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Get Smart(phones)

Last year, I purchased a smartphone, expecting to be out of the office more than usual. My chief needs were the ability to send and receive e-mails and to connect to the Bluetooth hands-free calling feature installed in my car. I found a device that met my needs—and then some.

by Jill Gilbert

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Smartphones seem to have taken over the business world. As professionals, we are tethered to Blackberrys and other smartphones more than ever. In fact, people are taking these pocket-sized devices on the road and leaving their laptops behind. Users can communicate and run office applications, access multimedia files, and manage information storage on a mobile computing platform that fits in your pocket.

How Did We Get Here?

The 2010s smartphones are the latest iteration of the 1990s PDAs, or personal digital assistants, married to a cell phone. Today's smartphones do everything the old PDAs did, and more. Simply put, a smartphone is a cellular telephone with built-in applications and Internet access. Smartphones provide digital voice service, as well as any combination of text messaging, e-mail, Web browsing, still camera, video camera, MP3 player, video player, television, and organizer. In addition to their built-in functions, smartphones have become application delivery platforms, turning the once single-minded cell phone into a mobile computer.

The early smartphones offered in 1994 were bulky and costly. Later devices, like the Palm Treo and Blackberry offered in 2002, created a market for enterprise-capable business smartphones. About this time, Microsoft morphed its Pocket PC (PDA) operating system into Windows Mobile for smartphones. In 2007, Apple released the first-generation iPhone and transformed the smartphone market with touch-screen technology.

Rewards and Challenges

Smartphones provide unified communications for an increasingly mobile workforce. They allow professionals to be tethered to work, yet decentralized and independent, while fostering consistent business processes. They allow distributed teams to keep in touch. Supporting a mobile workforce can be a challenge.

As with any new technology, using a smartphone requires training, time, and tenacity. Depending upon the device and operating system, it may take

a few days or a few weeks to become comfortable. Using these new tools has its rewards—a pocket-size smartphone and a wireless cellular network (or WiFi) allows you to do what previously required a 7-lb laptop computer and a briefcase full of cables. In addition, these always-on devices can increase productivity, as well as tip the work–life balance. A Forrester Research (www.forrester.com) study in late 2009 found that workers with smartphones did an extra two hours of work per week.

Features and Functionality

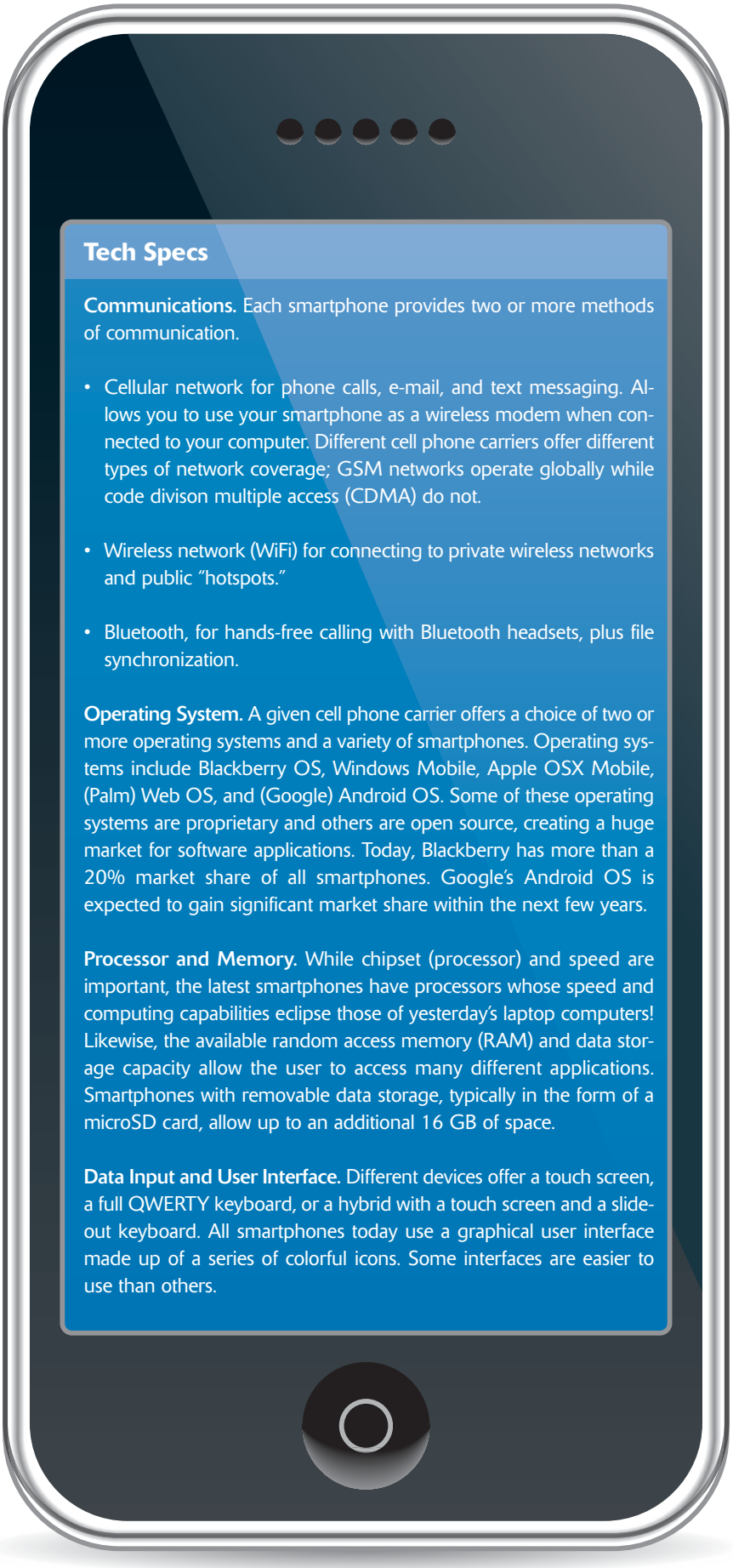
Business features include data and messaging services (e.g., Microsoft Exchange/Outlook, Lotus Notes, Novell GroupWise e-mail), calendar and task management, and the ability to view—and in some cases, create—office documents. The user can synchronize files with their office computer via USB cable, wireless, or Bluetooth connections. Most devices have Internet connectivity, supporting one or more full HTML and/or mini browsers, including Opera, Google, and Windows Internet Explorer.

Depending upon whether the model caters to business users or consumers, smartphones have one or more extras, such as global positioning system (GPS) navigation, cameras up to 5.0 megapixels, video capture, voice recording, MP3 music player, FM radio, and video output to TV.

Try Before You Buy

Would I purchase the same device, if I had to do it over again? Not likely—the operating system is not user-friendly and the touch screen is difficult to use for more than short messages. The memory, microSD card, camera, and other features are great, but I use them only occasionally.

Before you buy, check with your IT department to learn which operating system(s) your company supports. If you have a choice of several devices, establish your top priority needs and find a smartphone that meets these needs. If considering a touch-screen model, try it before you buy it. A touch screen may be perfect to view e-mails and data. But if you expect to compose and reply to dozens of e-mails each day, then you may need to use a stylus to enter data. A hybrid with a slide-out keyboard may be a better choice. em



Tech Specs

Communications. Each smartphone provides two or more methods of communication.

- Cellular network for phone calls, e-mail, and text messaging. Allows you to use your smartphone as a wireless modem when connected to your computer. Different cell phone carriers offer different types of network coverage; GSM networks operate globally while code divison multiple access (CDMA) do not.
- Wireless network (WiFi) for connecting to private wireless networks and public "hotspots."
- Bluetooth, for hands-free calling with Bluetooth headsets, plus file synchronization.

Operating System. A given cell phone carrier offers a choice of two or more operating systems and a variety of smartphones. Operating systems include Blackberry OS, Windows Mobile, Apple OSX Mobile, (Palm) Web OS, and (Google) Android OS. Some of these operating systems are proprietary and others are open source, creating a huge market for software applications. Today, Blackberry has more than a 20% market share of all smartphones. Google's Android OS is expected to gain significant market share within the next few years.

Processor and Memory. While chipset (processor) and speed are important, the latest smartphones have processors whose speed and computing capabilities eclipse those of yesterday's laptop computers! Likewise, the available random access memory (RAM) and data storage capacity allow the user to access many different applications. Smartphones with removable data storage, typically in the form of a microSD card, allow up to an additional 16 GB of space.

Data Input and User Interface. Different devices offer a touch screen, a full QWERTY keyboard, or a hybrid with a touch screen and a slide-out keyboard. All smartphones today use a graphical user interface made up of a series of colorful icons. Some interfaces are easier to use than others.