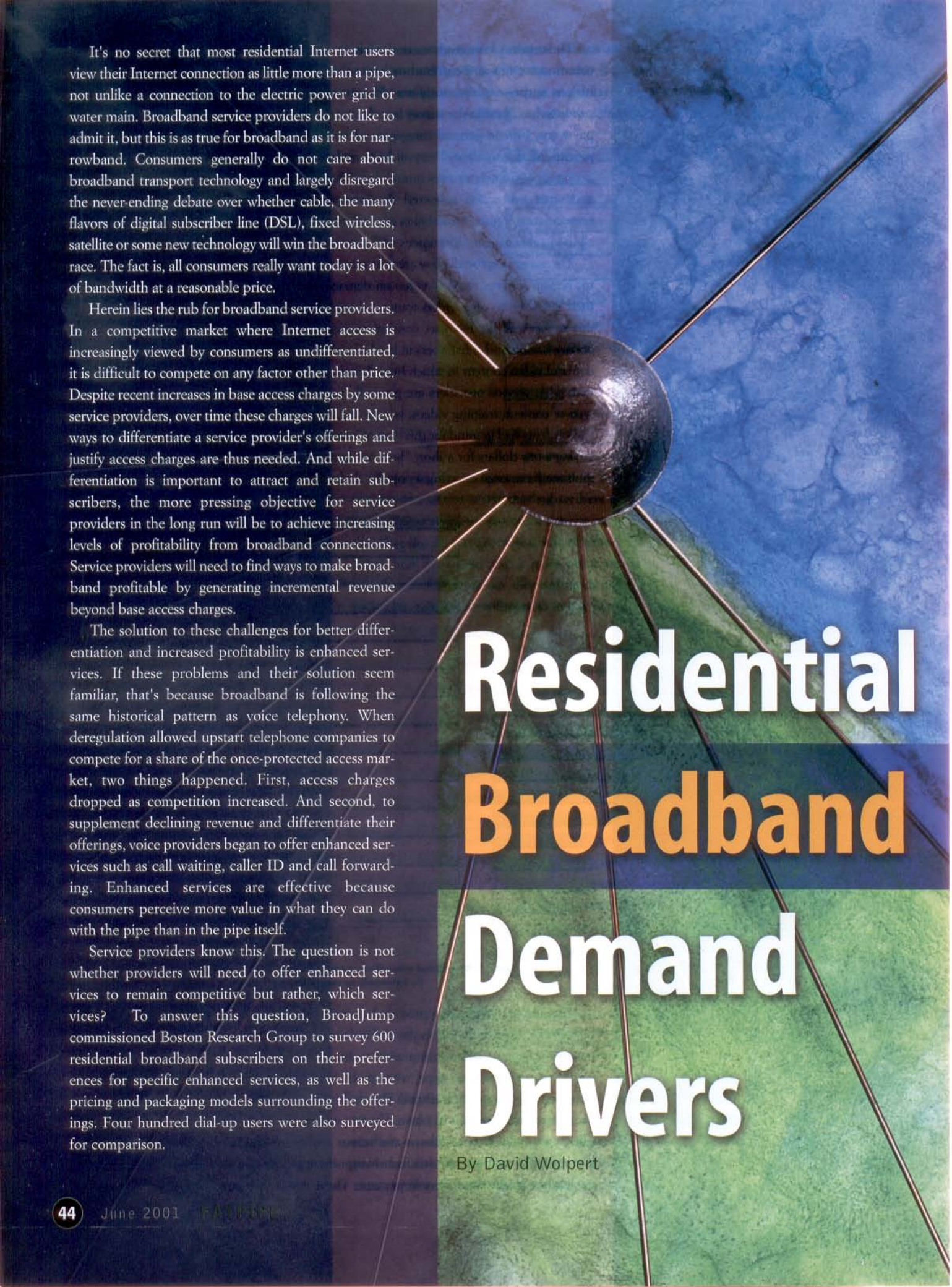


It's no secret that most residential Internet users view their Internet connection as little more than a pipe, not unlike a connection to the electric power grid or water main. Broadband service providers do not like to admit it, but this is as true for broadband as it is for narrowband. Consumers generally do not care about broadband transport technology and largely disregard the never-ending debate over whether cable, the many flavors of digital subscriber line (DSL), fixed wireless, satellite or some new technology will win the broadband race. The fact is, all consumers really want today is a lot of bandwidth at a reasonable price.

Herein lies the rub for broadband service providers. In a competitive market where Internet access is increasingly viewed by consumers as undifferentiated, it is difficult to compete on any factor other than price. Despite recent increases in base access charges by some service providers, over time these charges will fall. New ways to differentiate a service provider's offerings and justify access charges are thus needed. And while differentiation is important to attract and retain subscribers, the more pressing objective for service providers in the long run will be to achieve increasing levels of profitability from broadband connections. Service providers will need to find ways to make broadband profitable by generating incremental revenue beyond base access charges.

The solution to these challenges for better differentiation and increased profitability is enhanced services. If these problems and their solution seem familiar, that's because broadband is following the same historical pattern as voice telephony. When deregulation allowed upstart telephone companies to compete for a share of the once-protected access market, two things happened. First, access charges dropped as competition increased. And second, to supplement declining revenue and differentiate their offerings, voice providers began to offer enhanced services such as call waiting, caller ID and call forwarding. Enhanced services are effective because consumers perceive more value in what they can do with the pipe than in the pipe itself.

Service providers know this. The question is not whether providers will need to offer enhanced services to remain competitive but rather, which services? To answer this question, BroadJump commissioned Boston Research Group to survey 600 residential broadband subscribers on their preferences for specific enhanced services, as well as the pricing and packaging models surrounding the offerings. Four hundred dial-up users were also surveyed for comparison.

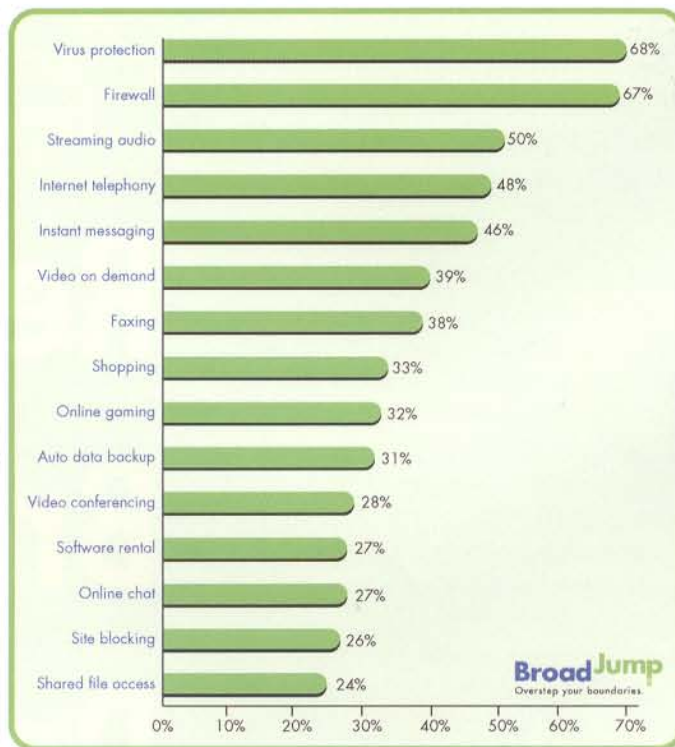


# Residential Broadband Demand Drivers

By David Wolpert

The results of the study were surprising, and some findings directly contradicted the common notions and current business strategies of many service providers. Perhaps the biggest surprise of the study was the extent to which subscribers not only wanted the services described in the survey but also were willing to pay for them—and in some cases, pay a lot. Fifteen general categories of enhanced services were tested. Amazingly, 24 percent of all broadband respondents ranked even the least desired service—shared file access—as extremely or very interesting. The most desired services—firewall applications and virus protection—garnered the interest of a startling 68 percent of broadband respondents. Figure 1 highlights general interest in these services. (For this and all other charts in this article, differences of 3 percent are not statistically significant.)

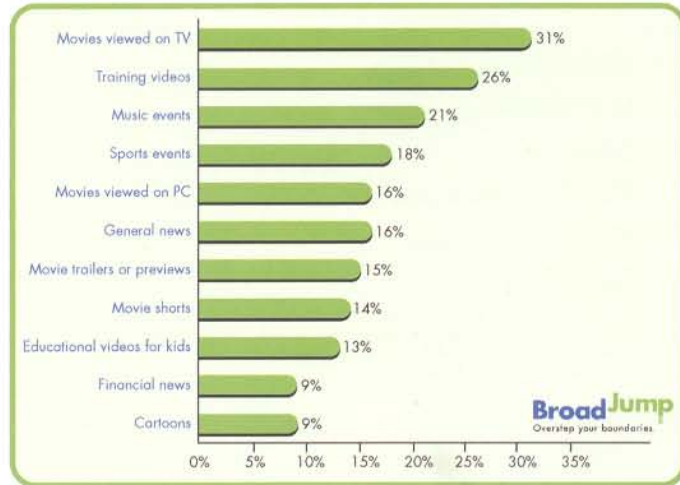
The survey explored a few areas in greater depth to understand subscriber preferences for certain services, such as video on demand. Several service providers have announced their intention to offer video content, though few can articulate what the "killer app" of this service will be. Even so, consumers seem interested—video on demand ranked sixth among broadband subscribers in level of general interest. The rankings of the types of on-demand video content in which broadband consumers indicated interest do not align well with what service providers are generally pursuing (Figure 2). The second most desired type of content, training videos, is a good example. We do not know what, exactly, survey respondents had in mind for this type of content. However, it is easy to imagine a consumer paying a few dollars for a short "how-to" home improvement video or perhaps a streamed multimedia tutorial on using a popular desktop software package.



**Figure 1: Broadband subscribers, general interest in enhanced services**  
(% extremely or very interested)

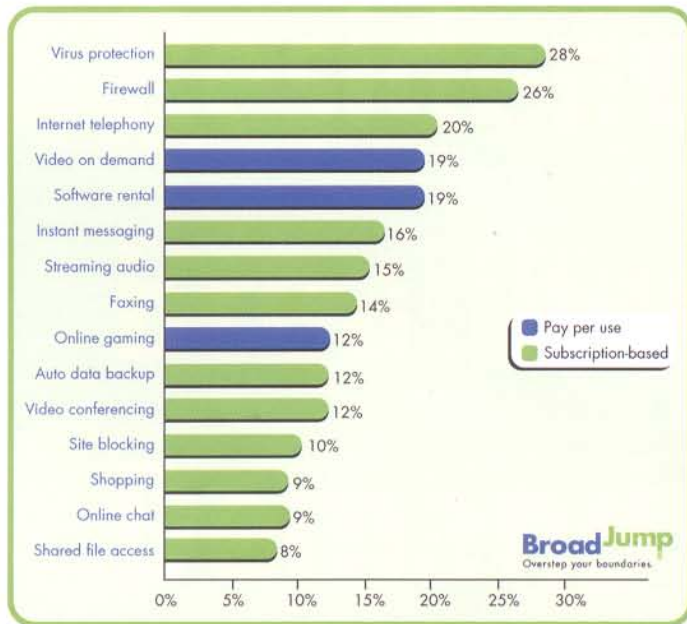
The survey results also provided a surprising finding about the notion that a key benefit of more bandwidth is the ability for simultaneous, multiple-user interaction. For instance, playing online games with multiple participants can be a painfully slow process over a narrowband pipe, whereas it should be comparatively painless—and in fact quite enjoyable—over broadband. But multiplayer gaming wasn't of much interest to the broadband respondents in our study, 54 percent of whom deemed it unimportant. The survey also asked about one-to-one versus multiparty video conferencing, with a similar result: 48 percent of broadband respondents considered multiparty video conferencing not at all or not very important. These results suggest that consumers may still

view their computers as personal devices and do not see broadband as a medium well suited to multiparty interaction. It also is possible, of course, that consumers would readily embrace services such as multiplayer gaming or multiparty video conferencing if shown how entertaining or useful these services can be.



**Figure 2: Broadband subscribers, interest in video on demand content, by type (% extremely or very interested)**

Proof that subscribers are generally interested in enhanced services is important, but the crucial test is whether subscribers perceive sufficient value in them to generate a significant revenue stream for service providers. The survey results provide evidence that they do. To test the willingness of subscribers to pay for enhanced services, respondents were presented with a price point and likely packaging model (either subscription-based or pay per use, depending on the nature of the service). The list of services ranked by subscriber willingness to pay parallels the ranked list of general interest fairly



**Figure 3: Broadband subscriber willingness to pay, subscription-based pricing at \$10 per service, per month, pay per use pricing at \$5 per use (% definitely or probably would sign-up)**

closely (Figure 3). Again, even the service for which subscribers are the least willing to pay—shared file access—had enough interest such that 8 percent of broadband subscribers would be willing to pay \$10 per month for it. Put in perspective, a service provider with one million subscribers could generate \$9.6 million in incremental revenue per year from a service with an 8 percent take rate and a \$10/month fee.

These figures for general interest and willingness to pay can be used to estimate revenue potential from each service using the following formula:

$$\text{Annual revenue potential} = (\text{total subscriber base}) \times (\text{willingness to pay}) \times Y \times 12P$$

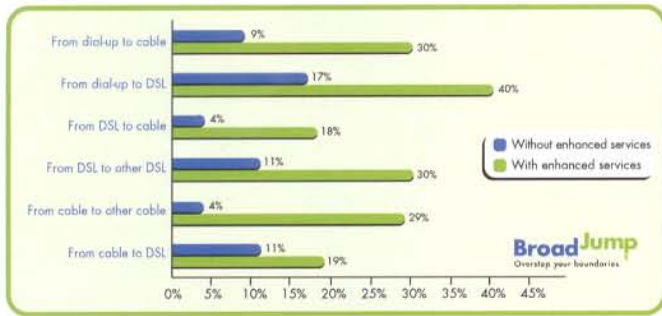


Figure 4: Percent of subscribers that definitely or probably will switch providers in the next 6 months

In this model, Y is an estimate of the percentage of subscribers who claim to be willing to pay for a service and actually will. P is the price per service (either \$10/month for a subscription-based service or \$5/month for a pay per use service, as tested). As an example, 16 percent of subscribers were willing to pay for an instant messaging service. In reality, perhaps only half of those will, so Y=50 percent. Instant messaging was tested as a subscription-based service at P=\$10. For a provider with one million subscribers, this suggests an annual revenue potential of (one million) x (20%) x (50%) x 12(\$10) = \$12 million. The key to maximizing revenue in this model is to increase Y through cost-effective marketing that demonstrates the value of each service to subscribers.

The good news is that subscribers will probably purchase a variety of services, not just one. In terms of willingness to pay, the security-oriented services of firewall and virus protection again topped the list, at 28 percent and 26 percent respectively, of subscribers indicating that they definitely or probably would sign up for these services at a price point of \$10 per service per month. Assuming that the same people are indicating interest in both services, it would be reasonable to assume, for instance, that 27 percent of subscribers are willing to purchase a bundle of both services for, say, \$18 per month. Using the above formula and Y value for a provider with one million subscribers, this package of services would generate just over \$29 million in incremental annual revenue.

Of course, the appropriate price for any service will vary based on several factors, but the survey suggests two general pricing guidelines that service providers should take into consideration:

1. Subscribers prefer to keep their monthly access charges low and pay more for individual enhanced services, as opposed to paying a higher base access charge and paying less for individual services.
2. Subscribers are willing to make an annual service commitment to a service provider if it would reduce the price for a bundle of enhanced services.

In short, subscribers are hesitant to pay a lot for individual services. But this price sensitivity may actually benefit access providers, because it means that subscribers are willing to enter into long-term contracts with providers to keep their total monthly service bills

lower, even if it means paying more for individual services. This loyalty alone is invaluable.

Another interesting finding concerned the second goal of enhanced services—to differentiate service providers. Respondents were asked if they would be more likely to switch to a service provider with enhanced services rather than one without, all else being equal. Regardless of a respondent's current access type, the answer was a resounding yes. The introduction of enhanced services more than doubles the size of the subscriber base that is likely to switch service providers. For example, 4 percent of current cable users indicated that they definitely or probably would switch to another cable provider in the next six months, if that were an option (Figure 4). But 29 percent of current cable users are likely to switch to a cable provider that offered enhanced services. Results nearly as dramatic were observed from current DSL and dial-up users. In fact, almost three-quarters of all respondents were at least somewhat interested in a service provider that offered enhanced services.

Getting subscribers to switch won't be as easy as simply offering some enhanced services, however. There are significant obstacles to overcome, which vary based on a subscriber's current access type (Figure 5). To attract dial-up users to broadband, a reduced pricing entry strategy or a tiered pricing model may be necessary. To attract users from competing broadband providers, a service provider should focus on reducing all switching costs.

There is no doubt that enhanced services can drive the profitability of broadband service providers and help to attract and retain subscribers. This study sheds light on what services and pricing and packaging models are most likely to be embraced by sub-

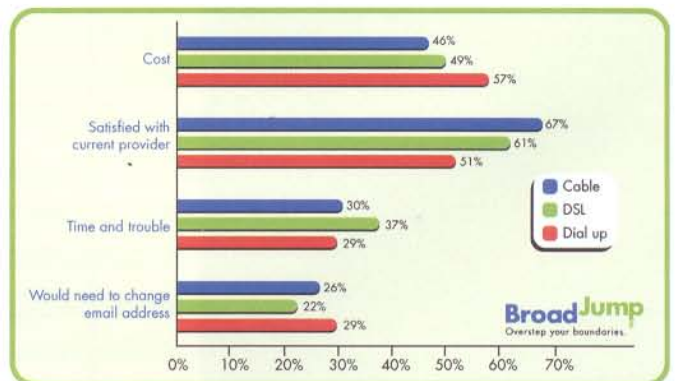


Figure 5: Reasons for not switching providers to obtain enhanced services

scribers. The real challenge, however, is to offer services that are truly compelling. The services must be better than what is available, often at no cost, on the public Internet. Furthermore, the value of these services needs to be clearly and effectively conveyed to subscribers. It will not be enough to provide links to these services on a provider's Web site and hope that subscribers find them. Finding the right services and the right pricing and packaging models to support them will take time and effort, but the patience and persistence will be well rewarded. **FAT**

David Wolpert is product marketing manager for BroadJump, a provider of software that allows residential broadband service providers to streamline installation, manage the connection and facilitate fulfillment of new services. BroadJump can be reached via its Web site at [www.broadjump.com](http://www.broadjump.com).