

Rural Broadband Services and The Digital Home

a Parks Associates white paper

Attribution

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1.0 Key Data

- The percentages of rural broadband households who are very satisfied and very dissatisfied with their broadband services are within the margin of error for all U.S. broadband households – they are no more inclined to be pleased or upset with their service and service provider.
- Creating a satisfied broadband customer is key to customer retention. A highly satisfied broadband subscriber is 46% **less likely** to churn from a current provider, whereas a highly dissatisfied customer is 384% **more likely** to leave a current broadband provider.
- A subscriber to a triple play of access services – broadband, television, and home telephone – is 15% more likely to be a highly satisfied broadband customer.
- Rural broadband customers are 10-20% less likely than all U.S. broadband subscribers to subscribe to the most-common broadband bundles.
- Cable and fiber broadband customers are over 40% more likely than their competitors (DSL providers) to have customers in a video and broadband bundle.
- Rural broadband consumers desire value-added services on par with all U.S. broadband households, with premium technical support services and online backup as the top-two desired value-added services.
- The value-added services offerings that correlate most strongly to high satisfaction levels are:
 - VoIP;
 - Premium entertainment offerings;
 - Home networks/residential gateways;
 - Online file backup; and
 - Premium technical support.
- Home network penetration in rural households is at approximately the same levels as with all U.S. broadband households.

- The presence of a home network provided by a service provider correlates to substantially higher interest in broadband value-added services, with 20-90% higher interest for certain services in households with a service provider-deployed home network versus those without.

2.0 Broadband Service Provider Considerations

The mindset under which broadband service providers develop and deploy services is evolving due to two important variables:

- Broadband services alone are becoming highly commoditized, and “speeds-and-feeds”-based marketing is changing as consumers can get the same or similar services from other providers. In fact, Parks Associates’ research finds that one-half of U.S. broadband households are not aware of the broadband speed they are receiving! This finding indicates that provider promotions won’t work on speed alone. Successful marketing must focus on other factors, such as bundles that combine broadband services with other core access services, good reliability and customer support, and compelling add-on services.
- As competition among providers increases, customer satisfaction and retention strategies become more important. The ability by service providers to offer unique value to their customers is important first and foremost in retaining customers. Later on, these value-added services will create new revenue streams among high percentages of their subscribers, but providers first must sow the seeds for higher customer satisfaction for their current subscribers.

Service Provider Strategic Considerations

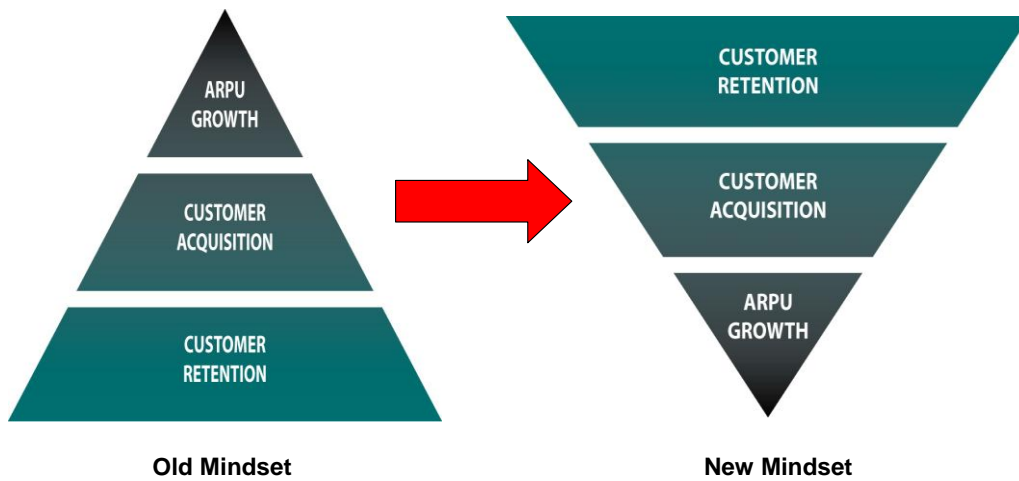


Figure 1 Service Provider Strategic Considerations

These tenets apply to broadband providers in a nearly uniform fashion, including to those serving primarily rural markets. Traditionally the market dynamics and operational mindset of the rural operator are different from a Tier 1 or Tier 2 service provider, but these conditions are likely to change as new competition emerges. Rural providers could see new challenges from wireless broadband providers or from Tier 1 or Tier 2 operators expanding their businesses or operating on the fringes of their territory. At the same time, all service providers, regardless of service territory, are seeking ways to increase the value of their offerings through bundles, value-added services, and innovations that may include an emphasis on enhanced customer care, connected home applications, advanced entertainment services, and even health and home management offerings.

This paper examines the evolution of broadband services and includes the following key findings:

- The ability of a service provider to bundle access services together and deploy certain value-added services is a key component of building customer satisfaction;
- The “connected home” is a very real concept for service providers that will allow them to add new value on top of features they might already be offering; and

- Service provider considerations for delivering connected home solutions must be built around:
 - Deploying and maintaining high-quality core services – communications, broadband, and video;
 - Delivering value-added services to segments of their customer base with flexible systems that provide service activation, billing, and customer care;
 - Packaging core and value-added services in bundles that offer price competitiveness and the ability to scale offerings to meet future consumer needs; and
 - Managing the delivery and quality of services and devices with a growing number of automated features.

This white paper draws primarily on data from Parks Associates' Q2 2009 study *Customer Support in the Digital Home*, a survey of more than 2,000 U.S. broadband households, including more than 550 self-defined rural broadband households.

To further the industry's knowledge about the role of value-added services and connected home offerings in increasing customer satisfaction, reducing churn, and building new revenue streams, Parks Associates is launching two new consumer studies:

- ***Broadband, Communications, and Entertainment Bundles:*** This survey of U.S. and Canadian broadband households examines the selection process for communications and entertainment services, drivers for high and low customer satisfaction with these services, interest in value-added services, and optimal packaging and pricing for service bundles.
- ***Customer Support in the Digital Home: Europe:*** This project features surveys of European consumers that provide a quantitative assessment of the market for digital home technical and support services. It examines current digital lifestyle products and services and identifies opportunities in advanced troubleshooting applications, break/fix services, and proactive automated solutions.

3.0 Gauging Customer Satisfaction

Overall the rural status of a household has little impact on level of satisfaction with its broadband service (**Figure 2**). It is the **type** of access service (**Figure 3**) that has some bearing on high and low satisfaction. Households with fiber broadband services report high satisfaction ratings in larger numbers, and households receiving satellite and wireless broadband services exhibit lower satisfaction ratings.

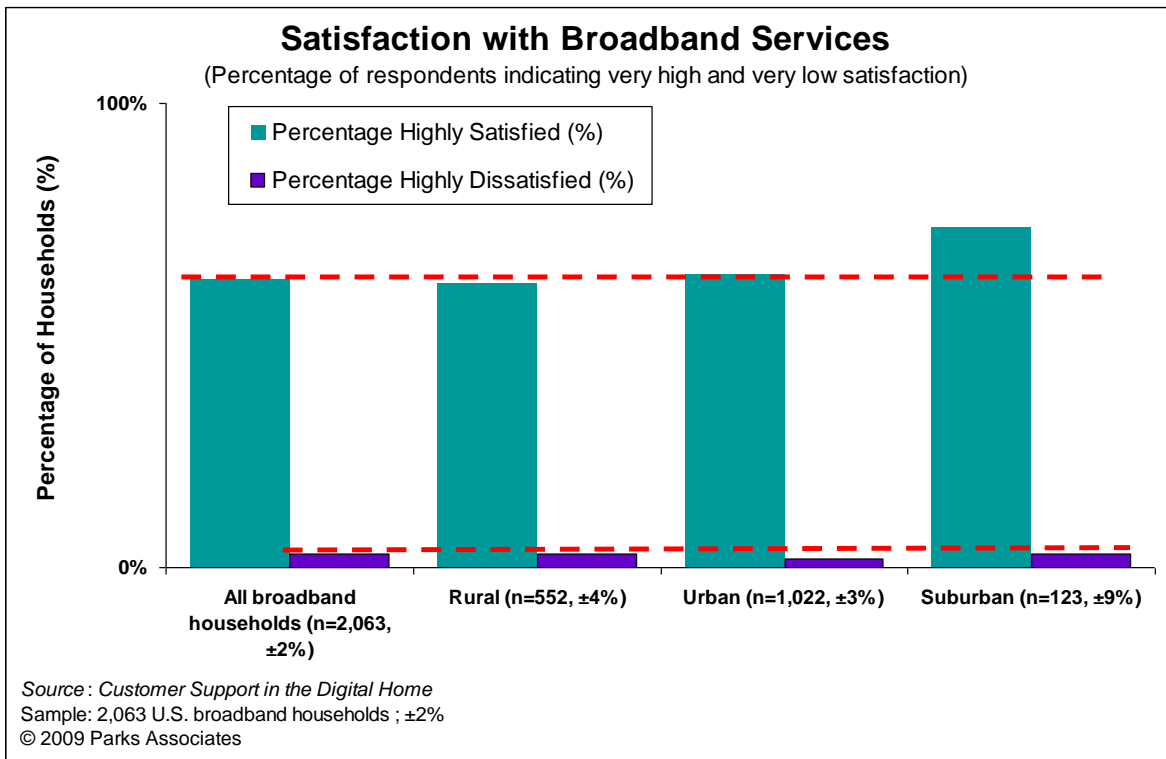


Figure 2 Satisfaction with Broadband Services: Urban, Suburban, and Rural Households

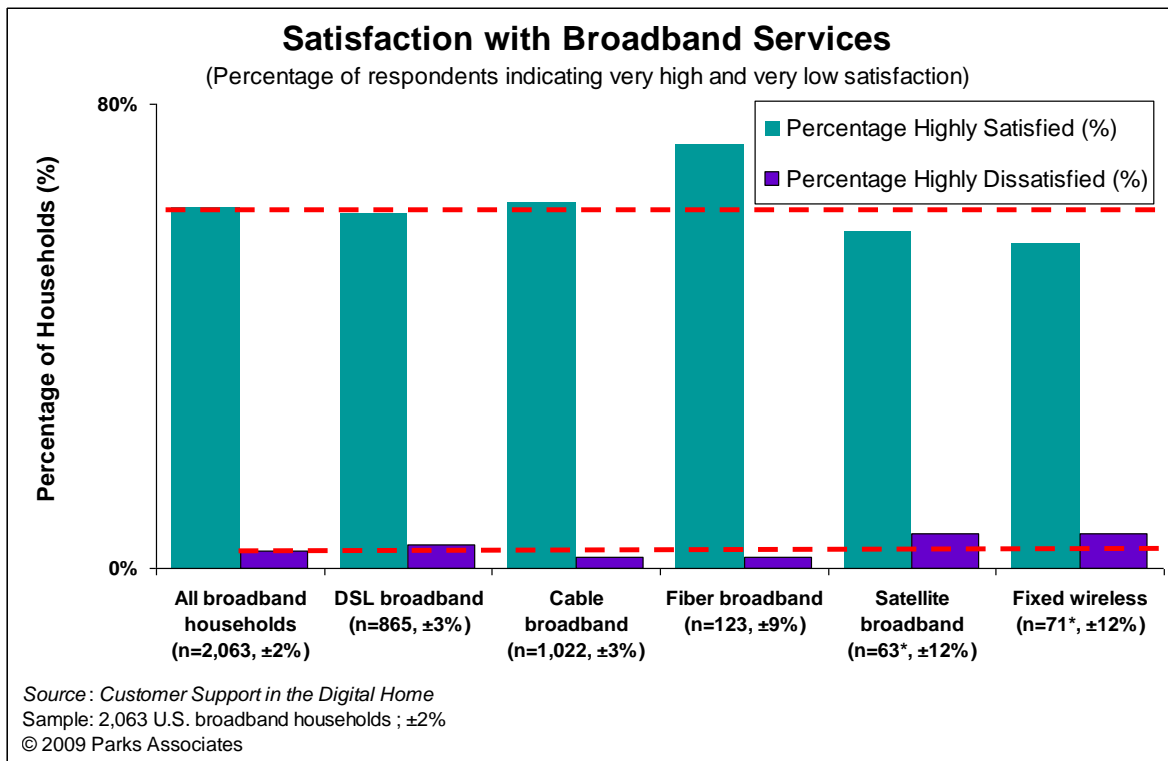


Figure 3 Satisfaction with Broadband Services: By Type of Access Service

4.0 Bundles at the Heart of Building Customer Satisfaction

Cable broadband providers continue to be successful at delivering a bundle of voice, video, and data services in one package (**Figure 4**). Specific data indicate that:

- More than 70% of cable broadband households subscribe to a bundle, with two-thirds subscribing to a broadband and video bundle and 25% subscribing to a triple play that includes home phone service;
- DSL providers have only 58% bundle penetration, with 25% for broadband and video and 17% for triple play;
- Fiber broadband providers have 78% bundle penetration, with 64% broadband and video bundles and 49% triple-play penetration; and
- Rural broadband customers are 10-20% less likely than broadband subscribers on a national level to subscribe to the most-common broadband bundles.

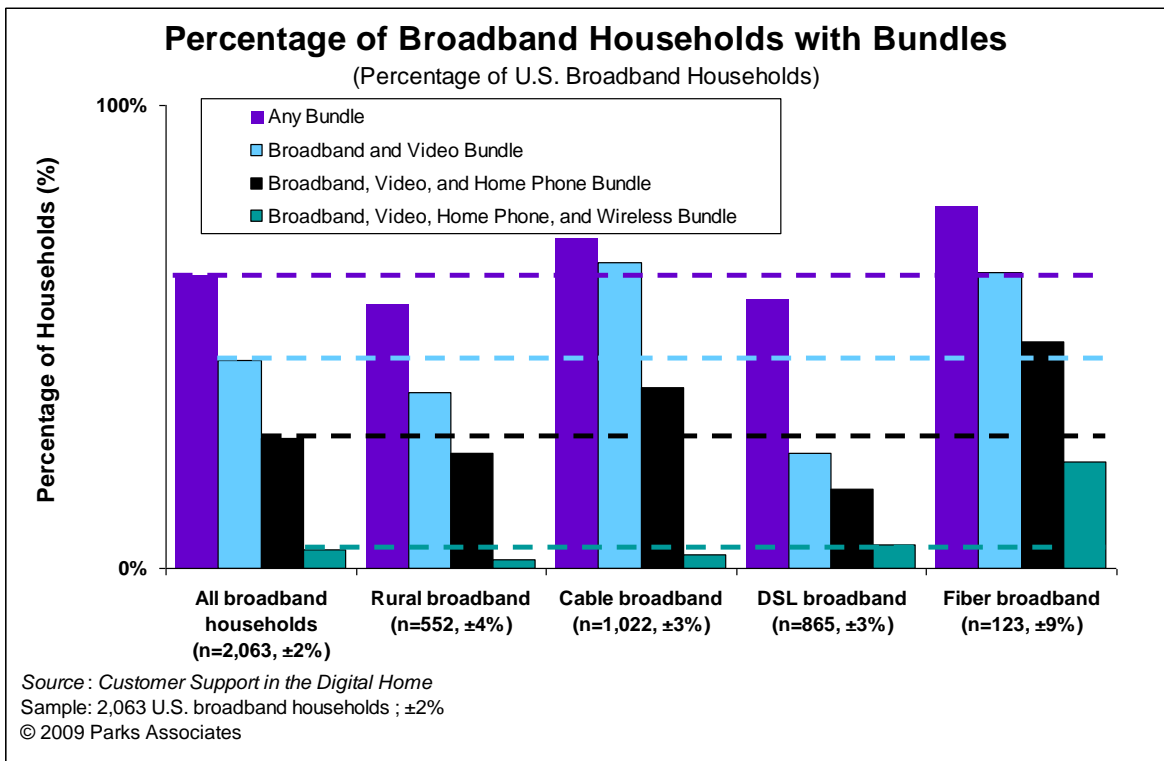


Figure 4 Percentage of Broadband Households with Bundles

Where bundles have immediate value is in their ability to increase customer satisfaction with broadband services. As **Figure 5** indicates, the more services a customer has, the higher the customer satisfaction with a provider. Creating a satisfied customer is essential to service providers' retention strategies:

- A highly satisfied broadband subscriber is 46% **less likely** to churn
- Highly dissatisfied customers are 384% **more likely** to leave their current broadband provider

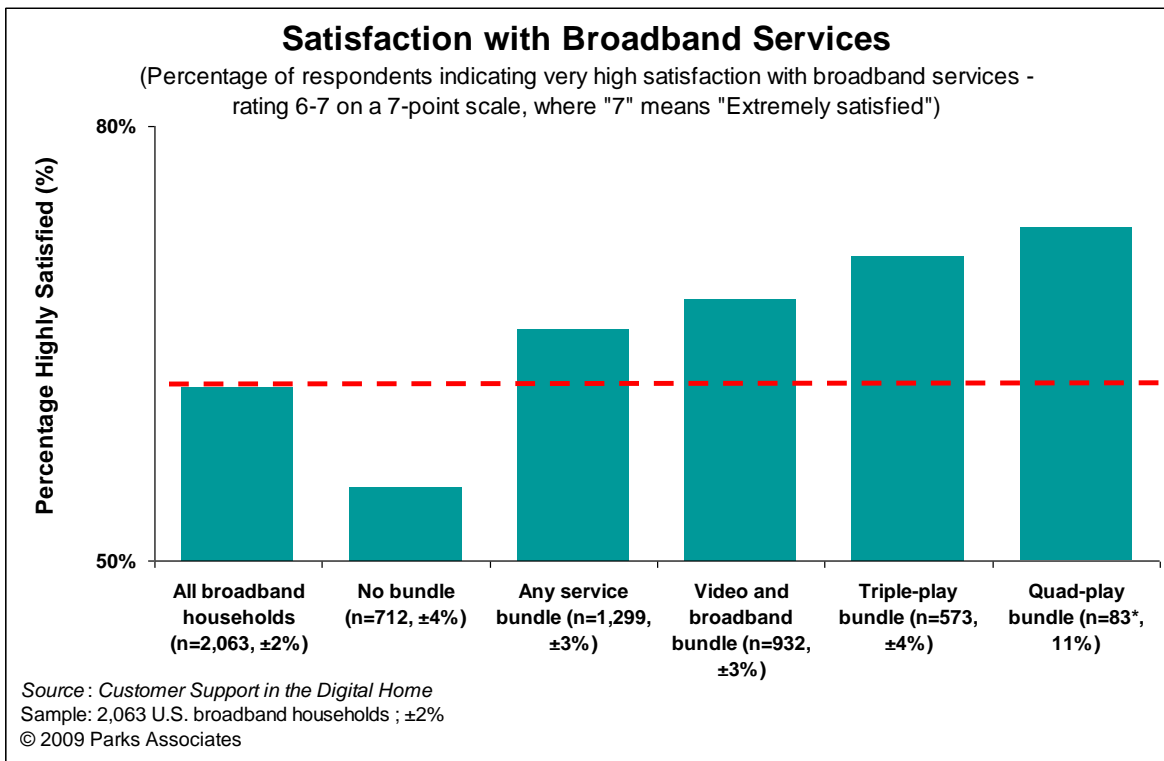


Figure 5 Satisfaction with Broadband Services: By Bundles

5.0 Value-added Services

Moving the broadband service value proposition beyond mere “speeds-and-feeds” will be an essential element in boosting customer satisfaction and establishing value-added services that can create new revenue opportunities. Additional service offerings will fall into one of several categories:

- **Entertainment:** Access to exclusive music, video, and game content.
- **Lifestyle:** Additional e-mail features (larger storage), calendaring, photo and video storage and sharing, and online storage and backup for data and digital media.
- **Premium Technical Support:** Phone, chat, remote, and in-home troubleshooting and fixing services, CE device setup and configuration, managed Internet security and parental control, and additional warranties and damage protection

- **Home and Health Management:** Web cameras that can be monitored from Web-connected devices and TVs, energy management features, and health tracking services (vital signs and health monitoring devices)

Very consistent with previous Parks Associates research, we find that technical support and certain lifestyle value-added services are among the most highly valued additional services (**Figure 6**). Rural respondents are as likely – if not slightly more so – to express interest in premium technical support and online backup services.

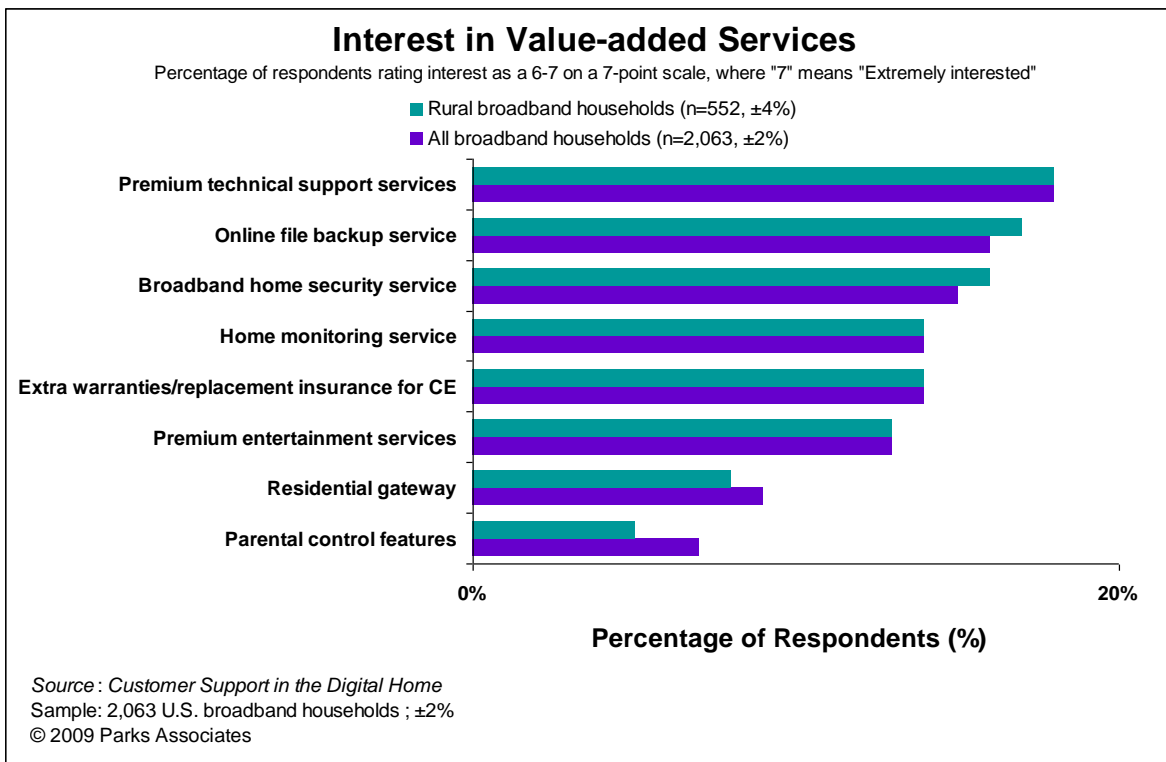


Figure 6 Interest in Value-added Services

Which value-added service offerings have the greatest potential in delivering significantly higher satisfaction? A service provider-deployed residential gateway or home networking solution is among the key value-added features that correlate to happier customers. Technical support and lifestyle features such as online backup and home IT support services are also important factors in creating highly satisfied broadband subscribers.

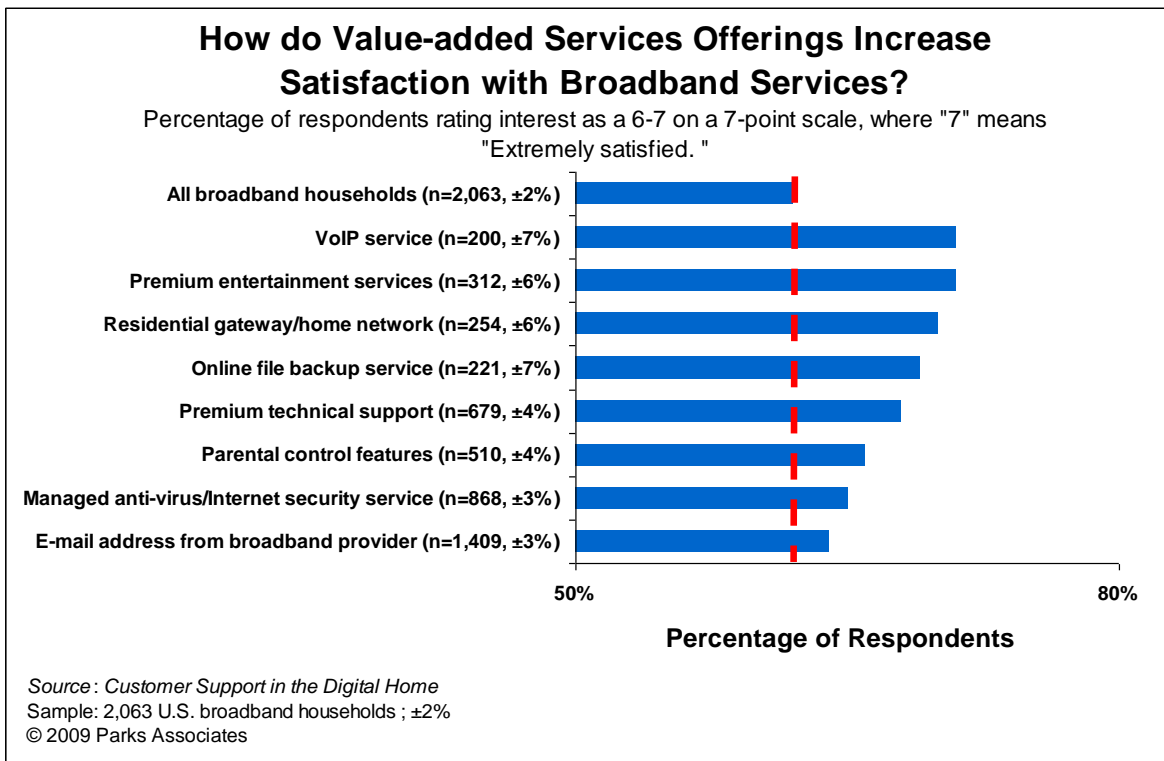


Figure 7 How do Value-added Services Impact Customer Satisfaction?

6.0 The Service Provider and the Connected Home

Between 2006 and the early part of 2009, the percentage of broadband households indicating that they use a service provider-deployed residential gateway or home networking solution has grown fourfold (**Figure 8**), an indication of the importance of centralized connectivity at the core of broadband service provider strategies. Home network penetration in rural households is at approximately the same level as it is with all U.S. broadband households.

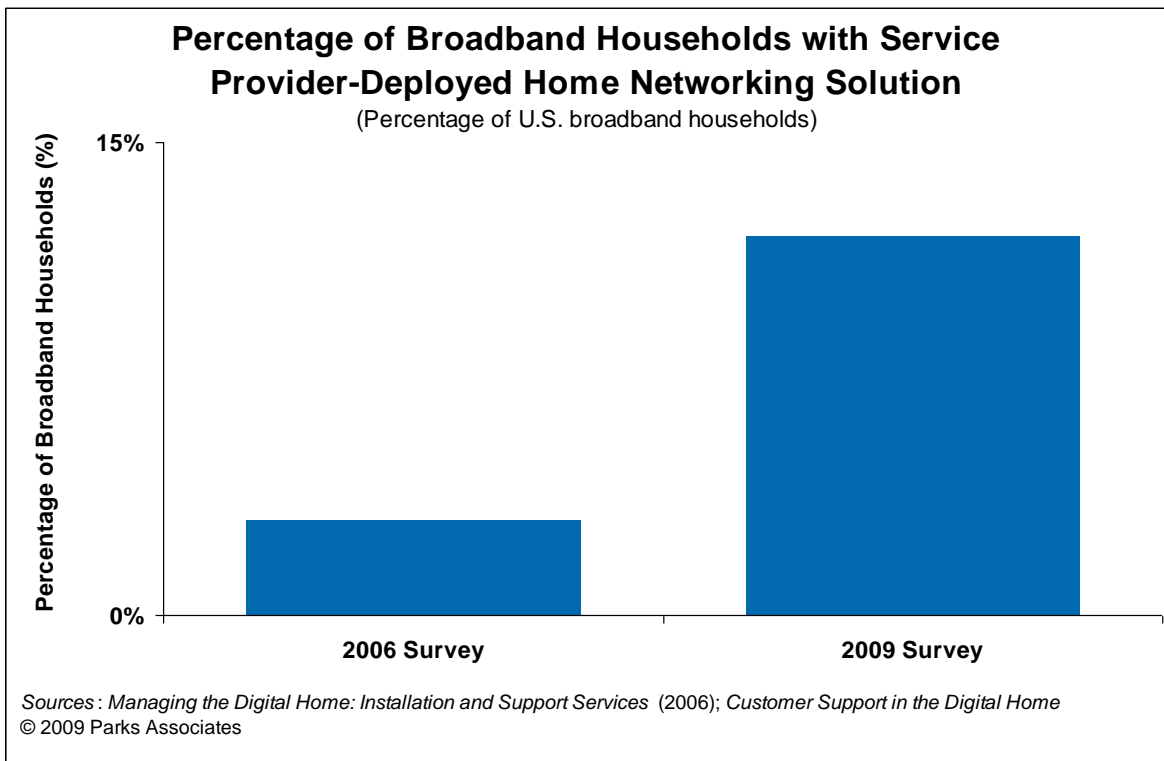


Figure 8 Percentage of Broadband Households with Service Provider-deployed Home Networking

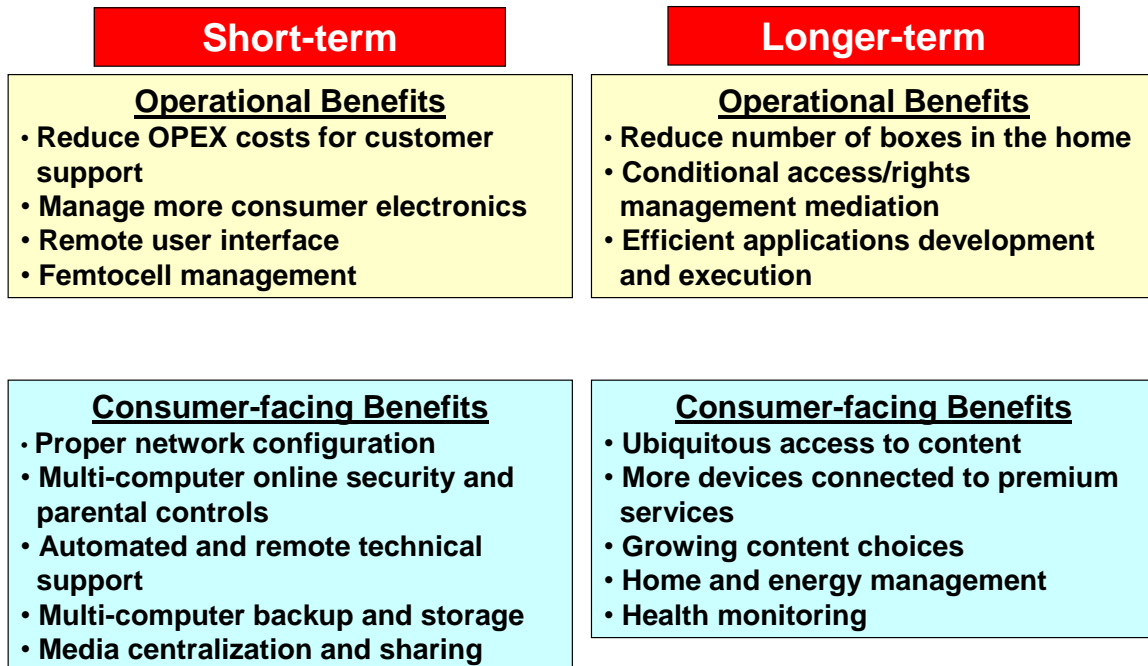
The presence of centralized and remotely managed customer premise equipment offers multiple benefits. Service providers gain operational efficiencies and enhanced customer support capabilities, and the consumer can get a host of new whole-home and multidevice features. Among the connected home services being targeted in early home networking deployments are those that focus on centralized management of antivirus and parental controls. Facilitating both online and in-home centralized backup of data and media will grow in importance for the residential gateway.

The residential gateway will then contribute to the longer-term benefit of reducing capital expenditures (CAPEX) among pay-television operators, which can manage their video services through the RG to mediate different content and rights management formats and distribute signals to lower-cost customer premise equipment or CE. The RG’s ability to serve as an applications gateway will also grow in importance for operators looking to more quickly and readily deploy value-added services and upgrades.

Consumers will benefit from a managed home network by receiving advanced services that allow distribution of content to a variety of devices – both fixed and mobile – over multiple

access networks. Applications such as home control and health management may also grow in importance, particularly as telehealth, energy management, and security functions rely to a greater extent on the two-way capabilities of broadband communications.

Managed Residential Gateways: Operational and Consumer Benefits



Source: *Connected Home: Global Outlook*
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Figure 9 Managed Residential Gateways: Operational and Consumer Benefits

Households already equipped with a residential gateway or home networking solution from their broadband service provider are receptive to a variety of value-added services. The early market for value-added services that leverages the residential gateway for multiplatform access will be mainly technical support and lifestyle management services, including online backup, but as Figure 8 indicates, the long-term benefits will include near-limitless content options and home automation and health-related services.

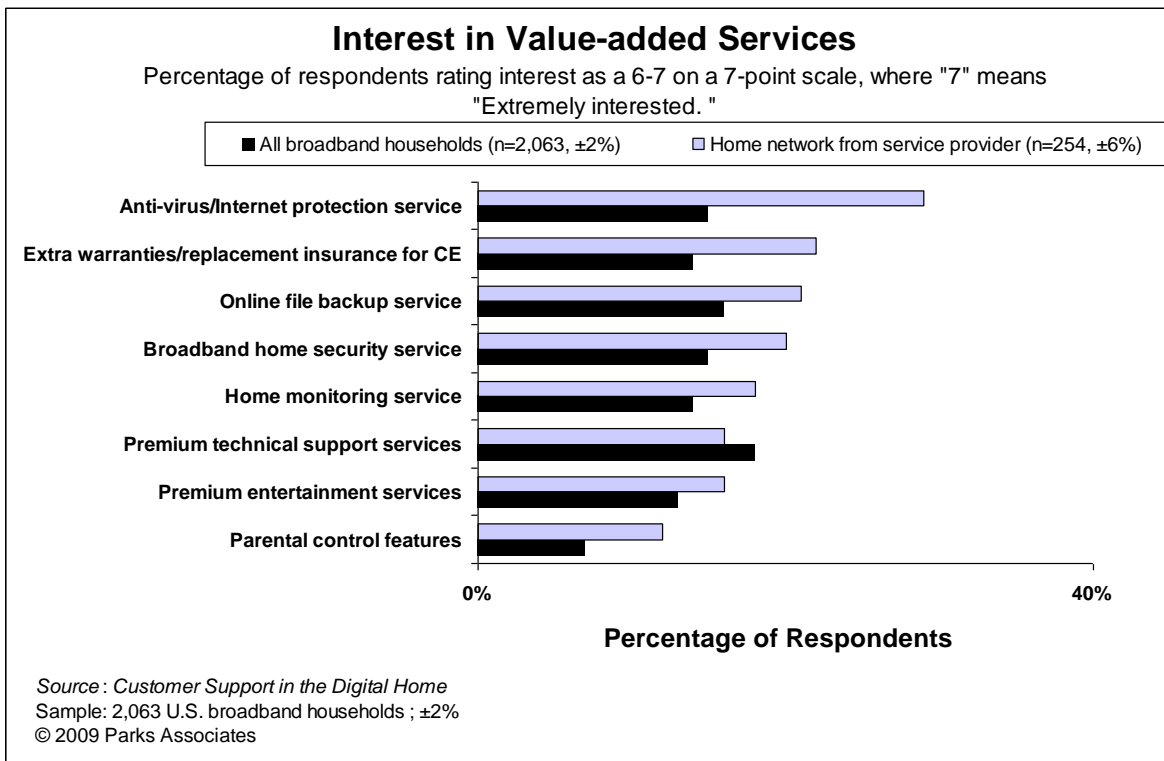


Figure 10 Interest in Value-added Services: The Impact of a Service Provider Home Network

7.0 The Role of Customer Support Enhancements

Broadband service providers have a significant opportunity to offer digital home technical support services as value-added features to their subscribers. Telecom operators in particular find themselves in an envious position of consistently scoring higher ratings among customers for superior customer support. Broadband service providers rank the highest among potential technical support providers on a trust level. And, research shows that broadband service providers tend to be among the first entities to receive a technical support phone call for home computer and home networking issues, regardless of whether they were responsible for deploying those products. As service providers seek to reduce so-called “out-of-scope” customer support calls, they have an opportunity to expand their overall service profile. Important elements of the customer support experience include:

- **Service quality management:** the ability by operators to dynamically measure data and video packets throughout their network in order to proactively solve issues related to quality-of-service delivery.

- **Service delivery:** building broadband-centric services that allow for scale and the ability to add value-added features as subscribers desire them. These abilities will require elements of proactive and dynamic service provisioning. As operators tie together management and delivery systems and data regarding service usage, they will have greater ability to market, deliver, and control the quality of services to subscribers.
- **Device management:** operators will be required to see deeper into the customer's home as devices beyond the residential gateway and set-top box are added to the home network. The implementation of data models and device discovery and management protocols for both new and existing customer premise equipment (CPE) and consumer electronics will be important in detecting and automatically fixing issues related to device management and inoperability.
- **Application development and deployment:** Advanced television services will be increasingly defined by the development and dynamic deployment of more open applications. Operators will seek ways to leverage their existing delivery systems to provide unique services without exceeding the requirements of customer premise equipment.
- **Consumer-facing technical support:** Premium technical support services that include installation and in-home and remote troubleshooting services are one of the biggest value-added service opportunities for operators. A significant consideration in delivering these services is whether operators will build up infrastructure on their own or partner with experts who can roll trucks and/or deliver remote technical support using their own call centers.

The market for premium technical support services in the U.S. was over \$3 billion in 2008 and will double by 2013.¹ Moreover, investments made by providers now in this area pay even greater dividends later as they will truly enhance their ability to manage and deploy a variety of new and high-demand services to their subscribers in the future.

¹ *Digital Home Tech Support: Analysis and Forecasts*, © 2009 Parks Associates

About the Author

Kurt Scherf studies developments in home networks, residential gateways, digital entertainment, technology development in the housing market, and residential and building management and controls. Kurt is the sole author or contributing author/analyst to more than 80 research reports and studies produced by Parks Associates since 1998.

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The company's expertise includes new media, digital entertainment and gaming, home networks, Internet and television services, digital health, mobile applications and services, consumer electronics, and home control systems and security.

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