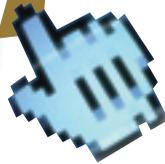# Psyber Psychiatry

To upgrade or not to upgrade?

Should you purchase a new PDA or wait for the next wave of innovations? Here's help deciding

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Personal digital assistants (PDA) are in a state of flux. Thanks to a flurry of hardware and operating system improvements over the last 18 months, PDAs that were cutting-edge last year pale in comparison to newer models.

Should you buy a new PDA now, or stick with your current model and wait for still more innovations? This article can help you decide.

WHY UPGRADE?

Pros. Today's PDAs are more versatile and intuitive. For example, many combination PDA/ mobile phones have newer operating systems, more memory, and greater software compatibility than earlier devices.

A frequent PDA user who craves more speed or added features might want to upgrade now. Likewise, users who are constantly on the road might want a new combination PDA/global positioning system.

John Luo, MD

Dr. Luo's column is featured monthly on CURRENT PSYCHIATRY'S Web site at www. currentpsychiatry.com

Cons. PDA operating systems are updated frequently, reflecting continuing improvements in handheld hardware. Microsoft late last year upgraded its Pocket PC operating system and changed its name to Windows Mobile.

Although frequent users will rejoice in the opportunity to do more, others might not want to spend $300 or more to get the latest features— only to see their new device become outmoded in a few months.

HARDWARE ADVANCES

Processors. The processor, the heart of a PDA, has also seen much change. Newer Palm and Pocket PC devices are based on the strongARM microprocessor produced by Intel under the Xscale brand. Each new processor has more speed, better multimedia, an improved camera interface, and lower power consumption than previous processors.

Smartphones, which reached the market in 2002, are geared to physicians who rely mostly on e-mail and calendar functions and have little need for mobile medical information.

A Windows Mobile smartphone typically looks like a mobile phone but has basic Pocket PC capabilities, such as viewing mail, a calendar, to-do list, and notes.

Windows Mobile smartphones, however, are compatible only with smartphone-specific programs, not with general Pocket PC software. This means that drug reference guides, DSM-IV-TR, and other commonly used medical programs cannot be viewed on a smartphone. If you love the idea of a smartphone but want a specialized program, check out www.smartphone.net.

Pocket PC phone. By contrast, the Pocket PC phone looks and works more like a PDA than a phone. Because it is connected to the cellular network, the device has wider Internet access than does a WiFi-enabled Pocket PC3. At 3.5-by-3.5 inches, the screen size is about twice that of the smartphone's screen. The device also is compatible with all Pocket PC software.

Pocket PC phones typically have more main memory than smartphones. Smartphones are limited to secure digital-based external memory, but Pocket PC phones have infrared and other connectivity options.

Palm-based smartphones can run most Palm software, depending upon operating system compatibility. Previous Palm smartphones were more limited because of an older operating system and lack of external memory cards.

The palmOne Treo 600, based on the new Palm Version 5 operating system, offers an external memory slot, built-in digital camera, and text messaging. palmOne offers a GSM (global system for mobile communication) protocol version for the T-Mobile, Cingular, and AT&T networks, and a CDMA (code-division multiple access) protocol version for the Sprint network.

OPERATING SYSTEM IMPROVEMENTS

Palm Source has released version 6 of its operating system—code named "Cobalt"—to hardware developers. This versatile new version—with higher resolution, Word and JPEG file support, simultaneous multiple communications, and other features—could reach the market around the winter holiday.

Microsoft has released Windows Mobile 2003 Second Edition. With certain devices, the operating system will help users read text or browse the Web by using more of the screen. With larger screen resolutions packed into a smaller area, fonts are smaller and hard to read. Windows Mobile 2003 Second Edition provides additional font-size controls to compensate for this change.

The new Windows Mobile version also features a start menu that displays frequently used applications, and WiFi security is improved compared with the previous version.

THE FUTURE

Tiquit, OQO, and FlipStart plan to release fully operable handheld computers later this year.

These new devices will run on Windows XP and other operating systems and will feature full central processing units, hard disks, liquid crystal display panels, USB connectivity, and built-in QWERTY keyboards. It remains to be seen if these computers will supersede Palm and Windows Mobile PDAs.

Sony's new Vaio U70 handheld computer, recently released in Japan, is available in the United States via specialty retailers such as dynamism.com.

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