



# **Making TV Meaningful: Consumers and IPTV Applications**

## **A Parks Associates White Paper**

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## 1.0 The Initial Traction for IPTV

Internet protocol television (IPTV) uses IP as the transport platform to send video signals to the television via high-speed Internet connections such as fiber-to-the-X connections (FTTx) and/or next-generation digital subscriber lines (xDSL). With this technology, consumers will be in complete control of what, when, and where they watch television programming. Moreover, given the versatility of the IP network, consumers will have the opportunity to embrace a plethora of services that go beyond video signals.

Although consumers may embrace IPTV services and applications to heighten their home entertainment experience, service providers – and especially telecom operators – are venturing into this business purely as a survival strategy. Over the past few years, telecom operators have been losing a significant percentage of consumers to voice-over-IP services from cable operators and mobile services from wireless operators.<sup>1</sup> Telecom operators are seeking new avenues that will prevent their existing consumers from switching to other service providers. However, we would caution these competitive video players to not lose sight of IPTV’s potential benefit to create new revenue streams via advanced services.

As a first step, telecom operators have to change gears from a “traditional fixed-line provider” to an “entertainment provider” if they want to be successful in the video business. They have to offer sophisticated programming packages that will entice consumers to keep their fixed lines in order to experience the advanced TV offerings. Moreover, telecom operators have to strategize their approach such that their initial survival strategy eventually turns into a revenue-generating model. To realize this model, telecom operators have to form strong partnerships with various network infrastructure, software, and other solution providers to build a network that supports the current offerings and is future-proof.

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<sup>1</sup> <http://www.sbc.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=21750>

## 2.0 What are the Potential Market Drivers?

For many decades, telecom operators have maintained their “5-9s” standard (i.e., 99.999% reliability assurance) for their voice service. Now as are expanding their services beyond voice and data, the question is whether they can maintain this steadfast “reliability” image as they did for their phone.

Although it is too early to answer this question, telecom operators have to watch for specific market drivers that will help them maneuver in the right direction. The obvious drivers are price of the bundle package and speed of the broadband service, while the not-so-obvious one is creating a compelling customer experience.

### 2.1 Competitive Pricing

In the current market scenario, service providers – including cable, satellite, and telecom operators – are getting very aggressive about how they price their services, particularly those bundled into packages.<sup>2</sup> In their quest to increase their customer base, service providers are offering triple-play packages with a very thin profit margin. Although this strategy may be successful in gaining initial customer traction, it will not be profitable in a long run. If telecom operators want to emerge as leaders in the video market, they have to identify compelling drivers for consumers to acquire their services beyond the “price” of the basic triple-play package.

### 2.2 Quest for Delivering High-Speed Connections

Cable providers offer video services and high-speed Internet connections using a hybrid fiber coax (HFC) network. Although HFC promises huge bandwidth for the downstream (400 Mbps), its performance on upstream transmission is notably slower (128 Kbps). This limitation hinders the opportunity for service providers who want to offer more interactive advanced TV services and applications.

Telecom operators have addressed this limitation by spending an enormous sum of money for the infrastructure that promises high-speed connections for delivering video

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<sup>2</sup> [http://www.comcastoffers.com/1/?cid=51993&affid=comcast\\_high\\_speed\\_internet](http://www.comcastoffers.com/1/?cid=51993&affid=comcast_high_speed_internet)  
<http://promo.yahoo.com/sbc/?refer=dsl0>

signals through FTTx and/or xDSL lines.<sup>3</sup> Although major Regional Bell Operating Companies (RBOCs) such as SBC and Verizon Communications vary in their initiatives regarding access infrastructure, both seem to have established good positions for supporting more interactive advanced TV services and applications. In a competitive environment where broadband speed no longer acts as a differentiator, telecom operators have to search for other options that will help them to distinguish themselves in the market.

## 2.3 Building a Better Customer Experience

As telecom operators gear up to position themselves as “entertainment providers,” they have to be creative in bundling services that really excite consumers. Customer experience creates a sense of bonding between the service operator and consumers and is critical for building long-term relationships with consumers.

In addition to providing a great deal of choices in programming, the cable operators and satellite television providers are moving to competing with strategic or compelling content as differentiators. For the cable operators, this now includes their video-on-demand offerings that include a wide choice of children’s, how-to, and educational programming. This type of programming is ideally suited for an on-demand world. It’s non-linear, meaning that its value does not diminish as if it were a live offering (such as Sunday afternoon football game). After years of doubt about whether video-on-demand programming was going to really pan out for the cable operators, we believe that we are just now at the beginning of a trend where interesting VoD content is going to be a competitive differentiator for an operator that can provide it via a two-way interactive connection. **Figure 1** (below) indicates that consumer use of VoD applications via their cable television provider is growing and that it is at the very least an application that spurs loyalty and that can reduce churn.

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<sup>3</sup> [http://news.com.com/Verizons+fiber+race+is+on/2100-1034\\_3-5275171.html](http://news.com.com/Verizons+fiber+race+is+on/2100-1034_3-5275171.html)  
[http://news.com.com/SBC+plans+billions+on+high-speed+fiber/2100-1037\\_3-5243514.html](http://news.com.com/SBC+plans+billions+on+high-speed+fiber/2100-1037_3-5243514.html)

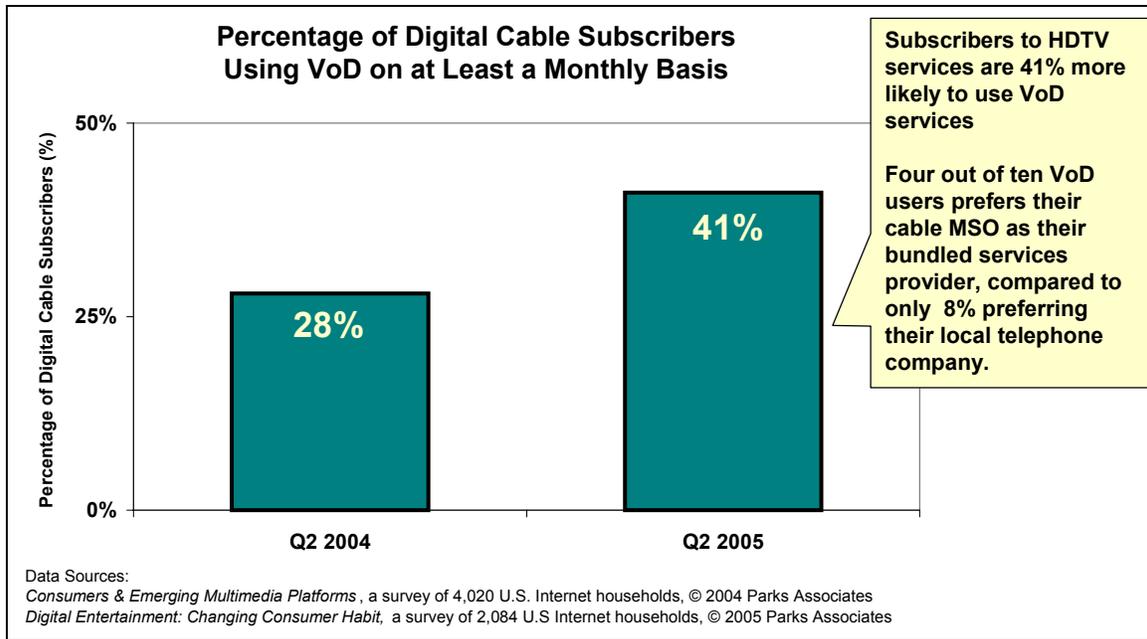


Figure 1 Percentage of Digital Cable Subscribers Using VoD on at Least a Monthly Basis

Certainly, the type of exclusive or strategic content that is currently considered the most significant differentiator is sports programming (at least for the mass-market). Sunday Ticket™, the optional National Football League programming available in the U.S. from DIRECTV, is a very strong lure for satellite subscribers. Parks Associates research has shown that current satellite TV subscribers are more likely to rate their satisfaction with the level of programming choices at or above a level provided by current digital cable subscribers, despite the wide variety of on-demand offerings from their cable competitors. We believe that the exclusive sports programming such as Sunday Ticket are one of the choices that attracts and retains customers with the greatest impact.

If sports programming is one of those forms of strategic or exclusive programming that is going to differentiate one television provider from another, where should competitive television providers look in terms of gaining access to it? Herein lies the significant challenge that competitive players are going to have – the cost of acquiring compelling sports offerings. In a report from the Government Accounting Office (GAO) titled *Subscriber Rates and Competition in the Cable Television Industry*<sup>4</sup>, cable television executives surveyed on the costs of their services indicate that “high programming costs

contributed to rising cable rates.”<sup>5</sup> Among the “major contributor[s]” to the increased programming costs is sports programming, which contributed to a 48% in cable programming expenses between 1999 and 2002. The GAO notes specifically:

“On the basis of our analysis of Kagan World Media data, the average license fees for a cable network that shows almost exclusively sports-related programming [GAO examined ESPN, ESPN Classic, ESPN2, FOX Sports Net, The Golf Channel, The Outdoor Channel, and the Speed Channel] increased by 59 percent, compared to approximately 26 percent for 72 nonsports networks, in the three years between 1999 and 2002. Further, the average license fees for the sports networks were substantially higher than the average for nonsports networks.”<sup>6</sup>

If compelling sports action is to be a competitive differentiator and traditional sports programming is prohibitively expensive for a competitive television provider to license, are there some other options? We believe that competitive video operators, in addition to licensing traditional content from many of the sports programmers listed above in the GAO report, may also want to look at how they can serve the local communities in which they are hoping to gain a competitive edge by looking at opportunities aimed at very specific regional/community sports programming. An obvious thought is high school sports, beginning with Friday night football games. Not only can competitive programmers find audiences who are seeking to watch an interesting matchup between two local high school teams, but the opportunity exists for competitive players to leverage the packaging of community-based programming for two more reasons:

- Should competitive video players be required to obtain local franchising rights from community governing boards such as city councils or town boards, they are likely to face requests/demands for local access programming as part of any franchise agreement. The ability by the telcos or any other competitive player to offer local access programming that goes beyond some of the amateurish shows and footage of city council meetings and hearings can be a compelling differentiator.
- Second, there may be an opportunity to attract local advertising dollars that are tied to the sports programming. As competitive video players think more locally in terms of the content available for rebroadcast, they may find local stores, restaurants, and other business that may find enormous value in providing

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<sup>4</sup> *Subscriber Rates and Competition in the Cable Television Industry*; Statement of Mark L. Goldstein, Director of Physical Infrastructure Issues for the Government Accounting Office; March 25, 2004.

<sup>5</sup> *Ibid.*, p. 9.

<sup>6</sup> *Ibid.*, p. 9.

marketing messages to a very targeted group of consumers, who may be just a short drive (or even walk!) away from their businesses!

Beyond high school sports, there is no reason to believe that any programmer yet has a monopoly on providing television time to collegiate sports beyond the “Big Three” (football and men’s and women’s basketball). Although ESPN is certainly moving in the direction of providing more sports to viewers by way of its recently –launched ESPNU channel, there may be other opportunities for video programmers to augment their sports offerings with packages that focus on a specific school or certain sports that may very well be outside of the mainstream. One company providing some of this content is XOS Technologies ([www.xostech.com](http://www.xostech.com)) through its XOS Network.

Beyond sports, culturally-specific programming that targets different ethnic groups via specific programming can also be a powerful tool to attract and retain customers and build revenues through specific programming packages. This so-called “long-tail” content may include some of the programming options that are described and rated below in **Figure 2**. For the most part, the enthusiasm for such content remains relatively stifled, largely because consumers equate the Internet to a usage model whereby they are required to sit directly in front of a home computer to view the programming. For many consumers, it’s a straightforward deal breaker; the video experience remains essentially linked to the television. In upcoming surveys, including *Bundled Services & Residential Gateways 2005*, we are strongly considering changing the wording of a question such as this to reflect a “video-on-demand service that allows to view the following content at either the home computer or a television.” We expect that the results would then reflect stronger support for certain types of programming.

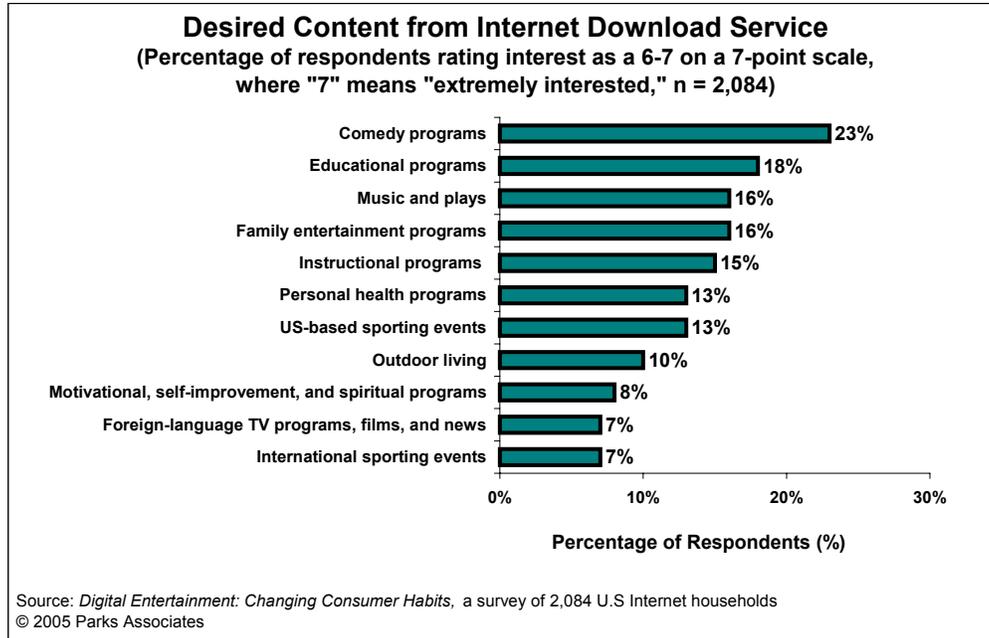


Figure 2 Consumer Comfort with DVR/PVR Ad-skipping Service

With the relatively low enthusiasm for certain types of programming noted as a caveat across *all* of the consumers surveyed in *Digital Entertainment: Changing Consumer Habits*, we do find markedly different levels of enthusiasm for such Internet-based programming options among younger consumers. **Figure 3** provides a comparison and contrast to the strong level of enthusiasm that younger consumers show toward the programming option versus the sample as a whole. Granted, the teenagers who completed this particular survey expressed enthusiasm for a great many of the technology products and services about which they were asked, and we provide this data with the caveat that the results below may simply be an indicator of “teenage survey enthusiasm” and nothing more. However, as children and teens grow more accustomed to using the Internet as a content resource (watching streaming video for personal or schoolwork use), finding and downloading music, and for sharing personal content with each other, we anticipate that – as they move into adulthood and have the financial means to select television programming services for themselves, they may very well expect a certain level of integration between what they do on the home computer and what is available for viewing on a television in their living rooms.

<b>Percentage of Respondents Indicating Strong Interest for Internet Programming</b> (Percentage of respondents rating interest as a 6-7 on a 7-point scale, where "7" means "extremely interested")				
	All respondents (n=2,084)	Age 13-37 (n=270)	Age 18-24 (n=213)	Age 25-34 (n=376)
Comedy programs	23%	53%	32%	26%
Educational programs	18%	26%	15%	20%
Music and plays	16%	35%	18%	13%
Family entertainment programs	16%	27%	10%	21%
Instructional programs	15%	22%	11%	17%
Personal health programs	13%	24%	11%	15%
U.S.-based sporting events	13%	28%	17%	15%
Outdoor living	10%	22%	8%	9%
Motivational, self-improvement and spiritual programs	8%	19%	5%	9%
Foreign-language TV programs, films, and news	7%	24%	7%	7%
International sporting events	7%	22%	8%	6%

Source : Digital Entertainment: Changing Consumer Habits , a survey of 2,084 U.S. Internet households  
© 2005 Parks Associates

Figure 3 Percentage of Respondents Indicating Strong Interest for Internet Programming

In addition to younger consumers, the ability by a television provider to also meet the specific needs of certain ethnic or racial groups – who may feel underrepresented by mainstream media sources for programming suited to their needs – will become a critical differentiator, particularly in areas of the country with larger penetration of certain ethnic groups. Cable and satellite operators have demonstrated a desire to make ethnic and foreign language programming available to their subscribers (either as a standard offering or as an optional feature for which subscribers pay extra). Competitive video providers will therefore also need to consider such offerings, particularly in areas of the country strongly represented by specific ethnic groups (for example, the West Coast with its large Asian population, the South and Midwest with Latinos/Hispanics, and the Northeast with large European and religious groups, such as Eastern Europeans and members of the Jewish faith).<sup>7</sup>

There is a window of opportunity to tap into this niche market by offering programming that is not currently available through traditional. As evident from **Figure 4**, there is an increased demand for international content such international sports or foreign-language TV programs among the Latino/Hispanic and Asian ethnic groups.

<sup>7</sup> These are general recommendations and not specific conclusions based on specific ethnic or racial segmentation that Parks Associates has conducted in research to date.

<b>Percentage of Respondents within Ethnic Groups                      Indicating Strong Interest in Internet Programming</b> (Percentage of respondents rating interest as a 6-7 on a 7-point scale, where "7" means "extremely interested")		
	<b>Latino/Hispanic (n=98)</b>	<b>Asian (n=93)</b>
<b>Comedy programs</b>	39%	28%
<b>International Sports</b>	19%	14%
<b>Music and plays</b>	31%	18%
<b>Foreign-language programming</b>	21%	17%
<b>Motivational/self-improvement/spiritual</b>	16%	13%

Source: *Digital Entertainment: Changing Consumer Habits*, a survey of 2,084 U.S. Internet households  
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Figure 4 Percentage of Ethnic groups Indicating Strong Interest in Internet Programming

### 3.0 Where is the IPTV Market Likely to Find Early Success?

Sometimes consumers find it difficult to comprehend the benefits offered by a new technology. If telecom operators have to make the grade among consumers with their IPTV offerings, they have to educate consumers about the richness of the technology. In their quest to educate consumers, telecom operators have to understand their consumers' preferences for advanced TV services and applications.

#### 3.1 Know Your Consumers

Parks Associates has identified four key segments in the U.S. based on consumers' specific preferences for advanced TV services and applications. These segments are "Converge Me", "TV on My Terms", "Interact with Me", and "Don't Bother Me." As an example, consumers interested in personalization services such as personalized recommendations from a service provider, one-button access to recording favorite TV programming, and one-button access to important information like news and weather are grouped into the segment called "TV on My Terms." The U.S. market has a good mix of consumers with different preferences, indicating that a "retail" video model may not be suitable.

Since IPTV is all about giving consumers full control over what they consume, the telecom operators in the U.S. have to build models that realize this concept. This approach can cause significant strain on telecom operators' resources and revenue as they have to offer customized services to all their consumers. Telecom operators therefore

have to identify the customer segment of the four specified that is most willing to pay for advanced TV services and applications.

Parks Associates has identified the consumer segment “Interact with Me” as willing to spend 20% more than average for advanced TV services. This segment, which represents 27% of all U.S. households, is highly interested in interactive services such as voting for game shows, targeted advertising, and gaming over the television.

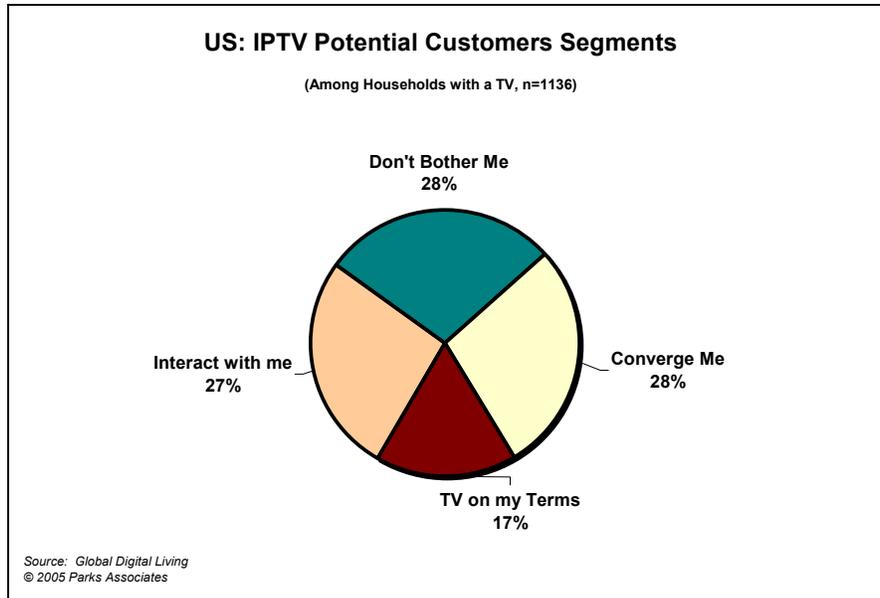


Figure 5 U.S. IPTV Potential Customer Segments

This segmentation approach to advanced TV services offers some interesting clues about where telcos and other competitive video players may be able to derive additional revenues from their customers. When we analyze current spending for communications and entertainment services (local and long-distance home phone, mobile phone, Internet access, TV, and watching movies at home) plus the amount of value (in terms of monthly dollars) that consumers attribute to such emerging services as video-on-demand, games-on-demand, and a home monitoring service (using Webcams, for example, to keep tabs on the kids or a babysitter), we find that there may be significant dollars still available from the “Interact With Me” and “TV on My Terms” segments.

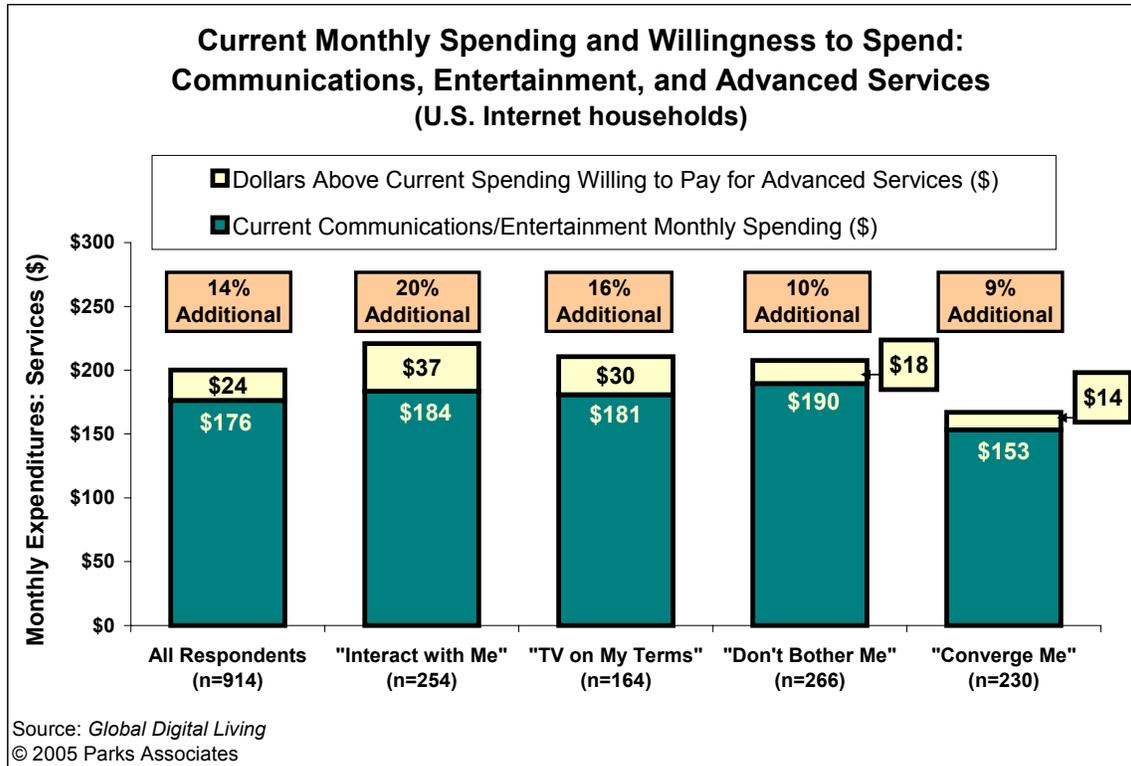


Figure 6 Current Monthly Spending and Willingness to Spend: Advanced Communications and Entertainment Services

One strong reason why the group of consumers labeled as “Don’t Bother Me” are more reticent to the notion of advanced TV services may have more to do with what they are currently spending for their communications and entertainment services, and not because they reject such solutions outright. What we sense is that these consumers may feel that their current entertainment packages are quite sufficient for their needs (in fact, they are already spending the **most** for current TV services among the four segments). Therefore, competitive video providers need to continue to serve their needs through standard programming options and also provide opportunities for them to access video-on-demand programming through their interactive services (because the “Don’t Bother Me” segment is still spending a good sum of money each month – a little over \$8 – for movies). Competitive video players may be in a position to move consumer dollars therefore away from Blockbuster and toward a VoD service. And once consumers try the services, they’re likely to continue using them if they present a good value (i.e., “I don’t have to return the movie to the store the next day) and provide the type of content that consumers are seeking. Another interesting finding is that consumers are still willing to pay for

services that are quite similar in nature (VoD vs. movies by mail, *a la* Netflix) if there's a perception of value, convenience, and choice. So, we'd argue that the interactive services – along with the necessary licensing agreements to be able to present compelling content to viewers – are going to be critical to the competitive video players as they seek to 1) provide “Me Too” services that strongly match currently-available offerings from the cable MSOs; 2) differentiate by providing exclusive or strategic content that isn't available at other sources (independent movies, foreign language programming, local community programming, quality high-definition programming, etc.); and 3) offer enhanced TV services (such as picture-in-picture (PIP) ability, compelling personalized programming guide, and faster channel switching) that are currently not offered by cable or satellite operators.

### **3.2 Analyze Consumers' Switching Behavior**

The majority of consumers subscribe to services on one-on-one basis from different service providers. Cable operators are the obvious choice among consumers when it comes to subscribing video and high-speed internet access, while telecom operators are the preferred choice for voice (wireline and wireless). Price is the major driver that causes consumers to switch between service providers for a particular service. However, consumers are unaware that their current service provider may provide services beyond their core offering, meaning telecom operators have to overcome the initial branding issue and have to emerge as entertainment provider.

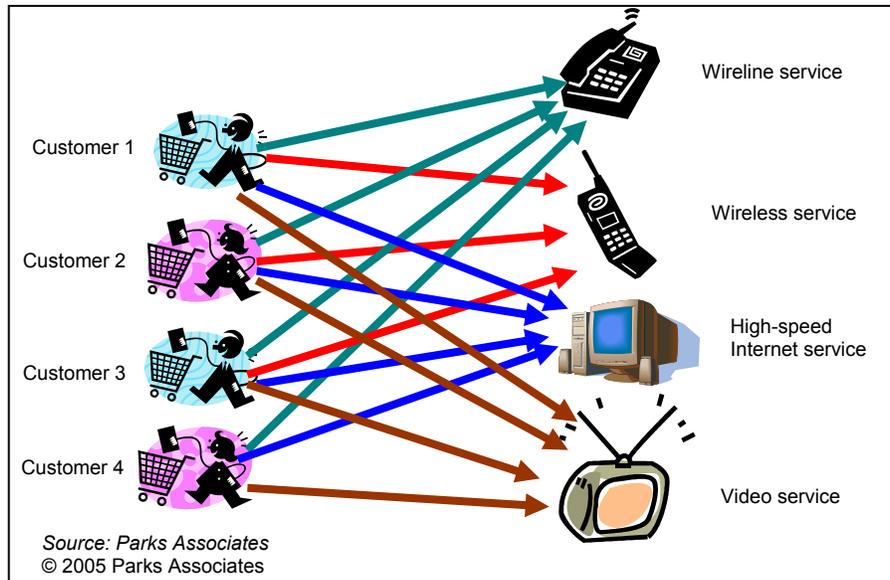


Figure 7 Current Consumer Behavior for Quad-play services

According to the current market dynamics, only 4.1 million subscribers are likely to select a telecom operator for a basic triple-play package (voice, data, and video.) Although cable operators seem to have thrice the market potential than telecom operators, they have a weak back-office infrastructure. They have to integrate multiple-networks together to offer triple-play services, which ultimately lead cable operators to commoditize their services to reduce cost, thereby providing consumers with a completely un-personalized experience.

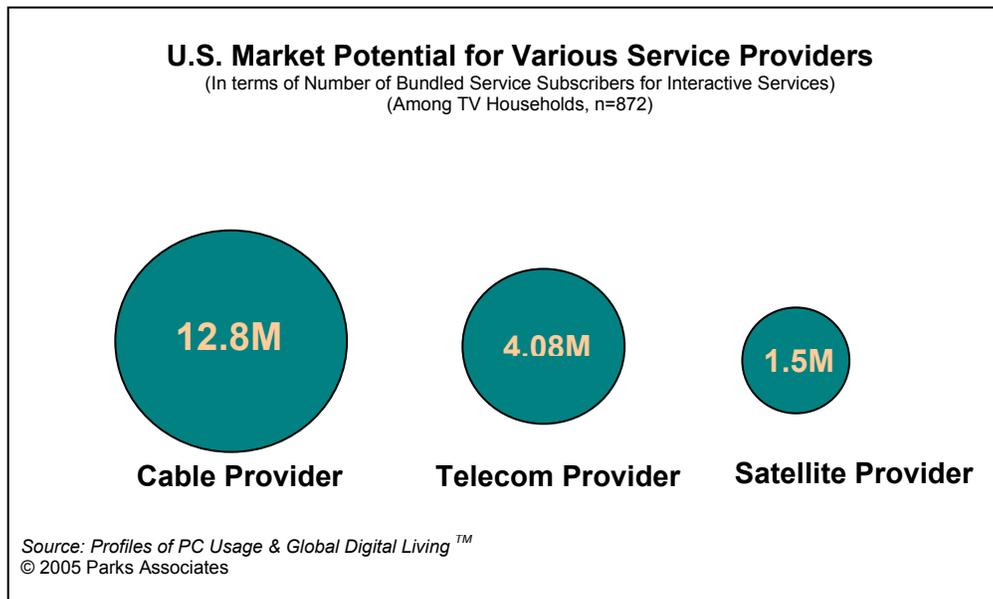


Figure 8 U.S. Market Potential for Various Service Providers

However, things can change with IP. Telecom operators may have an upper edge over cable operators because migration to IP will enable them to manage and offer multi-service opportunities (voice, data, video, and wireless) over a single network. Moreover, IP provides telecom operators better flexibility to manage the network and offer personalized packages to their customers. IP also enables the possibility to introduce various value-added services beyond video that truly differentiate telecom operators in the market. Since the IP infrastructure is fairly new, telecom operators have to ensure that they thoroughly test their system for reliability and scalability before their full-service commercial launch.

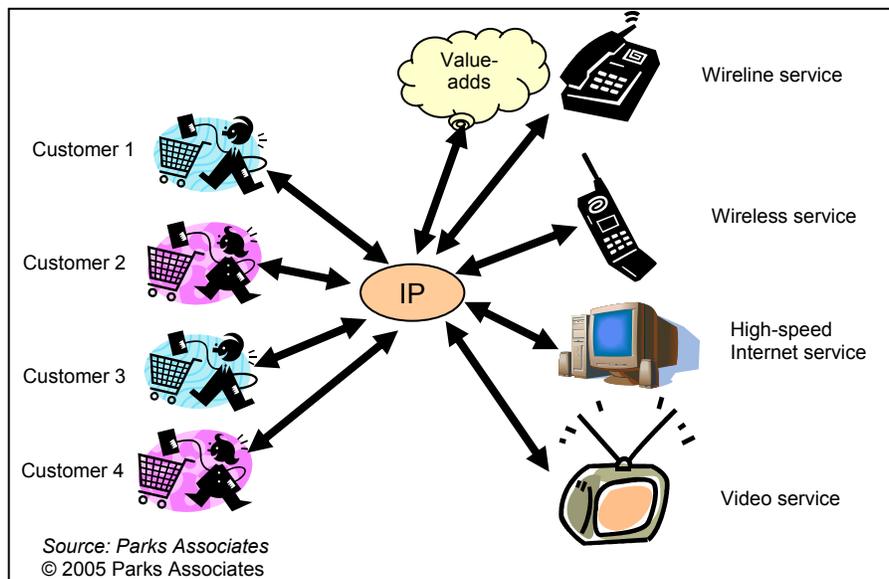


Figure 9 Future Consumer Behavior for quad-play service

In current market situation, steep discounts play an important role in driving consumers' decision to select a service provider. Nearly 33% of the respondents are willing to switch to a telecom operator for video services if they are offered \$20 or more in discounts. This finding raises an interesting question – “Can telecom operators monetize by offering steep discounts?”

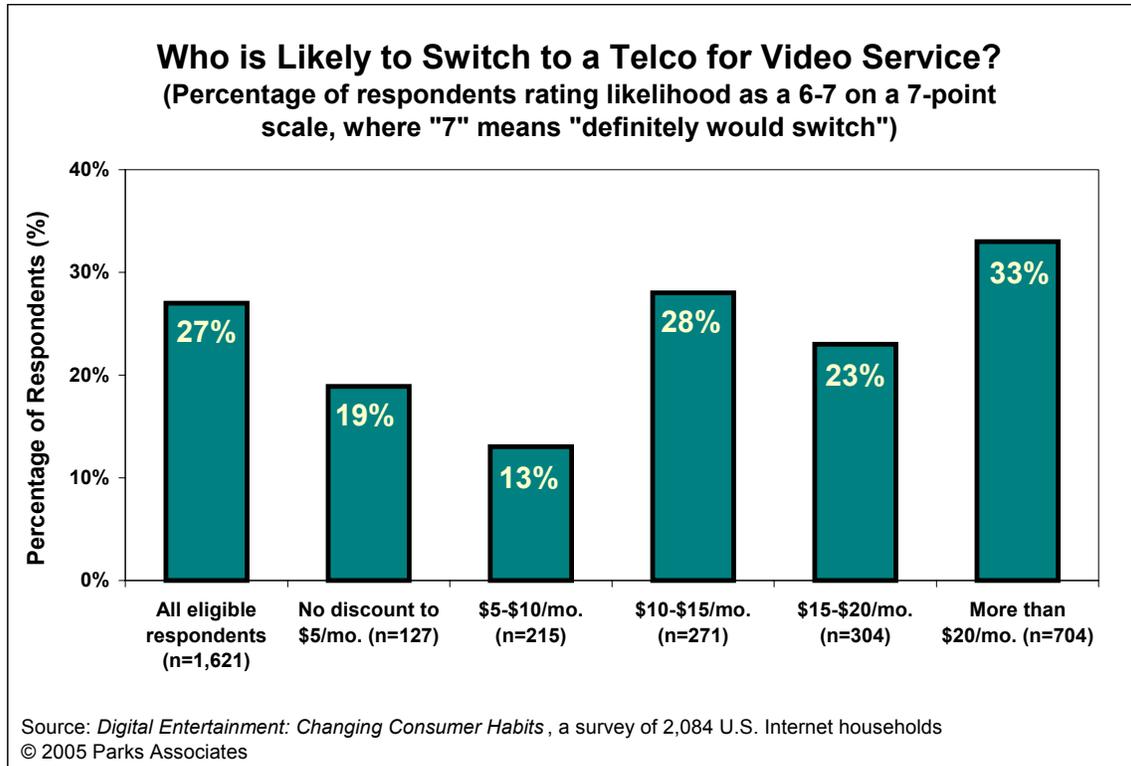


Figure 10 The Role of Discounts in Spurring a Switch to a Telco

Although offering steep discounts may be an ideal short-term solution, telecom operators must consider their long-term goals. One possible strategy that may favor telecom operators is their old “reliability” image. Telecom operators can garnish their basic quad-play services with additional services such as computer security software and other related services that have high profit margins. Another possible strategy is to use hands-on-training to consumers educate them regarding the benefits of bundling services and overcome the issue of “sticker-shock.” Presentation of multi-services offering in way that reflects consumers’ personal choices is essential to retain customer base and increase ARPU.

## 4.0 Conclusions

IPTV has the potential to cause a paradigm shift in telecommunications services, and service providers, especially telecom operators, have a great opportunity to increase customer ARPU. Over the years, telecom operators have found success from their “one bill” approach for triple-play service (which includes voice, data, and wireless). But with the addition of video into the package, things become more complicated. Consumers attach more value when it comes to video. Quality and quantity of video content are important issues that drive consumer preferences.

Although it is quite early to define an “ideal” market model, telecom operators have to follow a strategic approach by mapping out the key components necessary for the efficient operation of the IPTV infrastructure. Strong partnerships with experienced vendors and efficient delivery of compelling services, such as video-on-demand and other interactive service applications like targeting advertising, gaming, and entertainment-relating voting, will significantly improve their ability to compete for subscribers and revenue.

The market for multichannel IP video offerings is expected to grow rapidly between 2006 and 2010. Our forecasts project that nearly 13 million households worldwide will subscribe to such an offering at the end of 2006, and will grow to nearly 70 million households by the end of 2010. The Asia-Pacific region shows the most promise for growth in terms of total number of subscribers; it will account for two out of every three household subscribers at the end of 2006. The market for such services in Western Europe will also grow significantly during the 2006-2010 timeframe.

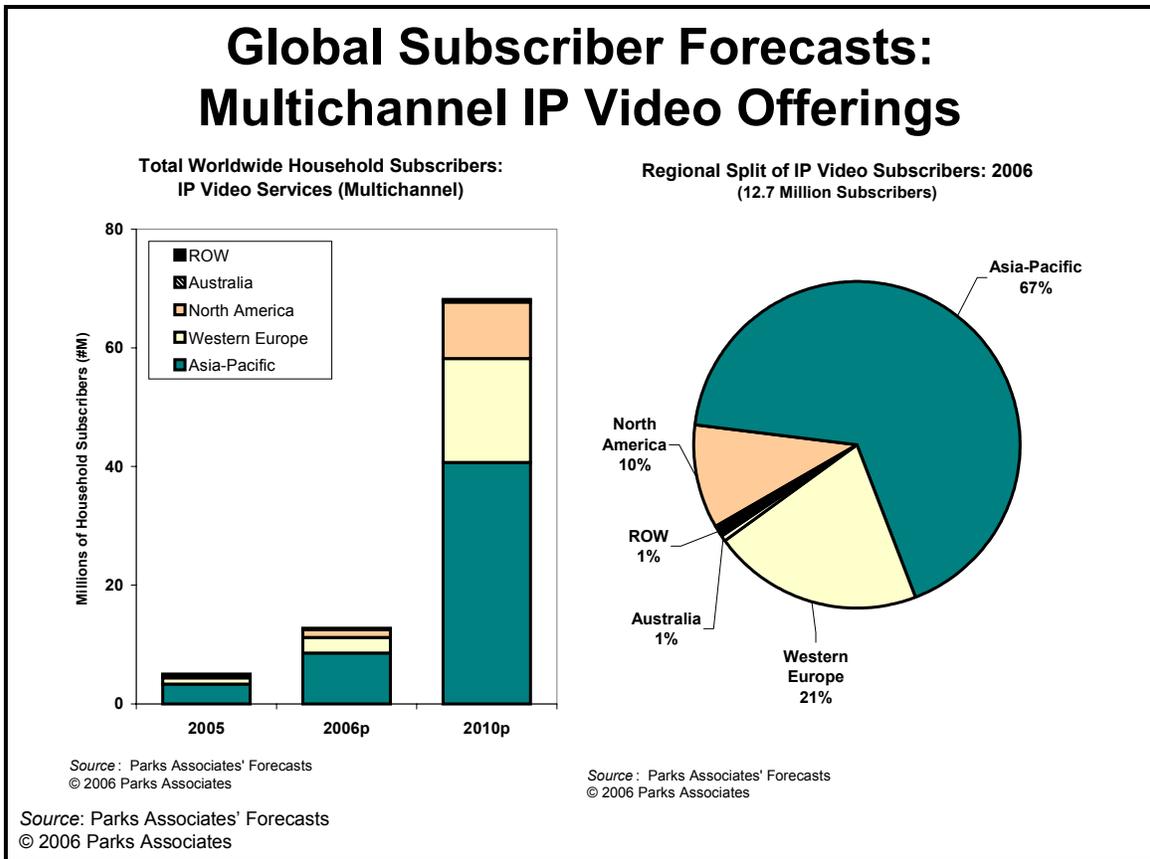


Figure 11 Global Subscriber Forecasts: Multichannel IP Video Offerings

**About the Authors:**

**Deepa Iyer** is a research analyst for Parks Associates and studies emerging technologies for delivering quad-play services in the broadband market. Her most recent focus is on studying the IPTV market and consumer dynamics, high-definition television, and both consumer and industry trends in the delivery of bundled services.

Deepa has a Master of Science in marketing research from the University of Texas at Arlington. In addition, she has a Master of Science in electrical engineering with a concentration in RF communication from the same university.

Deepa is an academic scholar and has been listed in the Dean's List for Academic Excellence since 2003. She has worked on various market research projects for many companies such as RadioShack, AMC Entertainment, Ford Credit, Mapsco, etc.

She was involved with RadioShack's Cinego, a DLP projector during its initial stages of development. She simulated Bass Diffusion Model for Cinego and forecasted its sales for the next three years. In addition, she did a customer segmentation study for AMC Entertainment for its Dallas-Fort Worth market. The main focus of the study was to understand the shift in the market due to the entry of media-center PCs and home theaters into the consumers' home.

Deepa has published a journal paper titled "Gauging an Industry Standard of Attitudinal Loyalty for Vacation Lodging in the U.S." for the Journal of Vacation Marketing. This paper has developed a platform for understanding customer behavior in the mid-scale and economy class hotels in the U.S.

**INDUSTRY EXPERTISE:** IP Video Services, HDTV, Digital Voice Services, and the Business of Bundled Services.

**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 40 research reports and studies produced by Parks Associates since 1998. Kurt is a frequent speaker at conference and events around the world, and is frequently cited in the industry and general business press. Kurt is a certified Focus Group Director. Kurt joined Parks Associates following a career in political research and multi-tenant dwelling management. He earned his BA from The University of Iowa.

**INDUSTRY EXPERTISE:** Consumers and Digital Entertainment, Home Networks & Residential Gateways, Wireless Distribution of Video, Media-center PCs, Set-top Boxes & Residential Gateways, and IPTV.

**About Parks Associates:** Parks Associates is a market research and consulting firm focused on all product and service segments that are “digital” or provide connectivity within the home. The company’s expertise includes home networks, digital entertainment, consumer electronics, broadband and Internet services, and home systems.

Founded in 1986, Parks Associates creates research capital for companies ranging from Fortune 500 to small start-ups through market reports, multiclient studies, consumer research, workshops, and custom-tailored client solutions. Parks Associates also hosts two executive seminars, both part of the Fall Focus series, and co-hosts CONNECTIONS™ (in partnership with the Consumer Electronics Association) each year. [www.parksassociates.com](http://www.parksassociates.com).