The Game Changers of the Video Content

Business: the OTTs

By

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Abstract

This research paper is centered on the changing marketplace of video content distribution that is occurring with the rise of the Over-the-Top (OTT) service providers from 2007 through 2016. The first part of this report helps provide a basic background into each of the different OTT companies, detailing the content they offer and their business plan to grow their service. This first section employs individual profiles of each specific OTT service launched thus far. Each profile focuses on answering these three main questions with each OTT service: What content does it offer?; How does it acquire the content it offers?; and How does the service make money off of its content?. The second part of the report provides an understanding of how these OTT services are impacting the businesses of MVPDs and Television networks that have been dominating video content distribution for the past decades before this introduction of the OTT. Data from recent years has already illustrated the fact that OTTs have begun to slightly diminish both the advertising and subscription revenues which MVPDs and networks rely on for business. By analyzing the trends in rapid growth of the OTT businesses and the diminishing returns in revenue for the MVPDs and TV network companies of the past era, this thesis concludes that OTTs will continue to grow and prosper in the new video content distribution marketplace while the businesses of MVPDs and TV networks must adapt in order to maintain their place in it in the future.

I. Introduction

In the past decade, Video-on-demand (VOD) services have become a larger and larger part of how people consume media. Like DVR devices, which have also become a major tool for watching television, watching VOD allows people to watch television programs, movies, and all other type of video content on their own time. Over the past few years, more viewers have become users of VOD and DVR services because of the convenience of being able to watch something whenever they want, rather than having to watch something as it is airing each week. Most television programs airing today are not live events, so there is no specific reason to watch them as they air on a channel. The process by which consumers watch programs after their live broadcasts is called time shifting. This concept has been around for many decades since the inception of the Sony Betamax in the 1970s, the original video recording device; but its practice has grown in recent years. However, unlike DVRs and its predecessors, VOD services have two other clear advantages. They don't force consumers to record the program before it airs, and also they allow anyone to watch a program on any type of screen they want, whether on their TV, on their PC, or even on their phone or tablet device. The benefits and conveniences of VOD and the DVR have led to a widespread growth of time shifting in the US TV viewing public in the last decade. In 2014, over 75% of US TV watchers have implemented either VOD or DVR services in their viewing habits (Statista).

Originally, VOD was just a simple form of individual item transaction for viewers, similar to pay per view. A person could use some type of digital online marketplace, such as iTunes, which offers hundreds of different movies and TV programs to select from. They would then pay some fee to iTunes to instantly download and watch that one film or program without having to go to a store to buy it or to your local Blockbuster to rent it. In 2005, certain TV

networks began to offer free VOD services to their own paying MVPD subscribers. They would put their own programs on demand to viewers shortly after the initial broadcast to allow viewers to catch up on the program if they missed the original airing. The networks would still be able to run ads on these on demand showings, so they would not have to worry about a loss in ad revenue by offering this. Over time, almost every TV network has created its own on demand channel or service to supplement its actual live station with free access for MVPD subscribers. Then, at the turn of the decade, Netflix created a new model for how to monetize VOD services. Netflix, which had begun as a simple DVD-by-mail rental service for a monthly fee, decided that instead of just mailing DVDs to customers; it could also create its own VOD type service allowing customers to instead access a library of movies and streams instantly rather than wait for the DVD in the mail. Unlike basic VOD before it where one paid to view each specific movie or show for a small fee, Netflix still required their customers to pay a monthly subscription fee of around \$8 to \$12. For that fee, consumers have access to not one but thousands of movies and TV shows to watch on demand as many times as they want. Clearly, this was a much better deal than paying for VOD access to one specific movie or show, which would cost \$3 to \$4 per title. The subscription-based model for on demand (SVOD) created by Netflix became so successful for the company that they quickly shifted almost sole corporate focus on it.

Many new VOD service providers have entered the marketplace in the past few years after seeing the success of Netflix, such as Hulu and HBO Now, and have implemented the same monthly subscription model. Amazon, arguably the most famous North American online marketplace, created its own SVOD service, as an add-on to its Amazon Prime membership, seeing the profit potential in it. What Netflix did with its video streaming business not only

popularized the SVOD business, but it also had another, much bigger effect. It offered a library of TV programs and movies bigger than any TV network had offered on their VOD service and without the requirement of subscribing to MVPDs. This type of content that is accessible without MVPDs is termed over the top (OTT) content. Netflix became the first OTT service capable of contending with multichannel video programming distributor's (MVPD) like DirecTV or Comcast by allowing access to a large amount of the same quality content at a low monthly rate. The growth of SVOD/OTT companies has made the idea of cord cutting possible, whereby content providing MVPD's are going to be cut by consumers, who will get rid of cable. Instead, they will get content through cheaper OTT service providers. Additionally network, local, and cable television could lose both subscription fees and ad revenue because of cord cutting caused by loss of subscribers and viewership.

Some of the long standing traditional TV networks owners and MVPD companies have begun to view these new OTT companies as a significant threat to their survival. They have also begun to work on methods of counteracting the potential loss that could occur because of future cord cutters. One way networks are doing so is by charging Netflix and other OTT companies higher digital syndication fees for the streaming rights to the programming it produces. They are able to this because these OTT companies are in great demand for more content to give to their subscribers. In response, Netflix and a few others have started to enter the field of producing their own media content rather than just paying for digital syndication rights to previously aired TV programming. Not only might it be eventually cheaper for these OTT companies to just create their own content rather than pay the increasing rates for digital syndication rights; but in doing so they also have another chip to sell subscribers on by having their own exclusive content offerings.

This thesis will consist of two different main sections explaining the marketplace and impact of OTT on the TV content service industry. The first section will deal with profiles on many of the different OTT service providers from a business standpoint. These profiles of different OTT companies will include details about the content they distribute, and where they are getting their content. Examples of specific content offerings and digital syndication deals made by the OTT content providers will be included in this part if available. The profile will also explain how the company is monetizing its services to customers, whether through sole subscription fees, ads, or both, and how the service has grown their business over time. Included with this will be specific pricing points and ad deals, as well as statistical data detailing the growth in users the service has gained over time. Lastly, any distinguishing features that help define each specific OTT company from a business standpoint or differentiate it from other OTTs or MVPDs will also be noted in these OTT profiles.

The second section of this thesis will then focus on answering the question of whether cord cutting has started having an effect on the marketplace, and if so, does it have some correlation with the growth in consumers of OTT services in the same period. An analysis of recent statistics on the subscriber base of different OTT companies will be done in coordination with stats from the same period on the subscriber base of the MVPDs. If there is a clear correlation between growth in OTT and loss in MVPD use, the section will then focus on the significance of this relationship and what it suggests for the future of OTT vs. MVPD. The second part of the thesis will also address how OTT service providers are affecting the linear TV business, whether local, cable, or network. Has network viewership or ratings been significantly weakened because of OTT, SVOD, and time shifting to the extent that it is hurting their revenues from advertisers? Is cord cutting starting to significantly diminish the subscription revenues

cable networks get from MVPDs? Both questions will be addressed using data (subscribers, ratings, etc.) illustrating the financial impact for TV networks because of the growth in OTT usage in recent years. The second section will also explain if and how both MVPDs and TV networks can effectively respond to the impact of OTT companies, cord cutting, and time shifting. The possibility that they can actually learn to benefit in this evolving marketplace will also be considered. Finally, this thesis will conclude by discussing if there is a trend that can be drawn from recent figures on OTT and cord cutting that could explain what is likely to happen in the future of the marketplace for television content and just how big of a role these OTT companies will play in it.

II. OTT Business Profiles

a. The Major OTT Players

i. Netflix

By far the largest internet SVOD service provider and the company most invested in the growth of over the top content is Netflix. As mentioned earlier, Netflix originated in the late 1990's by offering customers the ability to rent DVD's from their online catalog and receive them in the mail. Competing against Blockbuster, the long standing video rental chain, the convenience of their service and relatively low monthly fee (\$5-\$20) for customers allowed them to grow a fairly solid subscriber base in the millions in a little over a decade. The widespread popularity of DVD players becoming a larger part of the entertainment centers in households led to great success for the company. As the company grew, they also expanded their content library for customers. The game changer for the company did not really occur until 2007. In 2007, the company added a new feature of offering free internet video on demand content (Anderson) to

their monthly subscribers in response to Hulu and iTunes offerings of VOD. This idea increased business for the company in the next few years, separating itself from Blockbuster, and becoming the first large SVOD service provider. The number of subscribers multiplied with the interest in having the unlimited VOD service offered for one low monthly rate. In 2010, the company started streaming internationally their video content and the rapid growth of the internet streaming usage surpassed the DVD-by-mail service ("Netflix's View"). The company then separated its DVD-by-mail rental service from its SVOD service, now offering it standalone to customers. The continued growth of the streaming side made the leaders of Netflix consider abandoning the DVD-by-mail service altogether in 2011, although they opted to keep it on the side. The company continued to expand the streaming VOD side of the business, which resulted in their US subscriber base growing from low millions to tens of millions in just a few years from the service's initiation. In 2013 the company decided to begin producing its own original video content for exclusive straight to VOD release on its service. In the past few years, Netflix has expanded internationally and grown to have well over 70 million subscribers globally. In that time, the company's stock has rapidly risen and the company continues to rapidly increase the amount of money it spends on maintaining and improving its library.

Netflix solely focuses on delivering two most popular types of video content entertainment to its customers: movies and television shows. However, within these two areas, Netflix offers almost as widely diverse a network of content as possible for instant streaming on demand ("Netflix's View"). Clearly, the goal is to be able to offer a subscriber a large amount of good content, no matter what specific tastes he or she has in different movies or shows. This allows Netflix to attract almost anyone who enjoys watching films and television at their own leisure. Whether a subscriber wants to watch a romantic comedy, a vampire thriller, a

documentary about space, or a reality show about fishermen, he or she could find it all on Netflix's service. In the past couple of years, Netflix has offered anywhere from 5,500 to 7,000 different titles at a time on their streaming service, usually around 1,500 of which are television programs ("Statistics" from New on Netflix USA). Currently, the company is offering slightly more than 4,100 different movies and slightly less than 1,500 different television shows to watch on demand for US customers. The company tries to have at least a dozen or so titles in even the most niche genres of programming one could enjoy. Typically, Netflix subtracts a few hundred titles each month from its online streaming catalog and adds a few hundred new ones each month as well. Most titles with the exception of their original content are removed either 6 or 12 months after it was first released on the streaming service. Additionally, Netflix focuses most of their titles to be recently made movies and television shows, particularly within the past 5 to 10 years.

A large majority of Netflix's content is sourced by deals made with movie studios for digital licensing rights to stream movies the studio has produced. Netflix commonly makes deals for the rights to a studio's future films in the pay TV/premium cable window which occurs long after theatrical release and shortly after a home video release for the films. Netflix will normally pay hundreds of millions of dollars for multiyear licensing deals for rights to stream films in the premium cable window on their service to outbid competitors like HBO and Showtime who also seek these deals. Studios that Netflix has made deals with to stream in this window in the US market include Open Road Films, Relativity Media, The Weinstein Company, Walt Disney Studios, and FilmDistict. As example, in 2012 Netflix paid an undisclosed amount somewhere between \$200 million to \$300 million for the multiyear rights to stream all of Walt Disney Studios new films beginning in 2016 in the US pay TV window, outbidding HBO and others

(Graser). This deal includes all films to be made by the Disney corporation's studios including live-action and animated films. Many studios were originally hesitant to sell these rights away from premium cable TV networks, but as Netflix continues to show its willingness to spend hundreds of millions to outbid premium cable stations, more and more deals are going to them.

In addition to having the rights to films made in the windowing process months after the studio film's theatrical release, Netflix has also paid for rights to stream content from studio's libraries of films. Netflix has acquired the exclusive streaming rights in the US to many films in the library catalogs owned by Warner Bros., Universal, Sony, and Fox, to name a few. Deals for these back catalogued films tend to be cheaper than the rights to current films in the premium cable window, but still cost Netflix many millions of dollars. Since 2011, Netflix's ownership of streaming rights to these titles from the past has diminished over time, as the company remains more focused on having newer, fresher films to offer subscribers. One of the most recent things Netflix has done is cutting out the studios by going to film festivals and buying the rights to stream films directly from the independent producers. At Sundance earlier this year, Netflix paid \$7 million for the streaming rights to the film, *The Fundamentals of Caring*, and another \$5 million for the same rights for the film, *Tallulah* (Siegel).

Similar to how Netflix acquires films; with television programs it typically makes deals with TV groups to gain the digital syndication rights to stream them on their server. Netflix has made deals for the rights to different shows from all of the major networks, and many major cable channels. Typically, Netflix acquires these rights in specific deals made for each individual program with the program's distributor. For example, in 2011 Netflix paid \$1 million per episode to Lionsgate TV for the streaming rights for each episode of the critically acclaimed hit *Mad Men* (Nordyke and Rose). However, Netflix has also made digital syndication deals for

rights to large packages of content from major distributors. In 2013, Netflix made a multiyear agreement for an undisclosed amount with Turner Broadcasting and Warner Bros. Television for the rights to many animated shows on Cartoon Network, Adult Swim, and from Warner Bros. Animation (Whitney). Netflix has made similar types of deals to acquire the rights to many popular TV shows, which allows Netflix to start streaming them about a year after their original air date on television in the US.

Although a majority of Netflix's content has come from deals with other sources, Netflix established the production of its own original content when it made a deal to fund and produce the political drama television series, *House of Cards*, in 2011 (Andreeva). The program began streaming in February 2013, and quickly became a critical and popular hit for Netflix's debut of original content. Netflix's reasoning behind producing its own original content is twofold. It gives Netflix exclusive original content that people can only access by becoming subscribers. Assuming the content is good, it makes people feel like they have to subscribe to Netflix to watch it, similar to how HBO has been built by the popularity of their exclusive content that cannot be accessed unless one subscribes to HBO. The second reason for creating original programming is that Netflix does not have to keep paying the rapidly growing fees to stream content from other distributors, and try to outbid the other premium cable channels and OTT competitors (Salmon). Over time, the rise in these fees makes it more frugal for Netflix to just pay to produce its own content, and not rely so much on other distributors. Additionally, Netflix's original content is being watched more on average by subscribers than the licensed content.

Since Netflix began producing original content in 2013, the company has greatly increased its spending on growing its library of new original shows. Netflix has released over 40

over 30 different comedy specials. Netflix spent over \$100 million on just two seasons of *House of Cards* and spent close to that same figure to produce many other seasons of original shows (Greenfield). Netflix even began distributing its first original film content in late 2015 when it streamed *Beasts of No Nation* on its service before it had a theatrical release. Netflix signed a deal in 2014 with Adam Sandler and his production company, Happy Madison Productions, to produce four exclusive original feature films to be released on Netflix rather than in theaters (Spangler). Netflix plans on continuing to rapidly grow its production of original content in the future. In 2016, Netflix plans to release at least 600 more hours of new original programming with 31 new seasons of original shows, 10 feature films, and so much more (McAlone). To produce all of this original content, Netflix will spend nearly \$5 billion in 2016, and another \$1 billion to market it to current and potential subscribers ("Netflix's View").

Netflix's streaming service is accessible on many different devices that can connect to the internet from many different manufacturers including certain Blu-ray disc players, smart phones, gaming consoles like PS4, Roku, and even directly through smart televisions. Netflix first developed a mobile app for its streaming service in 2010. Netflix's service has a very unique user friendly interface that allows subscribers to create viewer profiles. The interface allows users to see the poster along with plot information of each title listed which helps attract the user. Typically Netflix is subscribed by a household, so the viewer profile allows specific members of the household to basically have his or her own personalized catalog using the service. It saves a viewer at the specific spot they left on a show or film and leaves it in their history. The profiles also allow Netflix to track metadata of users on their service. Netflix then uses a software algorithm to analyze everything a viewer watches and does in his or her profile to then offer

recommendations to the viewer of other content he or she might like on the service (Vanderbilt). The personalized viewing experience plays an important role in satisfying and engaging subscribers. The algorithm measuring subscriber's preferences also helps Netflix learn what type of content it should look to either produce or acquire in the future. Netflix's original television content is released a whole season at one time which has promoted the concept of binge-watching TV. Many viewers will watch many episodes or even seasons of one Netflix program at a time rather than on the weekly basis of traditional television programs. This concept has become very popular in the past few years, particularly amongst younger viewers (West). It also helped Netflix distinguish its show season premieres as being more eventful than a traditional TV season premiere.

Netflix's business revenue model relies solely on monthly subscription fees from customers. It does not rely on ads or paid content space. The advantages are that this allows Netflix to focus entirely on the interests of their subscribers, it does not have to worry about ratings for its content, and it can offer 100 percent commercial free content viewing. The disadvantage is that Netflix does not have two streams of revenue, meaning that if people do not pay for the service each month, the business loses money because there is no safety net coming from advertisers. Netflix relied on the monthly subscription concept well before it even began offering VOD streaming in the late 2000's. Netflix initially offered streaming only to its subscribers of the DVD-by-mail service at no additional charge where they could stream content for an hour per each dollar they spent on the subscription each month. Then in the late 2000's, Netflix offered a standalone streaming subscription at a rate of \$7.99, which is still its current basic rate today (Grozanick). Today, Netflix's basic streaming subscription price points are differentiated by the amount of screens one can watch on at one time and by the resolution

quality of the streaming. The basic package allows viewers to watch on one screen at a time in only standard definition. 'Its standard (middle tier) package priced at \$9.99 allows viewers to watch on two screens at a time and in high definition, while the premium (highest tier) package is priced at \$11.99 and allows subscribers to watch on four different screens at a time and in ultra-high definition (4K) resolution. Initially, however the standard package was the lowest package offered and only cost \$7.99 a month. This change occurred in May of 2014 when Netflix raised the price for all new customers; however anyone who had been a subscriber before then kept his or her standard package for \$7.99 (Stenover). Starting this upcoming May, it will change for the subscribers who signed up before May of 2014, as they will finally see their rate increase to the current offer of \$9.99 if they want to keep the standard Netflix streaming package. Included with every package is unlimited streaming, meaning subscribers can watch as long as they want each month. Netflix's subscribers do not have to make any long term commitment with these subscriptions. Netflix charges a subscriber's credit card once a month, but the subscriber has the right to cancel his or her subscription service for the beginning of the upcoming month. Additionally, Netflix offers a free one month trial of its service for each new potential subscriber

Netflix's subscriber base has grown rapidly over the years, especially after they began offering the SVOD service. In its first decade, before the company began offering any streaming service, Netflix grew to about 5 to 6 million US subscribers of their DVD-by-mail service. In 2011, Netflix grew to have more than 21 million subscribers to its streaming service and over 11 million DVD subscribers in the US, and another 2 million internationally ("Number of Netflix Subscribers"). Although in recent years Netflix's DVD subscriber base has shrunk by more than 50 percent; its growth in streaming makes the loss almost feel infinitesimal. By end of year

2015, Netflix has nearly 45 million US streaming subscribers, and over 30 million from the rest of the world. In 2015 alone, Netflix added 17 million subscribers and the rate of growth also seems to increase every year. Netflix currently operates in over 190 countries worldwide after entering 130 new countries earlier this year, and is trying to expand into as many markets as possible. In the near future, the number of subscribers is expected to continue to grow considerably. By 2020, Netflix is predicted to have well over 110 million subscribers worldwide, with major growth in Latin America and Europe ("Number of Household Subscripts Netflix"). Netflix's realistic goal for the US is to grow to eventually have somewhere from 60 to 90 million subscribers in the nation ("Netflix's View"). Unmistakably, Netflix's revenues from subscriptions have grown at the same rate as its subscriber base has grown. In the decade from 2005 to 2015, Netflix's annual revenue multiplied tenfold from a modest amount of \$688 million to making over \$6.78 billion from subscriptions last year ("Annual Revenue of Netflix"). In 2020, Netflix is predicted to have \$12.2 billion in yearly revenue from its worldwide subscriptions ("Netflix Subscription Revenue Worldwide"). Netflix's SVOD business model has shown to be very lucrative for the company, especially in recent years, and it appears it has Netflix headed on a trajectory of even more economic success in the future.

ii. Hulu

Hulu, founded in 2006, has become another one of the major OTT companies in its first decade of business, although its remains substantially smaller than Netflix. Hulu was originally formed to be a high quality online video media sharing service similar to YouTube, but that concept changed over time to focus more on content from film and television. Hulu began as a jointly owned venture by three of the largest media companies in the US; Disney, News Corp, and NBCUniversal (now part of Comcast), who still each own about one third of the equity in

the company (Kramer). It is important to note that all three of these companies own a major broadcast network and many other additional cable networks from which Hulu can receive content. It was initially difficult for Hulu's brain trust to get these large media competitors to work together and help Hulu grow, but they have succeeded in doing so. Hulu also works with many other content partners to establish its library for subscribers. Additionally, Hulu received major online support early on from many top internet companies including Microsoft and Yahoo, who looked to bring competition to Google after it had acquired YouTube (Worden). The company officially launched its site for public viewing access early in 2008, and initially all streaming content was free to users. For these first couple of years, Hulu was able to sell ad space on its streaming content to make a modest profitable business, because it had expansive access to free content from its stakeholders. It was able to quickly get two to three times the ad rate of broadcast networks (Callahan). Its offering of a free, easily accessible, deep catalog of television and other content helped the site grow its user base quickly. In less than a year, Hulu had reached up to 40 million viewers, became the sixth most visited Website for online video viewing, and was named AP's 2008 website of the year. In 2010, the company began offering a monthly subscription service. This decision was also Hulu's response to the growth of Netflix and its SVOD business. Certain content was still free for viewers, but the subscription would include a much deeper content library, more limited advertising, and the ability to access network shows one day after they premiered on television (Stelter). Hulu began producing and distributing its own original content in 2011 and continues to release some original content each year for subscribers. The company just started offering a more expensive subscription that will allow viewers to watch with zero advertisements. Hulu's subscription business has grown slower than its free site did early on with users. Today, the company has over 9 million

subscribers and is seeing consistent subscription growth each year ("About Hulu"). The free site continues to attract millions of new viewers each month. Hulu only expanded internationally in 2013 in Japan, which is still the only country it operates in outside of the US. Although Hulu's subscription base is still minor in comparison to the growth seen in Netflix, arguably its main competitor; Hulu has become the top ad supported video on demand (AVOD) site in terms of viewer engagement and has worked with over 2,000 different advertisers.

Hulu offers hundreds of thousands of hours of content to its subscribers. Hulu is currently offering over 2,600 different titles on its streaming service. Hulu acquires a large portion of this content as syndicating programming from its parent owning companies: Comcast, News Corp, and Disney. From Comcast who now owns NBCUniversal it licenses programming from their owned networks including NBC, NBC Sports, USA Network, Syfy, and Bravo. Hulu licenses programming that originally aired on FOX, FX, National Geographic Channel, Fox Sports 1 and 2, and other cable stations owned by News Corp. It also licenses the syndicated programming of ABC, Disney Channel, and Freeform from Disney. Hulu is also partnered with hundreds of other basic and premium cable networks for syndicated content including A+E, AMC, Showtime, PBS, and Turner Broadcasting. In most of these deals Hulu makes for content, the content providers share any advertisement revenues their video makes on Hulu's site with Hulu. Hulu generally only gets to keep 30 to 50 percent of the ad revenue generated by its supplier's syndicated videos, while the supplier gets the other 50 to 70 percent (Stelter and Stone). In addition to these ad sharing or barter deals, Hulu still purchases the rights to distribute content as well in other deals. Last year in one such deal, Hulu purchased the exclusive SVOD rights to all of Seinfeld's episodes for \$180 million from its rights owner Sony Pictures Television (Baxter). For film content, Hulu has made similar large deals for titles from

different studios including Dreamworks, Sony, and 21st Century FOX. Last year alone, Hulu spent \$1.5 billion on digital syndication rights for content (Brouwer). In total, Hulu has over 500 content providers it has partnered with, and which source over 90% of the site's film and television programming content ("About Hulu").

Hulu began producing and distributing its own original content before Netflix chose to, when it released it first web series in January 2011, *The Morning After* (Miller). Hulu continues to release more original programs each year, although it has not invested the amount of money in any one original show that Netflix has with some of its new originals. In 2014, Hulu CEO Mike Hopkins said Hulu planned to quadruple its spending on original content, although this commitment has been minor when compared with the amount of original programming Netflix is starting to drive out (Learmonth). This is likely because Hulu has failed to produce a major original hit like Netflix has done with many of its shows in the past few years. As of today, Netflix has produced 11 original comedy series, 4 original drama series, 3 original documentaries, and another half dozen original reality or news type shows. Most of these programs have ended or were cancelled after one or two season by Hulu. Netflix plans to continue to produce a select number of new original shows and more seasons of a few current shows in future years, looking for its first original hit with subscribers.

Hulu's streaming service is accessible to subscribers on gaming consoles, smartphones, tablets, some televisions, Roku, and numerous other devices in addition to computers. The free Hulu for non-subscription users is only available on PCs. Hulu's service has an easy to use, friendly user interface very similar to Netflix, although it does not allow viewers to make profiles. Hulu tries to make the viewing experience similar to the actual experience of watching television, particularly with how it employs commercial breaks and ads. Hulu's streaming video

quality has only reached 720p resolution in comparison to Netflix which now offers up to 4K high definition resolution. One unique feature of Hulu's service is that it allows users to embed videos on their own sites. Hulu also syndicates its own content to other partnering websites like Google, Yahoo, and MSN, meaning viewers of those sites might find Hulu's video content there (Dana and Steel).

As noted earlier, Hulu's business model began solely relying on advertising revenue for the company's first few years. This changed in 2010 when Hulu began offering a subscription service for \$7.99 month, which includes a much deeper library of video content than the free site to attract subscribers (Stelter). The \$7.99 monthly subscription price tag has remained constant for the base Hulu plan today that comes with limited commercials. Last year, Hulu also introduced a 100 percent commercial free subscription plan for \$11.99 ("Guide to Hulu No Commercials Plan"). Commercial free viewing is the only difference between Hulu's two offered plans. Hulu offers the option to add content with its Showtime premium add-on for a subscription fee of an additional \$8.99 a month, which is still lower than Showtime's own current SVOD service asking price. Similar to Netflix's subscriptions, Hulu does not ask for any long term commitment from subscribers and charges subscriber's credit cards on a monthly basis. Hulu also offers a free one month trial for subscribers who sign up online.

Hulu's business revenue is currently around a 50-50 split from advertising and subscriptions, and it projects equal growth in both for the near future of the company (Szalai). Hulu's number of paid subscribers is expanding slowly, but is consistently moving upward at a faster pace each year. In one year after Hulu initiated its subscription service, Hulu grew to have 1.5 million subscribers in the US ("Number of Hulu's Pay Subscribers"). Hulu is currently close to reaching 10 million subscribers, and its base grew by 30 percent in each of the past few years

(Mulligan). Hulu is still limited internationally, because it only operates in Japan and the US. Hulu is also getting millions of users viewing content on its free site, which does not help with subscriptions but helps the company make bigger advertising deals. Hulu has worked with 2,000 different advertisers so far and will continue to work with more in the future. Hulu is at the forefront of using the most advanced advertising technology that can allow its partners to target the right audiences and provide them with good viewer feedback data. Hulu is also very flexible with how it allows advertisers to place commercials. Hulu also is trying a new idea whereby they co-produce a commercial with another company that promotes both the company's brand with Hulu's (Peterson). Hulu made \$1.6 billion in total revenues in 2015, and is expected to grow this figure in the future (Lieberman). Hulu is projected to have over 17 million subscribers and \$2.4 billion in revenues by 2017.

iii. Amazon Prime

Amazon Prime Video is a small subsidiary of Amazon.com, the largest Internet retail site in the US. Amazon began offering VOD services with its Amazon Video section on its site as early as 2006 in a service called Amazon Unbox in a partnership with TiVo ("Amazon Unbox on TiVo"). Amazon Video offers thousands of television shows and films to pay to purchase or rent for streaming on its site. Amazon began offering free video streaming of a few thousand select titles as part of its Amazon Prime membership in 2011, which was only a small percentage of the total Amazon Video database (Warren). Amazon Prime was created in 2005, and it offered free two-day shipping and cheaper faster shipping for all Amazon purchases for an annual membership fee of \$79. The added perk of free video streaming did not raise the price of the membership in 2011, and more small perks have been added in recent years. Amazon has expanded its overall content library and the amount of programs free to Prime members since

2011. In 2013, Amazon began producing and streaming its own original series exclusive for Amazon Prime members. Amazon Prime has grown to have over 54 million members in the US and reaches about 46 percent of US households (Isidore). Amazon Prime's SVOD service also is employed internationally for members in the United Kingdom, Germany, Austria, and Japan.

Amazon Prime currently offers over 8,300 films or television programs for free streaming in the US, although Amazon Video has well over 50,000 titles in total that can be purchased for streaming on demand ("All Titles on Amazon Prime"). Like Netflix, Amazon Prime gets most of its video content library through digital syndication rights deals with distributors. Many television shows are on Amazon Video shortly after they air for purchase similar to how iTunes offers TV programming, however Amazon Prime members, like Netflix subscribers, normally have to wait some months for free streaming of these programs. Since 2012, Amazon Studios has also created original content for Amazon's SVOD service (Perez). Amazon has spent over \$3 billion on streaming content over the past few years, and about 10 percent is going to making original content (Spangler). Unlike Netflix or Hulu's production plans, Amazon's process for producing new shows runs more like a network's pilot season. It receives and market tests submitted scripts for pilots and feature films. The studio then has about a month and a half to decide whether to put them in development. For TV series, Amazon began a process of developing and releasing around 10 to 12 pilots on a certain date each year on Amazon VOD service. Amazon's viewers can watch and provide feedback on which of these pilots they would like to see made into a full series. The first Amazon pilot season on April 19, 2013 included about a dozen different shows, and five were later greenlit to series. Amazon's first original show, Alpha House, premiered in November of 2013. Amazon Studios just had its sixth such pilot season, and in total has released 15 original programs exclusively for Amazon Prime. In

2015, Amazon Prime's original comedy series, *Transparent*, won the Golden Globe for Best Comedy Series, making it the first online series to ever win a best series category at a major awards show (Riley). Seasons of Amazon's original series are also released at one time, similar to Netflix's releases. Amazon plans to continue to have a spring and fall pilot season in future years to develop more original programming for Amazon Prime. Amazon's VOD streaming service is available on many gaming consoles, Blu-ray players, smart TVs, smart phones, tablets, and other devices in addition to computers. Amazon Prime's interface is similar online to that of the entire Amazon site, and the service offers the highest quality video streaming available in up to 4K high definition.

Amazon Prime's business revenues come solely from its annual membership subscription fees, although this is a small percentage of the revenues Amazon's site makes in its online retail business. Amazon has no ads on any of its video content. In 2014, Amazon raised the price of its Prime membership from \$79 to \$99 a year. However, Amazon has expanded the membership perks to include other features like Amazon Prime Music and Prime Photos, in addition to keeping the free two-day shipping on all purchases and the free video content. Amazon Prime also has a free one month trial period. Last December, Amazon launched a new offering called the Streaming Partners Program ("Amazon Announces Streaming Partners Program"). This feature gives Amazon Prime members the option to add on subscriptions for OTT content from providers it partnered with like Starz, Showtime, and AMC for as low as \$8.99 a month. It is projected that Amazon Prime grew by about 35 percent in 2015 and now has 54 million US members (Isidore). This would equate to over \$500 billion in revenues just from US Amazon Prime memberships. It is estimated that around 65 million people have used Amazon Prime Video in the US by the end of last year, and by the end of the decade that number will grow to

near 90 million ("Number of Prime Video Users"). Internationally, Amazon Prime memberships are also expected to grow substantially in the coming years generating more revenue for the retail site.

b. Niche Audience OTT

i. Crackle

Crackle is an online distributor of content created and owned by Sony Corp in 2007. Crackle offers VOD television and film content for free to viewers, specializing in popular genres like action, comedy, and drama. Crackle operates in over 20 different countries mainly in the Americas and Australia-Asia Pacific regions (Winslow). A large majority of Crackle's content is from Sony's large library of films and television properties (Wilson). It has also partnered with other studios like MGM, Warner Bros., and Paramount to distribute some of their syndicated video content. In 2014, Crackle made a major deal to acquire the rights to stream over 140 films from NBCUniversal on its service for three years ("NBCUniversal inks Deal"). Crackle began producing its first own original web series in 2009, and has focused on producing mostly shorter version television programs since. Crackle has produced 12 original television series for streaming and 4 feature length films in total over the past seven years. Its highest rated original web series was produced by Jerry Seinfeld, Comedians in Cars Getting Coffee, and has already aired seven seasons of 47 total episodes. Crackle is readily available on PS4, Xbox, Roku, smart TVs, smart phones, and tablets in addition to its online streaming site; but the company only has video quality capabilities of up to 480p resolution ("Crackle FAQ"). Crackle is solely an ad supported service, as there are no fees for user viewing. It is not interested in offering a subscription service in the future, but is focused on remaining free for users. Crackle has about 18 million viewers each month (Lynch). It attracts mainly younger males 18-34. In

2014, Crackle decided to skip the advertising Newfronts for digital companies and head to the traditional TV Upfronts as a statement that it is a mainstream network for advertising. It has worked with major brand advertisers like Best Buy, BMW, and Verizon in recent years. Crackle also distributes its original programming internationally. The company plans on packaging its streaming service into other company's future OTT bundles including Sling TV (Grover). Crackle made around \$63 million in revenue in 2015, up nearly 40 percent from 2014. Crackle has pledged to continue to invest more into expanding its content library for the future, which should help it expand its viewership over time.

ii. Warner Archive Instant

Warner Archive Instant is an OTT SVOD service that was launched by Warner Bros. in 2013 (Pepitone). Warner Archive Instant serves audiences that enjoy classic films and television programs from the past. The service has content from the Warner Archive Collection, which includes hundreds of rare older titles from studios like Warner Bros., MGM, and RKO. It changes its title offering regularly. Warner Archive Instant is solely a subscription revenue service, with no commercials. The service is priced at \$9.99 month for subscribers and has a two week free trial period (Lawler). Warner Archive Instant is only available for streaming on Roku and Apple iPhones and tablets, in addition to its online site. Only through a Roku can one stream the service in full high definition. The OTT service is only currently available to US subscribers.

iii. Tribeca Shortlist

Tribeca Shortlist is a movie SVOD service created by Tribeca Enterprises and Lionsgate last October. The service caters to people who enjoy watching high quality indie and arthouse feature length films. Only about 150 independent titles are offered at one time on the service and about 50 different films are subtracted and added each month (Spangler). The service gets its

films from the libraries of studios like MGM, Sony, Miramax, and Lionsgate. One unique feature is that the service offers users film recommendations and commentary on the films from well-respected experts in the industry including many actors and directors, who are termed the "Shortlisters". Additionally, Tribeca Shortlist's library is all hand-curated by these talented people in the business. Basically, the service allows viewers to get an extra level of engagement by hearing why these "Shortlisters" love specific films. The SVOD service is commercial free and is priced at a low rate \$4.99 per month ("About Tribeca Shortlist"). Beyond computers, Tribeca Shortlist is accessible on Apple TV, Amazon Fire TV, Roku, iPhones, and iPads. The service is only offered in the US. The company is committed to keeping the content library small, and hopes to attract more cinephiles, who enjoy the unique experience the service offers (Porch).

iv. Feeln

Feeln is an online VOD streaming service owned by the Hallmark Cards Company that was launched in 2007, originally named SpiritClips. The company was founded by Academy Award Winning producer Rob Fried, who sold it to Hallmark in 2012. The service offers a content library of hundreds of family-friendly and inspirational movies, documentaries, and television shows on its streaming site. The service also holds the exclusive rights to the Hallmark Hall of Fame films ("About Feeln"). Feeln has produced over a hundred different family friendly short films and web series in the last decade, and the company puts up a new original short film each week on the service (Snider). No film on the service can be above a PG rating. Feeln's business model is fully subscription based with no advertising on content. Feeln holds a low price of \$3.99 a month for subscribers. The service is available on Roku, Apple TV, smart phones, Blu-ray players, Xbox, and a few other devices in addition to laptops and PCs.

One unique feature of the service is that users can actually send videos off of the service to family members and friends, similar to Hallmark's e-card service (Semuels). In September of 2014, Feeln had fewer than 500,000 subscribers but this figure has probably increased slightly in the past year and a half (Spangler).

v. Curiosity Stream

Curiosity Stream, nicknamed "the Netflix for Documentaries", is an SVOD service created by the founder of Discovery Channel, John Hendricks, in March 2015. It targets fans of nonfiction, educational video content on topics in science, technology, and history. Curiosity Stream's library includes short form original documentaries on different subjects, and long form series from public broadcasting companies around the world like the BBC and Japanese NHK ("Discovery Channel Founder Launches"). Currently, the service offers over 600 hours of documentary content from more than 1,400 different programs. Curiosity Stream is a commercial free subscription service that has three different affordable pricing levels.

Subscribers can view content in standard definition for a rate of \$2.99 a month, spend \$5.99 a month for high-definition video quality, or spend \$9.99 a month for the premium 4K resolution. Curiosity Stream is available on many non-PC devices including smart phones, Apple TV, Roku, and Amazon Fire TV. The service will be available internationally in five years. Curiosity Stream has not released data on how many subscribers it has, but Hendricks hopes to have 5 to 7 million subscribers by 5 years and over 15 million within 10 years (Friedman).

vi. Seeso

Seeso is a SVOD OTT service created by NBCUniversal Digital Enterprises in January 2016. The service offers a variety of different comedy programming from NBCUniversal's studios, targeting the market for comedy. It offers 2,000 hours of content from popular NBC hit

shows like *Saturday Night Live*, *The Office*, and *30 Rock*. Seeso has a variety of comedy specials from the past as well. Seeso is preparing to release 20 different original series in its first year, a few of which are already available (Jarvey). The subscription service is 100 percent advertisement free and costs \$3.99 a month. Additionally, a small section of content is available for free even without a subscription. In February, Seeso became available on its first non-PC devices with accessibility of Roku and Amazon Fire TV (Spangler). The service is only currently offered to users in the US.

vii. Noggin

Noggin is an OTT service created by Nickelodeon to provide mobile video content for preschool age children. Nickelodeon officially launched Noggin on March 5, 2015 in the US, and released it in Latin America in January 2016 (Richmond). Noggin provides VOD content from a library of shows and segments produced by Nickelodeon focusing on preschoolers, most of which air on Nick Jr. It includes hundreds of episodes of popular kids programs like *Blue's Clues, The Backyardigans*, and *Franklin*. Noggin is priced at \$5.99 a month and there is a one week free trial. Unlike most other OTT's, Noggin's main goal is to serve as mobile entertainment for little kids, supplementing cable rather than trying to replace it. Noggin is only available from the Apple, Google Play, and Amazon content stores; and there is no actual Noggin streaming site for use. The service's interface is focused on being kid friendly with extremely safe content. The service can also be accessed on up to 10 mobile devices at once (Hartkopf). Noggin is advertisement free and solely a subscription revenue venture for Nickelodeon owner Viacom. There is no official publicly released data on how many subscribers Noggin has picked up in the past years, but it likely has a few hundred thousand.

c. Small Bundles

i. Sling TV

Sling TV is an OTT service owned by Dish Network; it launched in February of 2015. The concept of Sling TV was to bundle programming from different popular networks to provide a cheaper alternative channel package for young adults who do not want to pay for \$60 or more for cable (Katzmaier). Unlike Netflix or Hulu, Sling TV offers live linear channel streaming on its content. This also means that Sling TV has the same ads and commercials that would be seen in any regular television viewing of the station. Sling TV also offers VOD content from many of the packaged channels, along with the live programming. Sling TV's main package, named "Best of Live TV", includes channels like AMC, TNT, TBS, ESPN, Food Network, CNN, Cartoon Network, and a dozen others. This package costs subscribers a relatively low price of \$20 a month in comparison to the costs of standard MVPD, and just like other OTT services there is no long term commitment for subscribers. Sling TV also offers extra packages each costing an additional \$5 a month. Examples of these are the Hollywood Extra package which includes EPIX channels and SundanceTV, the Sports Extra package which includes all of the ESPN channels and Univision Sports, and the Kids Extra package which includes Disney's kids channels, Boomerang, and Baby TV. Sling TV offers a free 7 day trial for consumers. Sling TV has some limitations in that users cannot pause or rewind live channels to skip commercials nor can they use it on more than one device at a time. Sling TV's streaming service is accessible on all PCs, Roku, Amazon Fire TV, smart phones, tablets, Xbox One among others. Sling TV offers high quality video content that appears almost as good as if the viewer was watching digital MVPDs.

Sling TV's business model is fully supported by subscription revenues. It does not receive advertising dollars from the commercials that air on its streamed channels, just like Dish

and other MVPDs do not receive ad money on the cable networks they distribute. In February, a year after its release, Sling TV grew to have more than 600,000 subscribers ("Dish Network's Sling TV"). Only 2 percent of US citizens said they had used Sling TV in a survey from the summer of 2015 ("Do You Use a Streaming Service"). Sling TV is only offered in the US by Dish, and will not be released internationally anytime soon. Interestingly enough, Dish does not want Sling TV to grow much bigger for a few years (Berman). Dish made a deal with its content providers to ensure that Sling TV does not grow beyond 5 million subscribers. MVPDs and programmers are worried that if Sling TV gets too popular, consumers will start using the cheaper OTT option and get rid of cable. This would not only hurt MVPDs like Dish but also the cable networks who are getting paid more with each cable subscription than with Sling TV's subscriptions.

ii. Playstation Vue

Playstation Vue is a streaming OTT service established and owned by Sony, and is the largest OTT channel bundle of any kind. Unlike Dish's main purpose for Sling TV, Sony used Playstation Vue to compete with MVPDs. Playstation Vue was rolled out only in Miami, New York, Philadelphia, Chicago, and a few other major cities in March of 2015 (Ingraham). The service spread nationwide on March 14, 2016 into 203 new US markets (Lempel). Playstation Vue offers a large and broad lineup of local, broadcast, cable, and on-demand channels that make it very comparable to the offerings of a traditional MVPD company. Playstation Vue offers three different tiers of packages of bundled channels to stream. The Access package starts at \$29.99 a month and includes more than 55 live stations including CNN, ESPN, FX, TBS, CBS, and many more. Subscribers also receive VOD content from the other 3 major networks. The Core package costs \$34.99 a month and includes all of the same channels on Access plus 15 to 20

more local and national sports stations like ESPNU and ESPNNEWS, and other smaller niche channels like IFC and SundanceTV. Finally, the Elite package costs \$44.99 a month and includes over a 100 channels combining everything in the Core package with more regional sports channels and film and entertainment channels. Interestingly, in the major markets that got the service in 2015, Playstation Vue's prices for each package cost \$10 more than the new price for other US markets (Jesdanun). These markets do, however, get the benefit of having the live over-the-air channels on their service. The service provides a free week trial for potential users, and there is no long term commitment or additional service fees for signing up. Additionally, like Sling TV, Playstation Vue offers many more add-on packages including access to premium channels like Showtime and Epix for additional monthly charges. Playstation Vue is mainly a service intended to be used by owners of Sony's gaming consoles, PS4 and PS3. However, the service is now also accessible on Chromecast, Amazon Fire TV, and iPads and iPhones. Playstation Vue's service includes the highest quality of high definition streaming. The service offer a few unique attractive user features like a Cloud DVR service that can record thousands of hours of content to play on demand, the ability to stream across different devices at a single time, and an interface that allows viewers to easily find any live or on demand shows they are looking for.

Like many other OTT's, Playstation Vue will rely solely on subscription revenue. Similar to Sling TV or standard cable, Playstation Vue's content has commercials but Sony does not get any money from the commercials seen by users on its streaming service. The service is only available in the US and likely will never be offered in international markets. Sony is not trying to limit Vue's growth in the same way Dish is with Sling TV. They have no real interest in keeping MVPDs in business, and would be happy to see more cord cutters start to use their

slightly cheaper product over the services of an MVPD. However, the service still has a relatively high price tag compared to other OTTs which may lessen its growth in the coming years. Sony has not released any official data on Playstation Vue's subscriber base, although it is estimated to be around a half a million users (Jesdanun).

d. Standalone OTT Offerings

i. HBO Now

HBO Now is an SVOD service created by HBO that was released nationwide in April 2015 (Baumgartner). HBO Now offers full access to most of the content that HBO has aired over the years. It includes all of HBO's current original shows like *Game of Thrones* and *True Detective*, and those from the past like *The Sopranos*. It also includes most films that HBO has the pay-TV window license rights to. HBO Now releases new content onto the service shortly after it premieres live on HBO. HBO Now is offered standalone for a monthly subscription rate of \$14.99, and there is a free 30 day trial offer available. The service is available on Amazon Fire TV, Apple TV, iPhones, Tablets, and Roku in addition to its online site, hbonow.com. HBO Now is strictly a subscription revenue service and it does not have any ads. The service is only available in the US. In February 2016, Time Warner, HBO's parent company, announced that HBO Now had grown to have over 800,000 US subscribers (Steel). The company is targeting cord cutters who would not have HBO access and hopes to reach 5 million HBO Now subscribers in the coming years.

ii. CBS All Access

CBS launched its own standalone OTT service, CBS All Access, in October of 2014 in 14 of the major US markets including New York and Los Angeles (Steel). CBS All Access offers live streams of local stations that air CBS along with more than 7,500 episodes of VOD

programming from CBS's popular shows. The service also offers new episodes of shows one day after they air live on CBS. CBS All Access has expanded nationwide allowing live streams of CBS affiliates in 75 percent of markets (Winslow). CBS announced that it would create an original *Star Trek* show series that would be released in 2017 as the first original series exclusively to CBS All Access subscribers. The service costs \$5.99 a month and there is a free one week trial period. It is available on Apple TV, Amazon Fire TV, Roku, and Android devices in addition to PCs for streaming. CBS All Access is entirely a subscription revenue making service, although there is advertising on the live streams of CBS stations and in the VOD content using the service. CBS is trying to be careful with the service, because it does not want to cannibalize MVPDs. CBS is considering offering an ad-free subscription plan for \$9.99 a month in the future (Littleton). CBS All Access is only available in the US. In March 2015, CBS All Access had 100,000 subscriptions, and that number has likely more than doubled in the past year (Szalai).

iii. Showtime's OTT

CBS Corp., who owns Showtime, launched Showtime's standalone OTT service in July of 2015 (Littleton). Similar to HBO Now, Showtime's service offers most of the content that has aired on Showtime's premium channel over the years in an on demand format. Additionally, both the east and west coast Showtime channels can be streamed live on the service. The service's library consists of thousands of films, documentaries, sports specials, and original series owned by Showtime. New episodes are uploaded on the VOD service shortly after they air live on Showtime. There is no exclusive content available only to subscribers of the service, but rather is exactly the same content a Showtime MVPD subscriber has access to. Showtime's OTT subscription varies on price depending on where you get the service. If you purchase it

standalone, the service is priced at \$10.99 a month, and streaming is available online and on Amazon, Android, Roku, and Apple devices. However, the price tag is only \$8.99 if you add it on to a Hulu, Amazon Prime, or Playstation Vue subscription. Showtime offers a one month free trial of the service for new potential customers. It is only available in the US so far. Showtime's revenue is exclusively from subscriptions and there is no advertising on any content in the service. The service is intended to target the growing demographic of young adults who want to watch Showtime and other premium content but will not pay large fees for a MVPD package (Villarreal). Showtime has not released exact subscriber figures for the service, but has revealed that it is growing. By the end of the decade the goal is to reach 4 million subscribers with the OTT service (Littleton).

III. The Effect of OTT in the Marketplace

There is a growing demand for video content. US adults spend over 5.5 hours a day watching video content, more than ever before, and that number is growing every year ("US Adults Spend"). This should be good news for anyone that distributes content, right? Well, it is not good for certain companies. The problem is people are not watching more TV, but are instead watching more content on digital devices. In 2015, Americans spent 1 hour and 16 minutes watching on digital devices, which is up 20 % from 2014 ("US Adults Spend"). This number is expected to increase even more in the future. Television viewing, however, has already started to decline by five or six minutes a year on average and this is expected to continue in the future. This problem is exasperated by the fact that younger viewers are shifting the most away from linear TV. The younger audiences are the future consumers of content, so companies in the business of traditional TV need them to watch TV. Even if someone in the US

is watching TV content; it is becoming more likely that they are not watching it live or waiting through commercials. Video on Demand usage has grown drastically in the US in the past decade. In 2007, the number of households watching content through VOD services was just over 36 million ("Pay TV in the US", p.53). In 2016, it is projected that over 76 million Americans will be watching content through some type of VOD service. More people are time shifting their viewing of television content than ever before, and most of these are young people. Over 60 percent of the content viewers 18-34 watch is time shifted (Cromwell). Just by looking at the profiles from the first section of this paper, it is clear that more and more companies are also entering the marketplace to service the growing habits of time shifted, portable, on demand viewing. At least 8 new OTT services have been launched since the beginning of 2015. Also more people are subscribing to these OTT services every year. In 2014, there were 173 million users of at least one OTT service in the US ("Number of OTT users in US"). There is likely to be 200 million OTT users in the US as early as 2019. The big OTT three of Netflix, Hulu, and Amazon Prime already had a combined total of over 100 million subscriptions in the US at the end of 2015. The growth in OTT and other VOD services is one major change in the marketplace for programming content.

OTT services are the new challengers in the marketplace. The groups on the other side of the marketplace for content are the incumbent pay TV providers, or MVPDs. How is their business changing in the same period where OTT has been rapidly growing? MVPDs have started to lose subscribers in the past few years, but it is not declining at the same fast rate OTT is growing. In 2010, 87 percent of US households had some type of MVPD service, and by 2015 that number dropped to 84 percent ("Pay TV Penetration Rare"). The 3 percent drop off is meaningful, but you have to keep in mind that the number of households in the US was also

growing by at least a million each year in this period ("Number of US Households"). By 2015, 4.9 million Americans had cut their MVPD service in their home, up over 10 percent from 2014's number of cord cutters ("Americans Cutting Cable"). However, this does not equate to as large of a net loss for MVPDs as it appears, because they are also gaining new subscribers each year. In 2015, the total net loss in subscribers was about 600,000, a 0.6 percent decrease in their total subscriber base. The bigger problem for MVPDs is that they are projected to lose even more subscribers from cord cutting in future years. In 2016, at least another 600,000 subscribing households will be lost to cord cutting. By the end of the decade, there should be around 8 to 9 million cord cutting households in the US.

Individual companies are being impacted by this overall increase in cord cutting.

Comcast, with its Xfinity service, is the largest MVPD in the country with over 22 million subscribers. In the past two years, Comcast has had a net loss of over 200,000 in total subscribers to its cable service ("Pay TV in the US", p. 24). The loss of cable subscribers has started hitting the bottom line. For the first time ever, Comcast's net income decreased in 2015 from the previous year's earnings. The company's net income was \$200 million less than the previous year (p. 23). Satellite providers like Dish Network are hurting badly from cord cutting as well. From 2013 to 2015, Dish Network's number of subscribers also dropped by about 200,000 (p. 28). Like Comcast, Dish's net income decreased in 2015 by \$200 million from the previous year. Almost every MVPD's number of subscribers has decreased in the past year and a half ("Pay TV Providers Ranked"). However, these losses have not been devastating for any one of these large companies, and they still make healthy annual profits from subscriptions. The losses to cord cutting so far have been fairly manageable for MVPDs, but the problem is that they are not projected to stop. MVPDs are still making a lot of money from subscriptions each

year, but they need to find a way to adapt soon to this changing marketplace. If they do not, it appears their business model may dramatically suffer in the future.

Clearly both OTT and cord cutting growth are major changes occurring in this evolving marketplace for video content. Can we assume that the rise of OTT is causing the cord cutting movement in the last few years? The problem with this question is it is nearly impossible to prove this, because there are so many other factors involved in these processes that are playing a role into the cord cutting decision. Is it likely that the increased number of OTT users and offerings available in recent years is the biggest reason for the increasing levels of cord cutting? The answer is likely yes. Americans are consuming more video content than ever before, so the demand is clearly there. Consumers are not getting rid of MVPD subscriptions because they are no longer interested in watching content. Instead, what is more important must be on the supply side. For the first time ever, people have significant alternatives to MVPDs. OTTs offer large amounts of quality video content for subscribers. Netflix offers more content on its service than any one cable channel does. The Internet has offered lots of free video content for a long time, but it was not usually the same quality of content that viewers can watch on TV. Today, Netflix, Hulu, and others are offering content that rivals the programs airing on TV, and these quality programs are being made available at a much lower rate than what MVPDs are offering. The average cable bill in the US is \$99 a month (Breen). Compare that to Netflix for \$9.99 a month or even Sling TV for \$19.99, and there is no contest on what is the better value for certain people. Over 67 percent of cord cutters said their main reason for doing so was because cable is too expensive and they want to save money ("Pay TV in the US", p. 47). MVPDs are also not truly serving their subscriber's best interests. People only watch on average about 17 channels regularly, yet cable is providing them with 190 channels on average (Polidoro). Nearly 90

percent of the content consumers are paying for they are not viewing. The OTT services are also servicing the changing viewing habits of audiences. They are providing more on demand content, user friendly interfaces, and allowing people to access their service on many different digital devices. Most MVPDs are doing little, if anything at all, to adapt to these changes. OTTs are becoming a very strong alternative to MVPDs in many different ways, which is why so many people are cutting the cord and shifting their money to them.

MVPDs are starting to experience some pain in this new marketplace for content, but what about the owners of broadcast and cable networks? Their business is also being affected by OTTs, and they have some problems in their future. Unlike MVPDs, broadcast networks like CBS and NBC make their revenue from advertising not from subscriptions. Cable networks like ESPN and CNN make money from both ads and subscriptions. Advertising sales are increasing with each passing year. The problem for broadcast and cable network owners is that television ad sales are being overtaken by digital advertising. In 2015, US TV ad spending actually fell by 0.1 percent, for the first time ever when the economy has not been in a recession (Brouwer). In 2016, it is projected that digital revenue will actually exceed TV revenue by \$2 billion. In TV Upfronts in 2014 and 2015, both cable and broadcast TV sales have decreased by at least 5 percent each year (Blattberg). OTT and VOD services are hurting the ratings of most TV programs, so advertisers are looking elsewhere to spend their money. Luckily, TV advertising revenue is predicted to remain fairly flat or increase slightly over the next few years, so traditional companies will not necessarily be hurt too much by digital ad growth. Most channels are also starting to place their programming online so they can offer and sell digital ad space, for which there is clear growing demand from advertisers. Thus even if traditional TV ad sales continue to decline, there are opportunities for broadcasters to make up the difference in digital.

TV broadcasters appear to be losing to digital media for future ad sales, but the loss does not appear to be too severe yet. As MVPDs lose subscriptions, cable networks also are losing the revenues they get from these subscriptions. In the past two years, ESPN has lost 7 million subscribers from cord cutting (Travis). The loss of that many subscribers equates to almost a \$1.1 billion loss in subscriber revenue in the time period. Many other channels have started losing subscribers in the past few years. Even if consumers are not canceling their MVPD subscription altogether, they still are likely to be cutting down on their monthly packages. The amount of MVPD subscriptions is going to decrease gradually in future years, and these cable channels like ESPN are going to lose revenue because of it. Cable and broadcast networks are starting to lose revenues from both ads and subscriptions because of the growth of OTT and new outlets for digital video content.

Can MVPDs and broadcasters do something to help stabilize the losses they are beginning to experience? The answer is yes, and some are already starting to do so. For MVPDs, the obvious example to follow is that of Dish Network. Dish decided to create its own OTT service, Sling TV, in 2015. Pricing Sling TV at \$19.99 and with a good package of stations should help its business grow for Dish. Other MVPD companies appear to be following suit. Dish decided to offer consumers a cheaper alternative to what it is offering with its traditional service. Dish will likely not make as much on Sling TV as it does with its cable packages initially, but it will supplement the losses its main service suffers due to cord cutting. MVPDs can also start offering packages with fewer channels for lower subscription rates. Subscribers know they are paying for many channels that they do not watch, so they are deciding to cancel their MVPD service altogether. MVPDs need to start offering more flexible plans where their customers can get access to what they want at a better price. Additionally, MVPDs should look

for ways to offer more on demand content and make their service more accessible on tablets and other portable devices. Cable channels are also beginning to try to adapt in this evolving marketplace for content. HBO, CBS, Showtime, Nickelodeon, and other broadcasters have released their own standalone OTT services at low monthly rates to attract cord cutters. In doing so these broadcasters are no longer hindered by people not wanting the high rates their distributors ask from consumers. If a consumer wants to watch programming from these networks and does not already have access to them, it is likely that this consumer will pay for the OTT service. Many other networks are making deals to enter the packages of other OTT services like Sling TV and Playstation Vue, which is another good option for broadcasters to supplement subscription revenue. The best way for these cable networks to respond to this shift to cord cutting is by making themselves available in as many different service packages as possible. Creating exclusive original content for OTT users is another smart way for these broadcasters to attract consumers to their services. If advertising money is going to shift more to digital space in future years, then the clear answer for networks is to distribute more content digitally. Many networks are starting to make more and more of their programming available online and on demand to serve younger viewers with different viewing habits. They can sell commercials on this online content. Thus, the more content they make available for viewers online, the more they have to sell to advertisers. There are many ways for MVPDs and networks to adapt to the threat of OTT and keep their business strong. It remains to be seen how many of these older companies will be willing to do so.

IV. Conclusion

Video content viewing is increasing every year, and people's viewing habits are also changing. Today, Americans want to have the ability to watch content on their own time at their own pace wherever they want. They also want to easy access to content with their new technology, and are watching on more screens than ever before in history. These factors are increasing the demand for OTT and VOD services that are made for these new types of viewers. Netflix changed the game when it began offering its high quality, high volume library of video content for a small monthly price of \$7.99. Since, Hulu has entered the marketplace as a response by major media companies to create an OTT service to rival Netflix. Amazon, the country's largest online store, developed Amazon Video and added it to Amazon Prime, which has grown to become a major SVOD service. These major OTTs have grown a solid subscriber base and become competitors to premium cable channels like HBO and Showtime in both the content acquisition and production business. These OTTs are all going after a broad viewer base, but there are also new services made for niche audiences. New OTTs like NBC's Seeso, targeting comedy lovers, and Noggin, targeting parents with preschoolers, are quality, cheap offerings targeting a specific audience. The newest OTT bundle packages from Sling TV and Playstation Vue are probably the biggest threat to pay cable. These OTT services could grow large subscriber bases in the future with the value they potentially offer cord cutters in comparison to MVPDs. Certain channels like HBO and CBS have created their own standalone OTT services to evolve their business into the cord cutting marketplace. In the future, I expect more OTT services of all types to be offered by different companies, as the demand and popularity of streaming VOD content increases. The current OTT services should continue to grow their business gradually each year. However, it remains to be seen if any of these newer OTT services ever becomes a real threat to Netflix.

As OTT and digital video content businesses are growing, the traditional TV companies are showing signs of concern. People are tired of paying large fees to MVPDs, especially for channels they mostly do not watch. OTTs are offering a cheaper, more flexible subscription service for American viewers. MVPDs and cable networks have begun losing subscribers in the past couple of years, but these losses have remained manageable. Today, these traditional MVPDs are still showing healthy profits. The problem is this trend will probably continue, and at some point the MVPD business model will become financially unsustainable. The future of advertising appears to be digital, not television. Although TV commercials will always be around, the rise of digital ad spending could be an opportunity for both AVOD OTTs and traditional networks. Distributing more video content digitally will allow these companies to make revenues selling ad space for their content. As a whole, the business of video content distribution will increase economically in the future. People will continue to spend on subscription services for content they enjoy, and advertisers will spend more to market to US consumers. The actual shift occurring in the marketplace is that more consumer money is going to be spent on OTT and digital content, and not on traditional television services. OTTs are prepared and will benefit from this shift. The lingering question is whether or not MVPDs and broadcasters will adapt quickly enough to prosper with Netflix and the other OTTs in the future.

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