

It's No Longer "Your Father's Mobile Phone"

Mobile Internet Will Drive the Next Wave of Innovation

Connected Life Market Watch is an ongoing research platform designed to sense market transitions and identify key inflection points in consumers' behavior and expectations. Its aim is to provide market insights to empower Cisco, its clients, and partners to seize market opportunities and lead market transformation. Cisco's Internet Business Solutions Group (IBSG), the company's global strategic consulting arm, fields several research cycles each year, focusing on trends in the service delivery experience, the mobile consumer, and transitions in video entertainment. Data cited in this report comes from a 2009 installment of Connected Life Market Watch, which surveyed broadband consumers in 13 countries.

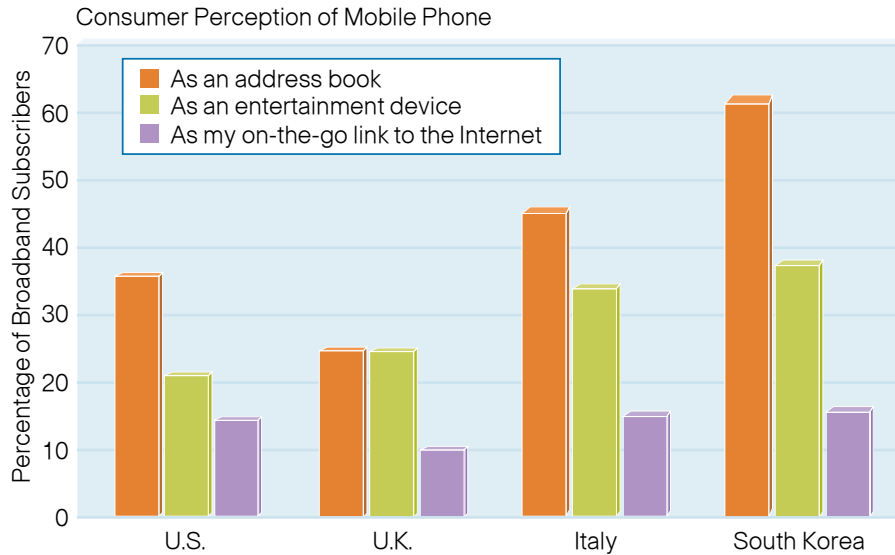
The mobile phone is truly a 24/7 device—always within an arm's reach of most consumers. The immediacy and constancy of its connection to the consumer is unique and makes the mobile phone amazingly adaptable. The mobile phone has been likened to the "Swiss Army Knife" of communications, quickly morphing from a voice communications tool for the business road warrior to an "always-on, access-anything device" for anybody.

For many, the mobile phone already acts as an entertainment and productivity tool, and today it is poised to morph once again. The mobile Internet is driving another wave of transformation for the mobile phone, which will enable it to play an even greater role in consumers' everyday lives.

The mobile Internet has evolved slowly since its beginnings in the late 1990s, but it is starting to gain traction. As Internet-friendly phones proliferate and networks improve and expand, more consumers are starting to explore the mobile Internet. Mobile Internet adoption is still in the early stages, with sporadic use even among early adopters. Few consumers today view their mobile phone as their on-the-go link to the Internet.

The mobile Internet is taking off at different rates in different countries (see Figure 1). Among countries where fixed broadband is mature, South Korea leads in the number of broadband consumers who have used the mobile Internet, and the United States boasts the largest number of respondents who use the mobile Internet on a daily basis. This higher percentage of regular users is due in part to the fact that unlimited, flat-rate mobile data plans are more common in the United States than in other countries, where the tariff structure often is based on the amount of data used.

Most consumers have a difficult time translating typical data usage into cost. They do not know the relative price of uploading a picture, or searching for a map. And as video usage proliferates, the variables intensify. Video is a very data-intensive service. Consumers can be shocked by how quickly they incur triple-digit bills if they watch or download video on their mobile devices. As a result, usage-based pricing can curb consumers' mobile behavior.

Figure 1. Mobile Internet Is Gaining Traction, But Still in “Early Adopter” Phase

Base: Broadband subscribers

Source: Cisco IBSG, 2009

Mobile Internet use is evolving differently in emerging countries, where computers and fixed broadband access are not pervasive. In these areas, 31 percent of respondents see the mobile phone as their on-the-go link to the Internet, versus only 14 percent in the United States.

Mobile Internet use today still pales in comparison to fixed Internet adoption. In the United States, even those respondents who use the mobile Internet every day use it only for two hours per week, while they spend 26 hours a week connected to the Internet on their computers. But the mobile Internet platform is building steadily. Most activity is in the realm of maps, email, and basic search, and consumers are starting to value the convenience of carrying out these tasks wherever they are.

A Powerful Tool for Social Change

The 2009 Iranian presidential election provides a profound example of how the mobile phone can become a critical communications tool during a rapidly unfolding political situation. In the wake of a much-debated election, Iranians armed with their mobile phones took to the streets. Protestors took photos and videos with their mobile phones, used text messages to organize meetings, and sent Twitter updates to inform the world about what was happening. In fact, the U.S. Department of State requested that Twitter postpone its scheduled upgrade because it believed that an interruption of Twitter service would have a large impact on the dynamically unfolding political situation.

The mobile industry has been layering functionality into mobile devices for years. By ensuring that mobile devices are always connected—not just from a voice or text message perspective, but also in terms of enabling “any content”—the possibilities are almost limitless.

Mobile Phone: From Photos to Video Broadcast

We all know how mobile phones have disrupted the traditional camera industry. Today, 59 percent of U.S. respondents take photos using their mobile phone at least once a month. In other countries, that number is even higher (United Kingdom, 65 percent; Italy, 76 percent; South Korea, 86 percent).

Today, consumers are also beginning to use their mobile phones for video—and not just for watching it. In fact, more consumers take videos on their mobile phones than watch video on the devices. In the United States, 24 percent of respondents capture videos more than once a month on their mobile phones. Again, these numbers are even higher in other countries (29 percent in the United Kingdom, 46 percent in Italy, 63 percent in South Korea, 58 percent in Mexico, and 70 percent in Saudi Arabia).

If those images are “stranded” on the phone, their value is limited. In the United States, for example, only 31 percent of respondents share photos with any regularity (more than once a month), and only 15 percent share videos. Even fewer upload these photos and videos to public websites regularly (11 percent and 9 percent, respectively). As service providers build out their networks and unlimited data plans become more pervasive, this situation will begin to change; with a click of a button, consumers will be able to send videos to their entire social network.

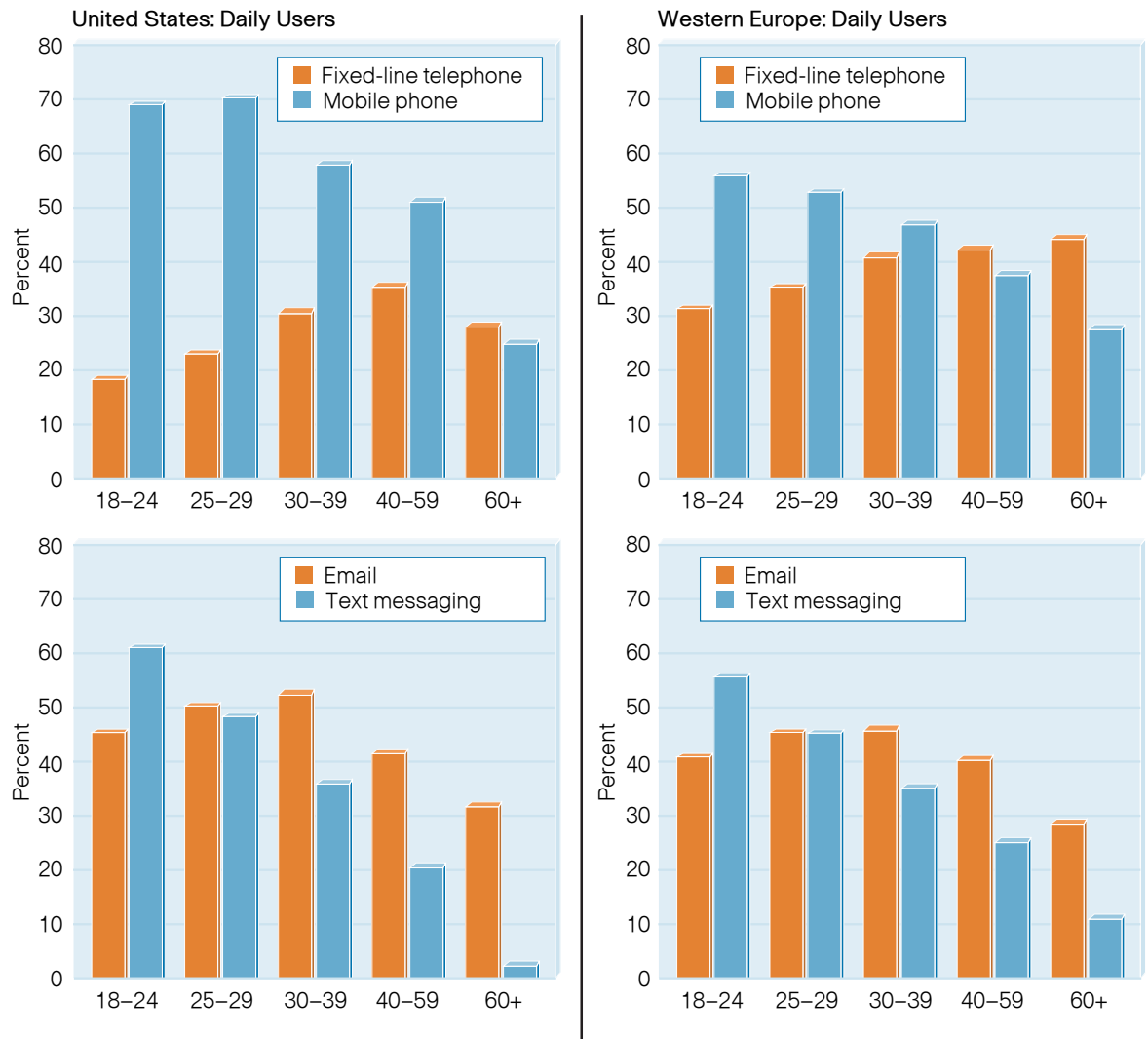
Interesting new applications continue to expand how this video can be used. For instance, with Qik (<http://qik.com>), consumers can immediately stream video from their mobile phones. Services like this could enable grandparents, for example, to see the first steps of their grandchild in real time, and just as easily allow a citizen on the ground to act as a journalist and broadcast his or her account of events in real time.

As Iran showed us, when images from the mobile phone are connected and combined with the functionality of Flickr, YouTube, Facebook, or Twitter, their power is truly astounding.

Changing Consumer Behavior at Home and at Work

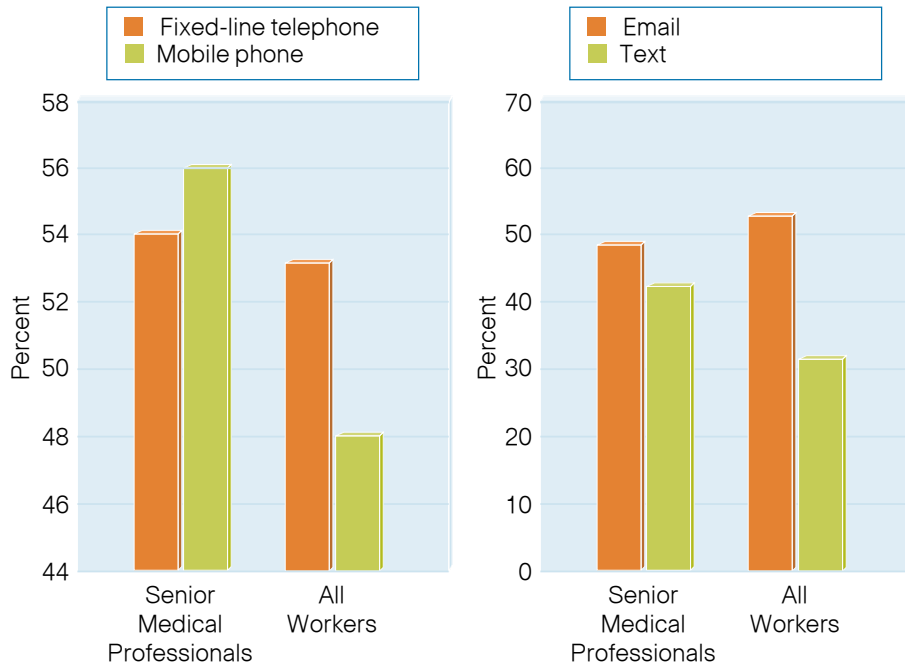
The mobile phone has already changed how generations of consumers communicate. In many parts of the world, including the United States and Western Europe, the trend is clear. Over time, landline phones have given way to mobile phones. In the United States, 18- to 24-year-olds are almost four times more likely to use their mobile phone than a landline phone to place a call each day (see Figure 2). Even in written communication, the mobile phone is changing behavior as email gives way to texting.

Figure 2. As Younger Generations Grow Up, Text Messaging Will Outpace Email



Base: Broadband subscribers
Source: Cisco IBSG, 2009

The mobile phone has also become a primary tool for communicating and collaborating at work. Among all workers globally, nearly the same number use a mobile phone for work daily (48 percent) as use a fixed phone daily (56 percent). And among some types of workers, this trend is accelerating. For instance, among senior medical professionals (e.g., doctors), mobile phone usage has surpassed fixed phone usage. While text usage among doctors hasn't eclipsed email usage, it is very popular and is gaining on email.

Figure 3. Mobile Trend Is Especially Evident Among Some High-End Professionals

Base: Broadband subscribers

Source: Cisco IBSG, 2009

Perhaps even more interesting is that the newest forms of communication—social networking and instant messaging—are growing up simultaneously on the fixed and mobile platforms. Instant messages and Facebook updates don't need to be shifted from the computer to the mobile phone. By their very nature, social networking and IM are equally at home on a mobile phone or on a computer.

In fact, 43 percent of respondents under 30 years of age in the United States send or receive an IM on their mobile phone at least once per month, and 33 percent update their social network site from a mobile phone at least once a month. In the United States, instant messaging is the fourth-most-popular application on the mobile Internet, while on the fixed Internet it ranks as only the 12th-most-popular application.

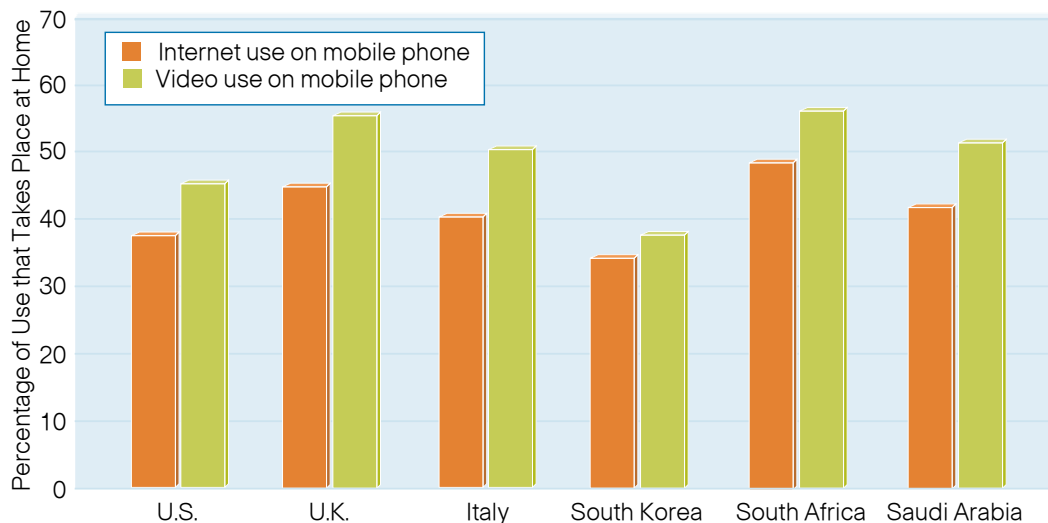
The fact that consumers want this kind of access as part of their mobile *and* fixed lives demonstrates that they perceive no separation between these two worlds. In the future, consumers will demand tools that seamlessly move with them across both mobile and fixed platforms. When asked about a potential service concept, 24 percent of global survey respondents under 30 expressed interest in a “social network alert” service that would automatically update their favorite social networking sites with any new tagged pictures or videos from their mobile phone each time they re-enter their homes. Interestingly, only 9 percent of respondents over 30 indicated the same level of interest.

Mobile Phone: It's About More than Just “Mobility”

As it evolves into more of a personalized 24/7 tool, the mobile phone will actually become less defined by the concept of *mobility*. Instead, it will become a key part of consumers’ “anywhere” experiences. Today, consumers have more control over their experiences than ever before. They want to be able to access whatever they need—anytime, anywhere.

It is important to realize that “anywhere” includes home (see Figure 4). Consumers rely on their mobile phones at home and at work, just as they do when they are on the go. In the United States, for example, respondents reported that 57 percent of their mobile Internet usage takes place at home or in the office. While this might seem odd at first, it is important to realize that the *portable, personalized, and immediately accessible* nature of the mobile phone has become as important a driver of value as mobility.

Figure 4. Home Is a Primary Location for Mobile Phone Use



Base: Broadband subscribers

Source: Cisco IBSG, 2009

Even beyond the well-known phenomenon of telephone “cord-cutting,” consumers benefit from the portable and immediate access the mobile phone provides, even when the person using the phone is not *mobile*, but is at home or at work. And the mobile Internet only increases these benefits. We’ve all seen evidence—from using the mobile phone in bed to check email before starting the day, to checking stock prices while having dinner with the in-laws. Sometimes, the mobile phone delivers an added benefit of enabling multitasking, such as checking the scores on your mobile phone while watching a game on TV. In each of these cases, a computer is likely no more than a room or two away, but the mobile phone is the device consumers reach for.

Because the mobile phone is used at home as much as it is anywhere else, it's not surprising that many survey respondents expressed interest in services that would improve their mobile phone performance at home. About half of respondents in the United States, Italy, and South Korea had interest in a "mobile at home" service that would improve data speed and call quality, and help them manage their spend by supporting all their home use on a lower-cost network. U.K. consumers were less enthusiastic, with 39 percent expressing interest.

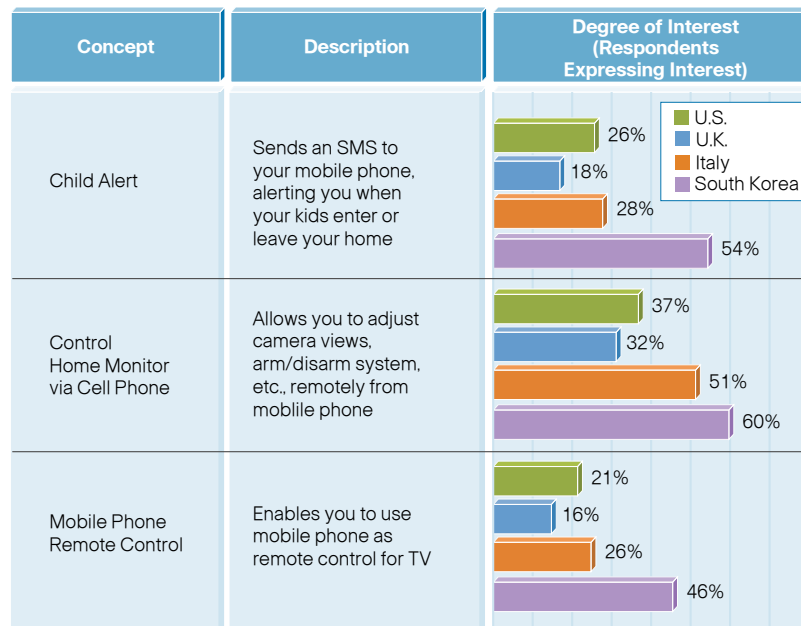
Mobile Phone Will Continue To Redefine Itself

With a reliable connection to the Internet, exciting new capabilities are possible for the mobile phone. As it integrates these new features, the mobile phone will transcend the boundaries that have defined it in the past. There is no shortage of ways that mobile phones can become even more indispensable in helping people live, work, play, and learn.

One example is a service that transforms the mobile phone into your personal time-keeper and traffic cop. This service monitors traffic conditions and public transportation schedules in real time and then integrates these with personal calendars, triggering alerts to the mobile phone to tell us when we need to depart our current location to reach the next destination on time (see <http://www.traffic.com/>).

The mobile phone can also be used to help maintain the safety of our children and homes; or as a handy, personalized remote control for the TV; or as an on-the-go extension of home entertainment, among many other new applications. We tested some of these in our most recent Connected Life Market Watch, and consumers are interested.

Figure 5. Percentage of Respondents Expressing Interest in New Mobile Phone Services



Base: Broadband subscribers

Source: Cisco IBSG, 2009

Example: Mobile Phone Redefines the Shopping Experience

One place where we can see the potential of the mobile phone to transform experience is in shopping. Consumers around the world appear ready to use mobile devices to make transactions, both on the web and in stores. More than 70 percent of global respondents always have their mobile devices with them while shopping in a store, and most of them call friends and family to discuss purchase decisions. Globally, 64 percent of broadband subscribers use their mobile devices to call family and friends about purchases, with several countries, including India and Brazil, topping 70 percent.¹ While most consumers already call friends while shopping, Cisco IBSG believes more advanced ways of communicating, such as mobile social networking, will increase the richness of interactions while consumers shop.

As mobile Internet connectivity becomes more pervasive, consumers will be able to use their phones to scan a product's bar code to find out if it is available elsewhere for less, or to receive suggestions on how best to use it. For example, Kraft's iFood Assistant sends recipes, store locations, and other information directly to a user's iPhone (see <http://www.kraftfoods.com/kf/iFood.aspx>). These capabilities will enable users to check a wide range of product information, including point of origin, the conditions under which it was produced, details about its journey to us, and much more.

The survey found that respondents worldwide are ready to try new in-store services that would make the shopping experience faster and more convenient:

- Broadband subscribers in Brazil were most enthusiastic about using a service to check the price of an item at another store, with 61 percent saying they would do so "always" or "often."
- More than 40 percent of Indian and Brazilian broadband subscribers, and 36 percent of their Chinese counterparts, would "always" or "often" use their mobile devices to seek assistance while in a store. Globally, 27 percent of broadband consumers would often check product reviews with their mobile devices, and 36 percent would sign up to receive coupons they could redeem at a store's point of sale.
- Enthusiasm for using mobile devices as a means of payment is highest in Brazil, South Korea, South Africa, China, and India, with 30 to 43 percent of broadband consumers "always" or "often" willing to pay using their mobile devices.
- Broadband consumers are also making purchases on their mobile phones. In the United States, about 31 percent of broadband consumers under 30 use their mobile phones at least once a month to buy ringtones, music, or other mobile services, and about 20 percent of this group buy other items, such as movie tickets or train tickets, at least once a month with their mobile phone.

1. In countries with low overall broadband penetration, including many emerging countries, broadband users typically have higher incomes and are more technology-savvy than the general population.

What It All Means

The evolution of the mobile phone—and the mobile Internet—has different implications for consumers, services providers, and businesses.

For consumers, it's an opportunity to get more from their mobile phone investment.

Soon, consumers will be able to do much more with their mobile phones. The mobile phone has already freed consumers from sitting at home or the office to wait for a phone call. In the future, it will eliminate the need to be in a specific location to conduct almost any type of business, whether personal or work-related. New capabilities could include using the mobile phone to check and trade stocks, participate in webinars, or even help a child with homework.

For service providers, this is an important opportunity. Integrated communication carriers and mobile service providers are counting on mobile data to drive their future revenue growth. Globally, mobile data traffic is forecasted to double every year through 2013, increasing 66 times between 2008 and 2013 to reach 2.2 exabytes per month in 2013.² An overall rise in the number of people accessing the web from their phones and in the time they spend online will contribute to this growth. The main driver, however, will be the number of people using their mobile phones to take, watch, and share videos, including both professional and user-generated videos. Service providers must prepare for the exponential increase in data traffic expected to flood the network in the next three years and craft innovative pricing strategies that encourage usage, yet retain value.

For all other consumer businesses, it's the wake-up bell. In the not-too-distant future, consumers will expect the ability to conduct business on a mobile device anytime, anywhere. If your business provides devices to consumers, delivers content to consumers, or sells products or services to consumers, what is your strategy for enabling and/or adapting to the mobile Internet world?

For more information about the Connected Life Market Watch research on the mobile Internet, contact Kate Griffin, Cisco IBSG Service Provider Practice, at kagriffi@cisco.com.

2. Cisco Visual Networking Index, June 2009.