

The wireless Web: reality, fantasy, or what?

Lately, it's not just *people* who get 15 minutes of fame: it's entire technology paradigms. This spring, suddenly, *everyone* was talking about the wireless Web. Then, predictably, came the debunkers: *it doesn't work, it'll never happen, nobody wants it.*

Needless to say, both sides have statistics to back them up. Ovum promises that a whopping 484 million earthlings will access the Internet via wireless by the year 2005. Whoa, Nellie, that sounds a bit optimistic. Especially when Strategis claims 66% of U.S. wireless users have *no interest whatsoever* in wireless Internet access.

As always, the real deal is somewhere in the middle.

In many locations, you can get wireless Web access right now, through your Palm® or Windows CE PDA, or even your cell phone. Of course, coverage is spotty, bandwidth is disappointing, and today's wireless devices -- especially cellphones -- are miserably underpowered Web clients. Europe, which far outstrips the U.S. in wireless usage, has also taken the lead in disappointing wireless Internet users, with first-generation WAP applications that rarely work, and are pointless when they *do* work.

On the other hand, there are some huge opportunities in wireless even right now -- for developers who are smart enough to *pick their spots* and *keep things simple.*

For over a year, you've been able to track UPS packages from wireless Palm VIIIs. Soon, you'll be able to do it using your cellphone or two-way pager. Behind the scenes, the user is sending a query to the Air2Web service provider, which communicates back and forth with UPS via XML, and then returns a response in a message format the user's device can understand. It doesn't take much bandwidth to deliver shipping status data -- and for anyone impatiently awaiting a package, the information is invaluable.

Then, there's Continental Airlines' new Flight Status Notification System, which sends automatic updates on your flight's status, at hourly intervals before your flight -- and can even provide gate numbers.

Or how about Captura Expense, a Web based application service that automates expense processing for large companies. Captura allows users to submit their out-of-pocket expenses directly from their wireless devices, now including wireless phones hooked up to AT&T's PocketNet wireless Internet service. There's less paperwork, companies identify their liabilities more quickly, and occasionally the additional purchases can even qualify for volume discount programs. Similarly, roving employees that bill by the hour can use wireless Web applications to report their time more quickly -- so it can be billed more quickly.

Historically, wireless data has been far slower than its tethered counterpart -- and that has driven the narrow, vertical nature of most wireless data applications. But there are exciting portents of change. Awfully large bets are being placed on technologies that promise to deliver not just wireless Internet, but *broadband* wireless Internet.

There's TeraBeam's Fiberless Optical network, which uses wireless at gigabit rates to eliminate the phone company's "last mile" bottleneck between business LANs and WANs. There are two competing approaches to Orthogonal

Frequency Division Multiplexing (OFDM), each promising to dramatically increase connection speeds and reliability. There's even MMDS, once a failed competitor to cable TV, but lately resurrected as an Internet access solution. Not all these technologies are intended to provide roam-anywhere Internet access to global jetsetters, but they all demonstrate the increasing viability of transmitting high-speed data without wires.

It may take five years, but the high-speed wireless Web *is* coming. And when it *does* -- when you can stand in a store and show the salesperson a better price from his competitor's Web site; or instant-message your girlfriend in class, with not just a note but a movie clip -- you'll wonder why you *ever* had to plug into a wall to plug into the world.

Bill Camarda is a widely published author, technology consultant and copywriter who has worked with many of the world's leading networking, telecommunications, and IT firms. His recent books include *Special Edition Using Microsoft Word 2000* and *Upgrading and Fixing Networks for Dummies, Second Edition*.