

# San Francisco Chronicle

Monday, July 21, 2003

## With free access plentiful, users ask, 'Why buy Wi-Fi?'

By Brian Bergstein  
ASSOCIATED PRESS

NEW YORK — Take my Wi-Fi, please.

That might as well be the motto of the increasing number of people who set up wireless Internet networks in their homes and businesses and — sometimes unwittingly — leave them open for anyone to share.

Then there are colleges, geeks and city officials who are making Wi-Fi as free as the foliage in public plazas. And now you can use Wi-Fi gratis in New York if you're a Verizon Internet subscriber or eating an Extra Value Meal at some McDonald's restaurants.

Add it all up, and there's a significant number of places where people with a properly outfitted laptop or handheld computer can get wireless Internet access without reaching for a credit card.

That could spell danger for burgeoning efforts to charge big bucks for the use of public Wi-Fi hot spots.

While Wi-Fi is shaping up as a true growth engine for chipmaker Intel Corp. and other technology companies, the idea of furling people to pay for it in public could be a flop — outside of select places like airports that have a captive audience of business travelers.

"Carriers going in and making money simply offering Wi-Fi service to customers in coffee shops — the reality of that is, it's not going to be that big," said David Chamberlain, an analyst with Probe Research.

Wi-Fi, short for wireless fidelity, radiates an Internet connection that multiple computers can share, at very fast speeds, for about 300 feet — a single hot spot.

Because it uses unlicensed radio frequencies, Wi-Fi is relatively

easy and inexpensive to operate. Many new laptop computers automatically detect Wi-Fi networks, while others easily can be made to do so by plugging in a wireless card.

Beyond widespread Wi-Fi use in homes and offices, the United States has some 5,000 public hot spots. That includes 2,700 operated by wireless phone carrier T-Mobile, mainly in Starbucks coffee shops and Borders bookstores. T-Mobile charges 10 cents a minute (the minimum cost is \$6, however), \$40 a month or \$360 a year, though existing T-Mobile customers can sign up for \$20 a month.

There are too few free spots, their argument goes, and frequent users will be willing to pay for customer service and encryption that can protect wirelessly transmitted data from snoops.

Indeed, security fears have prompted several companies to prohibit employees from accessing corporate networks from home or community hot spots. Some, like Dow Jones & Co., prohibit work-related access from any wireless network at all.

The knock on free networks doesn't fly with Ossip Kaehr, who uses the free Wi-Fi in midtown Manhattan's Bryant Park. Sitting with his laptop and his son at a table in the park one wet, gray afternoon, Kaehr said he doesn't believe security is any better on a Starbucks network.

In either place, Kaehr, chief technical officer for FirstGate Internet Inc., logs on only through a virtual private network (VPN), which provides a secure tunnel to his office for data.

"I like a spot like this, to combine work and leisure," Kaehr said as four-story-high trees rustled in the breeze and rambunctious organ chords drifted from a



RICHARD DREW / Associated Press

Marty Monaco (left) and Arthur Golden use wireless connections to work on their laptops in New York City's Bryant Park.

small carousel in the distance. "I browse free at home and in the office, so why pay serious money to use it in Starbucks?"

If that belief grows, so could hybrid Wi-Fi service plans. For example, Verizon is turning 1,000 New York pay phones into hot spots that can be used only by people who get DSL or dial-up Internet from Verizon. (As for security, Verizon doesn't employ encryption, advising wireless surfers to avoid sending sensitive information or to use VPN software.)

Probe Research's Chamberlain predicts similar models eventually will dominate. In that scenario, an Internet company like America Online would buy wholesale hot spot access for its customers from a provider like Cometa Networks Inc., a joint venture backed by Intel, AT&T Corp. and IBM Corp.

Another possibility, as Wi-Fi-capable handheld computers and cell phones proliferate, is for bookstores, coffee houses and other retail establishments to eat the few hundred bucks it takes to op-

erate a hot spot and offer Wi-Fi for free in hopes of getting customers to linger or return frequently.

Nine businesses along Boston's Newbury Street have shelled out \$350 each to share a high-speed data line that feeds their stores so they can transmit free Wi-Fi. The network has been running for more than a year, and no store has dropped out in disappointment, according to its organizer, computing consultant Michael Oh.

"There's much more money to be had in selling more books, more coffee, many more bottles of wine, rather than trying to sell (Wi-Fi) access," Oh said. "The traditional payment plan of by the hour, or by the month, is eventually going to go away."

Analyst Tim Shelton of Allied Business Intelligence Inc. envisions 12,400 hot spots in the United States and Canada by year's end and 78,000 by 2008.

But he says the industry needs to get much better at attracting average consumers. After all, there are only so many business

travelers and tech addicts who lug around laptops and are willing to pay to go online while out and about.

Though notebook computer sales jumped 17 percent in the United States and 14 percent worldwide in the first quarter, Gartner Inc. analyst Ken Dulaney attributes the rise to lower prices and better laptop performance rather than the buzz over Wi-Fi.

Parks Associates, a market research firm in Dallas, recently found that only 3 percent of Internet users have logged on through Wi-Fi hot spots. Only 5 percent of that small group took out a subscription to a Wi-Fi service.

"If you don't really travel nationwide, what's the need for hot spots?" said Parks Associates analyst Yuanzhe "Michael" Cai. "If you are just the average consumer, why do you want to go to a Starbucks or a hotel lobby when you can just use your DSL at home?"

In hopes of stimulating demand, Wi-Fi proponents at Boingo Wireless Inc. are linking other-

wise unrelated hot spots so users can roam, the way cell phone callers do when they leave their provider's range.

Even now, without widespread roaming, Boingo founder Sky Dayton believes there's more than enough demand to make for-fee hot spots successful. "In Wi-Fi, getting to profitability just doesn't require that much traffic," he said.

T-Mobile won't release subscriber numbers, but spokeswoman Kim Thompson says its Wi-Fi usage is growing. Still, she concedes "there are a lot of different (business) models out there."

"In terms of which one of those is going to win out, who knows?" she said.

Assuming mainstream demand picks up, how much of it will be consumed by community-based free hot spots, like the ones volunteer techies run in New York, San Francisco and other cities? The fashionable answer among commercial Wi-Fi purveyors is: not much.