

IBM Institute for Business Value

The changing face of communication

Social networking's growing influence on telecom providers



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By Rob van den Dam, Ekow Nelson and Zygmunt Lozinski

People are communicating more things to more people than ever before, and not just by phone anymore. Internet-enabled communication models are gaining audience, attention and market share at the expense of traditional telecommunication providers (Telcos). Can Telcos fight back and find new growth opportunities in this rapidly changing ecosystem? The challenge is not just in understanding the technology, but also the unfolding fundamental shifts in human communication behavior.

The face of communication has changed dramatically over the past few years. Traditional Telcos, which have historically dominated two-way interpersonal conversations, are increasingly being challenged by new market entrants that use open platforms to meet diverse and rapidly changing user wants and needs.

Social networking Web sites and services, such as Facebook, MySpace and Cyworld, have become primary communication media for a new generation of digitally aware consumers. Driven by high broadband penetration, maturing “social software” and readily available, affordable Internet-enabled multimedia devices, these sites and services are making inroads with enthusiastic users and garnering the attention of advertisers, consumer product companies and enterprises that are using social media to reach their customers; build brand loyalty; and communicate with geographically dispersed employees, suppliers and partners.

The widespread social networking phenomenon reflects shifts in two long-term communication trends. First, there is a *shift in communication patterns* – from point-to-point, two-way conversations to many-to-many, collaborative communications. Second, *control of the communication environment* is transitioning from Telcos to open Internet platform providers, enabled by better and cheaper technology, open standards, greater penetration of broadband services and wireless communication networks.

The combined effect of these trends is altering the competitive landscape in communications and giving rise to emerging business models that include:

- *Open and Free* – This model features companies that offer one-to-one communication services, but through an open Internet platform and at no – or very little – cost. These services potentially threaten profitable traditional services, such as long-distance calling and mobile roaming.

- *Gated Communities* – Companies using this model focus on many-to-many communications, rather than point-to-point, within telecom-controlled environments. They are, essentially, a “walled-garden” for operator-led collaboration services and are likely to appeal to users and enterprises that desire secure and reliable communication environments.
- *Shared Social Spaces* – This rapidly growing model facilitates collaboration on the open Internet. Key players include social networking sites such as MySpace and Facebook. These providers have the potential to become *de facto* integrated communication platforms, bringing together social networking, voice communication, e-mail, instant and text messaging, as well as content. They are drawing attention away from traditional Telcos and contributing to the fragmentation of the market. Beyond gaining audience share, these services pose an operational challenge to Telcos as they “piggyback” on the existing communications infrastructure, imposing network capacity issues and increased costs for the network providers.

In the short term, as the industry transitions to more open and collaborative communication models, the traditional model will likely remain dominant. Over the long term, however, the industry can expect a shift toward models that facilitate collaboration and sharing, with Shared Social Spaces attracting a more significant and impactful portion of people’s communication time.

Over the short to medium term, Telcos should focus on laying the foundation for a more open and collaborative future. They can begin by taking advantage of the window of opportunity in mobile social networking and also bolster their capabilities to serve the evolving, broader communication needs of enterprises. They should partner with, or acquire, existing players to proactively develop the capabilities required for success or enable other participants in the value chain to benefit from distinctive telecom capabilities. Using network and computing infrastructure optimization techniques, they can reduce the cost of delivering high-bandwidth content and potentially capture value from it. Over the long term, Telcos should embrace a broader definition of communication – one that encompasses everything from two-way conversations to many-to-many communications – and align the organization with this reality. Also, Telcos are well positioned to enable a cross-platform, fully integrated experience across mobile, fixed and Internet Protocol television (IPTV) services.

A new ecosystem is emerging from these long-term shifts in communication trends that will require bold, significant changes by existing telecom providers. The option of doing nothing is not a luxury many providers can afford, as revenues from traditional services continue to decline and highly resourceful Internet information providers and IT companies enter the communications space to claim a larger share of communication time.

The changing face of communication

A burgeoning market in social networking


Social networking, perhaps considered a “communication fad” in recent years, is transcending that phase and becoming an activity woven into the intrinsic fabric of the Internet.

Throughout the world, Internet users are turning *en masse* to such sites as Facebook, Blogger and Twitter to meet their communication needs. Consider, for example, that before 2005, not a single social media network was ranked among the world’s top 20 English-language Web sites.¹ By April 2010,

social networking sites comprised half of the same list, displacing many traditional Internet “stars,” such as AOL (see Figure 1).

Overall, the number of unique monthly visitors to the top six social networking sites increased 95 percent between June 2006 and June 2007 – and then another 50 percent from June 2007 to June 2008.² According to data from comScore, the global Internet information provider, unique visitors to social networking sites in June 2008 represented approximately

Rank	Aug 2004	Aug 2006	April 2010
1	Yahoo!	Yahoo!	Google
2	MSN	MSN	Facebook
3	Google	Google	Youtube
4	Microsoft	My Space	Yahoo!
5	Passport	Live	Live
6	eBay	eBay	Blogger
7	Amazon	Youtube	MSN
8	Offeroptimizer	Microsoft	Twitter
9	Fastclick	Amazon	Wordpress
10	Doubleclick	Orkut	MySpace
11	Go	Blogger	Google UK
12	Alibaba	Google UK	Microsoft
13	CNN	Passport	Amazon
14	BBC	BBC	Bing
15	165.254.12.202	Craigslist	eBay
16	AOL	Go	Linkedin
17	Google UK	CNN	Flickr
18	Gator	Alibaba	Craigslist
19	eBay UK	Megaupload	Rapidshare
20	SearchScout	IMDB	Livejasmin

 Social media sites

Note 1: The traffic rank is based on three months of aggregated historical traffic data and is a combined measure of page views and users (reach).

Note 2: Due to the way Alexa assigns “language,” multilingual Wikipedia, which is in global top 20, is not shown in this list.

Source: IBM Institute for Business Value analysis; Alexa Internet Web Search – top 20 English Language Web Sites.

Figure 1: Top 20 English language Web sites.

two-thirds of the world's Internet audience.³ According to The Nielsen Company, people continue to spend more time on social networking and blog sites than ever before, with total minutes increasing 82 percent year-over-year and the average time per person increasing 67 percent year-over-year in May 2009.⁴ Facebook alone saw 484 million unique visitors worldwide in March 2010, while Twitter was the fastest-growing Web brand, growing 1,928 percent from June 2008 to June 2009.⁵ In addition, developing countries have become very conducive to social networks. By far, the largest in Asia is China with its QZone (run by Tencent) being the largest social networking site with over 300 million active members and still growing quickly.⁶

In South Korea, considered by many to be the world's most developed social networking nation, 90 percent of teens and 40 percent of the entire population are members of the social networking site Cyworld.⁷ In the United States, 80 percent of young adults, 60 percent of teens and 30 percent of adults use social networks.⁸

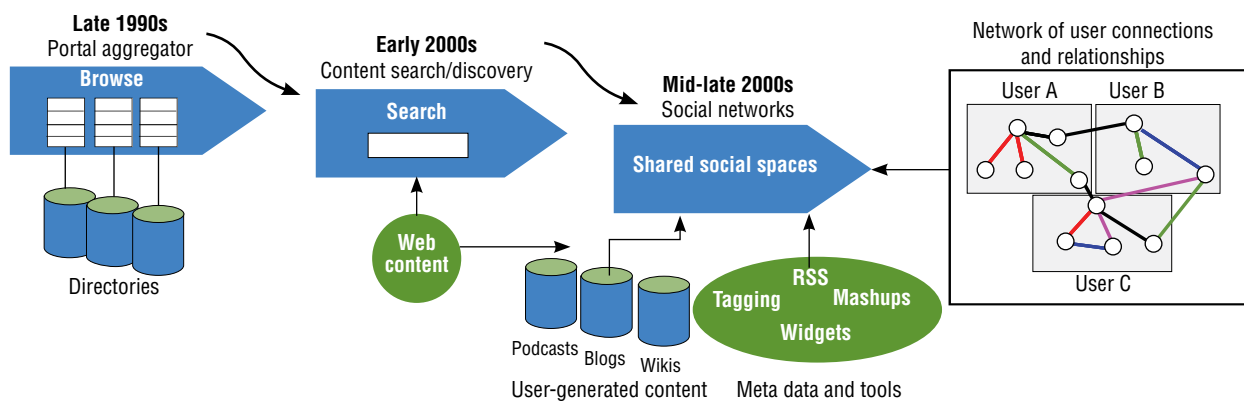
Not only are social networks generating a significant amount of online traffic, visitors to leading social networking sites also view more pages per visit than any other category of Internet site,

including such online portals as Google and Yahoo.⁹ This opens the door for potential revenue generation, as social networks – like most online service providers – base their business models on trading page views for advertising dollars.

Already, savvy marketers have begun to experiment more heavily with this concept. They spent US\$2.1 billion on social network advertising in 2008, almost double the US\$1.2 billion spent in 2007.¹⁰ By 2012, if the current trend continues, social networking ad revenues could reach \$3.8 billion, provided the right business model can be found.¹¹

The new online portal

Social networks have done more than attract users and ad revenue away from traditional Internet sites. They have become a primary destination for online users and represent the next stage in the evolution of the online experience, serving as control points for managing and enriching a user's digital lifestyle. They bring together user-generated and professional content, communication tools and services, online connections, applications and collaborative tools from blogs and podcasts to wikis and widgets (see Figure 2).



Source: IBM Institute for Business Value analysis.

Figure 2: Social networking sites are becoming online portals.

Communication and content distribution

With numerous communication tools at their disposal, social networks are becoming integrated communication hubs. The integration of MySpace and Skype, for example, illustrates how social networks and communication applications can converge to benefit users. MySpace members can make Internet phone calls using Skype's telephony network and MySpace's instant messaging program.¹² And Twitter has become extremely popular. More than just a messaging platform, it has evolved into a platform for unified communications where friends, business partners and acquaintances can connect for conversation. Instead of sending e-mails, sending texts or making phone calls, many people choose to write short messages on Twitter and publish them via a computer or mobile device.

Social networks are also increasingly becoming channels for digital content distribution, using their network of relationships to push information to users. In November 2007, for instance, Bebo launched its "Open Media" platform that offers media companies such as BBC, MTV and BSkyB an additional distribution outlet.¹³ And Apple is tapping into the popularity of social networking sites by embedding its iTunes Internet music download service into the Bebo Web site.¹⁴

Enterprises are leveraging social network applications to improve collaboration with customers, employees, partners and suppliers.

Expansion and extension

Traditional mainstream Internet sites and major consumer brands are beginning to recognize the value of social networking, not just for the potential advertising dollars it may generate, but also for e-commerce and the built-in mechanisms it employs to communicate with customers.

eBay, for example, has created more than 600 micro-social networks called eBay Neighborhoods, where members can access blogs, guides, reviews and product searches and then click to visit related auctions.¹⁵ And big-name brands, such as Coca-Cola, Victoria's Secret and Webkinz, have ventured into this newly charted arena by using social networks to generate brand awareness and affinity.¹⁶ Depending on a brand's goals, affiliating with a social network site – or possibly creating its own – can bring in an audience of customers, contain them and allow them a voice whenever appropriate.

Enterprises are also learning the value of a solution that facilitates communication and collaboration among employees, partners and suppliers. Social networks provide the opportunity to bridge the gap in communication and collaboration created by enterprise globalization. For example, General Motors uses social networking tools to facilitate communication between executives and employees, as well as to give product experts the opportunity to present new designs to the employee community.¹⁷ Motorola's "Intranet 2.0" initiative has met with considerable success, with 70,000 people using it every day, including partners.¹⁸ The company now has 4,400 blogs and 4,200 wiki pages. It uses, among other technologies, social networking, bookmarking and tagging.¹⁹

Telcos are getting in on the act

A number of Telcos are already responding to the challenges and opportunities of social networking. Many have initiatives underway that range from simply enabling online social networking sites, to extending their offerings to the mobile communication environment, to even building their own proprietary social networks.

For example, SK Communications, a subsidiary of SK Telecom in South Korea, acquired Cyworld in 2003 and is now generating approximately US\$200 million per year from selling digital items and advertising.²⁰ In 2005, the company started a joint venture with EarthLink to launch a mobile virtual network operator called Helio, which merged into Virgin Mobile in July 2008.²¹ In early 2007, Vodafone struck a deal with MySpace to enable MySpace users to access their profiles from Vodafone cell phones.²² Today, Vodafone has a similar arrangement with Facebook.²³ U.S. telecom operators Sprint, Verizon, AT&T and Virgin Mobile provide applications that allow users to access MySpace and Facebook on their mobile devices.²⁴

In 2009, Vodafone introduced Vodafone 360, a set of Internet services for mobile devices and PCs that gathers a customer's friends, communities, Facebook status updates, entertainment and personal favorites (such as music, games, photos and video) in one place. It also offers the ability to chat through Windows Live Messenger and Google Talk (see sidebar, Vodafone – Extending telecom capability to open social networking).²⁵

Vodafone – Extending telecom capability to open social networking

Vodafone 360 brings together a customer's contacts, status updates and messaging services from the mobile phone, social networks and other Internet accounts, enhancing the customer's experience and use of social media. Customers have integrated contacts, music, photos and mapping services and can share their favorite music choices – and even their physical location – how and when they choose with chosen groups of friends. The service is automatically backed up and synchronized, regularly and wirelessly, between a user's mobile device and computer.

Source: "Vodafone announces Vodafone 360." Vodafone press release. September 24, 2009.

Trends in communication evolution

The widespread social networking phenomenon is a reflection of shifts in two long-term underlying trends in communication:

1. Communication patterns are shifting from point-to-point, two-way conversations to many-to-many group communications and collaboration.
2. Shift in communication control is transitioning from provider-controlled environments to open Internet platform service providers with greater opportunities for user participation.

Shifts in communication patterns

Communication patterns are changing from personal and conversational to sharing and collaborative, augmented with links, videos, photos and other multimedia content that substantially enrich the communications experience. This is being enabled by greater global connectivity; the availability of affordable, high-quality content and communication devices; and the rise of social software.

“Communications overall is shifting from ‘point-to-point’ to ‘many-to-many,’ in order to socialize and enjoy an experience more deeply – people consuming content together and interacting during that experience from virtually anywhere in the world.”

– John Stankey, President and CEO, AT&T Operations

Traditional interpersonal communication, usually via the telephone, allows expression but does not provide group or collaborative capabilities. As Professor Clay Shirky, a leading authority on the social and economic effects of the Internet at New York University’s Interactive Telecommunication Program observes, “The telephone, the technological revolution that put the most expressive power in the hands of the individual, didn’t create an audience; telephones were designed for conversation.”²⁶ The availability and convergence of mobile communication and the Internet are now creating a platform that enables group communication encompassing many participants through shared spaces in virtually any geographic location.

The so-called “Net Generation,” composed of “digital natives” who have grown up in a technology-enabled environment, is at the forefront of this phenomenon. According to Pew Research, on average, a typical 21-year-old in the United States entering the workforce today has played video games for 5,000 hours; exchanged 250,000 e-mails, instant messages and phone text messages; logged 10,000 hours of cell phone use; and spent 3,500 hours online.²⁷

The new generation of digital natives is far more likely than their parents to own a digital music player; to have posted writing, pictures or video on the Internet; to have created a blog or profile on a social networking site; to have downloaded digital content such as songs, games, movies, or software; to have shared a remix or “mashup” creation with friends; and to have snapped a photo or video with a cell phone.²⁸

For many of this generation, social networking is even supplanting e-mail as the preferred method of communication. But they also use social networking for more than communication and content sharing. They use it to develop their identities, meet friends or form relationships that become part of their individual social graphs, which are becoming key resources for harnessing collective wisdom or opinion from “trusted” individuals.

But the shift away from traditional telecommunication to social networking is not limited to digital natives. A growing number of adults now use technology to get what they need from each other, instead of from traditional media and institutions. Nineteen percent of consumers in the 2007 IBM Digital Consumer Survey said they spend more than six hours per day on personal Internet activities.²⁹ Only 9 percent indicated they watch the same amount – or more – of television.³⁰

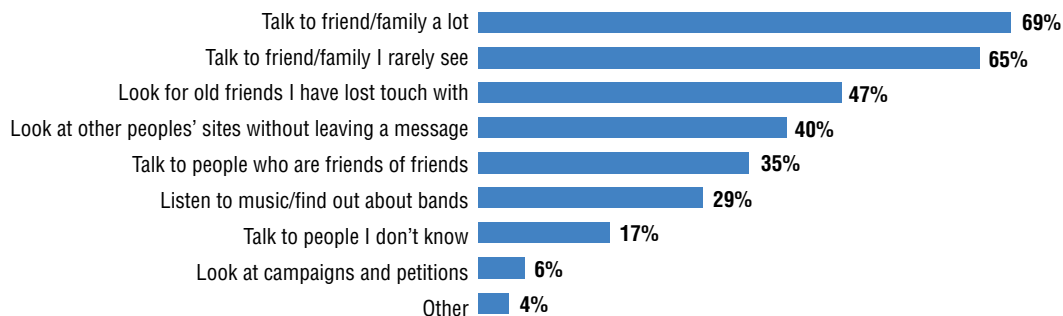
As shown in Figure 3, social networks are used instrumentally to reinforce social ties.

Brought up in the connected and collaborative world of the Internet, the Net Generation is at the forefront of shifting social communication patterns.

Shift in communication control

Widespread availability and affordability of connectivity and communication tools/devices are also shifting control of communication media away from the domain of Telcos and toward a more open communication platform.

The majority of households, individuals and businesses in developed nations have Internet access, and the number of Internet users in emerging economies is growing rapidly.³¹ In September 2008, there were 452 million broadband subscribers worldwide (more than the total number of households in the United States, Britain, France, Japan, Korea and Germany),



Source: IBM Institute for Business Value analysis; “Social Networking.” United Kingdom Office of Communications (Ofcom) 2008. http://www.ofcom.org.uk/advice/media_literacy/medlitpub/medlitpubrss/socialnetworking/report.pdf

Figure 3: The most popular activities in social networking are communications/staying in touch.

and this number is expected to grow to 876 million by 2012.³² At the same time, data connectivity speeds have increased considerably – from 56 kilobits per second (Kbps) modem connectivity speeds only a decade ago to 8-16 megabits per second (Mbps) today.³³ Some countries support bandwidth up to 90Mbps currently.³⁴ The costs of connectivity and storage have also declined significantly, and the availability of Internet-enabled devices, with increasing user interface sophistication, is enabling richer, more immersive experiences.

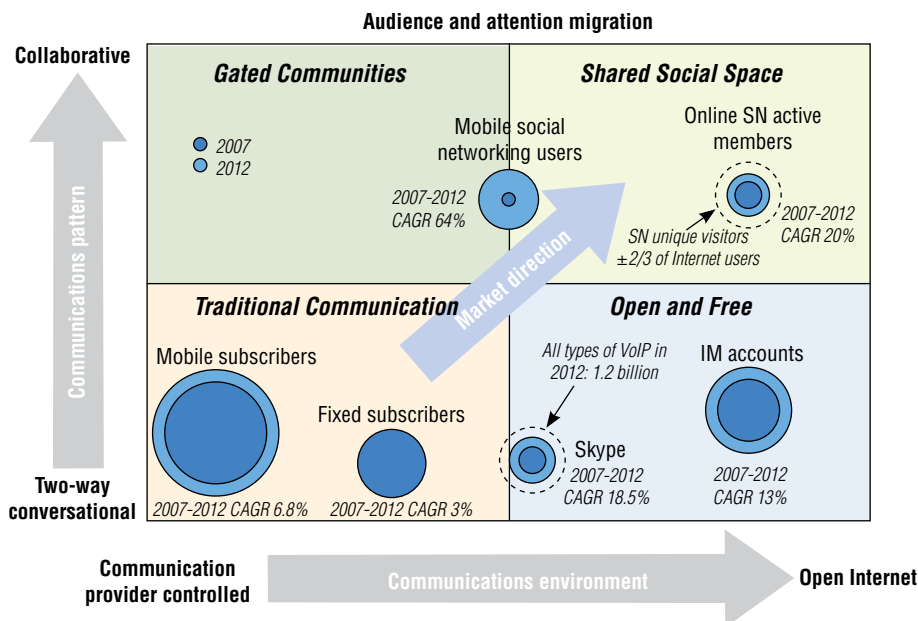
With better, cheaper technologies and greater use of broadband, the Internet and wireless networks, “Over the Top” (OTT) providers, such as social networking sites, are becoming ever-more viable platforms for communication services – and consumers are responding eagerly.

Impact of shifts on the emerging communication landscape

The combination of shifts in communication control and patterns is redefining the competitive landscape, giving rise to new business models. In contrast with traditional communication models, emerging models are based on open platforms that support many-to-many and/or collaborative communication patterns (see Figure 4).

Traditional communication

The traditional model, characterized by two-way point-to-point communication, is the domain of traditional Telco providers. It is the largest segment in terms of revenue and subscribers, but it is showing signs of slow growth as other



Source: IBM Institute for Business Value analysis based on publicly available data from eMarketer, Datamonitor, Skype, ABI Research and The Radicati Group, Inc.

Figure 4: Shifts in communication control and patterns give rise to new business models.

models take hold. Wireline revenue is declining and, although according to Gartner Inc., global mobile services revenue is forecast to grow 7.6 percent from 2007-2012, the mobile subscriber base has reached saturation in key developed markets.³⁵

Open and Free

This model offers alternatives to traditional point-to-point communication services on open Internet platforms. Companies in this domain provide basic communication services such as VoIP for free or at very low cost. Many of these services threaten profitable traditional services such as long-distance calling and mobile roaming.

Providers in this space include VoIP provider Skype, Google with GoogleTalk and Microsoft with Windows Live Messenger, which offer PC-to-PC voice services along with instant messaging and chat.³⁶ With over 560 million registered users worldwide, Skype has, in a matter of seven years, come close to creating a truly global telecom service.³⁷ While Skype's level of growth is impressive, there remains some skepticism about the ability of these types of new entrants to provide the high quality of service required to support professional, error-free business communications.

Many of the players in the "open and free" space, such as Microsoft and Google, have considerable resources and leave little room for a commercially viable response from Telcos beyond repackaging existing services into "convenience bundles." Some Telcos, however, seemingly have embraced the model and are partnering with disruptive new entrants. The mobile operator 3 in the United Kingdom and Italy, for example, has partnered with Skype to launch the 3 Skype-phone, which enables 3 subscribers to make free calls and send free Skype instant messages from their 3G mobile phones to other Skype users.³⁸ As first movers, these partners have the potential to attract and retain customers. However, while the benefits to Skype are obvious, it is too early to assess the true commercial value to 3.

Gated Communities

This model is also the domain of traditional communication service providers, but the focus is more on many-to-many communications rather than point-to-point. This is essentially a "walled-garden" approach in which operators facilitate collaboration services that will appeal to users and enterprises with a preference for the more secure and reliable communications environment traditionally provided by telecoms.

Gated Communities include both fixed (online) and mobile social networking. It is our view, however, that walled-garden social networking sites are unlikely to be successful as the majority of consumers have demonstrated a preference for open social networking sites. Telecom companies do have a window of opportunity in this model, however, by enabling mobile social networking on existing mobile network architectures, which, for the most part, remain closed platforms. Developments in smartphones and the mobile Internet, however, will gradually blur the advantage of mobile exclusivity. Forecasters estimate that by 2012, mobile social networking will represent a market opportunity of between US\$22.5 and US\$52 billion.³⁹

Mobile social networking provides a short-term opportunity to increase use of SMS, MMS and even voice traffic.

Recent studies have revealed that more than 40 percent of iPhone users in the United States, Germany, France and the United Kingdom are visiting social networking sites.⁴⁰ In South Korea, a mobile user visits Cyworld on average 11 times per day.⁴¹ The mobile service of the Japanese social network Mixi, which started as an online site, has turned out to be hugely successful with mobile page views already outnumbering online page views.⁴²

A number of traditional communication service providers have formed partnerships with open social networking providers to incorporate such services into their telecom environments. For example, in October 2008, Telefonica signed a global agreement with Facebook allowing it to integrate access to Facebook's mobile service and applications from all of Telefonica's mobile portals.⁴³

Enterprise-level collaboration has significant potential in this "Gated Communities" space. Many governments and corporations are redefining their communication needs beyond voice telephony and e-mail and are looking to productively employ Web-based collaboration tools such as blogs, wikis and social

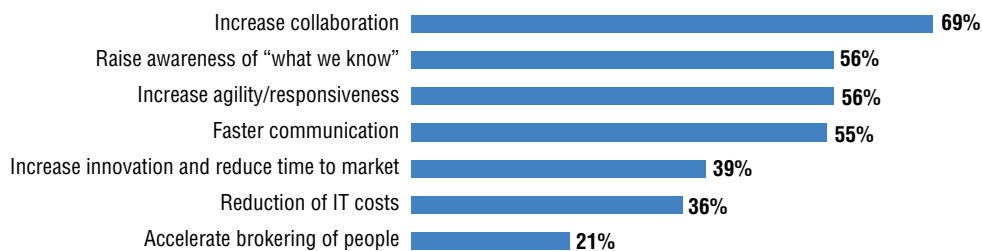
networking to help transform their organizations by achieving greater coordination and communication with their customers, employees and partners (see Figure 5).

While traditional telecom companies are often perceived as conduits of information, the opportunity exists for them to serve enterprises – and governments – with a broader set of innovative communication solutions that encompass collaboration in a secure, reliable environment with agreed service-level guarantees.

Shared Social Spaces

Shared Social Spaces facilitate collaboration on the open Internet. The main providers in this space are OTT applications such as MySpace, Bebo, YouTube and Facebook. But also virtual worlds such as Second Life belong to this domain and have integrated voice and text-based communication capabilities to connect to friends, even from mobile phones.⁴⁴

A number of key players in the "Open and Free" model are also offering services in this space, such as Google with its social network Buzz.⁴⁵ Other companies entering the fray



Source: "Enterprise 2.0: Agile, Emergent and Integrated." AIIM Market IQ. March 2008.

Figure 5: Businesses and organizations are leveraging social network applications to improve collaboration with customers, employees and partners.

include Microsoft, with investments in Facebook, and Nokia, with its OVI/Share platform.⁴⁶ As many of these players integrate telephony services, they have the potential to become fully integrated, end-to-end communication platforms.

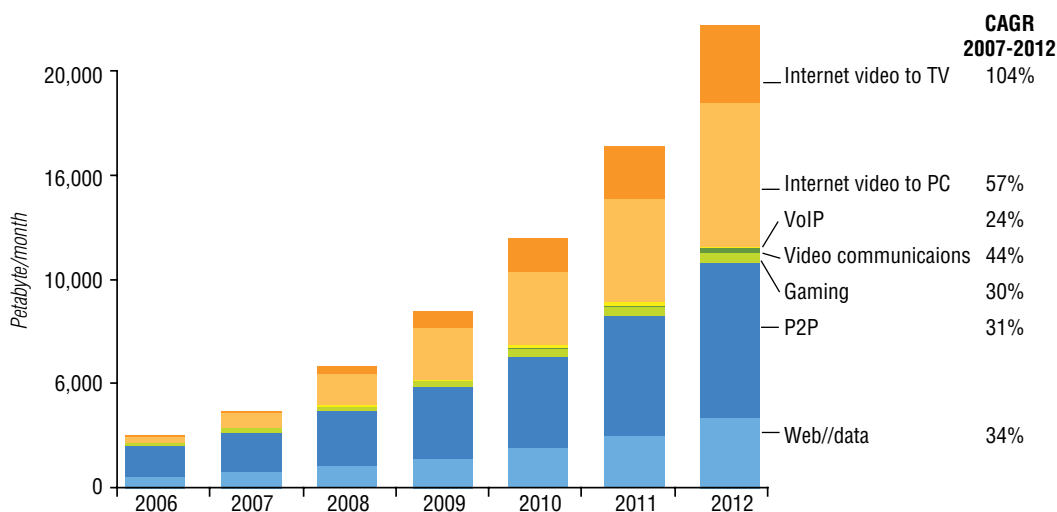
While there has been significant growth in social networking, we believe the revenue model remains unproven. Regardless, these media are drawing attention away from traditional communication service providers and are contributing to their slowing growth. Over the long run, they have the potential to generate reasonable revenue streams from advertising and other sources as dollars begin to follow “eyeballs.”

Still, telecom providers need to care about Shared Social Spaces and, especially, OTT applications that put additional strain on already-burdened network infrastructure, particularly with the rapid increase in video content sharing and distribution. According to a BBC News report, the United Kingdom

communications regulator Ofcom estimates these types of OTT services will impose an additional £830m (US\$1.4 billion) in bandwidth costs on U.K. Internet service providers (see sidebar, Free OTT services cost network providers).⁴⁷

It is projected that by 2012, the sum of all forms of online video, including TV, video on demand, Internet and peer-to-peer (P2P), will account for nearly 90 percent of all consumer Internet traffic, a large portion of which will flow through OTT applications (see Figure 6).⁴⁸

The dramatic increase in OTT traffic alters the equation for telecom operators and will likely force them to develop new business and revenue models. However, the massive investment required to satisfy consumer appetites for rich content is likely to exacerbate the tension between network providers and OTT providers.



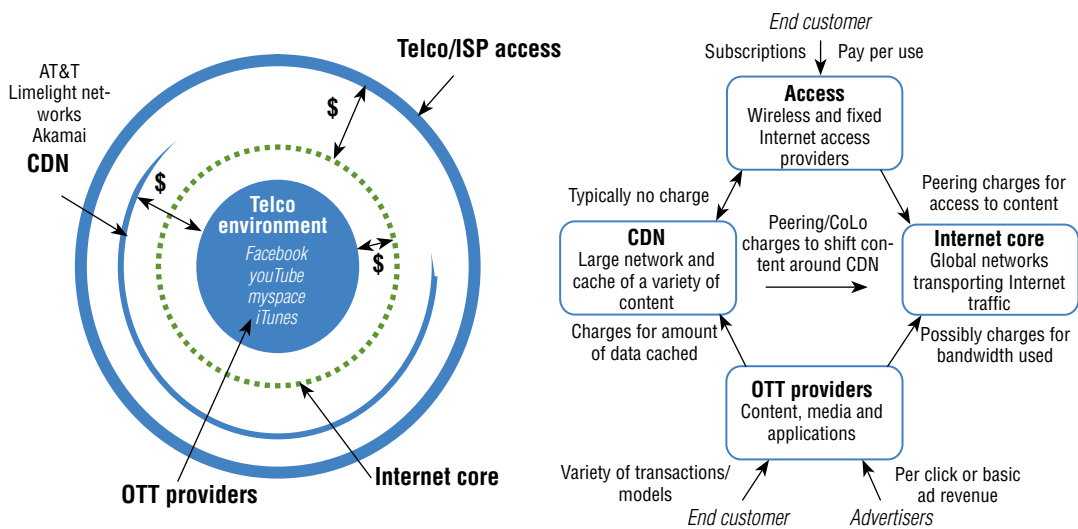
Source: Global consumer Internet traffic forecast, 2006 - 2012.

Figure 6: Global consumer Internet traffic forecast, 2006-2012.

To deal with over-burdening OTT traffic, telecom operators have options that include filtering or blocking OTT traffic, but this is unsustainable in many jurisdictions as it violates net-neutrality principles. Another option is to use Content Delivery Network (CDN) technology to relieve the load over the backbone and the Telcos' servers. By caching replicas of content and applications at multiple locations in the network, the CDN allows telecom operators to distribute content and applications closer to the end user and to realize more effective P2P traffic routing. This overcomes issues such as network bandwidth availability and congestion during peak usage periods and reduces the need for increasing core network capacity. Telecom operators can pass the cost of CDN investments on to customers through higher or differentiated broadband fees and/or reaching agreements with CDN providers to jointly fund these additional costs (see Figure 7).

Free OTT services costly for network providers

The launch of BBC's iPlayer Internet TV service in December 2007, an OTT service based on a P2P architecture, created a bandwidth capacity crunch for a number of Internet service providers (ISPs). For the U.K. ISP PlusNet, there was a 72 percent increase in the number of customers using more than 250 megabytes of streaming video per month and 100 percent growth in those using more than 1 gigabyte.⁴⁹ The cost for PlusNet to carry this OTT service increased by more than 200 percent per month and was not recoverable from customers.⁵⁰



Source: IBM Institute for Business Value.

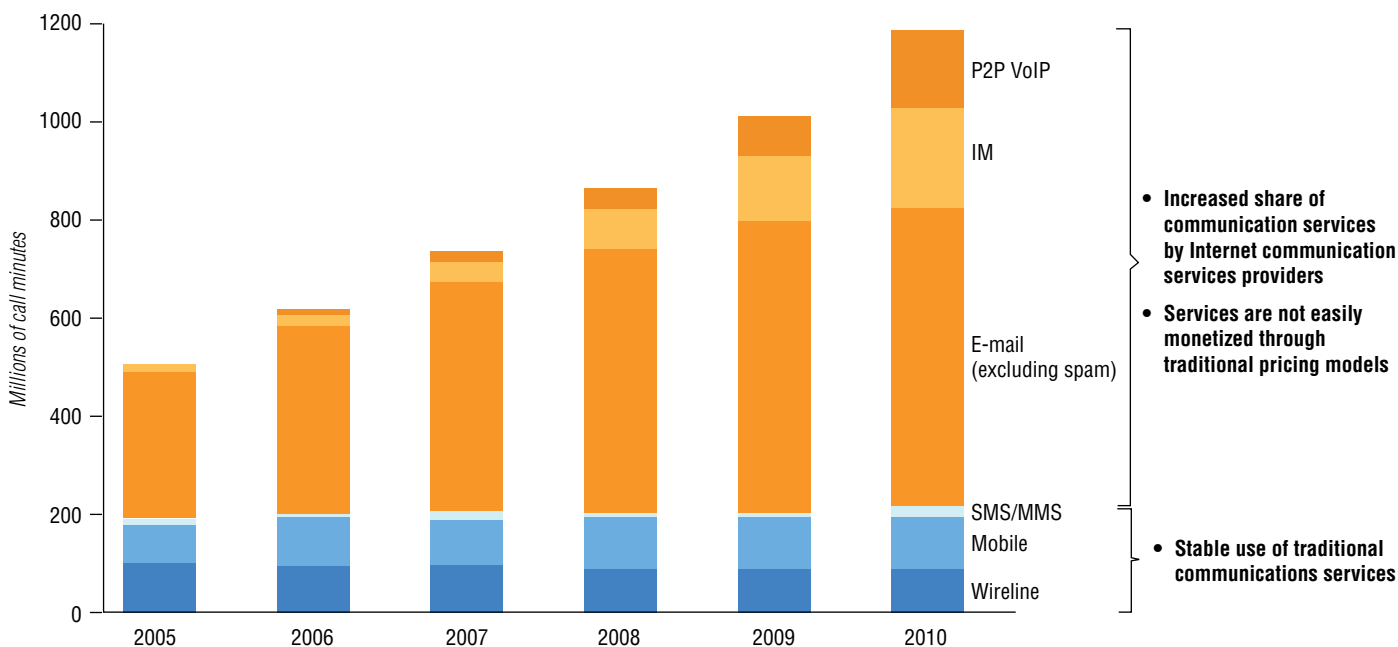
Figure 7: New business models to capture value from OTT traffic.

Toward an open and collaborative future

Emerging communication models are fragmenting audiences and shifting customers away from traditional telecom providers. While traditional providers continue to claim the largest number of subscribers, it is the users of social networking sites and open Internet communication services that are growing at significantly faster rates, even as take-up of traditional services accelerates in emerging economies. YouTube and Facebook, for example, claim the third- and fourth-highest share of global online minutes respectively.⁵¹

In France, for example, while volume of call minutes across fixed and mobile has increased by 9 percent – from nearly 190 billion minutes in 2005 to 207 billion in 2010 – OTT communications over the same period, including VoIP, P2P and instant messaging, has increased by 211 percent, from 303 billion to 942 billion minutes (see Figure 8).⁵²

At the same time, U.K. adults spend an average of 3 hours a week on social networks, with 6 percent of the population engaging for 11 hours.⁵³ Not surprisingly, teenagers are



Note: An e-mail or SMS/MMS is considered as a 30 second call.
 Source: Montagne, Roland. "Telco's views of openness." IDATE DigiWorld Summit 2009.

Figure 8: Overview of total communications market for France.

Over the long term, the largest share of incremental communication time will trend toward new providers and models.

spending significantly more hours on social networking than other segments of the population.⁵⁴ As many more people use social networking – and for potentially increasing periods of time – traditional providers’ share of overall communication minutes will continue to decline and long-term revenues are likely to fall as a result of increased competition and greater availability of lower-cost alternatives.

Although there is a substantial migration from the traditional communication model to the alternative Shared Social Spaces model, in the short term, all four models will co-exist. Traditional models will continue to be attractive to those who place a premium on reliability and quality of service, including corporations and enterprises. But, over the long term, the largest share of incremental communication time will trend toward new providers and models.

Recommendations and next steps

The social networking phenomenon arose from significant shifts in communication, driven by the widespread growth of Internet connectivity and the emergence of interactive online communication tools. These shifts have been redefining a century-old industry and, as a result, the advantages enjoyed by traditional communication service providers are beginning to wane. Telcos can, however, remain relevant in the face of changing user sentiments and demands if they take bold steps to adapt to this evolving marketplace.

Over the short to medium term, telecom providers should focus on the following to lay the foundation for a more open and collaborative future:

1. Exploit opportunities in the Gated Communities by enabling mobile social networking in current “closed” networks to capture a share of potential revenues, which are forecast to reach between US\$22 billion and US\$52 billion by 2012.⁵⁵
2. Partner with or acquire existing social networking players to proactively develop the capabilities required for success, including experimenting with new revenue-generating services. For example, Vodafone’s acquisition of Zyb – the social networking and online management tool for backing up and sharing contact and calendar information – demonstrates how a mobile operator can extend social networking from PCs to the mobile device with a view toward increasing data services revenue while delivering a much richer and unified communication experience.⁵⁶
3. Enable other participants in the value chain – including advertisers, virtual operators and application developers – to benefit from telecom capabilities such as location, presence, text/multimedia messaging services and conference calling, while providing access to customer analytics to help enhance services and offerings.
4. Bolster capability to deliver fully integrated enterprise communication services that combine voice, Internet-based communication and collaborative communication models. Enterprise spending on Web 2.0 collaboration technologies is forecast to grow to US\$4.6 billion globally by 2013, with social networking as the top spending category.⁵⁷ Partnerships with enterprise communication providers, software vendors and/or system integrators can provide an efficient path to delivering these services.

5. Work more closely with CDN and/or OTT providers to reduce the cost of delivering high-bandwidth content (e.g., video, music) in response to increasing demands for such services. This can be achieved through network and computing infrastructure optimization techniques such as traffic shaping, use of *faster-than-realtime progressive downloads* in place of realtime streaming, and caching of content close to the edge of the network using CDNs.⁵⁸ Such approaches can potentially lead to new business models that capture more value from this increasing OTT traffic, enabling an enhanced user experience through improved quality of service and innovative service partnerships that take advantage of this optimized environment.

Over the long term, as communications transition to Shared Social Spaces, telecom providers should:

1. Broaden the scope of their traditional telecommunications business to more actively encompass both point-to-point communications and many-to-many collaborative communication models, and align their organizations and industry partnerships accordingly. This has strategic and transformational implications for the business, impacting areas such as product and services offerings, skills, platforms, revenue models and markets, among others.
2. Create more compelling Gated Communities by delivering a cross-platform, fully integrated communication and collaboration experience across mobile, fixed and IPTV services. This will enable Telcos to stem their loss-of-share of communication time, as well as reduce churn, by offering a differentiated, premium-value service that promises greater flexibility, ease-of-use and a consistent experience on any communication platform – anytime, anywhere.

The nature and medium of communications are being rapidly altered by the movement of users to environments that offer less expensive – but more expressive – capabilities to facilitate both one-to-one and group communications with more people than ever before. These shifts are creating a new communication services ecosystem that will require significant and bold changes by existing providers if they wish to remain an integral part of a changing landscape. The journey will not be without risks, but the option of doing nothing is a luxury few can afford. Revenues from traditional services continue to decline, and highly resourceful Internet information providers and IT companies are entering this space to accommodate the collaborative, many-to-many services that are claiming a significantly larger share of the overall communications marketplace.

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References

- 1 IBM Institute for Business Value analysis based on information from the Alexa, the Web Information Company, Web site. <http://www.alexa.com>
- 2 Institute for Business Value analysis based on information from Comscore, the global Internet information provider.
- 3 "Social Networking Explodes Worldwide as Sites Increase their Focus on Cultural Relevance." comScore. August 12, 2008. <http://www.comscore.com/press/release.asp?press=2396>
- 4 "Twitter Grows 1,444% Over Last Year; Time on Site Up 175%." Nielsenwire. June 22, 2009. <http://blog.nielsen.com/nielsenwire/nielsen-news/twitter-grows-1444-over-last-year-time-on-site-up-175/>
- 5 "Facebook Closing In on 500 Million Visitors a Month." Social Networking Watch. April 21, 2010. <http://www.socialnetworkingwatch.com/2010/04/facebook-closing-in-on-500-million-visitors-a-month-.html>; "Twitter's 1928 percent growth and other notable social media facts." July 16, 2009. Mashable. <http://mashable.com/2009/07/16/twitter-june-2009-growth/>
- 6 "The Next Billion – The Rise of Social Network Sites in Developing Countries." Web2forDev. June 19, 2009. <http://www.web2fordev.net/component/content/article/1-latest-news/69-social-networks>
- 7 Schonfeld, Erick. "Cyworld ready to attack MySpace." *Business 2.0 Magazine*. CNN. July 27, 2006. <http://money.cnn.com/2006/07/27/technology/cyworld0727.biz2/index.htm>

- 8 Li, Charlene. "How Consumers use Social Networks." Forrester Research, Inc. June 21, 2007.
- 9 IBM Institute for Business Value analysis based on information from comScore, the global Internet information provider. June 2008.
- 10 eMarketer: "Social Networking Marketing: Ad spending and usage." eMarketer. December 2007; "eMarketer lowers Social Network ad spending estimate." eMarketer. May 20, 2008. <http://www.emarketer.com/Article.aspx?id=1006321>
- 11 Ibid.
- 12 Brown, Erika. "MySpace Says: Skype Me." *Forbes*. http://www.forbes.com/2007/10/16/skype-myspace-internet-technology-cz_eb_1016skype_print.html
- 13 "Bebo launches 'Open Media.'" Bebo in the News. <http://www.bebo.com/Press.jsp?PressPageId=5037676804>
- 14 "Apple to sell music through Bebo network." *Financial Times*. June 12, 2007. <http://www.ft.com/cms/s/2/104bad26-1925-11dc-a961-000b5df10621.html>
- 15 "Neighborhoods." eBay. <http://neighborhoods.ebay.com/>
- 16 "Promoting a thirst for Sprite in teenage cellphone users." *The New York Times*. June 7, 2007; "Pink Victoria's Secret." Facebook; "Webkinz, Come in and Play." Webkinz. http://www.webkinz.com/us_en/
- 17 Holtz, Shel. "GMnext: A preview of corporate communications in the social media era." January 3, 2008. http://blog.holtz.com/index.php/gmnext_a_preview_of_corporate_communications_in_the_social_media_era/
- 18 Hoover, J. Nicholas. "Motorola's IT Department Takes on Enterprise 2.0." *Intelligent Enterprise*. June 20, 2007. <http://www.intelligententerprise.com/showArticle.jhtml;jsessionid=A3SDGIXSOTXL4QSNLPSKHSCJUNN2JVN?articleID=199905898>
- 19 Ibid.
- 20 "Chinese Social Network site QQ.com beats Facebook almost 4:1 revenue wise." *Watblog.com*. March 28, 2008. <http://www.watblog.com/2008/03/28/chinese-social-networking-site-qqcom-beats-facebook-almost-41-revenue-wise/>
- 21 "Earthlink mobile venture rename Helio." *cnet.com*. October 25, 2005. http://news.cnet.com/EarthLink-mobile-venture-renamed-Helio/2100-1039_3-5914186.html
- 22 Gray, Tim. "Vodafone, MySpace Team on Mobile Social Networking." *E-Commerce Times*. February 7, 2007. <http://www.ecommercetimes.com/story/55629.html?welcome=1211232337>
- 23 Ibid.
- 24 IBM Institute for Business Value analysis.
- 25 "Vodafone Announces Vodafone 360." Vodafone. September 24, 2009. http://www.vodafone.com/start/media_relations/news/group_press_releases/2009/360.html
- 26 Shirky, Clay. *Here Comes Everybody: The Power of Organizing Without Organizations*. Penguin Press. February 28, 2008.
- 27 Rainie, Lee. "Digital Natives Invade the Workplace." *PewResearchCenter Publications*. September 28, 2006.

- 28 Boyd, Danah. "Socializing digitally." Thinker's corner. <http://www.danah.org/papers/VodafoneReceiver.pdf>.
- 29 "IBM Consumer Survey shows decline of TV as primary media device." August 22, 2007. IBM Institute for Business Value.
- 30 Ibid.
- 31 IBM Institute for Business Value analysis; "Entertainment and Media Outlook 2008 – 2012." Pricewaterhouse-Coopers. 2008; Broadband Penetration. Organisation for Economic Co-operation and Development. <http://www.oecd.org/sti/ict/broadband>
- 32 "World Broadband Subscriber Forecast." In-Stat. October 2008. <http://www.instat.com/catalog/Ccatalogue.asp?id=288>
- 33 "Average advertised broadband download speed, by country, Mbit/s, Oct. 2007." Organisation for Economic Co-operation and Development. <http://www.oecd.org/sti/ict/broadband>
- 34 Ibid
- 35 Hahn, William L. and Nhat Pham. "Dataquest Insight: Global Telecommunications Market Take." Gartner, Inc. July 22, 2008.
- 36 "What's New on Google Talk?" available at <http://www.google.com/talk/whatsnew.html>; Windows Live Messenger features available at <http://get.live.com/messenger/features>
- 37 "Skype By the Numbers: It's Really Big." GigaOM. April 20, 2010. <http://gigaom.com/2010/04/20/skype-q4-2009-number/>
- 38 "3 Skypephone Delivers Free Skype to Skype Mobile Calls and Instant Messages at the Touch of a Button." Skype.com. October 29, 2007. http://about.skype.com/2007/10/30-skypephone_delivers_free_sky.html
- 39 "Mobile Social Networking Revenues Could Reach US\$52 Billion by 2012." Cellular-news. February 11, 2008; "Mobile Web 2.0 revenues to reach \$22.4bn by 2013, driven by User Generated Content and Social Networking." Juniper Research press release. May 14, 2008. <http://juniperresearch.com/shop/viewpressrelease.php?pr=91>
- 40 "iPhone hype holds up." M:Metrics. March 2008. <http://www.mmetrics.com/press/PressRelease.aspx?article=20080318-iphoneye>
- 41 Mobile-korea.blogspot.com. November 14, 2007.
- 42 "FY 2007 Fourth Quarter (January-March 2008) and Full-Year (April 2007-March 2008) Earning Results Briefing Session." Mixi, Inc. May 12, 2008. http://eir.eol.co.jp/EIR/View.aspx?template=ir_material&sid=1095&code=2121
- 43 "Telefonica, Facebook strike global partnership deal." Telecom Paper. October 6, 2008. <http://www.telecompaper.com/news/article.aspx?cid=639352>
- 44 Roush, Wade. "New Portal to Second Life: You're Phone." Technology Review. MIT. February 16, 2007. <http://www.technologyreview.com/Infotech/18195/?a=f>
- 45 "Google's social side hopes to catch some Buzz." CNET News. February 9, 2010. http://news.cnet.com/8301-30684_3-10440662-265.html
- 46 Stone, Brad. "Microsoft to Pay \$240 million for Stake in Facebook." *The New York Times*. October 25, 2007. <http://www.nytimes.com/2007/10/25/technology/24cnd-facebook.html>; Zoller, Eden. "Nokia's social media strategy: muddle or masterplan?" Ovum. 2008. <http://www.ovum.com/news/euronews.asp?id=7123>

- 47 Wakefield, Jane. "BBC and ISPs clash over iPlayer." *BBC News*. April 9, 2008. <http://news.bbc.co.uk/1/hi/technology/7336940.stm>
- 48 "Cisco Visual Networking Index: Forecast and Methodology, 2007-2012." Cisco. June 16, 2008. http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white_paper_c11-481360_ns827_Networking_Solutions_White_Paper.html.
- 49 "iPlayer usage effect – a bandwidth explosion." Plusnet. February 2008. <http://community.plus.net/blog/2008/02/08/iplayer-usage-effect-a-bandwidth-explosion/>
- 50 Ibid.
- 51 "Technology Top 50 Global Tech Stocks: The Ones You Care Most About...Plus a Few More." Morgan Stanley. 2008
- 52 Montagne, Roland. "Telcos' views of openness." IDATE DigiWorld Summit. 2009; IBM Institute for Business Value analysis.
- 53 "UK's MySpace and Facebook addicts." Channel 4 News. July 20, 2007. http://www.channel4.com/news/articles/science_technology/uks+myspace+and+facebook+addicts/613077
- 54 Allen, David. "Kids spend twenty hours online a week." Tech Watch. <http://www.techwatch.co.uk/2008/03/25/kids-spend-twenty-hours-online-a-week/>
- 55 "Mobile Social Networking Revenues Could Reach US\$52 Billion by 2012." Cellular-news. February 11, 2008; "Mobile Web 2.0 revenues to reach \$22.4bn by 2013, driven by User Generated Content and Social Networking." Juniper Research press release. May 14, 2008. <http://juniperresearch.com/shop/viewpressrelease.php?pr=91>
- 56 "Vodafone: ZYB acquisition facilitates more mobile social networking." Datamonitor. May 2008. <http://www.datamonitor.com/industries/news/article/?pid=6A58957F-4BB1-42CD-A1EE-62D53B810155&type=CommentWire>
- 57 "Enterprise Web 2.0 worth \$4.6 billion in 2013." searchviews. April 21, 2008. <http://www.searchviews.com/index.php/archives/2008/04/enterprise-web-20-worth-46-billion-in-2013.php>
- 58 Odlyzko, Andrew. "The delusions of net neutrality." School of Mathematics, University of Minnesota. August 31, 2008. <http://www.dtc.umn.edu/~odlyzko/doc/net.neutrality.delusions.pdf>



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