of Facebook users is now so large that it could be considered the third largest "nation" in the world. Half the site's users log in at least once a day, spending an average of fifty-five minutes a day on the site.[8] "Facebook Facts and Figures (History and Statistics)," *Website Monitoring Blog*, March 17, 2010. Facebook is solidly profitable and revenues have been growing

with astonishing speed (estimated at over $4 billion in 2011, doubling from the prior year).[9] By spring 2011 some suggested that the value of the privately held firm may have reached $100 billion.[10]

- Facebook and Twitter have become activist tools and have played vital roles in supporting protest movements worldwide. China and Iran are among the governments so threatened by the power of these services that each has, at times, blocked Facebook and Twitter access within their borders.

- Twitter has emerged as a major force that can break news and shape public opinion. By the time Twitter was a five-year-old, the service boasted a population of over two hundred million users that were collectively posting more than a billion tweets (Twitter messages) each week.[11] P. Kafka, "Twitter CEO Dick Costolo Talks about His New Photo Service, but Not about Profits," *AllThingsD*, June 1, 2011. In another nod to the service's significance, the U.S. Library of Congress announced plans to archive every tweet ever sent.[12]

- Services such as Twitter, Yelp, and the highly profitable TripAdvisor have unleashed the voice of the customer so that gripes, praise, and ratings are now often captured and broadcast immediately at the point of service. Reviews are now incorporated into search results and maps, making them the first thing many customers see when encountering a brand online. TripAdvisor, with just five hundred employees, brings in over $500 million in revenue (at roughly 45 percent margins),[13] B. Wash, "Double Duty," *Colby Magazine*, Winter 2009; S. Morrison, "Expedia to Spin Off TripAdvisor," *Wall Street Journal*, April 8, 2011. while Yelp has reportedly turned down acquisition offers valuing it at $700 million.[14]

The Web 2.0 moniker is a murky one because like so many popular technology terms there's not a precise definition. We'll add some precision to our discussion by focusing on social media efforts—technologies that support the creation of *user-generated content*, as well as content editing, commenting, curation, and sharing. Social media efforts include blogs, wikis, social networks, Twitter, and photo and video sharing sites. The rise of social media has also coincided with the rise of mobile computing—meaning the worldwide Internet conversation is always in your pocket. Mobile and social also work together to create entirely new services, like the location-based game / discovery engine / deals platform, Foursquare.

The **peer production** leveraged by collaborating users isn't only used to create social media; it can be used to create *services*, too, and these are also considered to be part of Web 2.0. Skype and BitTorrent leverage users' computers instead of a central IT resource to forward phone calls and video. This ability saves their sponsors the substantial cost of servers, storage, and bandwidth. Peer production is also leveraged to create much of the open source software that supports many of the Web 2.0 efforts described above. Techniques such as crowdsourcing, where initially undefined groups of users band together to solve problems, create code, and develop services, are also a type of peer production. These efforts often seek to leverage the so-called wisdom of crowds, the idea that a large, diverse group often has more collective insight than a single or small group of trained professionals.

Table 7.1 lists several examples typically considered to fall under the Web 2.0 classification (a term coined by publisher and pundit Tim O'Reilly), and each is offered alongside its first-generation Internet counterpart.[15]

peer production

When users collaboratively work to create content, products, and services. Includes social media sites, open source software, and peer-produced services, such as Skype and BitTorrent, where the participation of users provide the infrastructure and computational resources that enable the service.

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TABLE 7.1 Web 1.0 versus Web 2.0

Web 1.0		Web 2.0
domain name speculation	→	search engine optimization, fans, and followers
page views	→	cost per click
screen scraping	→	Web services
publishing	→	participation
content management systems	→	wikis
directories (taxonomy)	→	tagging ("folksonomy")
Britannica Online	→	Wikipedia
personal Web sites	→	blogging, status updates, and link sharing
Ofoto	→	Flickr, Facebook, and Twitter
instant messaging	→	Twitter and Facebook
Monster.com	→	LinkedIn
RealNetworks	→	YouTube
YellowPages.com	→	Yelp
Travelocity	→	TripAdvisor
Vonage	→	Skype

Millions of users, billions of dollars, huge social impact, and most of these efforts grew to influence millions in less time than it takes the average freshman to complete college. When technology moves that quickly, even some of the world's most preeminent thought leaders can be sideswiped.

Consider that when management guru Michael Porter wrote a piece titled "Strategy and the Internet" at the end of the dot-com bubble, he lamented the high cost of building brand online, questioned the power of network effects, and cast a skeptical eye on ad-supported revenue models. Well, it turns out Web 2.0 efforts challenged *all* of these concerns. Among the efforts above, all built brand on the cheap with little conventional advertising, and each owes their hypergrowth and high valuation to their ability to harness the network effect.

This chapter can be considered in two parts. The first explains many technologies behind the social media / peer production / Web 2.0 movement, and we provide several examples of their use and impact. The final part of this chapter describes how firms should organize to engage with and take advantage of social media—specifically detailing how to "Get SMART" (with a social media awareness and response team). After going through both sections you should have a solid overview of major social technologies, how businesses are leveraging them, and how firms can organize for effective use while avoiding pitfalls.

TABLE 7.2 Major Social Media Tools

	Description	Features	Technology Providers
Blogs	Short for "Web log"—an online publication that keeps a running chronology of entries. Readers can comment on posts. Can connect to other blogs through blog rolls or trackbacks. **Key uses:** Share ideas, obtain feedback, mobilize a community.	■ Immediate publication and distribution ■ Reverse chronology ■ Comment threads ■ Persistence ■ Searchability ■ Tags ■ Trackbacks	■ Blogger (Google) ■ WordPress ■ Tumblr ■ Posterous
Wikis	A Web site that anyone can edit directly from within the browser. **Key uses:** Collaborate on common tasks or to create a common knowledge base.	■ Collaborative content creation ■ All changes are attributed ■ Revision history, with the ability to roll back changes and revert to earlier versions ■ Automatic notification of updates ■ Searchability ■ Tags ■ Monitoring	■ Socialtext ■ PBWorks ■ Google Sites ■ Atlassian ■ Jive ■ Microsoft (SharePoint) ■ Apple OS X Server
Electronic Social Network	Online community that allows users to establish a personal profile, link to other profiles (i.e., friends), share content, and communicate with members via messaging, posts. Most personal relationships are reciprocal (i.e., both parties agree to be "friends"). **Key Uses:** Discover and reinforce affiliations; identify experts; message individuals or groups; virally share media.	■ Detailed personal profiles using multimedia ■ Affiliations with groups, organizations, and individuals ■ Messaging and public discussions ■ Media sharing ■ "Feeds" of recent activity among members	Open/Public ■ Facebook ■ LinkedIn Private Platforms ■ Ning ■ Lithium ■ SelectMinds ■ LiveWorld ■ IBM/Lotus Connections ■ Salesforce.com ■ Socialtext

	Description	Features	Technology Providers
Microblogging	Short, asynchronous messaging system. Users send messages to "followers" who aren't required to follow back. **Key Uses:** distribute time-sensitive information, share opinions, virally spread ideas, run contests and promotions, solicit feedback, provide customer support, track commentary on firms/products/issues, organize protests.	■ 140-character messages sent and received from mobile device ■ Ability to respond publicly or privately ■ Can specify tags to classify discussion topics for easy searching and building comment threads ■ Follower lists	Open/Public 　■ Twitter Private Platforms 　■ Socialtext Signals 　■ Yammer 　■ Salesforce.com (Chatter)

KEY TAKEAWAYS

- A new generation of Internet applications is enabling consumers to participate in creating content and services online. Examples include Web 2.0 efforts such as social networks, blogs, Twitter, and wikis, as well as efforts such as Skype and BitTorrent, which leverage the collective hardware of their user communities to provide a service.

- These efforts have grown rapidly, most with remarkably little investment in promotion. Nearly all of these new efforts leverage network effects to add value and establish their dominance and viral marketing to build awareness and attract users.

- Experts often argue whether Web 2.0 is something new or merely an extension of existing technologies, but it's more important to appreciate the magnitude of the impact of the current generation of services.

- Peer production and social media fall under the Web 2.0 umbrella. Social media refers to content that is peer produced and shared online. But peer production also includes services that are enabled when users collaborate (examples include Skype and BitTorrent).

- Many Web 2.0 services often leverage the wisdom of crowds to provide insight, products, or ideas that can be far more accurate or valuable than those provided by a smaller group of professionals.

- Network effects play a leading role in enabling Web 2.0 firms. Many of these services also rely on ad-supported revenue models and open source software.

QUESTIONS AND EXERCISES

1. What distinguishes Web 2.0 technologies and services from the prior generation of Internet sites?

2. Several examples of rapidly rising Web 2.0 efforts are listed in this section. Make your own list of Web 1.0 and Web 2.0 services and technologies. Would you invest in them? Why or why not? Are there cautionary tales of efforts that may not have lived up to their initial hype or promise? Why do you suppose they failed?

3. In what ways do Web 2.0 efforts challenge the assumptions that Michael Porter made regarding Strategy and the Internet?

4. Trends in computing platforms and Internet services change quickly. How have the firms profiled in the bullet points above fared? Has each increased in use, value, and impact or shrunk? Are there other efforts or updates that you think are worthy of making the list in the next edition of this book?

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2. BLOGS

L E A R N I N G   O B J E C T I V E S

1. **Know what blogs are and how corporations, executives, individuals, and the media use them.**
2. **Understand the benefits and risks of blogging.**
3. **Appreciate the growth in the number of blogs, their influence, and their capacity to generate revenue.**

Blogs

Online journal entries, usually made in a reverse chronological order. Blogs typically provide comment mechanisms where users can post feedback for authors and other readers.

long tail

In this context, refers to an extremely large selection of content or products. The long tail is a phenomenon whereby firms can make money by offering a near-limitless selection.

Trackbacks

Links in a blog post that refer eaders back to cited sources. Trackbacks allow a blogger to see which and how many other bloggers are referring to their content. A "trackback" field is supported by most blog software and while it's not required to enter a trackback when citing another post, it's considered good "netiquette" to do so.

blog rolls

A list of a blogger's favorite blogs. While not all blogs include blog rolls, those that do are often displayed on the right or left column of a blog's main page.

Blogs (short for Web logs) first emerged almost a decade ago as a medium for posting online diaries. (In a perhaps apocryphal story, *Wired* magazine claimed the term "Web log" was coined by Jorn Barger, a sometimes homeless, yet profoundly prolific, Internet poster.) From humble beginnings, the blogging phenomenon has grown to a point where the number of public blogs tracked by BlogPulse has surpassed 160 million.[16]   This is clearly a **long tail** phenomenon, loaded with niche content that remains "discoverable" through search engines and that is often shared via other types of social media like Facebook and Twitter. **Trackbacks** (citation links back to original blog post) and **blog rolls** (a list of a blogger's favorite sites—a sort of shout-out to blogging peers) also help distinguish and reinforce the reputation of widely read blogs.

Most blogs offer a two-way dialogue, allowing users to comment (a sort of "letters to the editor" section for each post). The running dialogue can read like an electronic bulletin board and can be an effective way to gather opinion, brainstorm, and vet ideas. Comments also help keep a blogger honest—a vigorous community of commenters will quickly expose a blogger's errors of fact or logic.

Blogging can have significant appeal for an organization looking to be heard. Corporations that blog can enjoy *immediate* and *unfiltered* distribution of their ideas, with no limits on page size, word count, or publication deadline. And they can gather immediate *feedback* from readers via comments. Corporate blogs can be published directly to the public, skipping what bloggers call the mainstream media (MSM) and presenting their words without a journalist filtering their comments or an editor cutting out key points they'd hoped to make. That appeal has attracted some of the most senior executives to blogging. Hotel chief Bill Marriott, Zappos' Tony Hsieh, Timberland's Jeff Swartz, and Forrester Research's George Colony are among those CEOs who use their blogs for purposes that include a combination of marketing, sharing ideas, gathering feedback, press response, image shaping, and reaching consumers directly.

Given the advantages of blogs over traditional broadcast and "dead tree" print publication, it's not surprising that most mainstream news outlets also supplement their content with blogs that offer greater depth, more detail, and deadline-free timeliness. But they've got competition, and many of the most popular blogs have transformed into robust media enterprises. The political/news blog *The Huffington Post* grew to be more popular than all but eight newspaper sites and was acquired in 2011 by AOL for $315 million, a valuation significantly higher than many publicly traded papers.[17] Keep in mind that this is a site that lacks much of the sports, local news, weather, and other content offered by the locals.

Ratings like this are hard to achieve—most bloggers can't make a living off their musings. But among the elite ranks, killer subscriber numbers are a magnet for advertisers. Top blogs operating on shoestring budgets can snare several hundred thousand dollars a month in ad revenue.[18] Most start with ad networks like Google AdSense, but the most elite engage advertisers directly for high-value deals and extended sponsorships.

Blogs

While the feature set of a particular blog depends on the underlying platform and the preferences of the blogger, several key features are common to most blogs:

- *Immediate and unfiltered publication*. The ability to reach the public without limits on publication size and without having posts filtered, edited, or cut by the mainstream media.
- *Ease of use*. Creating a new post usually involves clicking a single button.
- *Comment threads*. Readers can offer comments on posts.
- *Reverse chronology*. Posts are listed in reverse order of creation, making it easy to see the most recent content.
- *Persistence*. Posts are maintained indefinitely at locations accessible by permanent links.
- *Searchability*. Current and archived posts are easily searchable.

- *Tags*. Posts are often classified under an organized tagging scheme.
- *Trackbacks*. Allows an author to acknowledge the source of an item in their post, which allows bloggers to follow the popularity of their posts among other bloggers.

Despite this increased popularity, blogging has its downside. Blog comments can be a hothouse for spam and the disgruntled. Ham-handed corporate efforts (such as poor response to public criticism or bogus "praise posts") have been ridiculed. Employee blogging can be difficult to control and public postings can "live" forever in the bowels of an Internet search engine or as content pasted on other Web sites. Bloggers, beware—there are dozens of examples of workers who have been fired for what employers viewed as inappropriate posts. The voice of the blogosphere can also wield significant influence. While not all blogosphere commentary deserves a response, firms ignore social media at their own peril (see sidebar below)! Tips on how firms should organize for social media engagement, issues to consider when developing corporate social media policy, and examples of effective and poor social media use are covered in Section 9.

The Power of the Blogosphere

Organized bloggers have often banded together as a powerful voice for change, leading the charge, for example, for news anchor Dan Rather's resignation. Others have helped an otherwise silent market voice be heard, such as when bloggers prompted the design of new insulin pumps. While not all blogosphere commentary deserves a response, firms ignore social media at their own peril! For an example of this, consider the flare-up Ingersoll Rand faced when the blogging community exposed a design flaw in its Kryptonite bike lock. Online posts and a video demonstrated that the thick metal lock could be broken with a simple ball-point pen. When Ingersoll Rand failed to react, the blogosphere erupted with criticism. Just days after online reports appeared, the mainstream media picked up the story. The *New York Times* ran a piece titled "The Pen Is Mightier Than the Lock" that included a series of photos demonstrating the ball-point Kryptonite lock pick. The event tarnished the once-strong brand and eventually resulted in a loss of over $10 million.

Like any Web page, blogs can be public, tucked behind a corporate firewall, or password protected. Third-party blogging services include Google Blogger, WordPress, Tumblr, and Posterous, with most offering a combination of free and premium features. The most popular platform for organizations choosing to host their own blog server is the open source WordPress system. Firms often choose this option to gain more control over security and formatting.

In the end, the value of any particular blog derives from a combination of technical and social features. The technical features make it easy for a blogger and his or her community to reach out for an ongoing conversation on some topic of shared interest. But the social side means that unless a reader base discovers a blog and is engaged, an effort will have little impact.

K E Y   T A K E A W A Y S

- Blogs provide a rapid way to distribute ideas and information from one writer to many readers.
- Search engines, social media sharing, and trackbacks allow a blogger's community of readers to spread the word on interesting posts and help distinguish and reinforce the reputations of widely read blogs.
- The comments section in blogs can create a conversation to gather opinion, vet ideas, and brainstorm. Public commentary can also apply pressure to correct inaccuracies and keep a blogger honest.
- Well-known blogs can be powerfully influential, acting as flashpoints on public opinion.
- Firms ignore influential bloggers at their peril, but organizations should also be cautious about how they use and engage blogs and avoid flagrantly promotional or biased efforts.
- Top blogs have gained popularity, valuations, and profits that far exceed those of many leading traditional newspapers, and leading blogs have begun to attract well-known journalists away from print media.
- Senior executives from several industries use blogs for business purposes, including marketing, sharing ideas, gathering feedback, press response, image shaping, and reaching consumers directly without press filtering.

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QUESTIONS AND EXERCISES

1. Search online to find out which blogs are currently the most popular. Why do you suppose the leaders are so popular?
2. How are popular blogs discovered? How is their popularity reinforced?
3. Are blog comment fields useful? If so, to whom or how? What is the risk associated with allowing users to comment on blog posts? How should a blogger deal with comments that they don't agree with?
4. Why would a corporation, an executive, a news outlet, or a college student want to blog? What are the benefits? What are the concerns?
5. Identify firms and executives that are blogging online. Bring examples to class and be prepared to offer your critique of their efforts.
6. How do bloggers make money? Do all bloggers have to make money? Do you think the profit motive influences their content?
7. Investigate current U.S. Federal Trade Commission laws (or the laws in your home country) that govern bloggers and other social media use. How do these restrictions impact how firms interact with bloggers? What are the penalties and implications if such rules aren't followed? Are there unwritten rules of good practice that firms and bloggers should consider as well? What might those be?
8. Investigate blogs online and share your list of favorites with your professor. Why do you like the blogs on your list? Are there blogs that are particularly useful for students of this course? Which ones?
9. What advantage do blogs have over the MSM? What advantage does the MSM have over the most popular blogs?
10. Start a blog using Tumblr, Blogger.com, WordPress.com, or some other blogging service. Post a comment to another blog. Look for the trackback field when making a post—if it's available, be sure to enter the trackback for any content you cite in your blog.

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3. WIKIS

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LEARNING OBJECTIVES

1. **Know what wikis are and how they are used by corporations and the public at large.**
2. **Understand the technical and social features that drive effective and useful wikis.**
3. **Suggest opportunities where wikis would be useful and consider under what circumstances their use may present risks.**
4. **Recognize how social media such as wikis and blogs can influence a firm's customers and brand.**

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wiki

A Web site that can be modified by anyone, from directly within a Web browser (provided that user is granted edit access).

A **wiki** is a Web site anyone can edit directly within a Web browser (provided the site grants the user edit access). Wikis derive their name from the Hawaiian word for "quick." Ward Cunningham, the "wiki father" christened this new class of software with the moniker in honor of the wiki-wiki shuttle bus at the Honolulu airport. Wikis can be one of the speediest ways to collaboratively create content online.

Many popular online wikis serve as a shared knowledge repository in some domain. The largest and most popular wiki is Wikipedia, but there are hundreds of publicly accessible wikis that anyone can participate in, with examples ranging from Wine Wiki for oenophiles to Wookieepedia, the Star Wars wiki. Wikis can also be used for any collaborative effort—from meeting planning to project management. And in addition to the hundreds of public wikis, there are many thousand more that are hidden away behind firewalls, used as proprietary internal tools for organizational collaboration. Many wikis also serve as knowledge management systems that act as a sort of collective corporate memory that's vital for sharing skills, learning, and preserving expertise even when employees leave the firm.

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Want to add to or edit a wiki entry? On most sites you just click the "Edit" link. Wikis support **what you see is what you get (WYSIWYG)** editing that, while not as robust as traditional word processors, is still easy enough for most users to grasp without training or knowledge of arcane code or markup language. Users can make changes to existing content and can easily create new pages or articles and link them to other pages in the wiki. Wikis also provide a version history. Click the "History" link on Wikipedia, for example, and you can see when edits were made and by whom. This feature allows the community to **roll back** a wiki to a prior page, in the event that someone accidentally deletes key info, or intentionally defaces a page.

Wikis are available both as software (commercial as well as open source varieties) that firms can install on their own computers and as hosted online services (subscription or ad-supported) where software and content are housed by third parties that run the technology for wiki users. Since wikis can be started without the oversight or involvement of a firm's IT department, their appearance in organizations often comes from grassroots user initiative.

Wikis

As with blogs, a wiki's features set varies depending on the specific wiki tool chosen, as well as administrator design, but most wikis support the following key features:

- All changes are *attributed*, so others can see who made a given edit.
- A complete *revision history* is maintained so changes can be compared against prior versions and rolled back as needed.
- There is automatic *notification* and *monitoring* of updates; users subscribe to wiki content and can receive updates via e-mail or RSS feed when pages have been changed or new content has been added.
- All the pages in a wiki are *searchable*.
- Specific wiki pages can be classified under an organized *tagging* scheme.

Jump-starting a wiki can be a challenge, and an underused wiki can be a ghost town of orphan, out-of-date, and inaccurate content. Fortunately, once users see the value of wikis, use and effectiveness often snowballs. The unstructured nature of wikis are also both a strength and weakness. Some organizations employ **wikimasters** to "garden" community content: "prune" excessive posts, "transplant" commentary to the best location, and "weed" as necessary. Wikipatterns.com offers a guide to the stages of wiki adoption and a collection of community-building and content-building strategies.

The larger and more active a wiki community, the more likely it is that content will be up to date and that errors or vandalism will be quickly corrected (again, we see the influence of network effects, where products and services with larger user bases become more valuable). At Wikipedia, for example, **griefers** and partisans regularly alter pages (in one noteworthy stretch, the page of former U.S. President Jimmy Carter was regularly replaced with a photo of a "scruffy, random unshaven man with his left index finger shoved firmly up his nose.")[19] But the Wikipedia community is so large and attentive that such changes are often recognized in seconds and rolled back, and mischief makers soon give up and move on. Several studies have shown that large community wiki entries are as or more accurate than professional publication counterparts.[20]

Examples of Wiki-Wise Organizations

Wikis can be vital tools for collecting and leveraging knowledge that would otherwise be scattered throughout an organization; reducing geographic distance; removing boundaries between functional areas; and flattening preexisting hierarchies. Companies have used wikis in a number of ways:

- At Pixar, wikis go after that great corporate productivity killer—the poorly planned meeting. All Pixar product meetings have an associated wiki. An online agenda ensures that all attendees arrive knowing the topics and issues to be covered. Anyone attending the meeting (and even those who can't make it) can update the agenda, post supporting materials, and make comments, helping ensure everyone has access to materials for preparation and can arrive with clear expectations and goals to focus on.
- At European investment bank Dresdner Kleinwort Wasserstein, employees use wikis for everything from setting meeting agendas to building multimedia training for new hires. Six months after launch, wiki use had surpassed activity on the firm's established intranet. Wikis are also credited with helping to reduce Dresdner e-mail traffic by 75 percent.[21]

- Sony's PlayStation team uses wikis to regularly maintain one-page overviews on the status of various projects. In this way, legal, marketing, and finance staff can get quick, up-to-date status reports on relevant projects, including the latest projected deadlines, action items, and benchmark progress. Strong security measures are enforced that limit access to only those who must be in the know, since the overviews often discuss products that have not been released.

- Employees at investment-advisory firm Manning and Napier use a wiki to collaboratively track news in areas of critical interest. Providing central repositories for employees to share articles and update evolving summaries on topics such as health care legislation, enables the firm to collect and focus what would otherwise be fragmented findings and insight. Now all employees can refer to central pages that each serve as a lightning rod attracting the latest and most relevant findings.

- Intellipedia is a secure wiki built on Intelink, a U.S. government system connecting sixteen spy agencies, military organizations, and the Department of State. The wiki is a "magnum opus of espionage," handling some one hundred thousand user accounts and five thousand page edits a day. Access is classified in tiers as "unclassified," "secret," and "top secret" (the latter hosting hundreds of thousands of pages and tens of thousands of user accounts). A page on the Mumbai terror attacks was up within minutes of the event, while a set of field instructions relating to the use of chlorine-based terror bombs in Iraq was posted and refined within two days of material identification—with the document edited by twenty-three users at eighteen locations.[22]

When brought outside the firewall, corporate wikis can also be a sort of value-generation greenhouse, allowing organizations to leverage input from their customers and partners:

- Intuit has created a "community wiki" that encourages the sharing of experience and knowledge not just regarding Intuit products, such as QuickBooks, but also across broader topics its customers may be interested in, such as industry-specific issues (e.g., architecture, nonprofit) or small business tips (e.g., hiring and training employees). The TurboTax maker has also sponsored TaxAlmanac.org, a wiki-based tax resource and research community.

- Microsoft leveraged its customer base to supplement documentation for its Visual Studio software development tool. The firm was able to enter the Brazilian market with Visual Studio in part because users had created product documentation in Portuguese.[23]

neutral point of view (NPOV)

An editorial style that is free of bias and opinion. Wikipedia norms dictate that all articles must be written in NPOV.

Don't Underestimate the Power of Wikipedia

Not only is the nonprofit Wikipedia, with its enthusiastic army of unpaid experts and editors, replacing the three-hundred-year reference reign of *Encyclopedia Britannica*, Wikipedia entries can impact nearly all large-sized organizations. Wikipedia is the go-to, first-choice reference site for a generation of "netizens," and Wikipedia entries are invariably one of the top links, often the first link, to appear in Internet search results.

This position means that anyone from top executives to political candidates to any firm large enough to warrant an entry has to contend with the very public record of Wikipedia. In the same way that firms monitor their online reputations in blog posts and Twitter tweets, they've also got to keep an eye on wikis.

But firms that overreach and try to influence an entry outside of Wikipedia's mandated **neutral point of view (NPOV)**, risk a backlash and public exposure. Version tracking means the wiki sees all. Users on computers at right-leaning Fox News were embarrassingly caught editing the wiki page of the lefty pundit and politician Al Franken (a nemesis of Fox's Bill O'Reilly);[24] Sony staffers were flagged as editing the entry for the Xbox game Halo 3;[25] and none other than Wikipedia founder Jimmy Wales was criticized for editing his own Wikipedia biography[26] —acts that some consider bad online form at best, and dishonest at worst.

One last point on using Wikipedia for research. Remember that according to its own stated policies, Wikipedia isn't an original information source; rather, it's a clearinghouse for verified information. So citing Wikipedia as a reference usually isn't considered good form. Instead, seek out original (and verifiable) sources, such as those presented via the links at the bottom of Wikipedia entries.

KEY TAKEAWAYS

- Wikis can be powerful tools for many-to-many content collaboration, and can be ideal for creating resources that benefit from the input of many such as encyclopedia entries, meeting agendas, and project status documents.
- The greater the number of wiki users, the more likely the information contained in the wiki will be accurate and grow in value.
- Wikis can be public or private.
- The availability of free or low-cost wiki tools can create a knowledge clearinghouse on topics, firms, products, and even individuals. Organizations can seek to harness the collective intelligence (wisdom of crowds) of online communities. The openness of wikis also acts as a mechanism for promoting organizational transparency and accountability.

QUESTIONS AND EXERCISES

1. Visit a wiki, either an established site like Wikipedia, or a wiki service like Socialtext. Make an edit to a wiki entry or use a wiki service to create a new wiki for your own use (e.g., for a class team to use in managing a group project). Be prepared to share your experience with the class.
2. What factors determine the value of a wiki? Which key concept, first introduced in Chapter 2, drives a wiki's success?
3. If anyone can edit a wiki, why aren't more sites crippled by vandalism or by inaccurate or inappropriate content? Are there technical reasons not to be concerned? Are there "social" reasons that can alleviate concern?
4. Give examples of corporate wiki use, as well as examples where firms used wikis to engage their customers or partners. What is the potential payoff of these efforts? Are there risks associated with these efforts?
5. Do you feel that you can trust content in wikis? Do you feel this content is more or less reliable than content in print encyclopedias? Than the content in newspaper articles? Why?
6. Have you ever run across an error in a wiki entry? Describe the situation.
7. Is it ethical for a firm or individual to edit their own Wikipedia entry? Under what circumstances would editing a Wikipedia entry seem unethical to you? Why? What are the risks a firm or individual is exposed to when making edits to public wiki entries? How do you suppose individuals and organizations are identified when making wiki edits?
8. Would you cite Wikipedia as a reference when writing a paper? Why or why not?

4. SOCIAL NETWORKS

LEARNING OBJECTIVES

1. **Know what social networks are, be able to list key features, and understand how they are used by individuals, groups, and corporations.**
2. **Understand the difference between major social networks MySpace, Facebook, and LinkedIn.**
3. **Recognize the benefits and risks of using social networks.**
4. **Be aware of trends that may influence the evolution of social networks.**

Social networks have garnered increasing attention as established networks grow and innovate, new networks emerge, and value is demonstrated. The two most dominant public social networks are Facebook and LinkedIn, sites often described as the personal and professional networks, respectively. But there are also a host of third-party networks where firms can "roll their own" private networks. Such services include Ning, Lithium, and SelectMinds.

Social networks allow you to set up a profile, share content, comment on what others have shared, and follow the updates of particular users, groups, firms, and brands that may also be part of those networks. Many also are platforms for the deployment of third-party applications (not surprisingly, social games dominate).

Hundreds of firms have established pages on Facebook and communities on LinkedIn, and these are now legitimate customer- and client-engagement platforms. If a customer has decided to press the

social network

An online community that allows users to establish a personal profile and communicate with others. Large public social networks include MySpace, Facebook, LinkedIn, and Google's Orkut.

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"like" button of a firm's Facebook page, corporate posts can appear in their news feed, gaining more user attention than the often-ignored ads that run on the sides of social networks. These posts, and much of the other activity that takes place on social networks, spread via feed (or news feed). Pioneered by Facebook but now adopted by most services, feeds provide a timely list of the activities of and public messages from people, groups, and organizations that an individual has an association with.

viral

In this context, information or applications that spread rapidly between users.

Feeds are inherently **viral**. By seeing what others are doing on a social network, and by leveraging the power of others to act as word-of-mouth evangelists, feeds can rapidly mobilize populations, prompt activism, and offer low-cost promotion and awareness of a firm's efforts. Many firms now see a Facebook presence and social engagement strategy as vital. Facebook's massive size and the viral power of spreading the word through feeds, plus the opportunity to invite commentary and engage consumers in a dialogue, rather than a continual barrage of promotion, is changing the way that firms and customers interact (indeed, you'll hear many successful social media professionals declare that social media is more about conversations with customers than about advertising-style promotion).

Feeds are also controversial. Many users have reacted negatively to a public broadcast of their online activity, and feed mismanagement can create accusation of spamming, public relations snafus, and user discontent and can potentially open up a site to legal action. Facebook initially dealt with a massive user outcry at the launch of feeds, and the site also faced a subsequent backlash when its Beacon service broadcast user purchases without first explicitly asking their permission and during attempts to rework its privacy policy and make Facebook data more public and accessible. (See Chapter 8 for more details.)

Social Networks

The foundation of a social network is the user profile, but utility goes beyond the sort of listing found in a corporate information directory. Typical features of a social network include support for the following:

- Detailed *personal profiles*
- Affiliations with *groups* (e.g., alumni, employers, hobbies, fans, health conditions, causes); with *individuals* (e.g., specific "friends"); and with *products*, *firms*, and other *organizations*
- Private *messaging* and public *discussions*
- Media *sharing* (text, photos, video)
- Discovery-fueling feeds of recent activity among members (e.g., status changes, new postings, photos, applications installed)
- The ability to install and use third-party applications tailored to the service (games, media viewers, survey tools, etc.), many of which are also social and allow others to interact

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While a Facebook presence has become a must-have for firms (see Chapter 8), LinkedIn has become a vital tool for many businesses and professionals. LinkedIn boasted a nearly $9 billion valuation after its spring 2011 IPO (some say that price is a sign of a tech bubble and is far too high for a firm with less than $16 million in profits the previous year).[27] Regardless of the valuation, the site's growth has been spectacular, and its influence is threatening recruiting sites like Monster.com and CareerBuilder.[28]

LinkedIn was conceived from the start as a social network for business users. On LinkedIn, members post profiles and contact information, list their work history, and can be "endorsed" by others on the network. It's sort of like having your résumé and letters of recommendation in a single location. Users can pose questions to members of their network, engage in group discussions, and ask for introductions through mutual contacts. The site has also introduced a variety of additional services, including messaging, information sharing, and news and content curation—yes, LinkedIn will help you find stuff you're likely to be most interested in (wasn't that Google's job?). The firm makes money from online ads, premium subscriptions, and hiring tools for recruiters.

Active members find the site invaluable for maintaining professional contacts, seeking peer advice, networking, and even recruiting. Starbucks manager of enterprise staffing has stated that LinkedIn is "one of the best things for finding midlevel executives."[29] Such networks are also putting increasing pressure on firms to work particularly hard to retain top talent. While once HR managers fiercely guarded employee directories for fear that a list of talent may fall into the hands of rivals, today's social networks make it easy for anyone to gain a list of a firm's staff, complete with contact information and a private messaging channel.

4.1 Corporate Use of Social Networks

Social networks have also become organizational productivity tools. Employees have organized thousands of groups using publicly available social networking sites because similar tools are not offered by

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their firms.[30] Assuming a large fraction of these groups are focused on internal projects, this demonstrates a clear pent-up demand for corporate-centric social networks (and creates issues as work dialogue moves outside firm-supported services).

Many firms are choosing to meet this demand by implementing internal social network platforms that are secure and tailored to firm needs. At the most basic level, these networks have supplanted the traditional employee directory. Social network listings are easy to update and expand, and employees are encouraged to add their own photos, interests, and expertise to create a living digital identity.

Firms such as Deloitte, Dow Chemical, and Goldman Sachs have created social networks for "alumni" who have left the firm or retired. These networks can be useful in maintaining contacts for future business leads, rehiring former employees (20 percent of Deloitte's experienced hires are so-called *boomerangs*, or returning employees), or recruiting retired staff to serve as contractors when labor is tight.[31] Maintaining such networks will be critical in industries like IT and health care that are likely to be plagued by worker shortages for years to come.

Social networking can also be important for organizations like IBM, where some 42 percent of employees regularly work from home or client locations. IBM's social network makes it easier to locate employee expertise within the firm, organize virtual work groups, and communicate across large distances.[32] As a dialogue catalyst, a social network transforms the public directory into a font of knowledge sharing that promotes organization flattening and value-adding expertise sharing.

While IBM has developed their own social network platforms, firms are increasingly turning to third-party vendors like SelectMinds (adopted by Deloitte, Dow Chemical, and Goldman Sachs) and LiveWorld (adopted by Intuit, eBay, the NBA, and Scientific American). Ning allows anyone to create a social network and currently hosts over 2.3 million separate online communities.[33] However, with robust corporate tools now offered by LinkedIn, we might see proprietary, in-house efforts start to migrate there over time.

A Little Too Public?

As with any type of social media, content flows in social networks are difficult to control. Embarrassing disclosures can emerge from public systems or insecure internal networks. Employees embracing a culture of digital sharing may err and release confidential or proprietary information. Networks could serve as a focal point for the disgruntled (imagine the activity on a corporate social network after a painful layoff). Publicly declared affiliations, political or religious views, excessive contact, declined participation, and other factors might lead to awkward or strained employee relationships. Users may not want to add a coworker as a friend on a public network if it means they'll expose their activities, lives, persona, photos, sense of humor, and friends as they exist outside of work. And many firms fear wasted time as employees surf the musings and photos of their peers.

All are advised to be cautious in their social media sharing. Employers are trawling the Internet, mining Facebook, and scouring YouTube for any tip-off that a would-be hire should be passed over. A word to the wise: those Facebook party pics, YouTube videos of open mic performances, or blog postings from a particularly militant period might not age well and may haunt you forever in a Google search. Think twice before clicking the upload button! As *Socialnomics* author Erik Qualman puts it, "What happens in Vegas stays on YouTube (and Flickr, Twitter, Facebook…)."

Firms have also created their own online communities to foster brainstorming and customer engagement. Dell's IdeaStorm.com forum collects user feedback and is credited with prompting line offerings, such as the firm's introduction of a Linux-based laptop.[34] At MyStarbucksIdea.com, the coffee giant has leveraged user input to launch a series of innovations ranging from splash sticks that prevent spills in to-go cups, to new menu items. Both IdeaStorm and MyStarbucksIdea run on a platform offered by Salesforce.com that not only hosts these sites but also provides integration into Facebook and other services. Starbucks (the corporate brand with the most Facebook "fans") has extensively leveraged the site, using Facebook as a linchpin in the "Free Pastry Day" promotion (credited with generating one million in-store visits in a single day) and promotion of the firm's AIDS-related (Starbucks) RED campaign, which garnered an astonishing three hundred ninety million "viral impressions" through feeds, wall posts, and other messaging.[35]

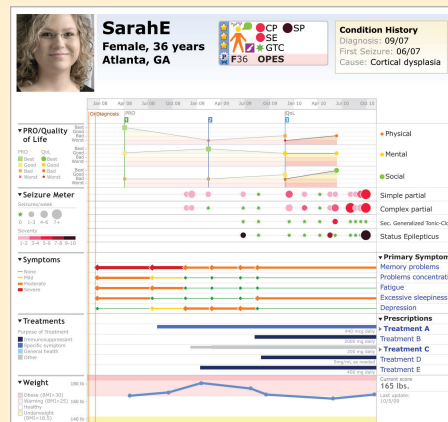### Social Networks and Health Care

Dr. Daniel Palestrant often shows a gruesome slide that provides a powerful anecdote for Sermo, the social network for physicians that he cofounded and where he serves as CEO. The image is of an eight-inch saw blade poking through both sides of the bloodied thumb of a construction worker who'd recently arrived in a hospital emergency room. A photo of the incident was posted to Sermo, along with an inquiry on how to remove the blade without damaging tissue or risking a severed nerve. Within minutes replies started coming

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back. While many replies advised to get a hand surgeon, one novel approach suggested cutting a straw lengthwise, inserting it under the teeth of the blade, and sliding the protected blade out while minimizing further tissue tears.[36] The example illustrates how doctors using tools like Sermo can tap into the wisdom of crowds to save thumbs and a whole lot more.

Sermo is a godsend to remote physicians looking to gain peer opinion on confounding cases or other medical questions. The American Medical Association endorsed the site early on (although they failed to renew during a raucous debate on health care reform),[37] and the *Nature* scientific journals experimented with a "Discuss on Sermo" button alongside the online versions of their medical articles. Doctors are screened and verified to maintain the integrity of participants. Members leverage the site both to share information with each other and to engage in learning opportunities provided by pharmaceutical companies and other firms. Institutional investors also pay for special access to poll Sermo doctors on key questions, such as opinions on pending FDA drug approval. Sermo posts can send valuable warning signals on issues such as disease outbreaks or unseen drug side effects. And doctors have also used the service to rally against insurance company policy changes.

These are some of the rich health monitoring and sharing tools available on PatientsLikeMe. Note that treatments, symptoms, and quality-of-life measures can be tracked over time.

Source: PatientsLikeMe, 2011.

While Sermo focuses on the provider side of the health care equation, a short walk from the firm's Cambridge, Massachusetts, headquarters will bring one to PatientsLikeMe (PLM), a social network empowering chronically ill patients across a wide variety of disease states. The firm's "openness policy" is in contrast to privacy rules posted on many sites and encourages patients to publicly track and post conditions, treatments, and symptom variation over time, using the site's sophisticated graphing and charting tools. The goal is to help others improve the quality of their own care by harnessing the wisdom of crowds.

Todd Small, a multiple sclerosis sufferer, used the member charts and data on PLM to discover that his physician had been undermedicating him. After sharing site data with his doctor, his physician verified the problem and upped the dose. Small reports that the finding changed his life, helping him walk better than he had in a decade and a half and eliminating a feeling that he described as being trapped in "quicksand."[38] In another example of PLM's people power, the site ran its own clinical trial—like experiment to rapidly investigate promising claims that the drug Lithium could improve conditions for ALS (amyotrophic lateral sclerosis) patients. While community efforts did not support these initial claims, a decision was arrived at in months, whereas previous efforts to marshal researchers and resources to focus on the relatively rare disease would have taken many years, even if funding could be found.[39]

Both Sermo and PatientsLikeMe are start-ups that are still exploring the best way to fund their efforts for growth and impact. Regardless of where these firms end up, it should be clear from these examples that social media will remain a powerful force on the health care landscape.

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KEY TAKEAWAYS

- Electronic social networks help individuals maintain contacts, discover and engage people with common interests, share updates, and organize as groups.
- Modern social networks are major messaging services, supporting private one-to-one notes, public postings, and broadcast updates or "feeds."
- Social networks also raise some of the strongest privacy concerns, as status updates, past messages, photos, and other content linger, even as a user's online behavior and network of contacts changes.
- Network effects and cultural differences result in one social network being favored over others in a particular culture or region.
- Information spreads virally via news feeds. Feeds can rapidly mobilize populations, and dramatically spread the adoption of applications. The flow of content in social networks is also difficult to control and sometimes results in embarrassing public disclosures.
- Feeds have a downside and there have been instances where feed mismanagement has caused user discontent, public relations problems, and the possibility of legal action.
- The use of public social networks within private organizations is growing, and many organizations are implementing their own, private, social networks.
- Firms are also setting up social networks for customer engagement and mining these sites for customer ideas, innovation, and feedback.

QUESTIONS AND EXERCISES

1. Visit the major social networks (MySpace, Facebook, LinkedIn). What distinguishes one from the other? Are you a member of any of these services? Why or why not?
2. How are organizations like Deloitte, Goldman Sachs, and IBM using social networks? What advantages do they gain from these systems?
3. What factors might cause an individual, employee, or firm to be cautious in their use of social networks?
4. How do you feel about the feed feature common in social networks like Facebook? What risks does a firm expose itself to if it leverages feeds? How might a firm mitigate these kinds of risks?
5. What sorts of restrictions or guidelines should firms place on the use of social networks or the other Web 2.0 tools discussed in this chapter? Are these tools a threat to security? Can they tarnish a firm's reputation? Can they enhance a firm's reputation? How so?
6. Why do information and applications spread so quickly within networks like Facebook? What feature enables this? What key promotional concept (described in Chapter 2) does this feature foster?
7. Why are some social networks more popular in some nations than others?
8. Investigate social networks on your own. Look for examples of their use for fostering political and social movements; for their use in health care, among doctors, patients, and physicians; and for their use among other professional groups or enthusiasts. Identify how these networks might be used effectively, and also look for any potential risks or downside. How are these efforts supported? Is there a clear revenue model, and do you find these methods appropriate or potentially controversial? Be prepared to share your findings with your class.

5. TWITTER AND THE RISE OF MICROBLOGGING

LEARNING OBJECTIVES

1. **Appreciate the rapid rise of Twitter—its scale, scope, and broad appeal.**
2. **Understand how Twitter is being used by individuals, organizations, and political movements.**
3. **Contrast Twitter and microblogging with Facebook, conventional blogs, and other Web 2.0 efforts.**
4. **Consider the commercial viability of the effort, its competitive environment, and concerns regarding limited revenue.**

Spawned in 2006 as a side project at the now-failed podcasting start-up Odeo (an effort backed by Blogger.com founder Evan Williams), Twitter has been on a rocket ride. The site's user numbers have blasted past both mainstream and new media sites, dwarfing the *New York Times* and LinkedIn, among

others. Reports surfaced of rebuffed buyout offers as high as $500 million.[40] By its fifth birthday the firm's 500 employees were supporting a global phenomenon embraced by over two hundred million users worldwide,[41] including some 13 percent of U.S. adults.[42] In fact, by 2011 Twitter's reach was so broad that the stealth raid that led to the killing of Osama Bin Laden was inadvertently live-tweeted by an IT-savvy neighbor, commenting on the ruckus in the neighborhood.

FIGURE 7.2   Bin Laden's Neighbor Accidentally Tweets the U.S. Raid

Tweets (topmost is most recent) by Abbottabad, Pakistan—based IT consultant Sohaib Athar (Twitter handle @ReallyVirtal), who had no idea (1) that Osama Bin Laden was his neighbor and (2) that his tweets about the neighborhood disturbance were actually a live account of a U.S. raid.[43]

Twitter is a **microblogging** service that allows users to post 140-character messages (**tweets**) via the Web, **SMS**, or a variety of third-party desktop and smartphone applications. The microblog moniker is a bit of a misnomer. The service actually has more in common with Facebook's status updates and news feeds than it does with traditional blogs. But unlike Facebook, where most users must approve "friends" before they can see status updates, Twitter's default setting allows for asymmetrical following (although it is possible to set up private Twitter accounts and to block followers).

Sure, there's a lot of inane "tweeting" going on—lots of meaningless updates that read, "I'm having a sandwich" or "in line at the airport." But while not every user may have something worthwhile to tweet, many find that Twitter makes for invaluable reading, offering a sense of what friends, customers, thought leaders, and newsmakers are thinking. Twitter leadership has described the service as communicating "The Pulse of the Planet."[44] For many, Twitter is a discovery engine, a taste-making machine, a critical source of market intelligence, a source of breaking news, and an instantaneous way to plug into the moment's zeitgeist.

Many also find Twitter to be an effective tool for quickly blasting queries to friends, colleagues, or strangers who might offer potentially valuable input. Says futurist Paul Saffo, "Instead of creating the group you want, you send it and the group self-assembles."[45] Users can classify comments on a given topic using **hash tags** (keywords preceded by the "#" or "hash" symbol), allowing others to quickly find related tweets (e.g., #iranelection, #mumbai, #swineflu, #sxsw). Any user can create a hash tag—just type it into your tweet (you may want to search Twitter first to make sure that the tag is not in use by an unrelated topic and that if it is in use, it appropriately describes how you want your tweet classified).

Twitter users have broken news during disasters, terror attacks, and other major events. Dictators fear the people power Twitter enables, and totalitarian governments worldwide have moved to block citizen access to the service (prompting Twitter to work on censor-evading technology). During the 2009 Iranian election protests, the U.S. State Department even asked Twitter to postpone maintenance to ensure the service would continue to be available to support the voice and activism of Iran's democracy advocates.[46]

microblogging

A type of short-message blogging, often made via mobile device. Microblogs are designed to provide rapid notification to their readership (e.g., a news flash, an update on one's activities), rather than detailed or in-depth comments. Twitter is the most popular microblogging service.

tweet

A Twitter post, limited to 140 characters.

SMS

A text messaging standard used by many mobile phones.

hash tags

A method for organizing tweets where keywords are preceeded by the # character.

Twitter is also emerging as a legitimate business tool. Consider the following commercial examples:

- Starbucks uses Twitter in a variety of ways. It has run Twitter-based contests and used the service to spread free samples of new products, such as its VIA instant coffee line. Twitter has also been a way for the company to engage customers in its cause-based marketing efforts, such as (Starbucks) RED, which supports (Product) RED. Starbucks has even recruited staff via Twitter and was one of the first firms to participate in Twitter's advertising model featuring "promoted tweets."

- Dell used Twitter to uncover an early warning sign indicating poor design of the keyboard on one of its portable computers. After a series of tweets from early adopters indicated that the apostrophe and return keys were positioned too closely together, the firm dispatched design change orders quickly enough to correct the problem when the next version of the product was launched just three months later. Dell also claims to have netted millions in outlet store sales referred via the Twitter account @DellOutlet (more than 1.5 million followers).[47]

- Brooklyn Museum patrons can pay an additional $20 a year for access to the private, members-only "1stFans" Twitter feed that shares information on special events and exclusive access to artist content.

- Twitter is credited with having raised millions via Text-to-Donate and other fundraising as part of global disaster relief.

- Twitter can be a boon for sharing time-sensitive information. The True Massage and Wellness Spa in San Francisco tweets last-minute cancellations to tell customers of an unexpected schedule opening. With Twitter, appointments remain booked solid. Gourmet food trucks, popular in many American cities, are also using Twitter to share location and create hipster buzz. Los Angeles's Kogi Korean Taco Truck now has over eighty-five thousand followers and uses Twitter to reveal where it's parked, ensuring long lines of BBQ-craving foodies. Of the firm's success, owner Roy Choi says, "I have to give all the credit to Twitter."[48]

- Electronics retailer Best Buy has recruited over 2,300 Blue Shirt and Geek Squad staffers to crowdsource Twitter-driven inquiries via @Twelpforce, the firm's customer service Twitter account. Best Buy staffers register their personal Twitter accounts on a separate Best Buy—run site. Then any registered employees tweeting using the #twelpforce, will automatically have those posts echoed through @Twelpforce, with the employee's account credited at the end of the tweet. As of November 2009, Twelpforce had provided answers to over 19,500 customer inquiries.[49]

FIGURE 7.3   A Sampling of Tweets Filtered through Best Buy's @Twelpforce Twitter Account

Surgeons and residents at Henry Ford Hospital have even tweeted during brain surgery (the teaching hospital sees the service as an educational tool). Some tweets are from those so young they've got "negative age." Twitter.com/kickbee is an experimental fetal monitor band that sends tweets when motion is detected: "I kicked Mommy at 08:52." And savvy hackers are embedding "tweeting" sensors into

all sorts of devices. Botanicalls, for example, offers an electronic flowerpot stick that detects when plants need care and sends Twitter status updates to owners (sample post: "URGENT! Water me!").

Organizations are well advised to monitor Twitter activity related to the firm, as it can act as a sort of canary-in-a-coal mine uncovering emerging events. Users are increasingly using the service as a way to form flash protest crowds. Amazon.com, for example, was caught off guard over a holiday weekend when thousands used Twitter to rapidly protest the firm's reclassification of gay and lesbian books (hash tag #amazonfail). Others use the platform for shame and ridicule. BP has endured withering ridicule from the satire account @BPGlobalPR (followed by roughly 200,000 people two months after the spill).

For all the excitement, many wonder if Twitter is overhyped. Some reports suggest that many Twitter users are curious experimenters who drop the service shortly after signing up.[50] This raises the question of whether Twitter is a durable phenomenon or just a fad.

Pundits also wonder if revenues will ever justify its initially high valuation (by 2009 the firm was said to have been worth $1 billion; by 2011 shares trading on private secondary markets suggested a $10 billion valuation).[51] Others wonder if rivals could usurp Twitter's efforts with similar features. Thus far, Twitter has been following a "grow-first-harvest-later" approach.[52] The site's rapid rise has allowed it to attract enough start-up capital to enable it to approach revenue gradually and with caution, in the hopes that it won't alienate users with too much advertising (an approach not unlike Google's efforts to nurture YouTube). MIT's *Technology Review* reports that data sharing deals with Google and Bing may have brought in enough money to make the service profitable in 2009, but that amount was modest (just $25 million).[53] Twitter's advertising platform is expected to be far more lucrative, but the firm has thus far struggled to find the right model. Reflecting Twitter's "deliberately cautious" approach to revenue development, the ad model featuring sponsored "promoted tweets" rolled out first as part of the search, with distribution to individual Twitter feeds progressing as the firm experiments and learns what works best for users and advertisers.

Another issue—as the service grew, many Twitter users rarely visited the firm's Web site. Instead, most active users would post and read tweets using one of many—often free—applications provided by third parties, such as Seesmic, TweetDeck, and Twhirl. This happened because Twitter made its data available for free to other developers via **API (application programming interface)**. Exposing data can be a good move as it spawned an ecosystem of over one hundred thousand complementary third-party products and services that enhance Twitter's reach and usefulness (generating *network effects* from complementary offerings similar to other "platforms" like Windows, iPhone, and Facebook). But there are potential downsides to such openness. If users don't visit Twitter.com, that makes it difficult to count users, serve profiling technologies such as tracking cookies (see Chapter 14), collect additional data on service use, and make money by serving ads or offering promotions on the Web site. All this creates what is known as the "**free rider problem**," where others benefit from a service while offering no value in exchange. Encouraging software and service partners to accept ads for a percentage of the cut could lessen the free rider problem.[54]

When users don't visit a service, it makes it difficult to spread awareness of new products and features. It can also create branding challenges and customer frustration. Twitter execs lamented that customers were often confused when they searched for "Twitter" in the iPhone App Store and were presented with scores of offerings but none from Twitter itself.[55] Twitter's purchase of the iPhone app Tweetie (subsequently turned into the free "Twitter for iPhone" app), its acquisition of TweetDeck, and the launch of its own URL-shortening service (limiting opportunities for bit.ly and others) signal that Twitter is willing to move into product and service niches and compete with third parties that are reliant on the Twitter ecosystem.

Twitter also got a boost when Apple deeply embedded Twitter into iOS 5. Users of the more than two hundred million Apple mobile devices gain a new one-button option to tweet photos, Web links, videos, map locations, and more. And the iOS will make Twitter easy to embed in other apps, too. Users can link a Twitter account used on their iOS devices to other apps, which means no need to log in or manually add an account each time you add an app that you'll want to tweet from. While not directly tied to Twitter revenue, these features have the potential to encourage Twitter adoption and decrease friction for embedding a tweet button into even more applications, offering a key alliance that broadens Twitter's distribution and utility and making it even harder for rivals to displace.

Microblogging does appear to be here to stay, and the impact of Twitter has been deep, broad, stunningly swift, and at times humbling in the power that it wields. But whether Twitter will be a durable, profit-gushing powerhouse remains to be seen. Speculation on Twitter's future hasn't prevented many firms from commercializing new microblogging services, and a host of companies have targeted these tools for internal corporate use. Salesforce.com's Chatter, Socialtext Signals, and Yammer are all services that have been billed as "Twitter for the Enterprise." Such efforts allow for Twitter-style microblogging that is restricted for participation and viewing by firm-approved accounts.

KEY TAKEAWAYS

- While many public and private microblogging services exist, Twitter remains by far the dominant service.

- Unlike status updates found on services like Facebook and LinkedIn, Twitter's default supports asymmetric communication, where someone can follow updates without first getting their approval. This function makes Twitter a good choice for anyone cultivating a following—authors, celebrities, organizations, and brand promoters.

- You don't need to tweet to get value. Many Twitter users follow friends, firms, celebrities, and thought leaders, quickly gaining access to trending topics.

- Twitter hash tags (keywords preceded by the # character) are used to organize "tweets" on a given topic. Users can search on hash tags, and many third-party applications allow for tweets to be organized and displayed by tag.

- Firms are leveraging Twitter in a variety of ways, including promotion, customer response, gathering feedback, and time-sensitive communication.

- Like other forms of social media, Twitter can serve as a hothouse that attracts opinion and forces organizational transparency and accountability.

- Activists have leveraged the service worldwide, and it has also served as an early warning mechanism in disasters, terror, and other events.

- Despite its rapid growth and impact, significant questions remain regarding the firm's durability, revenue prospects, and enduring appeal to initial users.

- Sites like Twitter have made data available to third parties via an API (application programming interface). The API has helped a rich ecosystem of over seventy thousand Twitter-supporting products and services emerge. But by making data available to third parties, firms may suffer from the free rider problem where others firms benefit from a service without providing much benefit back to the sponsor itself. Twitter's acquisitions (particularly of popular third-party clients that had used its API) have switched the firm from a platform sponsor to one that has begun to compete with other players in its ecosystem.

QUESTIONS AND EXERCISES

1. If you don't already have one, set up a Twitter account and "follow" several others. Follow a diverse group—corporations, executives, pundits, or other organizations. Do you trust these account holders are who they say they are? Why? Which examples do you think use the service most effectively? Which provide the weaker examples of effective Twitter use? Why? Have you encountered Twitter "spam" or unwanted followers? What can you do to limit such experiences? Be prepared to discuss your experiences with your class.

2. If you haven't done so, install a popular Twitter application such as TweetDeck, Seesmic, or a Twitter client for your mobile device. Why did you select the product you chose? What advantages does your choice offer over simply using Twitter's Web page? What challenges do these clients offer Twitter? Does the client you chose have a clear revenue model? Is it backed by a viable business?

3. Visit search.twitter.com. Which Twitter hash tags are most active at this time? Are there other "trending topics" that aren't associated with hash tags? What do you think of the activity in these areas? Is there legitimate, productive activity happening? Search Twitter on topics, firms, brand names, and issues of interest to you. What do you think of the quality of the information you've uncovered on Twitter? Who might find this to be useful?

4. Why would someone choose to use Twitter over Facebook's status update or other services? Which (if either) do you prefer and why?

5. What do you think of Twitter's revenue prospects? Is the firm a viable independent service or simply a feature to be incorporated into other social media activity? Advocate where you think the service will be in two years, five, ten. Would you invest in Twitter? Would you suggest that other firms do so? Why?

6. Assume the role of a manager for your firm. Advocate how the organization should leverage Twitter and other forms of social media. Provide examples of effective use, and cautionary tales, to back up your recommendation.

7. Some instructors have mandated Twitter for classroom use. Do you think this is productive? Would your professor advocate tweeting during lectures? What are the pros and cons of such use? Work with your instructor to discuss a set of common guidelines for in-class and course use of social media.

8. As of this writing, Twitter was just rolling out advertising via "promoted tweets." Perform some additional research. How have Twitter's attempts to grow revenues fared? How has user growth been trending? Has the firm's estimated value increased or decreased from the offer figures cited in this chapter? Why?

9. What do you think of Twitter's use of the API? What are the benefits of offering an API? What are the downsides? Would you create a company to take advantage of the Twitter API? Why or why not?

10. Twitter's revenue models are constantly evolving. Has the firm introduced new ways to make money since this chapter was written? Investigate its current revenue streams and estimated income, and be prepared to share and discuss with your class.

11. Follow this book's author at http://twitter.com/gallaugher. Tweet him if you run across interesting examples that you think would be appropriate for the next version of the book.

6. OTHER KEY WEB 2.0 TERMS AND CONCEPTS

L E A R N I N G   O B J E C T I V E S

1. Know key terms related to social media, peer production, and Web 2.0, including RSS, folksonomies, mash-ups, location-based services, virtual worlds, and rich media.
2. Provide examples of the effective business use of these terms and technologies.

6.1 RSS

RSS (an acronym that stands for both "really simple syndication" and "rich site summary") enables busy users to scan the headlines of newly available content and click on an item's title to view items of interest, thus sparing them from having to continually visit sites to find out what's new. Users begin by subscribing to an RSS feed for a Web site, blog, podcast, or other data source. The title or headline of any new content will then show up in an **RSS reader**. Subscribe to the *New York Times* Technology news feed, for example, and you will regularly receive headlines of tech news from the *Times*. Viewing an article of interest is as easy as clicking the title you like. Subscribing is often as easy as clicking on the RSS icon appearing on the home page of a Web site of interest.

Many firms use RSS feeds as a way to mange information overload, opting to distribute content via feed rather than e-mail. Some even distribute corporate reports via RSS. RSS readers are offered by third-party Web sites such as Google and Yahoo! and they have been incorporated into all popular browsers and most e-mail programs. Most blogging platforms provide a mechanism for bloggers to automatically publish a feed when each new post becomes available. Google's FeedBurner is the largest publisher of RSS blog feeds, and offers features to distribute content via e-mail as well.

RSS

A method for sending/broadcasting data to users who subscribe to a service's "RSS feed." Many Web sites and blogs forward headlines to users who subscribe to their "feed," making it easy to scan headlines and click to access relevant news and information.

**RSS reader**

A tool for subscribing to and accessing RSS feeds. Most e-mail programs and Web browsers can also act as RSS readers. There are also many Web sites (including Google Reader) that allow users to subscribe to and read RSS feeds.

FIGURE 7.4

RSS readers like Google Reader can be an easy way to scan blog headlines and click through to follow interesting stories.

Web sites that support RSS feeds will have an icon in the address bar. Click it to subscribe.

Click to subscribe to this site's RSS feed
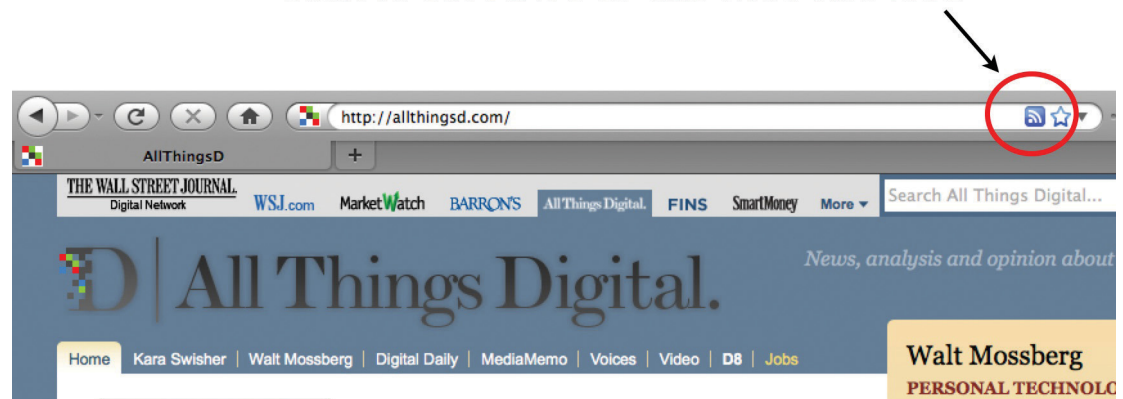
6.2 Folksonomies

folksonomies

Keyword-based classification systems created by user communities (also known as social tagging).

Folksonomies (sometimes referred to as social tagging) are keyword-based classification systems created by user communities as they generate and review content. (The label is meant to refer to a people-powered taxonomy.) Bookmarking site Del.icio.us, photo-sharing site Flickr (both owned by Yahoo!), and Twitter's hash tags all make heavy use of folksonomies.

With this approach, classification schemes emerge from the people most likely to understand them—the users. By leveraging the collective power of the community to identify and classify content, objects on the Internet become easier to locate, and content carries a degree of recommendation and endorsement.

Flickr cofounder Stewart Butterfield describes the spirit of folksonomies, saying, "The job of tags isn't to organize all the world's information into tidy categories, it's to add value to the giant piles of data that are already out there."[56] The Guggenheim Museum in New York City and the San Francisco Museum of Modern Art, among other museums, are taking a folksonomic approach to their online collections, allowing user-generated categories to supplement the specialized lexicon of curators. Amazon.com has introduced a system that allows readers to classify books, and most blog posts and wiki pages allow for social tagging, oftentimes with hot topics indexed and accessible via a "tag cloud" in the page's sidebar.

6.3 Mash-up

mash-up

The combination of two or more technologies or data feeds into a single, integrated tool.

Mash-ups are combinations of two or more technologies or data feeds into a single, integrated tool. Some of the best known mash-ups leverage Google's mapping tools. Mapnificent.net combines transit agency data with Google Maps to let users find locations that are close to public transportation. HousingMaps.com combines Craigslist.org listings with Google Maps for a map-based display for apartment hunters. IBM linked together job feeds and Google Maps to create a job-seeker service for victims of Hurricane Katrina. SimplyHired links job listings with Google Maps, LinkedIn listings, and salary data from PayScale.com. And Salesforce.com has tools that allow data from its customer relationship management (CRM) system to be combined with data feeds and maps from third parties.

Mash-ups are made easy by a tagging system called **XML** (for extensible markup language). Site owners publish the parameters of XML data feeds that a service can accept or offer (e.g., an address, price, product descriptions, images). Other developers are free to leverage these public feeds using application programming interfaces (APIs), published instructions on how to make programs call one another, to share data, or to perform tasks. Using APIs and XML, mash-up authors smoosh together seemingly unrelated data sources and services in new and novel ways. Lightweight, browser-friendly software technologies like Ajax and HTML5 can often make a Web site interface as rich as a desktop application, and rapid deployment frameworks like Ruby on Rails will enable and accelerate mash-up creation and deployment.

6.4   Location-Based Services

Computing devices increasingly know where you are—and this is creating all sorts of new opportunities for social media. Twitter, Facebook, and Google Buzz are among the many social services that have added location-based options, allowing you to tweet or post a status update attached with a physical location as determined by your phone's **global positioning system (GPS)**, triangulation from nearby cell phone towers, or proximity to neighboring Wi-Fi hotspots. This introduces a whole new way to gather and share information. In a new part of town and curious what folks are saying about the spot? Search for tweets tagged as being posted around that location.

Augmented-reality apps can overlay real data on top of images from a GPS and compass-equipped smartphone. Swivel your iPhone around with Stella Artois's Bar Finder app open, and it'll point you to the nearest Stella-equipped watering hole (it'll also let you text your friends to join you for a drink and call a cab for a safe ride home). Wikitude overlays images appearing through your phone's camera lens with geotagged data from Wikipedia. Point your Yelp app down the street and activate the monocle feature to see starred reviews hover over the top of establishments that appear on screen.

Boston-based SCVNGR (pronounced "scavenger"), a gaming app, has allowed over one thousand clients, including Princeton, MetLife, and Boston's Museum of Fine Arts, to create their own mobile phone–based scavenger hunts. The profitable firm has an 80 percent client return rate and had attracted funding from Google Ventures and Highland Capital Partners all before founder Seth Priebatsch turned twenty-one.[57]   SCVNGR has also run promotions that encourage repeat purchases and return visits with a diverse client base that has included American Express, Coca-Cola, and Buffalo Wild Wings. The firm also offers the mobile app LevelUp, which rewards users with Groupon-style deals and includes some rewards if you bring friends (making buying social).

Perhaps the best known among the location-based pure plays is Foursquare. The service allows players to "check in" at different locations, allowing players to earn "badges" displayed in the app for completing specific achievements ("gym rat" for exercise buffs, "school night" for weeknight bar hoppers). Check into a location more than anyone else and you become that spot's "mayor." Foursquare users can follow public location postings from their friends, discovering when a buddy is close by. Users submit tips, and a recommendations button offers suggestions on nearby places to explore. Foursquare grew to over one million users roughly one year after the service debuted at the 2009 South by Southwest conference, and now, roughly two years later, those numbers have grown to ten million.[58]   Firms are now using Foursquare for promotions and to support loyalty programs—offering "mayor specials" or other incentives when users are nearby. Starbucks, the Bravo television channel, frozen yogurt chain Tasti D-Lite, and the Milwaukee-based burger chain AJ Bombers are among the diverse clients leveraging the service.

XML

Abbreviation of Extensible Markup Language. A tagging language that can be used to identify data fields made available for use by other applications. For example, programmers may wrap XML tags around elements in an address data stream (e.g., ⟨business name⟩, ⟨street address⟩, ⟨city⟩, ⟨state⟩) to allow other programs to recognize and use these data items.

**global positioning system (GPS)**

A network of satellites and supporting technologies used to identify a device's physical location.

augmented-reality

Computer applications that overlay real-world images with computer-generated imagery and data.

FIGURE 7.6 A Sampling of Location-Aware Apps

Wikitude shows Wikipedia overlays on top of images appearing through the viewfinder. Stella Artois's Le Bar will point you to establishments offering the brew, and Foursquare offers nearby vendor promotions and discounts.
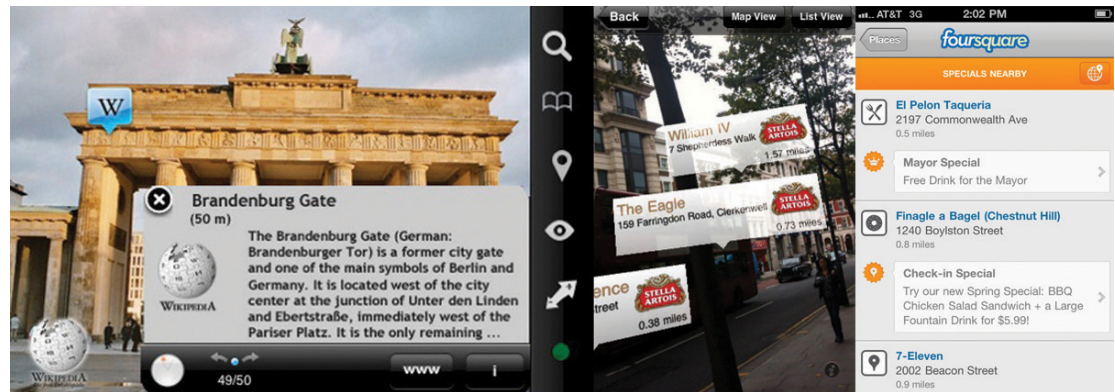
Of course, all this public location sharing raises privacy concerns. The Web site PleaseRobMe.com was created to draw attention to the potentially dangerous issues around real-time location sharing. After a brief demonstration period, the site stopped its real-time aggregation of publicly accessible user-location data and now serves as an awareness site warning of the "stalkerish" side of location-based apps. In most cases, though, users remain firmly in control—determining if they want to keep a visit private or release their locale to verified "app friends" or to the broader online space.

6.5   Virtual Worlds

In **virtual worlds**, users appear in a computer-generated environment in the form of an **avatar**, or animated character. Users can customize the look of their avatar, interact with others by typing or voice chat, and can travel about the virtual world by flying, teleporting, or more conventional means.

The most popular general-purpose virtual world is Second Life by Linden Labs, although many others exist. Most are free, although game-oriented worlds, such as World of Warcarft (with ten million active subscribers), charge a fee. Many corporations and organizations have established virtual outposts by purchasing "land" in the world of Second Life, while still others have contracted with networks to create their own, independent virtual worlds.

Most organizations have struggled to commercialize these Second Life forays, but activity has been wide-ranging in its experimentation. Reuters temporarily "stationed" a reporter in Second Life, presidential candidates have made appearances in the virtual world, corporations have set up virtual storefronts, and there's a significant amount of virtual mayhem. Second Life "terrorists" have "bombed" virtual outposts run by several organizations, including ABC News, American Apparel, and Reebok.

Even grade schoolers are heavy virtual world users. Many elementary school students get their first taste of the Web through Webkinz, an online world that allows for an animated accompaniment with each of the firm's plush toys. Webkinz's parent company, privately held Ganz, doesn't release financial figures. But according to Compete.com, by the end of 2008 Webkinz.com had roughly the same number of unique visitors as FoxNews.com. The kiddie set virtual world market is considered so lucrative that Disney acquired ClubPenguin for $350 million with agreements to pay another potential three hundred fifty million if the effort hits growth incentives.[59]

6.6   YouTube, Podcasting, and Rich Media

Blogs, wikis, and social networks not only enable sharing text and photos, they also allow for the creation and distribution of audio and video. **Podcasts** are digital audio files (some also incorporate video), provided as a series of programs. Podcasts range from a sort of media blog, archives of traditional radio and television programs, and regular offerings of original online content. While the term podcast derives from Apple's wildly successful iPod, podcasts can be recorded in audio formats such as MP3 that can be played on most portable media players. (In perhaps the ultimate concession to the market leader, even the iPod rival Microsoft Zune referred to serialized audio files as podcasts on its navigation menu.)

There are many podcast directories, but Apple's iTunes is by far the largest. Anyone who wants to make a podcast available on iTunes can do so for free. A podcast publisher simply records an audio file, uploads the file to a blog or other hosting server, then sends the RSS feed to Apple (copyrighted

material cannot be used without permission, with violators risking banishment from iTunes). Files are discovered in the search feature of the iTunes music store, and listings seamlessly connect the user with the server hosting the podcast. This path creates the illusion that Apple serves the file even though it resides on a publisher's servers.

While blogs have made stars of some unknowns, the most popular podcasts are from mainstream media outlets. A recent visit to the podcasting section of iTunes showed that eight of the top ten most popular podcasts were high-quality productions of mainstream media programs, including offerings from CBS, Comedy Central, NPR, and PBS. Podcasts are also revolutionizing education, with scores of universities "open sourcing" their classrooms and offering lectures for public consumption via Apple's iTunesU.

In contrast to iTunes, YouTube actually hosts video on its own servers, so all you need to do is shoot a video and upload it to the site. YouTube is a bastion of amateur video, with most clips shot and uploaded by nonprofessionals. It's also become a protest site (e.g., "A Comcast Technician Sleeping on my Couch"). However, YouTube has also become a go-to distribution platform for professional content such as ad clips, customer support guides, music videos, TV shows, movies, and more. Much of this **rich media** content can be distributed or streamed within another Web site, blog, or social network profile.

rich media

Content that is more complex than simple text. The term can refer to images, animation, audio, and video.

KEY TAKEAWAYS

- RSS fosters the rapid sharing and scanning of information, including updates from Web 2.0 services such as blogs, wikis, and social networks. RSS feeds can be received via Web browsers, e-mail, cell phones, and special RSS readers.

- Folksonomies allow users to collaboratively tag and curate online media, making it easy for others to find useful content. Since folksonomies are created by users themselves, they are often more easily understood and embraced than classification schemes imposed by site owners.

- Mash-ups promote the useful combination of different Web services, such as maps and other information feeds. Mash-up authors leverage technologies such as APIs and XML to combine seemingly unrelated data sources and services in new and novel ways.

- Location-based services are increasingly combining geolocated data with social media. Users can now quickly see related social media surrounding an area, even overlaying this data on top of maps and images through a phone's camera lens. Sites like Foursquare are morphing into loyalty and customer-rewards programs. While users are largely in control of sharing location data, some fear privacy and security issues from oversharing.

- Virtual worlds allow users to interact with and within a computer-generated alternate reality.

- Internet media is increasingly becoming "richer," leveraging audio, video, and animation. Organizations and users are creating and distributing rich media online, with interesting content spreading virally.

QUESTIONS AND EXERCISES

1. What is RSS and an RSS reader? Why would an individual use one? Why would a firm use RSS?
2. Use an RSS reader like Google Reader, or the features built into your e-mail program or browser, and subscribe to RSS feeds. Discuss your experience with the class. Which feeds did you subscribe to? What did you like or not like about using an RSS reader?
3. If you have a smartphone, download Foursquare or other location-based app. Is this service popular in your community? Research how firms are leveraging these tools for real business value.
4. Investigate SCVNGR. Many schools are using the tool for orientation programs. Is your school using this? If so, participate in a SCVNGR game on campus. If not, build a case for considering SCVNGR (or similar service) and share this with your student government or student orientation office.
5. Are privacy concerns from location-based apps valid? What can users do to be safe even while using location-based apps?
6. Visit Second Life or another virtual world. Create an avatar and look for examples of corporate/commercial involvement. Be prepared to discuss your experience—both positive and negative.
7. Investigate some of the many virtual worlds targeted at children, including Webkinz, Club Penguin, and Whyville. What are the revenue models for these efforts? How do these sites ensure they are safe for children? Assume the role of a parent—what are the pros and cons of these sites? Which (if any) would you allow your children to participate in? Why? Would you invest in any of these efforts or advise corporations to enter the kid-focused virtual world space? Why or why not?
8. If you don't already own it, download iTunes for free, go to the iTunes music store, and explore the free podcast section. Alternatively, find podcasts from another service. Which podcasts seem to be the most popular? Why? Do you use podcasts or other rich media? Why or why not?
9. Visit YouTube. Identify examples of corporations using the service. Identify examples of customer use. Be prepared to discuss your findings with the class. Do you think Google is making much money with YouTube? Why or why not?
10. Which firm do you think spends more on the technology infrastructure that powers its service—Apple with iTunes podcasts or Google with YouTube? Explain your answer.
11. Why would a firm make its data available via XML to use as a mash-up? What can it gain? Are there any risks involved in providing programming hooks that allow the creation of mash-ups?
12. Give examples of efforts that take advantage of folksonomies. Why are folksonomies considered to be useful?
13. Do you spend time in rich media Web sites? Which ones? How much time do you or your friends spend on these sites? How would you describe the quality of rich media content found online?
14. How might a firm use rich media online? What concerns does a firm or individual face with respect to rich media?
15. Why do you suppose that the most popular podcasts come from established media firms (e.g., Comedy Central, NPR) rather than amateurs, while the top bloggers emerged outside the professional journalist/writer community?

7. PREDICTION MARKETS AND THE WISDOM OF CROWDS

LEARNING OBJECTIVES

1. **Understand the concept of the wisdom of crowds as it applies to social networking.**
2. **List the criteria necessary for a crowd to be smart.**

wisdom of crowds

The idea that a group of individuals (the crowd), often consisting of untrained amateurs, will collectively have more insight than a single or small group of trained professionals.

Many social software efforts leverage what has come to be known as the **wisdom of crowds**. In this concept, a group of individuals (the crowd often consists mostly of untrained amateurs), collectively has more insight than a single or small group of trained professionals. Made popular by author James Surowiecki (whose best-selling book was named after the phenomenon), the idea of crowd wisdom is at the heart of wikis, folksonomy tagging systems, and many other online efforts. An article in the journal *Nature* positively comparing Wikipedia to *Encyclopedia Britannica* lent credence to social software's use in harnessing and distilling crowd wisdom.[60]

The crowd isn't always right, but in many cases where topics are complex, problems are large, and outcomes are uncertain, a large, diverse group may bring collective insight to problem solving that one smart guy or a professional committee lacks. One technique for leveraging the wisdom of crowds is a **prediction market**, where a diverse crowd is polled and opinions aggregated to form a forecast of an eventual outcome. The concept is not new. The stock market is arguably a prediction market, with a stock price representing collective assessment of the discounted value of a firm's future earnings. But Internet technologies are allowing companies to set up prediction markets for exploring all sorts of problems.

Consider Best Buy, where employees are encouraged to leverage the firm's TagTrade prediction market to make forecasts, and are offered small gifts as incentives for participation. The idea behind this incentive program is simple: the "blue shirts" (Best Buy employees) are closest to customers. They see traffic patterns and buying cycles, can witness customer reactions first hand, and often have a degree of field insight not available to senior managers at the company's Minneapolis headquarters. Harness this collective input and you've got a group brain where, as wisdom of crowds proponents often put it, "the we is greater than the me." When Best Buy asked its employees to predict gift card sales, the "crowd's" collective average answer was 99.5 percent accurate; experts paid to make the prediction were off by 5 percent. Another experiment predicting holiday sales was off by only 1/10 of 1 percent. The experts? Off by 7 percent![61]

In an article in the *McKinsey Quarterly*, Surowiecki outlined several criteria necessary for a crowd to be "smart."[62] The crowd must

- be *diverse*, so that participants are bringing different pieces of information to the table,
- be *decentralized*, so that no one at the top is dictating the crowd's answer,
- offer *a collective verdict* that summarizes participant opinions,
- be *independent*, so that each focuses on information rather than the opinions of others.

Google, which runs several predictive markets, underscored these principles when it found that predictions were less accurate when users were geographically proximate, meaning folks in the same work group who sat near one another typically thought too much alike.[63] Poorer predictive outcomes likely resulted because these relatively homogeneous clusters of users brought the same information to the table (yet another reason why organizations should hire and cultivate diverse teams).

Many firms run predictive markets to aid in key forecasts, and with the potential for real financial payoff. But University of Chicago law professor Todd Henderson warns predictive markets may also hold legal and ethical challenges. The Securities and Exchange Commission may look askance at an employee who gets a heads-up in a predictive market that says a certain drug is going to be approved or fail clinical trials. If she trades on this information is she an insider, subject to prosecution for exploiting proprietary data? Disclosure issues are unclear. Gambling laws are also murky, with Henderson uncertain as to whether certain predictive markets will be viewed as an unregulated form of betting.[64]

Publicly accessible prediction markets are diverse in their focus. The Iowa Electronic Market attempts to guess the outcome of political campaigns, with mixed results. Farecast (now part of Microsoft's Bing knowledge engine) claims a 75 percent accuracy rate for forecasting the future price of airline tickets.[65] The Hollywood Stock Exchange allows participants to buy and sell prediction shares of movies, actors, directors, and film-related options. The exchange, now owned by investment firm Cantor Fitzgerald, has picked Oscar winners with 90 percent accuracy.[66] And at HedgeStreet.com, participants can make microbets, wagering as little as ten dollars on the outcome of economic events, including predictions on the prices of homes, gold, foreign currencies, oil, and even the economic impact of hurricanes and tropical storms. HedgeStreet is considered a market and is subject to oversight by the Commodity Futures Trading Commission.[67]

| **prediction market** |
| Polling a diverse crowd and aggregating opinions in order to form a forecast of an eventual outcome. |

KEY TAKEAWAYS

- Many Web 2.0 efforts allow firms to tap the wisdom of crowds, identifying collective intelligence.
- Prediction markets tap crowd opinion with results that are often more accurate than the most accurate expert forecasts and estimates.
- Prediction markets are most accurate when tapping the wisdom of a diverse and variously skilled and experienced group, and are least accurate when participants are highly similar.

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8. CROWDSOURCING

LEARNING OBJECTIVES

1. **Understand the value of crowdsourcing.**
2. **Identify firms that have used crowdsourcing successfully.**

crowdsourcing

The act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined generally large group of people in the form of an open call.

The power of Web 2.0 also offers several examples of the democratization of production and innovation. Need a problem solved? Offer it up to the crowd and see if any of their wisdom offers a decent result. This phenomenon, known as **crowdsourcing**, has been defined by Jeff Howe, founder of the blog crowdsourcing.com and an associate editor at *Wired*, as "the act of taking a job traditionally performed by a designated agent (usually an employee) and outsourcing it to an undefined, generally large group of people in the form of an open call."[68]

Can the crowd really do better than experts inside a firm? At least one company has literally struck gold using crowdsourcing. As told by Don Tapscott and Anthony Williams in their book *Wikinomics*, mining firm Goldcorp was struggling to gain a return from its 55,000-acre Canadian property holdings. Executives were convinced there was gold "in them thar hills," but despite years of efforts, the firm struggled to strike any new pay dirt. CEO Rob McEwen, a former mutual fund manager without geology experience who unexpectedly ended up running Goldcorp after a takeover battle then made what seemed like a Hail Mary pass—he offered up all the firm's data, on the company's Web site. Along with the data, McEwen ponied up $575,000 from the firm as prize money for the Goldcorp Challenge to anyone who came up with the best methods and estimates for reaping golden riches. Releasing data was seen as sacrilege in the intensely secretive mining industry, but it brought in ideas the firm had never considered. Taking the challenge was a wildly diverse group of "graduate students, consultants, mathematicians, and military officers." Eighty percent of the new targets identified by entrants yielded "substantial quantities of gold." The financial payoff? In just a few years a $100 million firm grew into a $9 billion titan. For Goldcorp, the crowd coughed up serious coin.

Netflix followed Goldcorp's lead, offering anonymous data to any takers, along with a one-million-dollar prize to the first team that could improve the accuracy of movie recommendations by 10 percent. Top performers among the over thirty thousand entrants included research scientists from AT&T Labs, researchers from the University of Toronto, a team of Princeton undergrads, and the proverbial "guy in a garage" (and yes, that was his team name). Frustrated for nearly three years, it took a coalition of four teams from Austria, Canada, Israel, and the United States to finally cross the 10 percent threshold. The winning team represented an astonishing brain trust that Netflix would never have been able to harness on its own.[69]

Other crowdsourcers include Threadless.com, which produces limited run t-shirts with designs users submit and vote on. Marketocracy runs stock market games and has created a mutual fund based on picks from the 100 top-performing portfolios. Just under seven years into the effort, the firm's m100 Index reports a 75 percent return versus 35 percent for the S&P 500. The St. Louis Cardinals baseball team is even crowdsourcing. The club's One for the Birds contest calls for the fans to submit scouting reports on promising players, as the team hopes to broaden its recruiting radar beyond its classic recruiting pool of Division I colleges.

There are several public markets for leveraging crowdsourcing for innovation, or as an alternative to standard means of production. Waltham, Massachusetts—based InnoCentive allows "seekers" to offer cash prizes ranging from ten to one hundred thousand dollars. Over 120,000 "solvers" have registered to seek solutions for tasks put forward by seekers that include Dow Chemical, Eli Lilly, and Procter & Gamble. Among the findings offered by the InnoCentive crowd are a biomarker that measures progression of ALS. Amazon.com has even created an online marketplace for crowdsourcing

called Mechanical Turk. Anyone with a task to be completed or problem to be solved can put it up for Amazon, setting their price for completion or solution. For its role, Amazon takes a small cut of the transaction. And alpha geeks looking to prove their code chops can turn to TopCoder, a firm that stages coding competitions that deliver real results for commercial clients, such as ESPN. TopCoder contests have attracted roughly 300,000 participants from 200 countries.[70]

Not all crowdsourcers are financially motivated. Some benefit by helping to create a better service. Facebook leveraged crowd wisdom to develop versions of its site localized in various languages. Facebook engineers designated each of the site's English words or phrases as a separate translatable object. Members were then invited to translate the English into other languages, and rated the translations to determine which was best. Using this form of crowdsourcing, fifteen hundred volunteers cranked out Spanish Facebook in a month. It took two weeks for two thousand German speakers to draft Deutsch Facebook. How does the Facebook concept of "poke" translate around the world? The Spaniards decided on "dar un toque," Germans settled on "anklopfen," and the French went with "envoyer un poke."[71] Vive le crowd!

KEY TAKEAWAYS

- Crowdsourcing tackles challenges through an open call to a broader community of potential problem solvers. Examples include Goldcorp's discovering of optimal mining locations in land it already held, Facebook's leverage of its users to create translations of the site for various international markets, and Netflix's solicitation of improvements to its movie recommendation software.
- Several firms run third-party crowdsourcing forums, among them InnoCentive for scientific R&D, TopCoder for programming tasks, and Amazon's Mechanical Turk for general work.

QUESTIONS AND EXERCISES

1. What is crowdsourcing? Give examples of organizations that are taking advantage of crowdsourcing and be prepared to describe these efforts.
2. What ethical issues should firms be aware of when considering crowdsourcing? Are there other concerns firms may have when leveraging this technique?
3. Assume the role of a manager or consultant. Recommend a firm and a task that would be appropriate for crowdsourcing. Justify your choice, citing factors such as cost, breadth of innovation, time, constrained resources, or other factors. How would you recommend the firm conduct this crowdsourcing effort?

9. GET SMART: THE SOCIAL MEDIA AWARENESS AND RESPONSE TEAM

LEARNING OBJECTIVES

1. Illustrate several examples of effective and poor social media use.
2. Recognize the skills and issues involved in creating and staffing an effective social media awareness and response team (SMART).
3. List and describe key components that should be included in any firm's social media policy.
4. Understand the implications of ethical issues in social media such as "sock puppetry" and "astroturfing" and provide examples and outcomes of firms and managers who used social media as a vehicle for dishonesty.
5. List and describe tools for monitoring social media activity relating to a firm, its brands, and staff.
6. Understand issues involved in establishing a social media presence, including the embassy approach, openness, and staffing.
7. Discuss how firms can engage and respond through social media, and how companies should plan for potential issues and crises.

For an example of how outrage can go viral, consider Dave Carroll.[72] The Canadian singer-songwriter was traveling with his band Sons of Maxwell on a United Airlines flight from Nova Scotia to Nebraska

when, during a layover at Chicago's O'Hare International Airport, Carroll saw baggage handlers roughly tossing his guitar case. The musician's $3,500 Taylor guitar was in pieces by the time it arrived in Omaha. In the midst of a busy tour schedule, Carroll didn't have time to follow up on the incident until after United's twenty-four-hour period for filing a complaint for restitution had expired. When United refused to compensate him for the damage, Carroll penned the four-minute country ditty "United Breaks Guitars," performed it in a video, and uploaded the clip to YouTube (sample lyrics: "I should have gone with someone else or gone by car…'cuz United breaks guitars"). Carroll even called out the unyielding United rep by name. Take that, Ms. Irlwig! (Note to customer service reps everywhere: you're always on.)

The clip went viral, receiving 150,000 views its first day and five million more by the next month. Well into the next year, "United Breaks Guitars" remained the top result on YouTube when searching the term "United." No other topic mentioning that word—not "United States," "United Nations," or "Manchester United"—ranked ahead of this one customer's outrage.

> **📹 Video**
>
> Dave Carroll's ode to his bad airline experience, "United Breaks Guitars," went viral, garnering millions of views.
>
>
>
> View the video online at: http://www.youtube.com/v/5YGc4zOqozo

Scarring social media posts don't just come from outside the firm. Earlier that same year employees of Domino's Pizza outlet in Conover, North Carolina, created what they thought would be a funny gross-out video for their friends. Posted to YouTube, the resulting footage of the firm's brand alongside vile acts of food prep was seen by over one million viewers before it was removed. Over 4.3 million references to the incident can be found on Google, and many of the leading print and broadcast outlets covered the story. The perpetrators were arrested, the Domino's storefront where the incident occurred was closed, and the firm's president made a painful apology (on YouTube, of course).

Not all firms choose to aggressively engage social media. As of this writing some major brands still lack a notable social media presence (Apple comes immediately to mind). But your customers are there and they're talking about your organization, its products, and its competitors. Your employees are there, too, and without guidance, they can step on a social grenade with your firm left to pick out the shrapnel. Soon, nearly everyone will carry the Internet in their pocket. Phones and MP3 players are armed with video cameras capable of recording every customer outrage, corporate blunder, ethical lapse, and rogue employee. Social media posts can linger forever online, like a graffiti tag attached to your firm's reputation. Get used to it—that genie isn't going back in the bottle.

SMART

The social media awareness and response team. A group tasked with creating policies and providing support, training, guidance, and development expertise for and monitoring of a firm's social media efforts.

As the "United Breaks Guitars" and "Domino's Gross Out" incidents show, social media will impact a firm whether it chooses to engage online or not. An awareness of the power of social media can shape customer support engagement and crisis response, and strong corporate policies on social media use might have given the clueless Domino's pranksters a heads-up that their planned video would get them fired and arrested. Given the power of social media, it's time for all firms to get SMART, creating a social media awareness and response team. While one size doesn't fit all, this section details key issues behind SMART capabilities, including creating the social media team, establishing firmwide policies, monitoring activity inside and outside the firm, establishing the social media presence, and managing social media engagement and response.

9.1   Creating the Team

Firms need to treat social media engagement as a key corporate function with clear and recognizable leadership within the organization. Social media is no longer an ad hoc side job or a task delegated to

an intern. When McDonald's named its first social media chief, the company announced that it was important to have someone "dedicated 100% of the time, rather than someone who's got a day job on top of a day job."[73] Firms without social media baked into employee job functions often find that their online efforts are started with enthusiasm, only to suffer under a lack of oversight and follow-through. One hotel operator found franchisees were quick to create Facebook pages, but many rarely monitored them. Customers later notified the firm that unmonitored hotel Facebook pages contained offensive messages—a racist rant on one, paternity claims against an employee on another.

Organizations with a clearly established leadership role for social media can help create consistency in firm dialogue; develop and communicate policy; create and share institutional knowledge; provide training, guidance, and suggestions; offer a place to escalate issues in the event of a crisis or opportunity; and catch conflicts that might arise if different divisions engage without coordination.

While firms are building social media responsibility into job descriptions, also recognize that social media is a team sport that requires input from staffers throughout an organization. The social media team needs support from public relations, marketing, customer support, HR, legal, IT, and other groups, all while acknowledging that what's happening in the social media space is distinct from traditional roles in these disciplines. The team will hone unique skills in technology, analytics, and design, as well as skills for using social media for online conversations, listening, trust building, outreach, engagement, and response. As an example of the interdisciplinary nature of social media practice, consider that the social media team at Starbucks (regarded by some as the best in the business) is organized under the interdisciplinary "vice president of brand, content, and online."[74]

Also note that while organizations with SMARTs (social media teams) provide leadership, support, and guidance, they don't necessarily drive all efforts. GM's social media team includes representatives from all the major brands. The idea is that employees in the divisions are still the best to engage online once they've been trained and given operational guardrails. Says GM's social media chief, "I can't go in to Chevrolet and tell them 'I know your story better than you do, let me tell it on the Web.'"[75] Similarly, the roughly fifty Starbucks "Idea Partners" who participate in MyStarbucksIdea are specialists. Part of their job is to manage the company's social media. In this way, conversations about the Starbucks Card are handled by card team experts, and merchandise dialogue has a product specialist who knows that business best. Many firms find that the social media team is key for coordination and supervision (e.g., ensuring that different divisions don't overload consumers with too much or inconsistent contact), but the dynamics of specific engagement still belong with the folks who know products, services, and customers best.

9.2 Responsibilities and Policy Setting

In an age where a generation has grown up posting shoot-from-the-hip status updates and YouTube is seen as a fame vehicle for those willing to perform sensational acts, establishing corporate policies and setting employee expectations are imperative for all organizations. The employees who don't understand the impact of social media on the firm can do serious damage to their employers and their careers (look to Domino's for an example of what can go wrong).

Many experts suggest that a good social media policy needs to be three things: "short, simple, and clear."[76] Fortunately, most firms don't have to reinvent the wheel. Several firms, including Best Buy, IBM, Intel, The American Red Cross, and Australian telecom giant Telstra, have made their social media policies public.

Most guidelines emphasize the "three Rs": representation, responsibility, and respect.

- *Representation.* Employees need clear and explicit guidelines on expectations for social media engagement. Are they empowered to speak on behalf of the firm? If they do, it is critical that employees transparently disclose this to avoid legal action. U.S. Federal Trade Commission rules require disclosure of relationships that may influence online testimonial or endorsement. On top of this, many industries have additional compliance requirements (e.g., governing privacy in the health and insurance fields, retention of correspondence and disclosure for financial services firms). Firms may also want to provide guidelines on initiating and conducting dialogue, when to respond online, and how to escalate issues within the organization.

- *Responsibility.* Employees need to take responsibility for their online actions. Firms must set explicit expectations for disclosure, confidentiality and security, and provide examples of engagement done right, as well as what is unacceptable. An effective social voice is based on trust, so accuracy, transparency, and accountability must be emphasized. Consequences for violations should be clear.

- *Respect.* Best Buy's policy for its Twelpforce explicitly states participants must "honor our differences" and "act ethically and responsibly." Many employees can use the reminder. Sure customer service is a tough task and every rep has a story about an unreasonable client. But there's a difference between letting off steam around the water cooler and venting online. Virgin

Atlantic fired thirteen of the airline's staffers after they posted passenger insults and inappropriate inside jokes on Facebook.[77]

Policies also need to have teeth. Remember, a fourth "R" is at stake—reputation (both the firm's and the employee's). Violators should know the consequences of breaking firm rules and policies should be backed by action. Best Buy's policy simply states, "Just in case you are forgetful or ignore the guidelines above, here's what could happen. You could get fired (and it's embarrassing to lose your job for something that's so easily avoided)."

Despite these concerns, trying to micromanage employee social media use is probably not the answer. At IBM, rules for online behavior are surprisingly open. The firm's code of conduct reminds employees to remember privacy, respect, and confidentiality in all electronic communications. Anonymity is not permitted on IBM's systems, making everyone accountable for their actions. As for external postings, the firm insists that employees not disparage competitors or reveal customers' names without permission and asks that any employee posts from IBM accounts or that mention the firm also include disclosures indicating that opinions and thoughts shared publicly are the individual's and not Big Blue's.

Some firms have more complex social media management challenges. Consider hotels and restaurants where outlets are owned and operated by franchisees rather than the firm. McDonald's social media team provides additional guidance so that regional operations can create, for example, a Twitter handle (e.g., @mcdonalds_cincy) that handle a promotion in Cincinnati that might not run in other regions.[78] A social media team can provide coordination while giving up the necessary control. Without this kind of coordination, customer communication can quickly become a mess.

Training is also a critical part of the SMART mandate. GM offers an intranet-delivered video course introducing newbies to the basics of social media and to firm policies and expectations. GM also trains employees to become "social media proselytizers and teachers." GM hopes this approach enables experts to interact directly with customers and partners, allowing the firm to offer authentic and knowledgeable voices online.

Tweets from the Untrained

Followers of fashion label Kenneth Cole know when the firm's eponymous founder, chairman, and chief creative officer has tweeted via the corporate account—he signs these tweets with his initials KC. But it looks like KC could have used a bit of SMART training when he offered up a meant-to-be-light-hearted quip comparing Egypt's historic Mubarak-ousting protests (where several citizens were killed and injured) to enthusiasm for his firm's "new spring collection." Although the tweet was quickly deleted, screenshots (see below) linger forever, and the media widely reported on the big brand's insensitive gaffe.

KennethCole Kenneth Cole
Re Egypt tweet: we weren't intending to make light of a serious situation. We understand the sensitivity of this historic moment -KC
1 hour ago

KennethCole Kenneth Cole
Millions are in uproar in #Cairo. Rumor is they heard our new spring collection is now available online at http://bit.ly/KCairo -KC
3 hours ago

Training should also cover information security and potential threats. Social media has become a magnet for phishing, virus distribution, and other nefarious online activity. Over one-third of social networking users claim to have been sent malware via social networking sites (see Chapter 13). The social media team will need to monitor threats and spread the word on how employees can surf safe and surf smart.

Since social media is so public, it's easy to amass examples of what works and what doesn't, adding these to the firm's training materials. The social media team provides a catch point for institutional knowledge and industry best practice; and the team can update programs over time as new issues, guidelines, technologies, and legislation emerge.

The social media space introduces a tension between allowing expression (among employees and by the broader community) and protecting the brand. Firms will fall closer to one end or the other of this continuum depending on compliance requirements, comfort level, and goals. Expect the

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organization's position to move. Firms will be cautious as negative issues erupt, others will jump in as new technologies become hot and early movers generate buzz and demonstrate results. But it's the SMART responsibility to avoid knee-jerk reaction and to shepherd firm efforts with the professionalism and discipline of other management domains.

Astroturfing and Sock Puppets

Social media can be a cruel space. Sharp-tongued comments can shred a firm's reputation and staff might be tempted to make anonymous posts defending or promoting the firm. Don't do it! Not only is it a violation of FTC rules, IP addresses and other online breadcrumbs often leave a trail that exposes deceit.

Whole Foods CEO John Mackey fell victim to this kind of temptation, but his actions were eventually, and quite embarrassingly, uncovered. For years, Mackey used a pseudonym to contribute to online message boards, talking up Whole Foods stock and disparaging competitors. When Mackey was unmasked, years of comments were publicly attributed to him. The *New York Times* cited one particularly cringe-worthy post where Mackey used the pseudonym to complement his own good looks, writing, "I like Mackey's haircut. I think he looks cute!"[79]

Fake personas set up to sing your own praises are known as **sock puppets** among the digerati, and the practice of lining comment and feedback forums with positive feedback is known as **astroturfing**. Do it and it could cost you. The firm behind the cosmetic procedure known as the Lifestyle Lift was fined $300,000 in civil penalties after the New York Attorney General's office discovered that the firm's employees had posed as plastic surgery patients and wrote glowing reviews of the procedure.[80]

Review sites themselves will also take action. TripAdvisor penalizes firms if it's discovered that customers are offered some sort of incentive for posting positive reviews. The firm also employs a series of sophisticated automated techniques as well as manual staff review to uncover suspicious activity. Violators risk penalties that include being banned from the service.

Your customers will also use social media keep you honest. Several ski resorts have been embarrassed when tweets and other social media posts exposed them as overstating snowfall results. There's even an iPhone app skiers can use to expose inaccurate claims.[81]

So keep that ethical bar high—you never know when technology will get sophisticated enough to reveal wrongdoings.

sock puppet

A fake online persona created to promote a particular point of view, often in praise of a firm, product, or individual. Be aware that the use of undisclosed relationships in endorsements is a violation of U.S. Federal Trade Comission rules.

astroturfing

Engineering the posting of positive comments and reviews of a firm's product and services (or negative ones of a firm's competitors). Many ratings sites will penalize firms that offer incentives for positive feedback posts.

9.3 Monitoring

Concern over managing a firm's online image has led to the rise of an industry known as **online reputation management**. Firms specializing in this field will track a client firm's name, brand, executives' names, or other keywords, reporting online activity and whether sentiment trends toward the positive or negative.

But social media monitoring is about more than about managing one's reputation; it also provides critical competitive intelligence, it can surface customer support issues, and it can uncover opportunities for innovation and improvement. Firms that are quick to lament the very public conversations about their brands happening online need to embrace social media as an opportunity to learn more.

Resources for monitoring social media are improving all the time, and a number of tools are available for free. All firms can take advantage of Google Alerts, which flag blog posts, new Web pages, and other publicly accessible content, regularly delivering a summary of new links to your mailbox (for more on using Google for intelligence gathering, see Chapter 14). Twitter search and Twitter clients like TweetDeck can display all mentions of a particular term. And more advanced commercial tools, such as Radian9, HubSpot, and CoTweet, monitor a wide variety of social media mentions, provide metrics for ongoing campaigns and practices, and gauge sentiment and spot opportunities for sales leads or customer service.

online reputation management

The process of tracking and responding to online mentions of a product, organization, or individual. Services supporting online reputation management range from free Google Alerts to more sophisticated services that blend computer-based and human monitoring of multiple media channels.

FIGURE 7.7

Tools, such as those provided by HubSpot (depicted here), track social media mentions by key word or phrase. Savvy organizations can mine comments for competitive intelligence, insight, and product ideas or to coordinate follow-up and thoughtful customer service.

Facebook provides a summary of page activity to administrators (including stats on visits, new fans, wall posts, etc.), while Facebook's Insights tool measures user exposure, actions, and response behavior relating to a firm's Facebook pages and ads.

Bit.ly and many other URL-shortening services allow firms to track Twitter references to a particular page. Since bit.ly applies the same shortened URL to all tweets pointing to a page, it allows firms to follow not only if a campaign has been spread through "retweeting" but also if new tweets were generated outside of a campaign. Graphs plot click-throughs over time, and a list of original tweets can be pulled up to examine what commentary accompanied a particular link.

Location-based services like Foursquare have also rolled out robust tools for monitoring how customers engage with firms in the brick-and-mortar world. Foursquare's analytics and dashboard present firms with a variety of statistics, such as who has "checked in" and when, a venue's male-to-female ratio, and which times of day are more active for certain customers. "Business owners will also be able to offer instant promotions to try to engage new customers and keep current ones."[82] Managers can use the tools to notice if a once-loyal patron has dropped off the map, potentially creating a special promotion to lure her back.

Monitoring should also not be limited to customers and competitors. Firms are leveraging social media both inside their firms and via external services (e.g., corporate groups on Facebook and LinkedIn), and these spaces should also be on the SMART radar. This kind of monitoring can help firms keep pace with employee sentiment and insights, flag discussions that may involve proprietary information or other inappropriate topics, and provide guidance for those who want to leverage social

media for the firm's staff—that is, anything from using online tools to help organize the firm's softball league to creating a wiki for a project group. Social media are end-user services that are particularly easy to deploy but that can also be used disastrously and inappropriately, so it's vital for IT experts and other staffers on the social media team to be visible and available, offering support and resources for those who want to take a dip into social media's waters.

9.4   Establishing a Presence

Firms hoping to get in on the online conversation should make it easy for their customers to find them. Many firms take an **embassy** approach to social media, establishing presence at various services with a consistent name. Think facebook.com/starbucks, twitter.com/starbucks, youtube.com/starbucks, flickr.com/starbucks, and so on. Corporate e-mail and Web sites can include icons linking to these services in a header or footer. The firm's social media embassies can also be highlighted in physical space such as in print, on bags and packaging, and on store signage. Firms should try to ensure that all embassies carry consistent design elements, so users see familiar visual cues that underscore they are now at a destination associated with the organization.

As mentioned earlier, some firms establish their own communities for customer engagement. Examples include Dell's IdeaStorm and MyStarbucksIdea. Not every firm has a customer base that is large and engaged enough to support hosting its own community. But for larger firms, these communities can create a nexus for feedback, customer-driven innovation, and engagement.

Customers expect an open dialogue, so firms engaging online should be prepared to deal with feedback that's not all positive. Firms are entirely within their right to screen out offensive and inappropriate comments. Noting this, firms might think twice before turning on YouTube comments (described as "the gutter of the Internet" by one leading social media manager).[83] Such comments could expose employees or customers profiled in clips to withering, snarky ridicule. However, firms engaged in curating their forums to present only positive messages should be prepared for the community to rebel and for embarrassing cries of censorship to be disclosed. Firms that believe in the integrity of their work and the substance of their message shouldn't be afraid. While a big brand like Starbucks is often a target of criticism, social media also provides organizations with an opportunity to respond fairly to that criticism and post video and photos of the firm's efforts. In Starbucks' case, the firm shares its work investing in poor coffee-growing communities as well as efforts to support AIDS relief. A social media presence allows a firm to share these works without waiting for conventional public relations (PR) to yield results or for journalists to pick up and interpret the firm's story. Starbucks executives have described the majority of comments the company receives through social media as "a love letter to the firm." By contrast, if your firm isn't prepared to be open or if your products and services are notoriously subpar and your firm is inattentive to customer feedback, then establishing a brand-tarring social media beachhead might not make sense. A word to the self-reflective: Customer conversations will happen online even if you don't have any social media embassies. Users can form their own groups, hash tags, and forums. A reluctance to participate may signal that the firm is facing deeper issues around its product and service.

While firms can learn a lot from social media consultants and tool providers, it's considered bad practice to outsource the management of a social media presence to a third-party agency. The voice of the firm should come *from* the firm. In fact, it should come from employees who can provide authentic expertise. Starbucks' primary Twitter feed is managed by Brad Nelson, a former barista, while the firm's director of environmental affairs, Jim Hanna, tweets and engages across social media channels on the firm's green efforts.

9.5   Engage and Respond

Having an effective social media presence offers "four Ms" of engagement: it's a *megaphone* allowing for outbound communication; it's a *magnet* drawing communities inward for conversation; and it allows for *monitoring* and *mediation* of existing conversations.[84] This dialogue can happen privately (private messaging is supported on most services) or can occur very publicly (with the intention to reach a wide audience). Understanding when, where, and how to engage and respond online requires a deft and experienced hand.

Many firms will selectively and occasionally retweet praise posts, underscoring the firm's commitment to customer service. Highlighting service heroes also reinforces exemplar behavior to employees who may be following the firm online, too. Users are often delighted when a major brand retweets their comments, posts a comment on their blog, or otherwise acknowledges them online—just be sure to do a quick public profile investigation to make sure your shout-outs are directed at customers you want associated with your firm. Escalation procedures should also include methods to flag noteworthy posts, good ideas, and opportunities that the social media team should be paying attention to. The customer

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embassy

In the context of social media, an established online presence where customers can reach and interact with the firm. An effective embassy approach uses a consistent firm name in all its social media properties.

base is often filled with heartwarming stories of positive customer experiences and rich with insight on making good things even better.

Many will also offer an unsolicited apology if the firm's name or products comes up in a disgruntled post. You may not be able to respond to all online complaints, but selective acknowledgement of the customer's voice (and attempts to address any emergent trends) is a sign of a firm that's focused on customer care. Getting the frequency, tone, and cadence for this kind of dialogue is more art than science, and managers are advised to regularly monitor other firms with similar characteristics for examples of what works and what doesn't.

Many incidents can be responded to immediately and with clear rules of engagement. For example, Starbuck issues corrective replies to the often-tweeted urban legend that the firm does not send coffee to the U.S. military because of a corporate position against the war. A typical response might read, "Not true, get the facts here" with a link to a Web page that sets the record straight.

Reaching out to key influencers can also be extremely valuable. Prominent bloggers and other respected social media participants can provide keen guidance and insight. The goal isn't to create a mouthpiece, but to solicit input, gain advice, gauge reaction, and be sure your message is properly interpreted. Influencers can also help spread accurate information and demonstrate a firm's commitment to listening and learning. In the wake of the Domino's gross-out, executives reached out to the prominent blog The Consumerist.[85] Facebook has solicited advice and feedback from MoveOn.org months before launching new features.[86] Meanwhile, Kaiser Permanente leveraged advice from well-known health care bloggers in crafting its approach to social media.[87]

However, it's also important to recognize that not every mention is worthy of a response. The Internet is filled with PR seekers, the unsatisfiably disgruntled, axe grinders seeking to trap firms, dishonest competitors, and inappropriate groups of mischief makers commonly referred to as *trolls*. One such group hijacked *Time* Magazine's user poll of the World's Most Influential People, voting their twenty-one-year-old leader to the top of the list ahead of Barack Obama, Vladimir Putin, and the pope. Prank voting was so finely calibrated among the group that the rankings list was engineered to spell out a vulgar term using the first letter of each nominee's name.[88]

To prepare, firms should "war game" possible crises, ensuring that everyone knows their role, and that experts are on call. A firm's social media policy should also make it clear how employees who spot a crisis might "pull the alarm" and mobilize the crisis response team. Having all employees aware of how to respond gives the firm an expanded institutional radar that can lower the chances of being blindsided. This can be especially important as many conversations take place in the so-called dark Web beyond the reach of conventional search engines and monitoring tools (e.g., within membership communities or sites, such as Facebook, where only "friends" have access).

In the event of an incident, silence can be deadly. Consumers expect a response to major events, even if it's just "we're listening, we're aware, and we intend to fix things." When director Kevin Smith was asked to leave a Southwest Airline flight because he was too large for a single seat, Smith went ballistic on Twitter, berating Southwest's service to his thousands of online followers. Southwest responded that same evening via Twitter, posting, "I've read the tweets all night from @ThatKevinSmith—He'll be getting a call at home from our Customer Relations VP tonight."

In the event of a major crisis, firms can leverage online media outside the social sphere. In the days following the Domino's incident, the gross-out video consistently appeared near the top of Google searches about the firm. When appropriate, companies can buy ads to run alongside keywords explaining their position and, if appropriate, offering an apology.[89] Homeopathic cold remedy Zicam countered blog posts citing inaccurate product information by running Google ads adjacent to these links, containing tag lines such as "Zicam: Get the Facts."[90]

Review sites such as Yelp and TripAdvisor also provide opportunities for firms to respond to negative reviews. This can send a message that a firm recognizes missteps and is making an attempt to address the issue (follow-through is critical, or expect an even harsher backlash). Sometimes a private response is most effective. When a customer of Farmstead Cheeses and Wines in the San Francisco Bay area posted a Yelp complaint that a cashier was rude, the firm's owner sent a private reply to the poster pointing out that the employee in question was actually hard of hearing. The complaint was subsequently withdrawn and the critic eventually joined the firm's Wine Club.[91] Private responses may be most appropriate if a firm is reimbursing clients or dealing with issues where public dialogue doesn't help the situation. One doesn't want to train members of the community that public griping gets reward. For similar reasons, in some cases store credit rather than reimbursement may be appropriate compensation.

Who Should Speak for Your Firm? The Case of the Cisco Fatty

Using the Twitter handle "TheConnor," a graduating college student recently offered full-time employment by the highly regarded networking giant Cisco posted this tweet: "Cisco just offered me a job! Now I have to weigh the utility of a fatty paycheck against the daily commute to San Jose and hating the work." Bad idea. Her tweet was public and a Cisco employee saw the post, responding, "Who is the hiring manager. I'm sure they would love to know that you will hate the work. We here at Cisco are versed in the web." Snap!

But this is also where the story underscores the subtleties of social media engagement. Cisco employees are right to be stung by this kind of criticism. The firm regularly ranks at the top of *Fortune*'s list of "Best Firms to Work for in America." Many Cisco employees take great pride in their work, and all have an interest in maintaining the firm's rep so that the company can hire the best and brightest and continue to compete at the top of its market. But when an employee went after a college student so publicly, the incident escalated. The media picked up on the post, and it began to look like an old guy picking on a clueless young woman who made a stupid mistake that should have been addressed in private. There was also an online pile-on attacking TheConnor. Someone uncovered the woman's true identity and posted hurtful and disparaging messages about her. Someone else set up a Web site at CiscoFatty.com. Even Oprah got involved, asking both parties to appear on her show (the offer was declined). A clearer social media policy highlighting the kinds of issues to respond to and offering a reporting hierarchy to catch and escalate such incidents might have headed off the embarrassment and helped both Cisco and TheConnor resolve the issue with a little less public attention.[92]

It's time to take social media seriously. We're now deep into a revolution that has rewritten the rules of customer-firm communication. There are emerging technologies and skills to acquire, a shifting landscape of laws and expectations, a minefield of dangers, and a wealth of unexploited opportunities. Organizations that professionalize their approach to social media and other Web 2.0 technologies are ready to exploit the upside—potentially stronger brands, increased sales, sharper customer service, improved innovation, and more. Those that ignore the new landscape risk catastrophe and perhaps even irrelevance.

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KEY TAKEAWAYS

- Customer conversations are happening and employees are using social media. Even firms that aren't planning on creating a social media presence need to professionalize the social media function in their firm (consider this a social media awareness and response team, or SMART).

- Social media is an interdisciplinary practice, and the team should include professionals experienced in technology, marketing, PR, customer service, legal, and human resources.

- While the social media team provides guidance, training, and oversight, and structures crisis response, it's important to ensure that authentic experts engage on behalf of the firm. Social media is a conversation, and this isn't a job for the standard PR-style corporate spokesperson.

- Social media policies revolve around "three Rs": representation, responsibility, and respect. Many firms have posted their policies online so it can be easy for a firm to assemble examples of best practice.

- Firms must train employees and update their knowledge as technologies, effective use, and threats emerge. Security training is a vital component of establishing social media policy. Penalties for violation should be clear and backed by enforcement.

- While tempting, creating sock puppets to astroturf social media with praise posts violates FTC rules and can result in prosecution. Many users who thought their efforts were anonymous have been embarrassingly exposed and penalized. Customers are also using social media to expose firm dishonesty.

- Many tools exist for monitoring social media mentions of an organization, brands, competitors, and executives. Google Alerts, Twitter search, TweetDeck, Twitrratr, bit.ly, Facebook, and Foursquare all provide free tools that firms can leverage. For-fee tools and services are available as part of the online reputation management industry (and consultants in this space can also provide advice on improving a firm's online image and engagement).

- Social media are easy to adopt and potentially easy to abuse. The social media team can provide monitoring and support for firm-focused efforts inside the company and running on third-party networks, both to improve efforts and prevent unwanted disclosure, compliance, and privacy violations.

- The embassy approach to social media has firms establish their online presence through consistently named areas within popular services (e.g., facebook.com/starbucks, twitter.com/starbucks, youtube.com/starbucks). Firms can also create their own branded social media sites using tools such as Salesforce.com's "Ideas" platform.

- Social media provides "four Ms" of engagement: the megaphone to send out messages from the firm, the magnet to attract inbound communication, and monitoring and mediation—paying attention to what's happening online and selectively engage conversations when appropriate. Engagement can be public or private.

- Engagement is often more art than science, and managers can learn a lot by paying attention to the experiences of others. Firms should have clear rules for engagement and escalation when positive or negative issues are worthy of attention.

QUESTIONS AND EXERCISES

1. The "United Breaks Guitars" and "Domino's Gross Out" incidents are powerful reminders of how customers and employees can embarrass a firm. Find other examples of customer-and-employee social media incidents that reflected negatively on an organization. What happened? What was the result? How might these incidents have been prevented or better dealt with?

2. Hunt for examples of social media excellence. List an example of an organization that got it right. What happened, and what benefits were received?

3. Social media critics often lament a lack of ROI (return on investment) for these sorts of efforts. What kind of return should firms expect from social media? Does the return justify the investment? Why or why not?

4. What kinds of firms should aggressively pursue social media? Which ones might consider avoiding these practices? If a firm is concerned about online conversations, what might this also tell management?

5. List the skills that are needed by today's social media professionals. What topics should you study to prepare you for a career in this space?

6. Search online to find examples of corporate social media policies. Share your findings with your instructor. What points do these policies have in common? Are there aspects of any of these policies that you think are especially strong that other firms might adopt? Are there things in these policies that concern you?

7. Should firms monitor employee social media use? Should they block external social media sites at work? Why or why not? Why might the answer differ by industry?

8. Use the monitoring tools mentioned in the reading to search your own name. How would a prospective employer evaluate what they've found? How should you curate your online profiles and social media presence to be the most "corporate friendly"?

9. Investigate incidents where employees were fired for social media use. Prepare to discuss examples in class. Could the employer have avoided these incidents?

10. Use the monitoring tools mentioned in the reading to search for a favorite firm or brand. What trends do you discover? Is the online dialogue fair? How might the firm use these findings?

11. Consider the case of the Cisco Fatty. Who was wrong? Advise how a firm might best handle this kind of online commentary.

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