Will the Second Wave of Online Video Distribution Services Drown Out U.S. Pay TV?

As video subscriptions steadily decline amid the onslaught of over-the-top services, pay TV providers need to experiment with new video delivery options and business models to attract more customers.

Executive Summary

Amid the proliferation and popularity of subscription-based online video distribution (OVD) services such as Netflix, Hulu, Amazon Prime, etc., the U.S. pay TV industry has suffered a steady erosion of its customer base. Recently, content providers such as HBO and CBS have launched their own OVD services, which bypass traditional pay TV service providers. Several other content providers have signaled their intentions of launching similar services later this year.

To understand the degree of disruption these new entrants are having on the existing broadcasting business model, it is necessary to analyze the advantages that pay TV providers have over OVD services in areas such as availability of content, cost of subscription and video delivery quality of linear content.

With the increasing tendency of cord-cutting, 2015 will be a crucial year for pay TV providers. This white paper highlights the short-term and long-term effects of these new OVD services on U.S. pay TV subscriptions and offers counsel on ways pay TV providers should reevaluate their current strategies to stay relevant in the eyes of customers. However, today's advantages might not continue to be a competitive differentiator in the future. Hence, we believe that pay TV providers should start experimenting with new business and video delivery options, increase their investment in services that have gained significant customer acceptance and stop channelizing resources on services that have not struck a chord with customers.

Surveying the Video Market Landscape

With the launch of numerous OVD services by content providers, 2015 is shaping up as a critical year for the U.S. pay TV industry. Toward the latter half of 2014, HBO and CBS revealed their plans for launching stand-alone OVD services. Since these services no longer require a customer to subscribe to a TV package, this shift has the potential to disrupt the traditional pay TV business model. With major pay TV providers steadily losing video subscriptions (see Figure 1, page 2), the industry is keenly awaiting the repercussions of the second wave of OVD services.

In 2011, the U.S. pay TV market experienced the
first wave of OVD services, popularly known as over-the-top (OTT). Netflix, the most popular subscription-based OTT service, has since surpassed Comcast, the largest pay TV provider, in total number of video subscriptions.\(^1\) This trend continues in which pay TV providers have lost customers due to the rising popularity and proliferation of on-demand video services (see Figure 1). Leichtman Research Group, Inc. (LRG), in fact, reported that 13 major pay TV providers in the U.S., representing approximately 95% of the market, lost about 95,000 video subscribers in 2013 and 125,000 in 2014.\(^2\) Although these figures are minute compared with the overall pay TV subscription base of over 95 million, the declines indicate the need for pay TV providers to reinvent themselves.

The popularity of subscription-based OVD services not only eats into the revenue of pay TV companies, but also utilizes a large portion of the broadband infrastructure that they provide to their customers. Statistics by Sandvine, a network management company, suggest that during peak hours, Netflix customers consume more than one-third of the total Internet traffic on fixed networks in North America.\(^3\) Availability of content in more bandwidth-consuming formats like 4K will further increase the traffic on these networks in the future. Low price points, choice of content and accessibility across different devices have carved out a new segment of video customers for these online aggregators.

Nielsen’s Total Audience Report (Q4 2014) states that roughly 40% of U.S. households subscribe to streaming services such as Netflix, Hulu Plus or Amazon Prime Video.\(^4\) The revenue loss for major pay TV providers during the past few years is mainly attributed to the following viewer categories:

- **Cord never**: Viewers who have never subscribed to any pay TV packages.
- **Cord cutter**: Viewers who used to subscribe to a pay TV package but discontinued it due to the availability of other video services.
- **Cord shaver**: Viewers who have shifted to a less expensive pay TV subscription package.

**Advantages of Pay TV Service Over OVD Subscription by Content Providers**

With a host of content providers such as HBO, CBS and others venturing into stand-alone subscription-based services, customers will have an even wider array of OVD options from which to choose. Univision, Showtime, Discovery and NBCUniversal have also signaled a possible launch of similar stand-alone services later in the year. Rather than...
opting for a conventional TV package, customers would have the freedom to choose a specific set of "channels" via an array of OVD services. Despite increasing OVD momentum, however, pay TV providers still have a definitive edge in the following categories:

- **Content availability:** The main reason for the popularity of services like Netflix and Hulu is their vast libraries of video content. Pay TV subscriptions also give the customer a wide array of channels from which to choose, catering to a variety of household tastes. In fact, our soon-to-be-published Communication Services Customer Experience Study (2014) found that only 25% of pay TV subscribers are thinking of cutting the cord. Missing their favorite shows and programs was cited by 34% of these customers as a barrier to discontinuing their pay TV service. OVD services typically have limited content offerings since they mostly host in-house produced titles. Some content providers are also restricted in the content they can feature on their OVD services. For example, CBS All Access cannot show its Thursday and Sunday NFL games due to contractual obligations.

OVD services by content providers have also suffered from lackluster adoption. For instance, HBO Nordic, which was launched in 2012 as a stand-alone OVD service, counts 68,000 subscriptions compared with Netflix's 864,000 subscriptions in Sweden, as per the Mediamätning i Skandinavien (MMS) consumer survey. This 2013 survey reported that Netflix, which was also launched in 2012, had average daily views of 308,000, far exceeding HBO Nordic's 17,000 daily views. This data suggests that customers value choice in their OVD services. In spite of the launch of these OVD services in the same year, Swedish pay TV subscriptions decreased by only 36,000 (less than 1%) in 2013. So it may be that new services will also have a difficult time gaining customer loyalty in the overcrowded U.S. video entertainment space.

- **Cost of subscription:** Monthly pricing for OVD services by content providers will be a crucial factor in determining customer acceptance. Subscription prices for these services will need to be significantly lower than the price paid to pay TV providers for it to make economic sense to consumers. HBO, which is among the most popular content providers to join this wave, launched its service HBO Now at $14.99/month. Most subscribers pay between $10 and $18 to their pay TV provider for adding HBO to its existing package. Moreover, current pay TV subscribers of HBO can view on-demand content from a multitude of devices using the free HBO Go app. Hence, an existing pay TV subscriber is quite unlikely to switch to the HBO Now service. The fact that subscribers must sign up for this service using an Apple device or through a Cablevision broadband package largely restricts its accessibility. This might change in the coming months when the service opens to additional popular platforms.

Since several pay TV providers also own broadband infrastructure, customers can save on their net monthly payments by bundling TV and Internet services. Considering a hypothetical situation where all content providers launch their own OVD services, opting for a stand-alone Internet package in addition to a variety of OVD subscriptions would be more expensive than purchasing a bundled TV and Internet service. Figure 2, next page, compares less expensive bundled services with stand-alone Internet packages purchased in addition to five OVD subscriptions (at an average price of $10/month). In all the cases, it is cheaper to bundle TV and Internet services. The least expensive TV packages from DirecTV and Dish ($30/month and $20/month, respectively) would still be cheaper than subscribing to several individual OVD services. Hence, from a customer point of view, subscribing to multiple OVD subscriptions will not be an economical option. The added complication of tracking and paying different bills, and a non-uniform user experience for each of these OVD services is another drawback.

For content providers, the risk of cannibalizing their revenue from pay TV operators by launching stand-alone OVD services is a major concern, since customers are unlikely to pay for both services. Revenue from these stand-alone services should more than offset the loss of revenue from pay TV operators, enabling content providers to remain profitable and cover the cost of these new services. WWE network, for example, launched a stand-alone streaming service in early 2014 at $9.99/month with a six-month commitment clause. Reacting to this move, pay TV operators such as Dish Network and DirecTV stopped featuring the sports entertainment producer’s pay-per-view programs, which had an adverse effect on its Q3 2014 revenues. WWE experimented with
its pricing plan to offset this loss, by launching a $12.99 cancel-any-time plan in August 2014, which resulted in a paltry 23,000 new customers in Q3 2014. That pricing plan was recently replaced by a simplified, no-commitment $9.99 monthly subscription and free trial offer in November 2014, which has helped them garner more subscriptions.

- **Quality of linear video content viewing:** OVD services have struggled to maintain their quality of service since they do not have control over the network on which their live video content is delivered to the consumer. Roughly 7% of U.S. customers re-opted with paid TV services in the last two years, according to our upcoming 2014 Communication Services Customer Experience study. Roughly 9% of customers cited poor quality of service and service disruption as one of the main reasons for dissatisfaction with their non-pay-TV services.

Technical glitches, video lag compared to conventional pay TV transmission and non-availability of content are some of the common impediments faced by customers of OVD services when they try to access linear video content. For example, HBO Go crashed during the season four premier of *Game of Thrones* due to high customer viewership demand. HBO reported a record 6.6 million viewers for the premier show on all its platforms. WatchESPN, one of the prominent customers of white-label online streaming service by MLB Advanced Media, received numerous customer complaints about inability to access the U.S./Germany soccer match during FIFA 2014. During the match, WatchESPN reportedly had 1.7 million concurrent users. This suggests the Internet may not be the best medium for delivery of live content.

CBS, in fact, has decided to host live streaming of content in only 14 media markets. Customers in the other geographies it serves will have to be satisfied with on-demand content 24 hours after a live broadcast. This delay in availability is applicable to some live content for the newly launched HBO Now service. Content delivery networks (CDNs), which cache video content closer to the customer, work well for time-shifted video content. In the future, if stricter net neutrality rules are implemented, service quality of OVD services could improve. However, it is safe to assume at this point of time that the creation and successful execution of these laws will take a considerable amount of time.

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**The Economics of Bundling**

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<thead>
<tr>
<th>Service</th>
<th>Channels</th>
<th>Price</th>
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<tbody>
<tr>
<td>AT&amp;T Uverse</td>
<td>140+ Channels</td>
<td>$20/Month</td>
</tr>
<tr>
<td>Verizon FiOS</td>
<td>20+</td>
<td>$40</td>
</tr>
<tr>
<td>Cox</td>
<td>155+</td>
<td>$60</td>
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<tr>
<td>Charter†</td>
<td>125++</td>
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<tr>
<td>Time Warner</td>
<td>20+</td>
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<tr>
<td>Comcast</td>
<td>10+</td>
<td>$120</td>
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*Promotional 12-month price  †Bundle also includes phone service

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**Figure 2**
The Way Forward

<table>
<thead>
<tr>
<th>Start Doing</th>
<th>Keep Doing</th>
<th>Stop Doing</th>
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<tr>
<td>• Over the top (OTT) TV streaming services.</td>
<td>• Deployment of new age DVRs.</td>
<td>• Launching similar OVD services.</td>
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<tr>
<td>• Customization of bundles.</td>
<td>• TV everywhere.</td>
<td>• Partnering with OVD services.</td>
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<tr>
<td>• Device analytics to improve customer experience.</td>
<td>• Improving monetization by dynamic ad insertion.</td>
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Though many younger users seem willing to tolerate a lower quality of service, for uninterrupted linear video viewership customers would still have to rely on pay TV providers.

The Way Forward for Pay TV Providers

The new wave of OVD services might not have a disruptive effect on the pay TV model due to the reasons discussed above. Meanwhile, some subscription-based OVD services appear to have reached a saturation level in terms of subscriptions in the U.S. This is one reason Netflix is now expanding its international presence to Australia and New Zealand, after establishing a foothold in key European countries.

Curiosity among ardent fans of particular programming could result in additional churn for pay TV providers for a few months after the launch of OVD services by content providers, but they should still be the preferred choice to view linear video content. Thus, there will be no long-term customer churn for pay TV providers due to the launch of these services.

As video entertainment evolves, it is essential for pay TV providers to reinvent themselves and take advantage of their superior content delivery infrastructure to stay relevant in the eyes of customers.

**Start Doing**

Pay TV providers must start experimenting with new video delivery options and business models to attract more customers.

**Stop Doing**

• Launching similar OVD services.

**Keep Doing**

• Deployment of new age DVRs.
  • TV everywhere.
  • Improving monetization by dynamic ad insertion.
  • Rent-/buy-on-demand titles.

**OTT TV streaming services**: In early 2015, Dish TV announced the launch of an OTT TV streaming service called Sling TV, priced at $20/month. Verizon has also revealed plans to launch a similar OTT service in the latter half of 2015. Such services will attract millennials due to attractive pricing options and the ability to access content from various Internet-enabled devices.

Long term evolution (LTE) multicast is among the new technologies that could be crucial in ensuring the quality of live streaming of content for such services by wireless players. This could be a major differentiator for OTT TV streaming services and other OVD services for enhancing quality of service. A major challenge to pay TV providers to launch such services would be to strike carriage deal to distribute content over several regions.

Dish TV and Turner Networks had tough negotiations in 2014 during contract renewals, resulting in blackouts. Meanwhile, the basic package offered by Sling TV features channels such as Turner Network’s CNN, TNT, TBS and Cartoon Network. This could be an indication of how carriage deals will emerge as pay TV providers look to maximize their revenue potential through innovative services.

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Non-pay TV providers are also moving into this territory, which will make it more competitive. Apple has hinted at launching an OTT TV service later this year. Sony confirmed partnership with 21st Century Fox, CBS Corp, NBC Universal and Viacom to launch such a service with a large bundle of channels starting at $50. But such a hefty monthly fee could be a deterrent to customer adoption.

- **Customization of bundles:** An Advertising and Audiences report by Nielsen reveals that even though an average U.S. TV household receives 189 channels, customers only view an average of 17 channels consistently. Availability of such a high count of channels is partly responsible for TV packages being significantly more expensive than other OVD services. Sling TV provides only about 20 channels in its basic package priced at $20/month. But customers have the choice to add genre-based packages at an additional cost of $5/month. The recent announcement of HBO as an add-on channel for Sling TV subscribers shows how such services could substitute regular pay TV bundles in terms of premium content availability. A similar approach to reduce the number of channels per bundle and increase customization in channel selection will be an attractive proposition for cord cutters and cord shavers.

- **Device performance analytics to improve customer experience:** Pay TV providers have a dubious record of maintaining customer satisfaction. According to a survey conducted by American Customer Satisfaction Index (ACSI) in early 2014, pay TV providers scored 65 on a scale of 100. This is one of the lowest scores among all 43 industries tracked by ACSI. Using analytics beyond personalization and content recommendation could be the key to improving customer satisfaction scores. Device performance analytics can be used to predict which customer premises equipment is most likely to fail and when. It can also be used to continuously monitor the health of STBs and DVRs and determine the likelihood of performance degradation. A renewed focus on reliability and quality is necessary to clearly differentiate pay TV services. Such proactive steps will go a long way in improving perception among customers.

**Keep Doing**

Some strategies adopted by TV providers to counter the popularity of OVD services have gained customer acceptance. It would be prudent for these companies to invest further in the following going forward:

- **Deployment of new-age DVRs:** A large majority of pay TV subscribers in the U.S. still use legacy set-top boxes with limited storage and poor UI features. Cloud DVRs and hybrid DVRs are becoming increasingly popular among TV subscribers as they provide a host of new features compared with a traditional set-top box (STB). Some features that can vastly improve customer experience include: using the cloud to increase video storage space, recording multiple live streams simultaneously, unifying experience across mobile devices and TVs, providing video delivery to multiple set-tops and other IP-connected devices in subscriber homes and integrating multiple services on a single platform (e.g., home automation notifications while watching a movie on TV).

- **TV everywhere:** Accessibility across different platforms and devices is a major reason for the popularity of OVD services such as Netflix, Hulu, Amazon Prime, etc. All major U.S. pay TV providers have launched their “TV everywhere” services, which let customers view content from Internet-enabled devices. Usage of TV everywhere has increased from 43% in April 2014 to 49% in October 2014 among cable subscribers between 18 and 64 years of age, according to a TV Everywhere Tracking Study by HUB research. The study also showed that 61% of millennials reported that access to TV everywhere services made them feel more positive about the TV provider, and 56% said the same about the network they’re watching.

TV everywhere could directly compete with OVD services since content availability across different devices is one of their main attractions. Pay TV providers would need to include more content in these services to further popularize them among their customer base. TV everywhere service has also evolved over the last few years from a platform where broadcasters validate a customer’s TV subscription to pay TV providers directly validating their users. Comcast’s X1 app is a prime example of how these services have grown from mere content aggregation to bundling other services such as home automation control and voice-mail notification, thereby enhancing its value.
Improving monetization by dynamic ad insertion: Dynamic ad insertion (DAI) refers to the technology used for personalizing advertisements in on-demand and TV everywhere titles. DAI is becoming more relevant as seen in the Viacom/TWC and Turner/Comcast carriage deals. Rising content acquisition costs make it necessary for pay TV providers to extract more revenue from different streams. Ad revenue through DAI could be a significant revenue source for pay TV providers going forward. Before DAI takes off, however, customer acceptance of ads for premium on-demand content and effective measurement of ads for time-shifted content are among the issues that must be addressed.

Rent/buy-on-demand titles: Use of video on demand (VOD) content by pay TV providers is slowly gaining popularity with consumers. According to a Digitalsmiths report published in Q4 2014, almost 70% of subscribers did not rent any VOD titles from their pay TV catalog compared with 73% a year ago. Roughly 48.8% of the customers surveyed said discovery of VOD titles is easier, which is a 4.7% improvement compared with Q3 2014 figures. Transactional VOD is a competitive space with players like Amazon Instant, Redbox Kiosks and iTunes providing a wide array of video selection. Pay TV providers need to improve their video content selection and increase service adoption to attract more viewers. Free on-demand marathons by Comcast and Verizon – which garnered a strong consumer response – could be an effective way to improve customer awareness.

Stop Doing
Pay TV providers need to rethink strategies that could be detrimental to their bottom lines over the long run.

Launching similar on-demand services: Services such as Streampix (Comcast) and Redbox Instant (Verizon) were launched to compete head-on with OVD services. They were priced below popular subscription OVD services such as Netflix and Hulu and garnered initial market interest. But both these services were discontinued in the latter half of 2014 due to lack of customer awareness and limited choice of content. Since players like Netflix, Hulu and Amazon Prime have accumulated large libraries of video content over the last several years and provide access on several platforms, launching similar services will require huge investments for new entrants to be heard above the din.

Partnering with OVD services: Recently, U.S. pay TV providers such as Dish TV, CableOne, MediaCom and Suddenlink – along with some regional players – have integrated their video offerings with Netflix. This could eventually result in reduced pay TV subscriptions for these service providers and more broadband usage. Even though broadband subscriptions are soaring, pay TV average revenue per user (ARPU) is roughly twice that of broadband ARPU. Currently, such partnerships with U.S. pay TV providers are not integrated with customer billing. Hence, the revenue sharing between them would be quite different from the traditional model between pay TV providers and broadcasting networks. According to a Wall Street Journal report, Netflix pays a one-time bounty and a small recurring monthly fee for new subscribers that sign up through an operator’s set-top box. Those payments are much smaller than commissions that operators receive for selling premium channels such as HBO. In at least some of these cases, operators don’t receive a cut of existing customers’ Netflix bills. Hence, such a move is more beneficial to Netflix since it can address the needs of customers with set-top boxes apart from the wide array of devices that it supports. Such a move could also adversely affect the total revenue of the service provider going forward.
Footnotes


10 “Sling TV to add HBO prior to ‘Game of Thrones’ return,” USA Today, April 2015. wwwusatoday.com/story/tech/2015/04/01/sling-tv-adds-hbo/70779812/.


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