

# Chapter 1

## What Is the Mobile Internet?

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### *In This Chapter*

- ▶ Getting mobile with the Internet
  - ▶ Distinguishing between the mobile Internet and the regular Internet
  - ▶ Finding cool tools for your mobile experience
  - ▶ Seeing and doing things unique to the mobile Internet
  - ▶ Getting a line on mobile Internet safety
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You probably have heard about the Internet by now, but you might not have heard about the mobile Internet. If you haven't, you're not alone. In fact, you're in good company: Billions of people are in the same situation.

If you're using the *mobile Internet*, you have connected to the Internet by way of a wireless carrier data connection, usually to get made-for-mobile information and applications to display on your mobile phone screen.

This chapter helps clarify what the heck we're talking about, what all the fuss is about, and why you should care about the mobile Internet — at least enough to try out the mobile Internet. We're pretty sure that you'll like it if you give it a try.

If you think that being Internet-savvy might be beneficial, don't necessarily bank on it. The mobile Internet isn't the little brother of the Internet. It's different enough that you need a different mindset, and a different understanding specific to the mobile Internet maze, to navigate it effectively. Later in this chapter we explain that difference.

Oh, and don't forget about buzzwords. *Lots* of new words, phrases, and expressions are used in the mobile Internet world that set it apart from the Internet world. We do our best to acquaint you with them. If this topic is all new to you, take your time; we help you get it right, and at your own pace. Even if you're a know-it-all who breezes through this book, you can still pick up expert tips to make your wireless world much better — we promise.

The mobile Internet is a new frontier — the Wild West of the mobile-phone business. It's time to get this mobile Internet show on the road (pun intended).

## *Welcome to the Mobile Internet*

Over the past 20 years, wireless carriers (AT&T Wireless, Sprint–Nextel, T-Mobile, Verizon Wireless, and others) have offered cellular-telephone voice services. Most people have made calls on a mobile phone by now. About ten years ago, wireless carriers introduced SMS (Short Message Service), or text messaging. People almost everywhere now had their mobile phones and alphanumeric pagers built into one device. Text messaging is now a hugely successful service, with billions of text messages sent monthly. If you haven't voted on *American Idol* with text messaging or sent a quick note to a friend, ask any kids in your vicinity — they can fill you in on the power of text messaging.

For the next trick up their mobile-phone sleeves, manufacturers such as Motorola, LG, Nokia, RIM, Samsung, Sony Ericsson, and many others were quite busy in their little workshops around the world, trying to figure something out: how to make people's lives even easier. After combining a mobile phone with a pager, what could they possibly dream up next? Someone then thought about making Internet-like services work on mobile phones. They realized that mobile phones could become even more like tiny computers: They had screens, keyboards, and tiny little software applications running them — and they were all connected to a network. Ta-da! Like magic, a new cyberspace was created: Now, people all over the world have Internet access to Web sites from mobile phones anytime, anywhere.

More than 200 million people in the United States, and almost 3 billion people worldwide, are now using mobile Internet services on their mobile phones every day — in every way. Services have advanced from only making calls to family and business associates to text-messaging quick notes to friends; voting on *American Idol*; reading sports scores from ESPN; sending jokes (yes, we said it) and bank balances to mobile phones; checking e-mail on BlackBerrys and answering Yahoo! instant messaging chats; and surfing a made-for-mobile World Wide Web for the latest ringtones from Avril Lavigne, pictures of *The Simpsons*, games from Atari, uploads to Flickr, stock quotes from E\*Trade, and news from CBS News — all on the mobile Internet. Holy smokes, Batman (yes, you can get *Batman* on your mobile phone now, thanks to Apple iPhone) — the mobile Internet is truly catching up faster than anyone thought possible. Finally, the Internet and the World Wide Web have hit the wireless world.

## A history of the mobile Internet

The mobile Internet had its humble beginnings around 1998 and had its growing pains, misses, and hits (way more misses than hits). Its nickname was like a cartoon sound effect — WAP — which was a shorter version of Wireless Application Protocol. The mobile Internet wasn't supposed to be named WAP, so back then they referred to it as *wireless Internet* (no relation to WiFi as we now know it), and wireless Internet Web sites were *WAP sites*.

Early in 2000, the wireless world caught fire with the launch of the Internet on a mobile phone. (We realize that true mobile-phone fanatics are shaking their heads now, but stay tuned — this stuff comes up to the present *really* fast.) Great idea, shaky start. Back then, only a few mobile phone models had built-in Web browsers, wireless carriers' data-connection plans were extremely expensive, and average consumers found it next to impossible to find WAP Web sites that worked on their mobile phones. The whole Internet-on-a-mobile-phone idea was somewhere between a boondoggle and a complete mess. Customers

didn't like it, content companies didn't like it, and wireless carriers didn't like it. It was a good recipe for failure, as we all know now.

But the wireless industry had to start somewhere. (Hey, Rome wasn't built in a day.) Think back to the early days of the Internet — Web 2.0 it wasn't. Most people used CompuServe, AOL, or Prodigy — all on dialup — and endured limited content and network capabilities, browsers with primarily text-based services, no graphics, and a few bits of information posted by even fewer people. Think of the Internet now: Computers have next-generation browsers from Microsoft, Apple, Opera, or Firefox; full-fledged multimedia services from Google, Yahoo!, Facebook, and YouTube; and all-you-can-eat Internet access from Comcast, EarthLink, or Time-Warner Cable. The information highway simply grew much bigger and faster. The mobile Internet has done the same thing over the past eight years: It has become the made-for-mobile information highway: You can get on from nearly anywhere, and it's moving faster than ever.

## *Understanding What's Different about the Mobile Internet*

The mobile Internet is a new creature; it's more than just the Internet gone wireless. First, you must understand that the mobile Internet is a mass-media communications channel — just like newspapers, magazines, billboards, theaters, movies, radio stations, television networks, and Internet Web sites.

Second, recognize that the mobile Internet is as different from the Internet as radio is from television. Early TV shows were quite bland and simple: Actors read their scripts in front of the camera because that was the way it had been done on radio — not very exciting. But as time went by, the two different mass-media channels became quite different in the programming (or content) they offered; each developed offerings to suit its particular strengths. The same concept now applies to the Internet and the mobile Internet.

Two factors make the mobile Internet a unique experience, distinct from the Internet of yore: the tools you use to access it and the content and experience that people are looking for after they start using it. The following sections explore each of these topics in turn.

## *Checking out the tools you need*

Most of the cool stuff you can find on the Internet now, whether you view it, download it, or generate it as a user, is well suited to be delivered by available wired technology: high-speed dialup, broadband, and cable networks. But all that cool Internet stuff may not be as well suited to a mobile phone — or as appealing — if it isn't produced in the right format or context. That's because the similarities between the mobile Internet and the wired Internet are (for the most part) skin deep — and the differences are complex. As with all media technologies in the past, evolution takes hold and things change quite quickly — spurred by the need to attract and engage new audiences.

The challenge all along for wireless carriers, mobile phone manufacturers, and Internet-based content companies was how to give customers access to the huge amounts of information and services available on the Internet — on the go. Information, entertainment, and services made for the Internet had the benefit of large monitors, full QWERTY keyboards, computer-based browsers, and high-bandwidth data networks for connectivity.

The mobile Internet, on the other hand, arrives in an entirely different way. Here are the items you need:

- ✓ **A mobile phone (or smartphone or PDA):** First and foremost, you can't jump onto the mobile Internet *without* a mobile phone. These devices — phone, smartphone, or PDA — are the items that make the mobile Internet different. The size requirements for the screen display on Internet Web sites (and the large amounts of information at those sites) are tough to make work on mobile phones with their small screens and tiny keypads. A mobile phone screen is a fraction of a computer monitor's size. And, mobile phone keypads versus computer keyboards — let's not go there (at least not until Chapter 4, which tells you all about phones, smartphones, PDAs, and other devices).
- ✓ **A mobile browser:** To make the Internet work on mobile phones, wireless carriers created and installed made-for-mobile Web site browsers in all mobile phones. We don't get technical about that topic here, but most are based on next-generation WAP 2.0 and xHTML technologies. Although mobile browsers and computer-based browsers have their similarities, you still find that using a mobile browser to navigate the Web is a unique experience. Find out all about it in Chapter 7.

- ✓ **A data plan:** The mobile Internet has become more popular as carriers have packaged plans for the wireless data airtime that gives consumers mobile Internet access in a cost-effective way. Such plans include AT&T Wireless Media and Verizon Wireless America's Choice Premium. For details about providers and data plans, see Chapter 5.

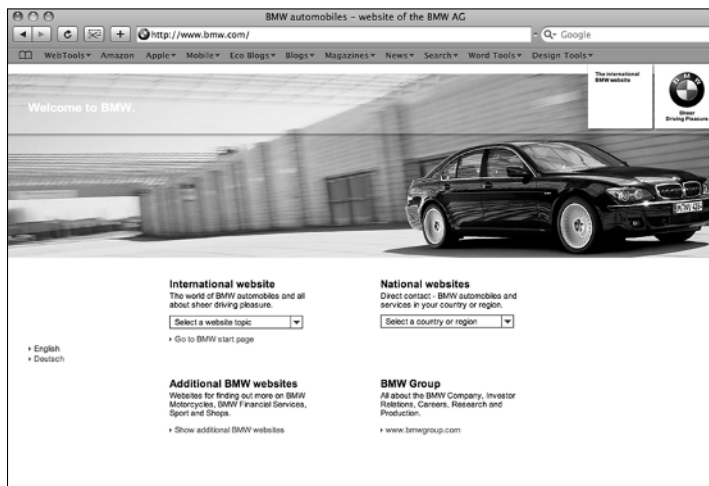
In essence, wireless carriers and their partners built an end-to-end mobile Internet system from scratch for everyday people to enjoy Internet-like services while on the go.

## Surfing made-for-mobile sites

Here's an area where repeating a few mobile-Internet phrases may help you get used to them — in this case, made-for-mobile.

A *made-for-mobile* Internet site is a Web site that's streamlined and designed to work on mobile devices. The sites are most easily identified for consumers by their URLs — essentially, the .com part goes away — for example, BMW.mobi (versus BMW.com) and wachovia.com/mobile versus wachovia.com. (We get into mobile Internet Web site naming details later.)

Internet sites, such as the BMW site shown in Figure 1-1, have too many graphics and too much information for everyone's little mobile phones to access and display in a practical way. Accessing the *pure* Internet on a mobile phone might not be the best use of a person's time and money.



**Figure 1-1:**  
The Internet  
site of  
BMW.

The real answer is to make an Internet-like experience work on mobile phones — and that means making it very simple. The information that people want on their mobile phones should be easy to access and display, and quite affordable as an option from their wireless carriers of choice. The *made-for-mobile* phrase indicates that a site enables you to

- ✓ **Browse more easily on your mobile device:** Because a mobile device has a small screen, no large keyboard, and no “real” mouse, a made-for-mobile site has pared-down navigation, lets you enter text easily, and is designed to fit on a smaller screen.
- ✓ **Access highly condensed, small bites of content and services on the go:** The sites are specifically designed and developed for your mobile phone, offering (for example) made-for-mobile news, weather, sports, e-mail, instant messaging, ringtones, pictures, and videos. Because you aren’t always home or at the office with full Internet access, made-for-mobile describes the types of services and information you want quickly and easily, anytime, anywhere.



The best use of the mobile Internet is to receive the information, applications, and services that work best on mobile devices when you’re away from your computer. We don’t mean that you need to overload the little gizmos with everything you can see on the Internet. The mobile Internet is the information equivalent of a fast snack on the go. At a bus stop, in a taxi or train, waiting for a plane or a friend, before a business meeting, you can snap up tidbits of useful info like these:

- *Practical information:* Find the nearest restaurant or hotel, receive stock market updates, check out movie listings or flight schedules, look for the best shopping deals, and check local weather.
- *Pastimes:* Download entertainment (ringtones, images, games, videos, and music on demand, for example), find out who won the big game, or update blogs with notes and pictures.

If you get the made-for-mobile versions of all these products and services, before long you’ll be right at home on the mobile Internet.

- ✓ **Find what you need with smaller downloads:** Made-for-mobile content, applications, and services make all this stuff as inexpensive as possible to access through your mobile phone and your wireless carrier’s data services.

Figure 1-2 shows the mobile version of the BMW site shown earlier in Figure 1-1. The mobile version is much easier to navigate on a phone than the Internet site.



**Figure 1-2:**  
The made-  
for-mobile  
BMW site.

## *Determining What to Do on the Mobile Internet (Now That You're Hooked)*

Think about it. When you're away from your computer, you still have a way to get business information, catch up with friends, find places in an unfamiliar city, or get entertained.

What's most interesting about the mobile Internet is that it's right where you want it to be: handy. You most likely have it with you all the time — in your pocket, purse, rucksack, or whatever — on your mobile phone. And, as long as your carrier's signal covers your device wherever you are, you can use it whenever you're ready.

Wireless carriers offer package deals that make the mobile Internet usable. Mobile phone manufacturers build mobile Internet capabilities into every new phone now sold. Content providers and applications deliver more made-for-mobile services every day. Here are some of the mobile Internet options available to you:

- ✓ **Entertainment sites:** From mobile TV to uploading pictures to updating your blog, it's all available for you to do whenever you want, wherever you want. If you missed the latest episode of your favorite reality TV show, you can catch the highlights before anyone tells you who got voted off. If you're standing at the Statue of Liberty after taking the perfect picture from your mobile phone camera, just load up the picture and post it on your Internet Web site, or blog about it right then and there. If you want to Web-surf, the mobile Internet offers a World Wide Web of opportunities to explore. See Chapter 9 for details.

- ✔ **Information:** Every month, hundreds or thousands of made-for-mobile text messaging services and mobile Web sites are launched by wireless carriers, media companies, and content providers. They're fun to browse whenever you have a few spare minutes. See Chapter 6 to find out about text messaging, Chapter 7 for tips on browsing the mobile Internet, and Chapter 8 for information about how to use mobile search tools.
- ✔ **M-commerce:** It's like e-commerce, only portable. If you want to use your mobile phone like a virtual ATM, you can do it. If you want to buy some flowers while you're stuck on a plane, that's no problem. If you want to check out the latest reviews on your favorite band after the concert — you got it. Chapter 11 helps you shop till you drop; Chapter 12 introduces mobile money management.
- ✔ **E-mail and instant messaging (IM):** Wireless carriers have many ways to help you keep connected to your business and personal e-mail while you're away from your computer. You can check and send e-mail anywhere you are. All e-mail software and services can be connected to your mobile phone, which makes it easier to keep in touch; you can send and receive messages while on the golf course or on the ski slope. (Why sit in an office if you don't have to?) Check out Chapter 10 to find out ways to check your e-mail and send instant messages from your phone.
- ✔ **Mobile software applications and widgets:** Mobile phones now are really tiny computers, with tiny operating systems that you can use to load tiny applications such as games, expense trackers, and maps. If you have a useful desktop widget that keeps you up to date with RSS feeds from the Internet, a made-for-mobile version is likely on its way. Check out your favorite computer application and widget provider's Internet Web site — it definitely has something in the works coming to a mobile phone near you. Chapter 7 showcases a few applications and widgets for you to try on your mobile phone.
- ✔ **User-generated mobile Web sites:** All the made-for-mobile tools, services, and technologies you need in order to stake your own claim on the mobile Internet land rush are at your fingertips. You can buy a made-for-mobile Internet *yournamehere.mobi* domain from your mobile phone on your way home on the bus, create your own mobile Web site when you get home (in about an hour), and then have it launched, ready to share with all your friends, before you leave home the next day. You can also test and work with your current Internet Web site to make it made-for-mobile (and call it *m.yournamehere.com*) within hours. The choices are endless. See Chapter 15 for details.
- ✔ **Mobile Internet for business:** Home business, small business, corporate, or the next big thing — wireless carriers and their partners have everything you need to create, develop, and launch your company, products, services, and promotions to the whole wireless world whenever you're ready. From launching your own ringtone, wallpaper, and

video storefronts to building made-for-mobile software applications and mobile Web sites, the mobile Internet is officially open for business. Chapter 2 introduces ways the mobile Internet can help you at work; Chapters 13 and 16 go into more detail about pitching your business tent on the mobile Internet.

## *Some Thoughts about Safety and Privacy*

As you probably know, you can have many identities on the Internet. You might have an e-mail account associated with your work. But you can have an e-mail account at home — or several e-mail accounts at Web-enabled Internet service providers such as Yahoo!, Google, or MSN. In addition, you can set up your own blog, where you can hide (or enhance) your identity, for whatever reason. On the Internet, everyone can be (or seem to be) whomever they want to be.

With your mobile phone on the mobile Internet, however, what you see is pretty much what you get. It's one way that the wireless world is quite different from the wired world: You are who you are. Wireless carriers must identify you directly and accurately so that they can bill you for any service subscription or airtime package. They have to keep records on your communications and purchase activities — for your protection more than anything else. Additionally, your mobile phone — and phone number — becomes your personal identifier to all product and service companies you engage with through mobile Internet services.

So what *are* the truly unique features of your mobile phone and the mobile Internet that make it different from the Internet world? Here's the short list:

- ✓ **Mobile phones are extremely personal.** A mobile phone is the first truly *personal* communications product ever created. You may have thought that the computer was personal because its name is “personal” computer, but a mobile phone becomes a basic personal possession, like a set of car keys. (That's appropriate when you consider that the phone is the key you use to access the mobile Internet.) Mobile phones are so personal that most people refuse to share theirs with anyone else — not even with their spouses. Some people would rather lose a pet than lose a mobile phone. (Maybe they keep virtual pets on their phones.) Others won't leave home without their mobile phones, even to go to the corner store, just in case. Most people don't leave home without keys, a wallet or purse, *and* a mobile phone. Most would go back home to retrieve a forgotten mobile phone, but might not bother if it were their keys or wallet.

As mentioned in a recent speech by the mobile industry guru Tomi Ahonen ([www.tomiahonen.com](http://www.tomiahonen.com)), six out of ten people worldwide place their mobile phones next to their beds before they go to sleep. And, more than two-thirds of the global mobile consumer population use mobile phones as alarm clocks. Additionally, mobile phones have a *personal* phone number that's yours, *only* yours, and nobody else's. It's not your house's, not your spouse's, and not your dog's (well, maybe you trust your dog enough to let her borrow your phone).

- ✓ **Mobile Internet services and all voice communications reach you through your mobile phone, where you can be accurately identified.** By having a unique number that only you own, along with a mobile phone that you register with the wireless carrier, you can be tracked by whatever you do with your mobile phone. It's therefore relatively easy to capture data about your behavior — whom you called, which detailed text messages you sent, how long you were on the mobile Internet, what you were doing, where and when you were doing it, and whom you connect with. Most of this information is held in trust and confidence between you and your wireless carrier — but it's all there. You're protected by federal regulatory laws (unless, of course, you're doing something criminal). Also, if you buy your mobile phone and mobile Internet services through your employer, your employer has all the same rights it would have with your on-the-job computer and Internet usage.

If your employer pays your mobile phone bill, it owns access to your mobile phone and mobile Internet records — and can look at them if and when required.

- ✓ **The mobile Internet is always on and available for communications with your mobile phone.** You can leave CNN on the TV all day, but you don't take the TV with you when you go out because it's a pain to lug and it doesn't work all that well (unless you have a *really* long extension cord and a satellite receiver on your head). And, you can drag your laptop computer with you when you go out, but it isn't practical to use everywhere. It may work when connected to WiFi hotspots, or if you have a wired connection and power, but who brings one to the dance club on Saturday night? But you can do that with your mobile phone. Mobile phones now have excellent battery life, work well in about 90 percent of urban areas in North America (according to the wireless carriers), and fit right into your pocket.

Mobile phone etiquette is important. It might not always be polite to have your mobile phone turned on wherever you are — people might get angry if your phone starts ringing in the movie theater, in church, or in the classroom when the teacher is trying to explain the theory of relativity. Always turn off your mobile phone or turn it to Silent mode or Vibrate mode (yes, we said *vibrate*) to keep your friends, business associates, and family members liking you better during gatherings or meetings or whenever your spouse has something important to say. (“Oops, sorry, dear — hold that thought while I take this call. . . .” Let's not go there.)



✓ **Mobile phones and wireless carrier mobile Internet services have built-in payment systems — basically, it's a wireless wallet.** You can pay your bills over the Internet, and you can buy books at Amazon.com and pay for them using your Visa card. But on your mobile phone, nearly all your calling and mobile Internet transactions are charged to your wireless carrier bill on the day you create them. This includes all made-for-mobile products and services including text messaging, ringtones, wallpapers, music, games, video, wireless data-network access, long distance, roaming, and whatever else is coming down the pike.

Basically, any product and service that “touches” your mobile phone can get billed through the wireless carrier. Vending machines, movie tickets, fast-food restaurants, taxicabs, and other venues that deal in small cash amounts (places or machines that accept micropayments less than \$20) will soon accept payment by mobile phone — all tracked and charged to your mobile phone bill. New payment options from your wireless wallet or your m-commerce mobile phone are already available. In Helsinki, Finland, more than half the single tickets for public transportation are paid by mobile phones and billed through a wireless carrier. In South Africa, you can have your paycheck sent directly to your mobile phone account that's linked to your bank account.



Okay, mobile phones have a potential downside: If you lose your phone and don't report the loss as soon as possible, you can be liable for all calls, products, and services that are purchased, whether you're the one that bought them or not. The best safeguard is to keep your mobile phone in your personal possession at all times, report any immediate loss or theft of your mobile phone to your wireless carrier and the police, and review and track all your wireless carrier billing statements before you make payments.



We strongly recommend that you read all terms and conditions of your wireless carrier's service contract — as well as the “fine print” published on any mobile Internet service offerings. In the mobile Internet world, the wireless carriers are your best friends and will do everything in their power to keep you protected from false claims or any fraudulent activities. Wireless carriers and the mobile Internet world are highly regulated service industries; they're in business to serve and protect the mobile phone users who *keep* them in business.

