Leichtman Research Group, Inc.

Research Notes

3Q 2002 *Actionable Research on the Adoption and Impact of Broadband Media*

Widespread Adoption of Digital Video Recorders (DVRs) Not Inevitable

The number of households in the United States with Digital Video Recorders (DVRs) will grow from a customer base of approximately 1 million today to 15 million in five years. While this is a significant increase – this number does not represent a widespread consumer adoption of this technology.

In this issue:

As a stand-alone product/service offering, DVRs have failed to make significant inroads with consumers. In three years of availability, backed by millions of dollars of advertising and promotions from some of the biggest names in the industry, DVRs have reached just 1 percent of US households. With approximately 350,000 stand-alone DVRs sold during this period, this represents an average of one sale per available retail outlet per week.

Leichtman Research Group consumer research (conducted earlier this year with combined studies of over 2,600 US households) shows a somewhat lukewarm reception to DVRs as a stand-alone offering. While over 25% of consumers are interested in the concept of getting television programs on-demand, just 5% of consumers express a willingness to pay for a DVR device with a monthly fee.

> ***"Some industry consultants predict that 30 million to 50 million American homes will have personal video recorders in the next five years. Leichtman thinks the figure will be closer to 15 million of the nation's more than 100 million homes with TVs."***
>
> **- Atlanta Journal Constitution**
> *July 31, 2002*

On the supply-side, direct broadcast satellite (DBS) providers have been leading the way in deployments of DVRs with about 650,000 DVRs deployed to date. With EchoStar's no monthly fee-based offering, DBS providers are expected to continue to accelerate DVR deployments.

Cable operators are also looking at the potential of DVRs as a competitive tool, but with a current base of over 16.5 million digital cable

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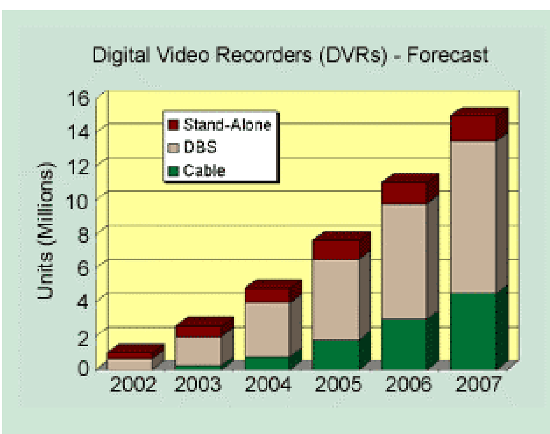
households, networked based services like video-on-demand (VOD) and subscription video-on-demand (SVOD) using the currently embedded base of premise equipment may provide a more attractive option to rolling out services that would require changing out this equipment base with DVR-enabled set-tops.

The hurdles facing widespread deployment of DVRs by cable companies also extend to the overall business model of cable programming. One highly controversial element of DVR technology is its ability to allow users to bypass advertising. This creates a significant potential conflict with an operator's ad revenues – impacting both operator-owned programming and local ad insertions.

Consumer demand data is part of an LRG industry study - ***VOD and SVOD: Consumer Perceptions and Market Opportunities*** and a recent LRG research report – ***DVRs: Next Big Thing or Next Betamax?***



Broadband Internet to Grow by 25 Million Subscribers in Next 5 Years

Leichtman Research Group forecasts that broadband Internet connections will grow by 25 million over the next five years (from about 12.5 million at the end of the first quarter of 2002 to 37.3 million by 2007).

> ***"Recent statistics from Leichtman Research Group indicate that cable ISPs are still outselling DSL companies by nearly 2-to-1. And with corporate futures at stake, the infamous last mile becomes more heated every day."***
>
> **- CIO Magazine**
> *August 1, 2002*

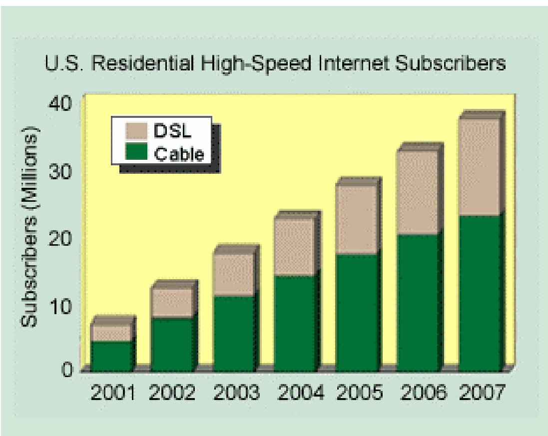
A number of factors contribute to the aggressive consumer adoption of broadband services:

– Availability - the top nine cable operators collectively represent over 90% of cable subscribers in the United States. These nine operators currently report broadband Internet availability for 75% of homes passed in their systems.

– Price Sensitivity – over twice as many consumers say that they are likely to subscribe to broadband Internet service at $30 per month as are at $45 per month.

– Broadband Penetration – today, about one-quarter of all US Internet households subscribe to broadband. By 2007, broadband will represent one-half of all online households.

While some have expressed public disappointment about the rate of broadband adoption in the US – much of this is the result of unrealistic expectations for broadband rollouts. The reality is that higher-priced broadband services have followed an aggressive adoption curve, and that this trend is likely to continue at a healthy rate for the next several years.



This data is based on comprehensive industry data and an LRG consumer survey of over 1,000 households throughout the United States examining cable modem and DSL Internet access. This data is part of an LRG research report – ***Broadband Internet Growth: On-Target***.

Number of Digital Subscribers Forecasted to Double in Next 3 Years

The number of digital cable subscribers in the US will continue to grow from a customer base of approximately 16 million at the end of the first quarter of 2002 to 32 million subscribers in 2005. By 2006, this number will grow to about 37 million digital subscribers.

Digital cable services have quickly emerged as a key component in the cable industry's efforts to protect their core customer base and generate incremental revenues. Since its introduction in 1996, these digital services have already shown its value and importance to the industry:

– The average digital subscriber spends nearly $200 per year more on cable television than the average analog subscriber.

– Digital cable subscribers already account for over one-half of cable's premium movie subscribers.

– Digital cable subscribers order, on average, 250% more Pay-per-View movies than their analog counterparts.

"Digital cable customers are more satisfied than analog customers, despite the fact that they pay an average of $16 more per month, according to a survey conducted by the Leichtman Research Group."

- Media Life Magazine
May, 2002

This data is based on comprehensive industry data and an LRG consumer survey of over 1,200 households throughout the United States. This data is part of an LRG research report – ***The Digital Cable Divide***.

Cable by the Numbers

Overall, this has been a very challenging quarter for the cable industry. In the second quarter, every major cable operator saw declines in Basic video subscribers – with the top ten MSOs reporting a cumulative decline of nearly 250,000 subscribers.

> ***"Even if that decline is a one-time glitch, 'basic cable is flat,' says Leichtman Research Group President Bruce Leichtman. People who don't subscribe to cable either can't get it or don't want it."***
>
> **- USA Today**
> *May 12, 2002*

Two bright spots for the industry are the continued growth of broadband Internet and digital subscribers. Cable operators added about 900,000 new broadband Internet subscribers this quarter, nearly doubling the growth of the major DSL providers and continuing to hold a commanding 65% market share of the US residential broadband Internet market.

Digital cable rollouts also continued. Nearly 900,000 digital subscribers were added during the past quarter – maintaining the technology's impressive growth curve.

This data has been created using company reports compiled and analyzed by Leichtman Research Group analysts.

2Q 2002 Broadband Internet Growth

Cable Growth

Operator	BB Internet Subs	Net 2Q Adds
Time Warner	2,466,000	271,000
AT&T	1,762,000	137,000
Comcast	1,168,900	128,400
Cox	1,115,000	113,689
Charter	905,500	157,800
Cablevision	610,505	50,740
Adelphia	377,500	N/A
RCN	149,602	12,807
Mediacom	145,000	18,000
Insight	103,400	8,900
Cable One	56,000	11,600
Total Cable	**8,859,407**	**909,936**

DSL Growth

Operator	BB Internet Subs	Net 2Q Adds
SBC	1,700,000	213,000
Verizon	1,500,000	150,000
Bell South	803,000	74,000
Qwest	508,000	24,000
Covad*	179,000	(1,000)
Total DSL	**4,690,000**	**460,000**
TOTAL BB	**13,549,407**	**1,369,936**

Sources: The Companies and Leichtman Research Group, Inc.

All data from Q2 2002, except Adelphia from Q4 2001 (last reported information). Subscriber counts may not represent solely residential households. For example, Charter Communications notes that commercial accounts are calculated on an equivalent modem unit (EMU) basis, and represent about 8% of its modem subscribers.

** Covad subscriber counts reflect residential users only. Total subscribers (including business) are 357,000.*

Subscriber Counts – Top 10 MSOs (end of 2Q 2002)

	Homes Passed	Total Subs	Penetration	2Q Net Growth	One Year Net Growth
Basic Cable	102,800,000	60,051,512	58.4%	(249,281)	(46,724)
Digital Cable	96,000,000	16,577,609	17.3%	891,309	4,877,382
Broadband Internet	79,700,000	8,709,805	10.9%	897,129	3,479,482
Telephony	10,800,000	1,828,481	16.9%	173,160	649,472

Source: The Companies and Leichtman Research Group, Inc.
All data from top 10 MSOs through Q2 2002, except Adelphia through Q4 2001. Digital Cable Homes passed are approximated for some MSOs that list digital only as a percentage of Basic. Internet data does not include RCN. Telephony numbers include only AT&T, Cablevision, Cox and Insight.

For more information on any of the data mentioned in this newsletter and our other research programs, visit us on the web at www.LeichtmanResearch.com or contact us at info@LeichtmanResearch.com.

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