



## Verizon Ratchets Up Stakes in the Cable-Telecom War

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In the escalating war between telecom and cable companies, Verizon Communications recently unveiled plans to offer video service via fiber-optic lines running directly into homes. According to Wharton experts and others, however, the company's ambitious agenda faces a number of obstacles, including equally ambitious agendas from competitors like Comcast, Cox Communications and Cablevision.



On Oct. 21, Verizon announced that it would expand its fiber-to-the-premises (FTTP) service to homes in Virginia and parts of Delaware, Maryland, Massachusetts, New York and Pennsylvania. The service is already offered in California, Florida and Texas. The goal for Verizon - one of the original Baby Bells with annual sales now topping \$70 billion - is to reach one million homes and businesses with the new technology by the end of the year and two million by the end of 2005. SBC Communications - another former Baby Bell, which dominates the southwest and western part of the U.S. - is planning a similar rollout to offer video service in 2005. According to a report in the November 17 *New York Times*, SBC will pay \$400 million to Microsoft for software that can be used to deliver TV programming over high-speed lines.

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FTTP, based on the same fiber-optic technology used in telephone networks, offers speeds up to 20 times faster than current digital subscriber line and cable technology. Here's why: Current telecom broadband connections - known as digital subscriber lines (DSL) - are slowed by the traditional copper wiring used for telephone service. Although a connection may start on a fat fiber-optic pipe, it ultimately goes onto a slower copper wire before entering a household. It's like connecting a fire hose to a straw. Verizon's plan to run fiber-optic cable directly to homes would connect a broadband fire hose to a home, enabling video on demand. Its broadband Internet access services will offer download speeds of up to 5 Mbps (megabits per second), 15 Mbps and 30 Mbps for a bundle of services at a base cost of \$34.95.

"DSL was a lame technology because it was fiber going to copper wire," says Wharton business and public policy professor [Gerald Faulhaber](#). "The connection is only as strong as the weakest link. I'm surprised DSL did as well as it did. At least the telecoms leveraged DSL to get into broadband."

The big question is not whether Verizon, which is spending \$800 million on the FTTP rollout, can install super-fast broadband pipes, but whether it can bundle video with Internet access, local and long distance phone service and wireless to poach customers from cable providers. "In the big picture, everyone in telecommunications will have to provide a full bundle and compete in TV and voice," says Wharton legal studies professor [Kevin Werbach](#).

### The Broadband Holy Grail

The reason why telecommunications companies are so eager to provide video service is simple: The firms have near-monopolies in businesses that are dying. Cellular phones are replacing traditional phone service. Second phone lines, which were used for dial-up connections, are disappearing as consumers move to broadband service. But the biggest threat of all may be that cable companies and firms like Vonage are taking additional customers by offering voice service over the Internet.

"The surviving regional bells like Verizon and SBC became well aware last year that their comfort zone - wireline voice - is going away," says Faulhaber. "It's not good when you have a monopoly in a business" that is disappearing. Research from the Yankee Group illustrates the point. According to a report by analysts Patrick Mahoney and Kate Griffin, local Voice over IP (VOIP) will reach 17.5 million U.S. homes by the end of 2008, up from just one million today.

Werbach says that without new markets and technologies, telecommunications companies could be trapped in a business that is capital intensive, has high fixed costs and faces declining subscribers. The only strategy for Verizon and its rivals is to take the current cash flow from wireline voice services and invest it in new markets such as FTTP and wireless. Verizon, which is the controlling shareholder of Verizon Wireless, a joint venture with Vodafone, already has its wireless bases covered. Now it's betting that it can give consumers the broadband holy grail - a pipe to a house that can do everything, including video service.

Verizon's move has its risks. The biggest is that there is no guarantee consumers will flock to Verizon's FTTP service. Faulhaber notes that similar efforts in Korea and Japan flopped, mainly because DSL in those countries is cheap (\$20 a month) and fast (12 Mbps, "better than the office") due to denser populations and closer connections. The farther DSL lines have to travel from a central plant the slower the connection gets. In the United States, DSL connections offer about 1.5 Mbps. "Running fiber to the house is expensive, but if Verizon can displace some cable subscribers it's worth it," Faulhaber notes.

While Verizon may attract early customers, there are longer-term questions, including how it will offer video service. The problem: It's unclear whether Verizon can operate as a television company. "The pipe has to include video and that's the rub," says Faulhaber. "Verizon knows as much about running video to the home as I do. The best they can do is not screw it up."

One possibility, he adds, is to lease the connection to other companies that can handle the programming. In this scenario Verizon could open its super-fast connection to a media company, such as Disney, or a mogul like Rupert Murdoch, CEO of News Corp. "That would be good, but it's very 'untelephone' like. Telecommunications companies have to hold on to everything."

Another option, the riskier one, is that Verizon will become an aggregator like Comcast and negotiate deals with content providers. "The challenge is that video isn't in the DNA of telecommunications companies," says Werbach. "If Verizon tries to be a media company it will get in trouble."

One more risk stems from the fact that Verizon is plagued by an identity crisis. The company is pursuing two high-growth businesses - FTTP and wireless. "Instead of going with one strategy change, it is trying to do two at once," Faulhaber says. "I don't think it can do both." In addition, Verizon is currently rolling out a speedy wireless broadband connection called EDVO through its wireless unit. That service, which offers a wireless connection running at the speed of DSL, could swipe potential customers from its FTTP efforts. Verizon plans to expand coverage to two thirds of the U.S. by the end of 2005, up from one-third at the end of 2004. The tab for that expansion: \$1 billion.

Meanwhile, Verizon isn't just rolling out FTTP service, dubbed FiOS, anywhere. Its first target markets tend to be affluent suburbs such as Falls Church, Va. "FiOS has been an extraordinary hit with our earliest customers in Texas and elsewhere," says Bob Ingalls, Verizon Retail Markets president. "People are literally lining up to get what they know is a fantastic service at an excellent price." Sanford C. Bernstein analyst Jeff Halpern says in a research note that Verizon's plans to focus on areas where there is demand - and shifting 12 to 18 months later to mass installations - may generate better early returns.

As for the SBC deal with Microsoft, which is expected to cost SBC more than \$4 billion over the next three years, the Microsoft technology "will make it easier for SBC to offer TV programming to its customers on a variety of devices that might eventually include cell phones and personal digital assistants,

when wireless speeds become fast enough," the *Times* says.

## Consumer Preferences

Telecom and cable companies have long been battling for the hearts, minds and money of consumers. As cable companies began to encroach on voice services, telecommunications firms cut deals with satellite TV providers to create video bundles with broadband and phone services. When the telecommunications companies began losing the broadband battle to cable firms, Verizon lowered prices on DSL.

According to Jeffries & Co. analyst Richard Klugman, Verizon has spent little time talking about its current bundle with DirecTV, an arrangement whereby a Verizon customer can also get satellite TV at a discount, and even less on its new VOIP service. The silence is "leading us to believe that any success to date has been modest at best," says Klugman.

Yet even if early bundling moves aren't working, it's too soon to count Verizon out. Yankee Group research shows that consumers want a bundle that includes everything from TV to wireless. Specifically, 17% of consumers say a "Grand Slam" bundle of local and long distance, cable/satellite, Internet and wireless would be their top choice. Local and long distance ranked second at 16% and a package with local and long distance, cable/satellite and Internet had 14%. Consumers also seem to be open to bundles from telecommunications companies, with 39% saying they want their telecom companies to provide an integrated bundle compared to 19.5% who want their cable companies to offer a complete package.

That's why FTTP is so important to the telecom firms. A super-fast pipe that includes video service is considered to be the key component of an effective bundle. Cable companies started with TV and moved to broadband and voice. Telecom companies are trying to do the opposite. The catch? "It's easier for cable guys to offer wireless than for telecom guys to offer video," says Faulhaber, adding that a cable company can offer wireless service by leasing capacity from a player such as Sprint. Virgin Mobile offers a branded wireless service, but leases Sprint's infrastructure.

To offer video, Verizon has to figure out the nuances of the television business, something Comcast does very well. Nevertheless, analysts say Verizon will claim a few cable victims with its video service. Credit Suisse First Boston analyst Lara Warner wrote in a research note that Cablevision could be affected by Verizon's latest moves. More than 90% of Cablevision's territory overlaps with Verizon's, she says.

Meanwhile, the company's FTTP efforts could reinvent video service. With a fiber-optic pipe running into homes anything is possible, especially at speeds that could reach 30 mbps to 100 mbps, says Klugman. Indeed, the way consumers get TV might change. Consumers could pick and choose channels and access independent networks produced by amateurs armed with video cameras over the Internet. "Once the pipe is fat enough, you have convergence and can deliver anything," says Werbach. "For instance, I pay Comcast for 200 channels, but I'd be more than happy to have constant access to two or three channels and pick a few on demand from there." In one regard, Verizon could relegate video to just another part of a big bundle. "If you think of video as part of a vast stream of content from commercial and amateur sources, TV may look different."

If successful, on demand video beyond the networks and cable channels could be the killer application that makes the FTTP efforts fly, Werbach adds. Verizon's FTTP technology could be the beginning of something big, or it could just be another initiative that flames out. In either case, it's clear that FTTP is not going to happen immediately. "One needs to have skepticism about these FTTP announcements," says Werbach. "Verizon is serious, but it's going to take a long time to roll this out to 100 million homes in America."

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