How Will The Success Of DSL Affect Home-Run Fiber?

By Jason Marcheck ■ *The Confluence Research Group*

In the midst of all the FTTP (fiber to the property) hoopla that has been occurring over the past year, DSL-related topics have largely fallen out of the pages of the telecom trade press. However, with the earnings releases for the first quarter of 2004, we have been given a strong reminder that dirty old copper has some fight left in it. For the first time since high-speed Internet services have been offered, the number of customers added by the top DSL provider topped the number of customers added by the top Cable Modem provider. During the first three months of 2004, SBC added a reported 446,000 new DSL subscribers, compared to Comcast's reported number of 392,000 net cable modem additions. To further bolster the case for DSL's viability, Verizon (once a distant 'Show' Horse in the High-Speed Internet Stakes), announced that it had added 345,000 DSL customers during the quarter. Some might see this as powerful evidence that FTTP's time might not yet have arrived.

As I, and many other pundits, have said repeatedly over the past few years, FTTP offers telephone companies the best medium through which to match the services offered by cable companies over its HFC (aka Fiber-to-the-Node) network architecture. However, with SBC overtaking the lead in adding high-speed customers, and with Verizon competing as vigorously as ever with Comcast, some will certainly be tempted to question the true need for FTTP.

Much of the debate against last-mile fiber is borne from the feeling that it is overkill given the fact that high-speed Internet services run just fine over copper, coax and wireless connections. Furthermore, there is the feeling that without video services, telcos will not be able to compete with cable companies in the long run for residential customers. While these are valid points, they do not comprise a complete argument. There are several reasons why last-mile fiber is the technology of choice on a going forward basis.

Why Fiber is the Future

The three main reasons why 'home-run' fiber will slowly, but steadily represent an increasing number of last-mile connections in North America are:

1. Costs
2. Regulation
3. Competition

Costs

During the past few years, tremendous progress has been made in driving the costs of deploying last-mile fiber to the point where it is on par with deploying last-mile copper. The consensus in the industry now is that in Greenfield areas, fiber truly has arrived at the point where it is just as economical from a capital expenditures perspective to deploy FTTP. (Now the true cost debate surrounding FTTP centers on the operational expenditures required of the various FTTP solutions. i.e. active vs. passive architectures.) If this is true, and the capital requirements of deploying fiber are equivalent to those of copper, then the same cost structure can be applied to network refurbishment projects. The average telephone company replaces 3% to 5% of its network per year. Thus, it is reasonable to assume that as telcos keep up with routine replacement of its physical plant, FTTP installation will increase organically.

Regulation

A topic of less importance with smaller independent telephone companies, the regulation issue becomes very relevant when examining the motivations for RBOCs to deploy last mile fiber. Since the passage of the Telecommunications Act of 1996, the RBOCs have been waging war with the FCC over the requirement for incumbent carriers to allow competitive carriers to lease portions of their networks for the purposes of increasing the amount of choice consumers might have in selecting a service provider. This has caused immense turmoil in the telecom industry, and remains one, if not THE, primary concern of the RBOCs.

Not to sound anti-competitive, but the RBOCs did get it from both ends in some respects concerning the unbundling of network elements. First, they are required to allow competitors to use their facilities to compete for their customers. (Author's Note: Yes, I realize the tremendous righteousness embodied by the spirit of this provision and the benefit that the requirement has to the consumer.) Next, while RBOCs opening up their networks to all comers, their chief competitors for residential customers, the cable companies (MSOs), are not subject to any such requirements. So, with respect to high-speed Internet service, the RBOCs are forced to compete with a more mature technology (cable modem service), while at the same time staving off bites at the ankles by any competitive telco that wishes to offer DSL services.

Some relief was offered in the form of the FCC's decision that last-mile fiber connections installed by incumbent carriers would not be subjected to the same unbundling requirements that are in place for last-mile copper, and other network elements. (Which, by the way, is the reason that Fiber-to-the-Curb/Node/Cabinet is subject to regulation, while Fiber-to-the-Home/Premise is not.) Thus, the more homes and businesses that incumbent carriers (i.e. RBOCs) connect via last-mile fiber, the less access to customers they have to share with competitive carriers.

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Competition

Finally, and most important from "DSL-impact" perspective, last-mile fiber ultimately makes sense for those carriers that wish to remain viable over the long run. To answer the question posed in the title of this article, yes, the success of DSL will affect home-run fiber. DSL proliferation will definitely strengthen the value proposition for last-mile fiber from a long-term perspective.

In the battle for the residential customer, relationships and bundles have become omnipotent. The service provider that is able to establish the stickiest relationship with the consumer, by offering the most attractive bundle of services will ultimately win the battle for that customer. As it stands now, telephone companies have fixed and mobile voice services, and high-speed Internet via DSL. Cable companies have video services and high-speed Internet via cable modem. Each of these combatants is attempting to steal the other's proverbial cheese. For the RBOCs, this effort is beginning to surface in the form of partnerships with satellite TV services. The MSOs, on the other hand, are beginning to foray into Voice over IP service offerings to residential consumers.

Who will win this battle is far from decided. In fact, the armies are not even fully in place. What is clear however is that residential consumers are showing an insatiable appetite for personal telecommunications and entertainment services. High-speed Internet service is so popular that consumers now need multiple computers in each home hooked up to the broadband connection. They need Internet access on their mobile phones. They need ways to connect their laptops to the Internet (excuse me, high-speed Internet) when they are outdoors, or in transit, or having a coffee. Consumers need access to cable movies and TV shows via Video-on-Demand. They need access to first-run movies before they come to Blockbuster. Clearly, the opportunity to serve these needs, and to profit from them is tremendous.

DSL is not only whetting consumers appetite for these services, it is establishing the telco as the enabler of many of those services. As such, DSL is the perfect gateway for last-mile fiber. At some point, MSOs will be offering a viable alternative to telco voice services. Simultaneously, video services might just be the biggest piece of the residential bundle out there. Therefore, I would argue that telephone service providers have tremendous incentive to both rollout FTTP, and to deliver video services over that infrastructure. Because of this, I am very confident that although last-mile fiber will not appear overnight, it will progressively make its way to homes and buildings near you.

What This Means to Building Owners

Now, while it is important to understand the market issues that will be driving the evolution of the residential broadband market, the key for building owners is to understand the vital role that the services enabled by DSL, Cable Modem and/or Direct Fiber will play in the value proposition of your properties. Although I believe DSL is a gateway to home-run fiber, the clear message being delivered by way of SBC's and Verizon's quarterly DSL numbers is that the thirst for broadband on the part of residential consumers is creating a true "hockey-stick" of opportunity for those in position to serve this market.

With the money to be made by providing your tenants with robust voice, video and data services (not to mention the marketing advantage these services can provide to your community), the time for ensuring that your communities have those services is now. As Amy Cravens pointed out in her article in the April 2004 issue of this magazine, many building owners are not waiting for the incumbent telco or Cable Company to offer triple play services, and are taking the initiative to become their own service providers. An outstanding example of this can be seen in Andrew Marshall's article (in the same April issue). Mr. Marshall was quick to warn that this process can be time consuming and challenging. However, as he goes on to show, the rewards can be great. ■

About the Author

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