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Apple Eyes the Wireless Auction

Steve Jobs & Co. consider joining the FCC's auction of wireless spectrum, and a win would give Apple many intriguing options—for the iPhone and more

by Peter Burrows

Talk of the government's pending auction of valuable wireless spectrum has focused largely on one intriguing newcomer to the bidding: Google (GOOG). But another tech powerhouse has considered joining the bidding as well: Apple (AAPL).

Two sources tell *BusinessWeek* that Steve Jobs & Co. have studied the implications of joining the auction, which will be held Jan. 16. The winners will get rights to use the spectrum that analog TV broadcasters are handing back to the government in 2009, given their mandated move to digital television.

Dubbed "beachfront property" by the Federal Communications Commission, it's the last swathe of wireless spectrum likely to become available that would have the attributes necessary for a new mainstream broadband network (BusinessWeek.com, 8/1/07). Signals at the 700Mhz spectrum, for example, could provide far faster Internet access than today's cellular or even Wi-Fi networks, and the signals can easily pass through buildings and work glitch-free, even in lousy weather.

RISK FOR APPLE'S MARGINS

At this point, says one of the sources, Apple is leaning against participating in the auction. It's not the money. With nearly $14 billion in cash, the company can clearly afford the $4.6 billion minimum bid required by the government, and could probably come up with the $9 billion that's expected to win a portion of the spectrum to be made available for a nationwide network. There will assuredly be stiff competition from phone companies and other potential bidders such as Google, DirecTV (DTV), and eBay (EBAY), which owns Skype's Net calling software.

Rather, the risk for Apple is in entering the generally low-margin, hardscrabble world of running a massive-scale network. Rather than focus all of Apple's entrepreneurial instincts on creating the next innovative gizmo, the company would be on the hook for the massive operational headaches that go with provisioning traffic, activating new subscribers, and fielding their angry calls when service glitches occur.

As with Google, becoming a network operator would drag down Apple's margins—and could pose a cultural drag on an innovative company. And other than iTunes, Apple has not stood out for its Internet services. Only 1.7 million people pay the $99 annual fee for its .Mac service, disappointing given Apple's success in so many other areas. "Even for companies like Google, the economics [of owning a network] are barely intelligible," says Amol Sarva, chief executive of Txtbl, a mobile e-mail company. "For Apple, this seems highly implausible."

IPHONE NETWORK SOLUTION

Still, even the possibility of an Apple bid is intriguing. For starters, it would mean Apple would no longer need to rely on a phone company to deliver songs, TV shows, and other digital fare purchased at its iTunes Music Store. As it is, the major complaint of iPhone shoppers isn't with the phone, but with the pokey Net access from Apple's exclusive U.S. partner, AT&T (T).

If it owned its own spectrum, Apple could provide the network service itself, possibly for far less than the $1,440 iPhone owners must now fork out over the course of the cheapest two-year contract. For example, Apple could hold down costs by letting users choose a Net telephony program such as Skype rather than develop its own voice software, say analysts.

Apple might even be able to give away network service for free, and make its money off services such as iTunes and possibly by selling subscribers advertising space. "With the kind of cash position they have and the kind of push they just made into the handset space [with the iPhone, and now with the iPod touch, which also has Apple's Safari Web browser built in], it makes a lot of sense for them," says one former Apple executive.

MAJOR STRATEGY CHANGE?

Indeed, cutting out the carrier would probably be in sync with Steve Jobs' view of the world. Before striking the iPhone deal with AT&T, he publicly dissed phone companies as little more than "orifices"—good only for providing dumb pipes to deliver more innovative companies' more innovative services.

"Apple is the most anti-carrier company there is," says the former Apple executive. "They're probably already frustrated with AT&T. If they put a few billion behind this, they could build a kick-ass network." Indeed, on Sept. 5, Apple announced a new iTunes Wi-Fi Music Store so consumers can buy songs at wireless hotspots, something they can't do on AT&T's network. And Jobs made a point of noting Wi-Fi is faster not only than the so-called 2.5G EDGE network, but also than 3G cellular networks.

The fact Jobs was interested enough to investigate bidding for the spectrum opens up the possibility of a major strategy change for Apple. Today, Apple's approach is built on the idea of the PC—preferably a Mac—being the "hub of the digital lifestyle." If you want content on your iPod or iPhone, or on your TV via an Apple TV settop box, you download it to your PC or Mac, and then sync it with those other devices.

FROM DEVICES TO SERVICES

But if it had its own network, Apple could conceivably move to a "cloud computing" approach, where it would store customers' files, music, movies, e-mails, and other content on servers in its own data centers, and dole it out directly to whatever device a customer is using at any given time. If you wanted to purchase the latest Pixar flick from iTunes, you wouldn't need to schlep over to the Mac to do it; it could be delivered straight to the Apple TV—or even to an Apple TV at the ski house miles away from that Mac.

Taken to its extreme, some experts suggest Apple could one day move to making its money on selling such services, rather than on the devices themselves. "At some point, they're going to tap out the percentage of people who still need to buy an iPod," says one telecom executive who requested anonymity. "Maybe their strategy is to get into the services business, and switch to getting nice, recurring revenues" from subscribers. Indeed, Apple has already changed its accounting for the Apple TV and for the iPhone. Rather than book revenue when the cash register rings, Apple books the sale over 24 months.

To be sure, Apple has given no hints of any such makeover of its hugely successful strategy. Still, most analysts think this Net-centric model of computing will dominate in the future. Following the success of Google, Yahoo! (YHOO), and others, Microsoft (MSFT) is already signaling it will follow suit. And Apple would have some unique advantages should it head in

this direction, particularly the Mac OS. For starters, it's based on the battle-tested Unix operating system, considered far more reliable and powerful than Microsoft's Windows.

SUPERIOR 'WALLED GARDEN'

And since the Mac OS lies at the core of the data centers that host the iTunes store as well as almost all of Apple's commercial products (except for the iPod shuffle, nano, and classic), it could provide a level of glue to help Apple provide a superior experience for its customers. With such a common foundation of software, Apple could more easily ensure that Pixar movie is sent in the proper resolution, whether it's to be viewed on a large-screen, high-definition TV or on an iPhone. Also, Apple could simplify the job of syncing various devices.

When a new appointment is entered into an iPhone, the network could make sure to update the calendars on the customers' Mac or laptop, or even the iPod in their car. Says one longtime Net executive: "Apple's current architecture forces you to designate a Mac as your server where you stream to Apple TV or sync your iPhone. This is really klutzy. So what is the answer? Well, one is to have your media in the cloud. If the performance is there, it would be a superior model."

In a sense, Apple would have created a new kind of "walled garden." Normally, this term refers to Net offerings that limit where consumers can go on the Web. Think about the limited browsing available from most TV cable boxes. But Apple's walled garden would be defined not by what it limits you from doing, but by the fact it's tuned to work best with Apple's own hardware. For Apple fans, they'd only have to be familiar with one user interface. And since Apple's products all rely on the same set of software—Safari Web browser, the iTunes Music Store, the Quicktime Media player—they wouldn't have to deal with the many incompatibilities that plague Net users.

Also, Apple includes a wireless networking technology called Bonjour in every download of iTunes that lets any Apple product automatically spot other Apple products within range. Here's one possibility: An iPhone owner could be able to use the device like a handheld media server, to move movies or songs or files out in the cloud among those devices.

GRUNT WORK FOR A PARTNER

The hardware cost of building out the network would probably not be that huge, measured in hundreds of millions, possibly, rather than billions. And if Apple went to a voice-is-free approach or to a flat fee, many of the administrative tasks—bill tracking, or detailed call data, for example—would be largely unnecessary. And since no lawns would need to be dug up to make way for new fiber cables, Apple could connect homes for less than $300, compared with more than $800 for fiber, say experts.

Of course, there would be enormous complexity in running such a network, given rules set by the FCC. That's why most sources think Apple would sign up a partner to handle the grunt work—say, an equipment provider such as Ericsson (ERIC) or Alcatel (ALU), or a consulting firm such as EDS (EDS). Even then, skeptics such as Txtbl's Sarva doubt Apple could ever figure a way to make a return on its network investment.

The rules approved by the FCC on Aug. 31 make the job more difficult as well. Thanks in large part to pressure from Google and other Net companies, owners of the spectrum will be required to allow any device or application to run. Such "open access" rules are an attempt to break the ability of phone companies and cable providers to limit which cell phones or other devices consumers can use, or to prevent them from using competing services for downloading music or playing games. That means Apple would have to think not only about enhancing the use of Apple products, but also take on the gargantuan task of making sure the network also supports competing hardware and software, from Microsoft's Zune music player to Amazon's (AMZN) Unbox movie service.

And Jobs might have to beat out Google CEO Eric Schmidt, an Apple director, in a bidding war (BusinessWeek.com,

7/20/07).

Schmidt has said Google, come January, will likely bid.

Burrows is a senior writer for BusinessWeek, based in Silicon Valley.