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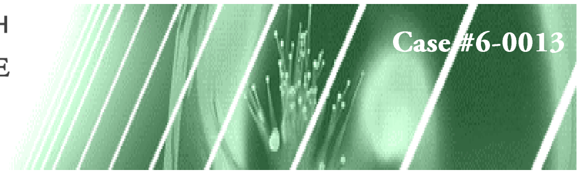


Video On Demand (VOD): A Killer App *or* "Too Little, Too Late"?

Nothing on the tube and a trek to the video store is out of the question—what do you do? Video on Demand (VOD) may be your answer. For years, cable providers envisioned Video on Demand offering consumers access to hundreds of movie titles and other entertainment content just a few clicks away on the remote. Experimentation with VOD started in the early 1990s when Time Warner and Bell Atlantic tried to deploy VOD networks in Orlando, Florida. However, the cost of building the VOD infrastructure coupled with the cost of upgrading the cable networks, proved too expensive to support VOD as a stand-alone service. But as cable companies have invested over $45 billion over the past eight years upgrading their coaxial cable plants to broadband hybrid fiber/coaxial (HFC) systems that provide a wide range of services (including digital cable and high speed internet access), VOD has once again emerged as a promising source of growth for cable operators.[1]

VOD technology worked by placing movies or premium television content at a central storage facility, called a cable head end. The content could then be streamed to individual subscribers that have upgraded to digital cable. The subscribers simply selected the film or program that they wanted to view using their remote control. The price of the film would be added to the consumer's monthly cable bill, and the person would be instantly gratified as the movie played on their time schedule.

True VOD differed from pay-per-view not only due to instant delivery of the movie, but also because it permitted all the typical VCR controls, enabling the consumer to stop, fast forward, pause and rewind—all the features they had enjoyed when viewing video rentals and DVDs.

Cable providers aggressively rolled out digital cable from 1999-2001, with fairly impressive results. As of the end of 2001, over 24% of all subscribers subscribed to digital cable and

[1] Mesniaeff, Greg, Ashlea Mittelstaedt, "The VOD Squad", p.4, Sun Trust, July 31, 2001.

This mini-case was prepared by Ed Ludwigson (T'02—MBA Fellow, Center for Digital Strategies) of the Tuck School of Business at Dartmouth under the supervision of Visiting Assistant Professor Melissa M. Appleyard. It was written as a basis for class discussion and not to illustrate effective or ineffective management practices. The authors gratefully acknowledge the support of the Glassmeyer/McNamee Center for Digital Strategies, which funded the development of this case. CDS Case #02015. Version: March, 2002.

more than 2/3 of premium subscribers had upgraded to digital. As the pace of digital cable rollouts declined throughout 2001, VOD was considered a way to spark additional adoption of digital cable, one of the industry's most profitable products.

The questions on the minds of many cable executives included: Was this finally the right time for VOD? Was the market big enough for VOD and could they lock in customers before movie studios began to distribute movies directly over the Internet? Could they overcome existing exclusive distribution deals with video rental companies and compete with an exploding market for DVDs?

Early VOD Experiments

By 2002, nearly all major cable providers in the United States were experimenting with VOD services in trial markets. VOD had been launched in 40 markets covering more than 6 million basic subscribers (approximately 10% of the market). By the end of 2002, analysts projected that 1/3 of all subscribers, or 23 million, basic subscribers would have access to VOD.[2]

Charter Communications, a strong proponent of VOD, aggressively commercially deployed VOD during 2001. Charter was also the industry leader in deploying digital cable services to its customers and achieved 31% digital penetration by the end of 2001 providing a strong platform for deploying VOD services.[3]

Digital penetration was even higher in markets where Charter launched its VOD Service. In Los Angeles, one of Charter's oldest markets, digital cable had 68% market penetration, one year after the VOD launch and only two years from the digital launch. Customer churn, the number of consumers that return their digital cable boxes per month, was also about half of the company-wide average in VOD markets.

Charter's VOD markets exhibited customer churn rates much closer to those of basic analog cable, which was in the 2.3%-2.5% range, compared with an industry average churn for digital subscribers of 4-6% per month. Thus Charter's experience demonstrated that VOD could help drive penetration of digital cable and make it a much stickier service, as demonstrated by the lower customer churn rates.

Charter was also delivering on the VOD promise of creating additional revenue streams, as VOD subscribers averaged 3.1 titles per month compared to 0.9 titles for traditional Pay Per View services, despite the small selection of titles.[4]

Revenues for VOD premium movie titles have been estimated at approximately 55-60% for the film studio, 10% for the VOD aggregator, and 30% for the cable companies.[5] Thus on an

[2] Ader, Jason. "VOD Rollout in Full Swing; SVOD Looms Large", p.1, Thomas Weisel Partners, November 7, 2001.
[3] Cohen, Jessica Reif, Nathalie Brochu, Christopher M.Giordano, "Cable Television", p.43, Merrill Lynch, January 28, 2002
[4] Ibid.
[5] Ader, Jason. "VOD Rollout in Full Swing; SVOD Looms Large", p.5, Thomas Weisel Partners, November 7, 2001.

average $3.95 movie, Charter saw over $12 in incremental revenues per VOD subscriber per month, with cash flows before SGA of nearly $3.67.

Estimates on payback periods for investment in VOD infrastructure, varied depending on the average number of titles per month and the peak levels of concurrent usage (which determined the level of capital expenditures needed), but reasonable estimates of consumer usage suggested a pay back period from 1.7 – 3.1 years with a per subscriber usage of 4 titles to 2.5 titles per month.[6]

By 2002, Charter had 500,000 VOD subscribers and was forecasting 1.3 million subscribers by the end of 2002. Current deployments included Glendale, California, Birmingham, Alabama, Los Angeles, Atlanta, St. Louis, and Ft. Worth. Charter was aggressively targeting more markets estimating VOD would be available to 2.2 million basic cable homes by year-end 2002.

Are Movies on Demand Enough?

In an effort to expand the possibilities for VOD services beyond movies several providers of premium TV content were developing Subscription Video on Demand (SVOD) services. SVOD allowed subscribers to watch as much premium content as they desired as part of their digital cable package or for an additional monthly fee. By early 2002, SVOD was being trialed with major cable networks such as HBO, Showtime, and Starz among others.

For example, HBO could offer SVOD subscriptions to their hit shows "The Sopranos" and "Sex and the City" allowing viewers to catch the latest episode and a select number of previous episodes simply by clicking the remote. SVOD was seen as a major driver to expand the VOD services beyond movies on demand by offering a whole range of premium television content.

Adelphia, Time Warner, and Cablevision were also testing SVOD in target markets with a range of pricing structures and content. Basic pricing models included providing SVOD content as an a la carte service costing from $3 - $6 per network or $10 for a bundle of three networks. Other models included pricing SVOD as part of the premium cable subscription, and others envisioned a mix of free SVOD content combined with a la carte pricing for new releases and special sporting events. (See Exhibit 1 for a list of selected SVOD trials.)

Content Availability and Video Rental Exclusives

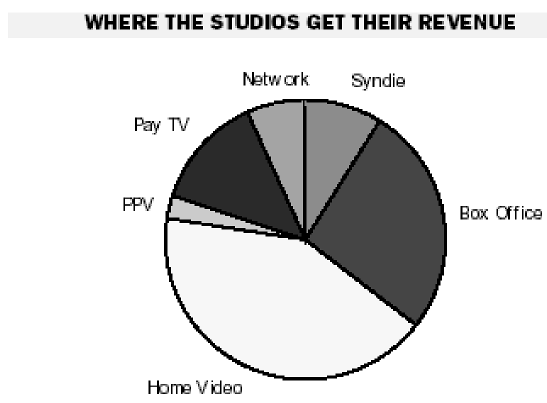
In the beginning of 2001 the availability of content for VOD subscribers posed a major concern, as cable networks evaluated the multi-million dollar investments in VOD equipment. Concerns loomed over the reluctance of major movie studios to make their films available via VOD for fear of cannibalizing the lucrative video rental market. Many cable

[6] Ibid, p.8.

operators approached VOD cautiously since without the major film libraries they doubted their investment in VOD infrastructure would pay off.

Figure 1 below depicts the importance of the video rental market to the overall revenue of film studios, as estimated by media analyst Paul Kagan. Film studios' largest revenue stream was through video rental markets and some analysts estimate this represented nearly 50% of all revenues for some studios. Major studios would contract with Blockbuster and other major video rental shops to share in a portion of their sales, in exchange for granting them an exclusive distribution window of 45-60 days and discounted prices for wholesale purchases of new releases.

Figure 1: Where the Studios Get Their Revenue



Source: Paul Kagan Associates

In the summer of 2001, Vivendi Universal announced that it would make its film library available to the In Demand Cable consortium. In Demand was a VOD aggregator owned by several cable companies including AT&T Broadband, Time Warner Entertainment, Comcast, and Cox.

Since the Vivendi announcement, Sony, Disney, Fox, Miramax and others have announced similar plans to license their films to VOD.[7] Although these agreements provided VOD with a better selection, the film studios maintained their 45-60 day exclusive agreements for new releases with the video rental businesses.

The exclusive window was a key element in the reluctance of some content creators to distribute their movies via VOD. However, with the explosive rise in DVD purchases that were not subject to the exclusive distribution window, it was unclear as to the impact of video rental's exclusive window on the future of VOD. Typically, DVDs were available for sale at major retailers at the same time they were available for rental.

[7] Smith, David Lee, Ramsay P. Woodall, "Recent Bright Past for VOD is a Likely Precursor to a Brighter Future", p.1, Dain Rauscher Wessels, September 10, 2001.

With DVD prices for new releases below $20 in early 2002, and production costs of less than $1, DVD purchases resulted in a major boost for the film studios. Consumers responded with overwhelming enthusiasm for DVDs, purchasing an average of 16 DVDs per year, compared to five or six videotapes.[8] This resulted in consumer spending of $4.6 billion on DVD purchases in 2001, and represents a significant threat to both VOD and the traditional video rental business. While DVD player penetration was at 23% in the U.S. by the end of 2001, some analysts believed that as DVD penetration spread beyond the wealthiest segments, DVD purchases would eventually fall back in line with historical videotape purchase rates, and rentals markets would continue to grow.

Do You Need to Own the Content?

With the majority of revenues in VOD deals distributed to the content provider, it was interesting to note that two major cable providers, AOL Time Warner and Cablevision both owned significant amounts of content assets. AOL Time Warner's content assets included Warner Brothers, New Line Cinema, CNN, Cinemax, HBO, TBS, TNT, Court TV, and Cartoon Network among others. Cablevision's subsidiary Rainbow Media owned several NY focused cable channels including the MetroChannels, News 12 Networks, MSG Network and Fox Sports Net New York.

Complementing these local and regional services were Rainbow's strong national networks: American Movie Classics, Bravo, The Independent Film Channel, WE: Women's Entertainment and a 50 percent holding in Fox Sports Net. Rainbow Media also developed content exclusively for SVOD through a program called Mag Rack which offered niche programming, or "magazine channels" for specialized interests such as bird watching, classic cars, and wine tasting. By early 2002, Mag Rack encompassed 18 VOD channels and 100 hours of highly specialized on-demand programming, available as part of Cablevision's digital cable service.[9]

As HBO and other Time Warner properties developed VOD offerings, did this relationship give Time Warner a lead in capturing the value in VOD? Could Cablevision also benefit from its extensive content holdings through VOD offerings such as Mag Rack? Time Warner had by no means exclusively offered their content within their own networks, as Charter and Adelphia both had SVOD markets underway. But as VOD and SVOD matured would the experience in creating content for VOD best position Cablevision and AOL Time Warner? Would they be able to capture value through VOD within their own networks, or would content ultimately be distributed across as many networks as possible, neutralizing any advantages of being both a content owner and distributor?

[8] Orwall, Bruce, Martin Peers and Ann Zimmerman. "DVD Sales Move Forward Fast — Movie Units Eclipse VCRs in Popularity and Hollywood Is Worried — People Buy Disks Rather Than Rent Them, Setting Up Clash With Retailers, 02/08/2002, The Wall Street Journal Europe

[9] Stump, Matt. "Mag Rack Targets Micro Niche", Multichannel News, January 28, 2002.

Internet End Around

Perhaps the ultimate challenge looming on the horizon for VOD was the prospect of direct distribution over the Internet. With the aggressive deployment of broadband into the home market using cable modems and DSL, the major movie studios were pursuing direct movie distribution that had the potential of completely circumventing VOD. Two companies, Movielink, backed by Sony, AOL Time Warner, Vivendi Universal, MGM, and Viacom's Paramount pictures, and a competing venture called Movies.com with backers 20th Century Fox and Walt Disney were created to provide direct internet distribution. An independent company, Intertainer, already offered broadband movie distribution to over 350,000 subscribers with content from Disney, Warner Brothers, Universal, Dreamworks, and several cable channels. Intertainer charged $7.99 for its basic service, which included TV shows, concerts and sports, plus pay-per-view fees of $2.99 to $3.99 a movie.

But while technically feasible, the experience and quality of video over broadband was not comparable to the DVD-like quality of Video on Demand. DSL and Cable networks were built for bursts in traffic, which was significantly different from the constant high bandwidth required to deliver full motion video. In addition to delivery issues, the number of households that would have their PC networked to their TV, to be able to enjoy favorite movies while relaxing in the living room, would remain limited for the foreseeable future. The analyst group Gartner predicted that it would not be until 2005 that Internet VOD had any substantial presence in the United States.[10]

So would 2002 finally be the year for VOD, as VOD continued to drive adoption of digital cable and successfully leveraged the investments in an upgraded cable plant and set top box infrastructure? Or was the window just a bit too short for VOD and SVOD? The content producers seem to be jumping on board with VOD distribution, but the question remained as to whether the cable providers would be able to lock in customers, before a more lucrative distribution channel was established.

[10] Business Wire, "GartnerG2 Says Internet Video-on-Demand Success Still a Long Way Off", 01/30/2002.

Exhibit 1: SVOD Launches

	Premium Network SVOD Launches		
MSO/System	**Launch date**	**Networks launched**	**Price**
Adelphia:			
• Cleveland	Sep-01	HBO on Demand Starz on Demand Showtime on Demand	free w/digital and premiums
Cablevision:			
• Long Island	Sep-01	HBO on Demand Showtime on Demand Starz on Demand	free w/digital and premiums
Time Warner Cable:			
• Columbia, SC	Jul-01	HBO on Demand	$3.95 / mo
• Austin, Tex.	Nov-01	HBO on Demand	$6.95 / mo
• Cincinnati	Jan-02	HBO on Demand	$9.95 / mo

Source: Multichannel News, 2/11/02