The Future of Television:

Will broadcast and cable television networks survive the emergence of online streaming?

by

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Abstract

The rise of the internet and other technological innovations have dramatically revolutionized the way we live our lives, and especially the way in which we consume media. The television industry, which has been a model for stability and success since the 1950s, is now under intense pressure to maintain its revenue streams and margins in the face of internet-based competition. With advertising revenues especially threatened, it is not clear how broadcast networks can continue to remain sustainable without significantly changing the nature of their programming or entering the online space themselves. As Internet penetration increases and the population becomes more tech-savvy, it is plausible to suggest that television networks and cable services in the US may cease to exist. However, it is impossible to predict the technological changes that may occur in the next 50 years, which is why I will focus on the more immediate future. I believe that TV sets and cable boxes will continue to exist, however the purpose that they serve will change significantly. As more and more people watch TV shows online and on-demand, it becomes increasingly challenging for networks to attract and retain advertisers for on-air broadcasts. Nevertheless, the demand for news telecasts, award shows, election coverage, sports – essentially live events, remains steady and will drive networks in the immediate and medium-term future.

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I. Introduction

Since its introduction and adoption in the early 1950s, television has been a staple part of the American lifestyle. Viewers across the country would wait in fervent anticipation for their favorite sitcoms to come on every week. Often the entire family would be ready in front of the TV set to catch *I Love Lucy*, *The Andy Griffith Show*, *The Mary Tyler Moore Show*, and in later years *Seinfeld* and *Friends*.

However, changing technological and lifestyle trends over the past decade or so have threatened to derail the industry. With a desire for convenience, and the opportunity to freely access content without any time restrictions and at a relatively low cost; online streaming is rapidly gaining popularity as a means of watching TV. The average customer spent 146 hours monthly watching live TV in 2011, and 4.5 hours streaming[1]. For the 18-35 age group, a key TV demographic, these figures change to 120 and 7 hours respectively[2]. The number of US TV households actually declined in 2012 for the first time since 1990 – down to 114.7 million[3].

While the gap is still large, much of it can be attributed to sporting events and news programs. It is also important to note the growth rates for these categories, a 0.9% annual increase in live TV viewing compared to a 7% increase in online streaming[1]. YouTube is the 4th most visited website in the US, accounting for 45% of all streamed video[4]; while 33% of all consumers have streamed a movie or TV show on Netflix or Hulu Plus[1]. These changes are

[1] "State of the Media: U.S. Digital Consumer Report Q3-Q4 2011." *Reports and Insights: Nielsen*. Nielsen, 23 Feb. 2012. Web. 10 Oct. 2013. <www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2012-Reports/Digital-Consumer-Report-Q4-2012.pdf>.

[2] See Figure 1 in Appendix for in-depth breakdown of viewing statistics by demographic

[3] Fixmer, Andy. "Nielsen Cuts 500,000 U.S. TV Homes on Census, Web Viewing". *Bloomberg - Business, Financial & Economic News*. Bloomberg L.P., 25 Sept. 2012. Web. 13 Jan. 2013. <http://www.bloomberg.com/news/2012-09-25/nielsen-cuts-u-s-tv-homes-by-500-000-on-census-shift-to-web.html>.

[4] See Figure 2 in Appendix for breakdown of online video viewing by brand.

causing the industry to rapidly re-examine the way it operates, and figure out how to stay ahead of the curve.

The industry's top figures and executives have all been either publicly or privately vocal in their acknowledgement of the evolving landscape. Brian Roberts, the CEO of Comcast Corp. believes that we will see "more change in television in the next five or 10 years than the last 25—combined."[5] The convergence of television and the Internet has forced TV providers to constantly innovate, but more importantly has required them to look beyond advertising as their primary revenue – a significantly challenging proposition.

There are many different players in the TV industry: cable service providers like Time Warner and Comcast, television networks like CBS and HBO, the FCC and other regulators, and finally the new breed of online video-on-demand (VOD) services like Netflix, Hulu and Amazon. In this paper, I will narrow my focus to the networks and study the possible strategies they can adopt in this technological revolution. That being said, the nature of the industry is that the fortunes of these various entities is closely interlinked, and as such I will spend a significant amount of time discussing these other groups as well.

There are three broad groups of TV networks that I will focus on:

1. **Broadcast networks:** have a national audience, and can be accessed for free by customers without any form of subscription. Each network typically hosts a wide range of programming, including general entertainment, news, sports, award shows, election coverage and specials. There are five large broadcast networks in the U.S. – CBS, NBC, ABC, Fox and The CW.

[5] Emmich, Erika. "Predictions: The Future of TV." *CNBC - Inside Wealth*. CNBC, 12 May 2013. Web. 8 Oct. 2013. <http://www.cnbc.com/id/47285315/page/3>.

2. **Cable networks:** have a more targeted, specific audience and require a subscription. There are over 100 cable networks, and each network caters to a specific niche or genre of content. For example, ESPN focuses on sports, Lifetime is targeted specifically at women, while FX's content is more edgy, eclectic and offbeat – the list goes on.
3. **Premium networks:** In some ways, premium networks are a subset of cable networks generally. The difference is that basic cable is typically sold to customers as a bundle of various different networks, whereas premium networks must be purchased separately at an additional cost. Programming on these networks is less subject to censorship from the FCC, as they serve a specific audience that opts in to their service. The largest premium networks are HBO and Showtime.

This paper aims to delve deeper into the issues facing these three groups, understand how their current revenue and margins are generated, and exactly why these are now under question. To determine this, my research will outline what I consider to be the four major threats to these networks: On-demand streaming services, user-generated content, illegal piracy, and the telecom industry. Using a case-study process, I will explain the intricacies of each platform and why they have been successful. Furthermore, I will assess the impact of these innovations on broadcast and cable networks, and evaluate the courses of action that can be taken to ensure the continuing success of the TV industry and the networks.

II. The Networks: how they generate revenue

Apart from serving a different audience, there is also a fundamental difference in how each type of network makes money. For a broadcast network, on-air advertising is the primary source of revenue. A half-hour primetime episode is licensed to a broadcast network for

$500,000 to $1m, while an hour costs $1m to $5m[6]. To pay for this programming, networks include an average of 20 commercial slots, each 30 seconds long that are sold to advertisers who can air their ads.

The revenue from each slot varies based on the type and popularity of programming. A 30-second slot on CBS' *Survivor* on Wednesday nights earns the network just under $150,000 while *American Idol* brings in over $350,000 for Fox[7]. Weekend programming is much less lucrative, with either re-runs or less popular shows that generate under $50,000 per spot. On average, a network earns approximately $5m an hour using an average of $125,000 per advertising spot[8].

Although broadcast networks are free to air, most Americans access these through a third party cable or satellite carrier. This earns the network a retransmission fee – which is what cable operators have to pay for the privilege of carrying (and charging for) services that can be accessed for free via an antenna. While this fee is considerably lower than advertising revenue, the combined value of retransmission fees to all the networks is estimated to hit $3bn in 2015. For simplicity's sake, I will work on the assumption that almost all broadcast networks' revenue comes from advertising – and we will leave retransmission fees aside until Section 4.3.

Cable networks also generate advertising revenue, but advertising spots on cable networks are considerably cheaper at an average of $16,000 in 2011. Their primary revenue source is subscription. Cable networks sell their services to platforms such as Comcast, Time

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[6] Blumenthal, Howard J., and Oliver R. Goodenough. *This Business of Television*. Rev. and updated 3rd ed. New York: BillBoard Books, 2006. Print.

[7] Adage. "The Cost Of 30 Second TV Commercial On Primetime TV Fall 2012." *Domain Shane: Brick and Mortar Meets the Internet*. N.p., 24 Oct. 2012. Web. 22 Jan. 2013. <http://domainshane.com/the-cost-of-30-second-tv-commercial-on-primetime-tv-fall-2012-and-you-only-want-to-pay-what-for-the-domain/>.

[8] See Table 1 in Appendix for list of 30-second commercial spots.

Warner and Xfinity at a wholesale price, charged per subscriber per month. The operators then repackage and bundle various offerings to deliver to the end customers.

This is a successful model because it guarantees constant revenue. If 80 million households subscribe to a cable network, which charges the operators 5c a month per subscriber, this translates to $8m of revenue a month of $96m a year. There is a lot of variation in exactly what the monthly fee is. ESPN is the biggest outlier in this regarding, charging over $5 a month. The average cable network fee however is significantly less than a $1. Premium cable networks work the same way, with a typical fee between $2 and $3.

III. The Issues: A shift in consumer behavior

This system has been in place for years and has been extremely successful. However, the viability of this model is now under question given the shift in consumer preferences toward digital and online platforms. No company or platform illustrates this more than Netflix. Founded in the early 2000s as a DVD rental service, Netflix entered the online streaming space in 2007 and completely changed the way in which people watch television. Leveraging its existing customer base of approximately 6 million, Netflix began offering various movie titles and television shows as a free add-on before eventually adding a subscription fee. Netflix's domestic customer base grew to 17 million by the end of 2010, and 27 million by 2012[9].

While Internet penetration during this time has increased, it is staggering to note that streaming videos on Netflix accounts for more than 33% of all Internet data usage in North America between 9am and 12am. Netflix's success also gave rise to competitors such as Amazon Instant and Hulu – who remain small players right now but could potentially make a big impact.

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[9] "Netflix : SEC Filings." Netflix : Overview. N.p., n.d. Web. 3 Jan. 2013. <http://ir.netflix.com/sec.cfm>. [Customer numbers taken from 2013 and 2011 annual reports]

Nevertheless, the exponential growth in online streaming made it clear that the medium was fast becoming the preferred means of watching television.

3.1. Technological trends: over-the top video devices

Netflix's success and its subsequent impact is only one part of the story though. One of the major reasons that all the digital platforms mentioned above have been successful is the technological progress that has allowed them to flourish. Internet penetration is the key to this, something that has come to be taken for granted in recent years. As of 2012, 274 million Americans or 87.5% of the population had Internet access, nearly double the number of people in 2000. Of these, 166 million watched at least one video on a computer – most likely on YouTube and Netflix.

What has really helped propel online streaming is the ability to access content on multiple platforms. Television is still an integral part of America's daily entertainment, with a television penetration level of 95.8% of households[10] – that is households with a satellite or cable connection. There are two interesting caveats to this statistic however. Firstly, while still extremely high, this number is slowly but continuously declining. More telling though is that of the remaining households that are not considered traditional television households – 75% own a TV set at home. This means that they are still engaging with the television set – either through an over-the-top device, gaming console or DVD player.

Gaming consoles are an especially fast-growing platform for online streaming. For all the convenience of streaming via the Internet, the TV-watching experience is simply not the same on a 15-inch laptop screen through headphones as it is on a 42-inch plasma with surround sound. It is easy to circumvent this simply by plugging in one's laptop to the television set via an HDMI

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[10] "The Nielsen March 2013 Cross-Platform Report: Free to Move Between Screens ."*Reports and Insights: Nielsen*. Nielsen, 8 Mar. 2013. Web. 15 Mar. 2013. <http://www.nielsen.com/us/en/reports/2013/the-nielsen-march-2013-cross-platform-report--free-to-move-betwe.html>.

cable. However in an age of growing impatience and desire for convenience, even this seemingly simple task is viewed as too cumbersome. The wires are messy, you have to keep unplugging and re-plugging your laptop when you want to take it elsewhere – and it's harder to rewind, fast-forward and pause playback from your couch when your laptop is all the way next to the TV set itself. A remote control would solve that problem, but the pattern is clear – too many steps and additions to keep repeating on a sustained basis.

All of these 'problems' can be solved with the use of gaming consoles. Their biggest obvious advantage is that they can connect to the Internet, providing them with the crucial first step of being able to access the online video libraries of Netflix, Hulu, YouTube and the rest – each of who have specialized applications that ensure their videos are compatible over the device. Secondly, there is an established base of users who already use gaming consoles – especially in the 18-34 demographic. 39% of homes own '7th Generation Gaming Consoles', i.e. consoles that have the capability to stream video[11]. These include the Microsoft's Xbox 360, Sony's PlayStation 3, and Nintendo's Wii.

Access to these additional streaming services requires a monthly subscription fee in the region of $15 paid to the console owner – however this gives one access to all internet-enabled content as well as bonus gaming features. It does not require an additional fee to Netflix, Hulu or YouTube or any of the streaming platforms themselves. When taking into account the vast array of options the subscription opens up, it is unlikely the additional fee will prove to be much of a deterrent. Currently, 6% of all online customers watch video daily on gaming consoles. However this number is likely to increase as customers who already own consoles though are increasingly

[11] "State of the Media: U.S. Digital Consumer Report Q4 2012." *Reports and Insights: Nielsen*. Nielsen, 09 Nov. 2012. Web. 10 Oct. 2013.

using them for streaming services. VOD and streaming services accounted for 22% of users' overall time spent on gaming consoles[12], up from 19% in 2011 and 10% in 2010[13].

Another major revolution to the streaming industry has been the introduction of Roku. The company was founded in 2002 in California, and offers a product that is similar to a set-top box that is similar to what cable operators provide. Roku however functions completely through the Internet, and is organized in the form of channels. Content is provided by Roku Partners, which include a combination of established networks and independent users – similar to YouTube. Roku's software is open source, which means anybody can create and set up a channel (although unlike YouTube it requires some relatively complex computer coding).

Roku has over 150 free channels – with offerings as diverse as Fox News, CNBC, TED Talks, Disney.com, Rutgers University channel, Amazing Facts, and Fandango[14]. It also features various premium channels, including Netflix, Amazon Instant, and HBO Go. Users can add and remove channels as they please, and will only pay for what they consume. Roku merges the key elements of traditional cable/satellite TV (high quality programming, access to a variety of channels) with those of YouTube (user-generated, niche content) to create a concoction that is in many ways the best of both worlds.

In addition, it is an economically viable for the TV consumer. Roku has 4 types of boxes available, the cheapest of which is a one-time cost of $50[15]. Considering that majority of channels are still free, and that premium services like Netflix and Hulu do not require an additional subscription than if it were viewed on a computer or other device – this eventually

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[12] See Fig. 3 in Appendix for breakdown of gaming console usage
[13] "Play vs. Stream: The Modern Gaming Console." *Nielsen Newswire*. Nielsen, 13 Mar. 2013. Web. 1 Apr. 2013. <http://www.nielsen.com/us/en/newswire/2013/play-vs--stream--the-modern-gaming-console.html>.
[14] "Channel Store | Roku Streaming Player." *Roku.com*. Roku, Inc. Web. 23 Feb. 2013. <http://www.roku.com/channels/#!browse/most-watched>.
[15] "Roku Products | Roku Streaming Player." *Roku.com*. Roku, Inc. Web. 23 Feb. 2013. <http://www.roku.com/roku-products>.

eliminates the need for a cable connection. At present, the array of channels available on Roku is still much smaller than on Time Warner or Comcast, meaning it is still used more as a supplement than a replacement – but like many of the platforms discussed in this paper, has the potential to go much further.

Apple has also attempted to enter this space with the launch of Apple TV. The device works in a similar way to Roku, with the added benefit of being compatible with Apple's iTunes store. This is especially useful for customers who frequently buy or rent content from iTunes, as they can now do this directly on their TV. However, Apple TV is priced significantly higher at $90 and does not yet have the breadth of content to match Roku. Nevertheless, the firm has set their sights on being a market leader in this space. Their dominance of the mobile and tablet market – another rapidly growing platform to stream video not addressed in this paper – combined with their ability to create customer lock-in through integration of various Apple products (Mac, iPhone, iPad, Apple TV) mean that they cannot be dismissed lightly.

3.2. Lifestyle trends: an appetite for content and mobility

From a consumer standpoint, there are two major drawbacks of the current television model: a lack of flexibility and the potential for clutter. Cable and satellite services are usually structured as a packaged deal featuring a multitude of channels and programming. While access to more content may be desirable in some ways, most consumers have very specific tastes in terms of what they want, thereby rendering most of the channels they subscribe to worthless[16]. Additionally, cable limits the consumer to only watching shows one their television sets and at a specific time.

[16] See Section 5.2 for a more detailed analysis of consumer viewing habits and its implications.

Ten years ago, this was not a problem. While DVR recording has helped address the time aspect, it can still be somewhat cumbersome to skip through the commercial breaks. More importantly, the technologies that have been developed in the intervening period as discussed above have made it easier for consumers to bypass these problems. Additionally, a generation of viewers has grown up in an age where technology has become an integral part of everyday life – and as such have grown to seek constant engagement and maximize the use of their time and attention span.

Smartphones and social networking in particular have changed the way in which people interact with media and the outside world. As of April 2012, 44% of US mobile customers owned a smartphone[17] – with many also owning tablets and other handheld devices. The function of a mobile phone has gone beyond simply making phone calls and sending texts. In fact, these traditional functions only account for 18.8% of total time spent. For all intents and purposes, smartphones are now personalized mini-computers that can be used to check email, navigate travel routes, browse the internet take photos, access social networks and of course, watch videos.

While the amount of time actually spent watching videos on smartphones is relatively low at 5.2%, it is becoming more and more prevalent. 41% of online customers watch at least one video every day on a handheld device – including mobile devices[17]. What is more interesting though is the cross-platform engagement displayed by users while watching television. 57% of users check their email during a program, and 44% visit a social networking site[18] – often to comment or blog about the show they are watching.

[17] "State of the Media: U.S. Digital Consumer Report Q4 2012." *Reports and Insights: Nielsen*. Nielsen, 09 Nov. 2012. Web. 10 Oct. 2013.

[18] See Fig. 4 in Appendix for more statistics about simultaneous cross-platform activity

From my own experience, I have seen people simultaneously watching a show on their TV set while playing a game on their smartphone and browsing the internet on their laptop.

Going back to the issue of 'clutter', the combined availability of streaming services and multiple devices have enabled consumers to pick and choose what they watch and bypass the conventional cable model should they wish to do so. As of this year, 5.01 million households no longer receive television through a traditional platform – termed "Zero-TV households by Nielsen. Although this is under 5% of total households, this number has grown 2.5 times in the last six years. 53% of these homes get their video content through their computer or internet-enabled TVs, with 14% through mobile or tablet devices. 48% of them watch TV content through subscription services, reiterating the value of being able to choose and pay for what you watch[19].

Demographics also play a key role in this trend, and the age structure of the US means that the shift towards non-traditional media platforms will be significant and sustained. 39.4% of Zero-TV homes are under the age of 35, compared to just 18.1% of TV homes. If we increase the cut-off age to 44, the numbers are 60.7% and 35.6% respectively – increasing the gap further. There is a definite correlation between age and online viewing, with younger viewers increasingly favoring non-traditional platforms. The key 18-49 demographic that all TV networks are eager to capture accounts for 44% of the total TV audience, but 55% of the online viewing audience[20].

This is significant given that the US population is currently skewed in a younger direction. 33.8% of the total population is under 24[21] and have grown up with technology

[19] Source: The Nielsen March 2013 Cross-Platform report.
[20] See Fig. 5 in Appendix for breakdown of Zero-TV households by age
[21] See Fig. 6 in Appendix for U.S. population age structure

at their fingertips. It is well documented that the US population is aging, and while this may pose other significant economic challenges – it is a tremendous positive for the online media and technology sectors. As the current American youth has been inundated with technology and particularly internet-based content, they will continue to favor these platforms as they grow older. Meanwhile, the current segment of the population that still relies on traditional TV outlets will gradually be phased out in favor of digital-focused media stratosphere.

3.3. Illegal streaming and Piracy

Internet piracy via illegal downloads and streaming of video presents a major conundrum to both television networks and online streaming platforms. The challenge is that it is extremely widespread, difficult to monitor or police, and extremely easy for potential users to access. Countless computer experts and hackers find ways to circumvent copyright restrictions with complex codes, upload the decoded video onto hundreds and thousands of websites where it can be streamed for free with the click of a button.

Moreover, improvements in video technology mean that this is not like piracy of old – where low-quality video filmed directly off the TV screen with a camcorder meant that resorting to piracy meant a severe downgrade in the viewing experience. In today's age of digitization, even illegal streams are extremely close to HD quality. Efforts to quell Internet piracy through regulation have either failed or met with severe resistance from Internet lobbies who plead their rights to freedom of expression.

Nick Bilton of the New York Times described the war against Internet piracy as "playing the world's largest game of Whac-A-Mole."[22] To illustrate his point, he uses the example of Pirate Bay, formerly the largest file sharing and torrent download website – a major source of illegal downloading. In early 2012, a number of authorities from different countries won an injunction against the website which prevented users from entering it. In a defiant response, the site administrators "wrapped up the code that runs its entire Web site, and offered it as a free downloadable file for anyone to copy and install on their own servers. People began setting up hundreds of new versions of the site, and the piracy continues unabated." Similar unsuccessful wars have been waged on other websites like MegaUpload and ATDHE. New sites under modified URL names simply reappear and pick up where their predecessors left off.

The episodes that are most ripe to piracy are episodes that are not legally available elsewhere, in other words recent episodes of current shows. Some networks have tried to avoid this problem by making their recent episodes available online for free through Hulu, their own websites, or other platforms. Even this arrangement however still limits their ability to maximize the monetary value that they would otherwise generate in the absence of piracy. At present, there seems to be no solution to piracy and the networks have no choice but to maximize their efforts in containing it, and then simply hoping for the best.

IV. The Competition: The Changing Media Distribution Landscape

As a result of all the factors mentioned above, most broadcast and cable networks have also decided to enter the online space. Some of them host their own content and make new

[22] Bilton, Nick. "Internet Pirates Will Always Win." *NYTimes.com*. The New York Times, 4 Aug. 2012. Web. 21 Dec. 2012. <http://www.nytimes.com/2012/08/05/sunday-review/internet-pirates-will-always-win.html?_r=0>.

episodes available to stream for a certain time period, while others have simply decided to license them out to Netflix or other streaming services. For cable networks, this is an easier transition to make as the subscription model can easily be replicated online – HBO GO is a prime example and success story in this regard.

Broadcast networks however have been severely hit due the impact on advertising. If more people watch TV online, or even through DVR, advertisers are less willing to pay for on-air spots as they did before – thereby hitting broadcast networks' primary revenue source. I have already discussed *American Idol*, which generates $340,000 per 30-second spot. This is still the second most expensive ad slot on TV, and significantly higher than most other shows. However, to add some context, the same spot sold for over $500,000 last year – which was a drop from the 2009 peak of $609,000. The result of this trend is that broadcast networks must seriously consider alternative revenue sources, or else face the threat of possible extinction – at least in the form that we see them as today. On the other side, advertisers are now less reluctant to spend their budgets on TV and increasingly looking online for advertising opportunities.

4.1. Online streaming: Netflix, Hulu and others

Netflix was founded in 1997 as a DVD-rental service, where customers receive DVDs in the mail. It built its reputation on flat fee unlimited rentals with no late fees, and announced its billionth DVD delivery in February 2007. Around the same time, Netflix decided to enter the online streaming space, effectively building upon their existing customer base. In 6 short years, Netflix grew its customer base from 6 million to 29 million, including a 4 million jump in the fifteen months alone. Revenues were a staggering \$3.6 billion, with gross profits of \$973 million and net income of \$17 million[23].

Netflix follows a simple subscription model, \$7.99/month for unlimited streaming of available titles. Their main costs are content acquisition and licensing costs, enabling them to screen titles across various networks, studios and distributors. In terms of television, an obvious point to note is that recent episodes of current shows are not available – but Netflix offers a viable and more convenient alternative to syndication.

A criticism they have faced is that they focus on quantity over quality, with over 9000 movies and 2000 TV shows. However, their steady growth in customers (barring an exodus of customers in 2010 which was due to the company and management's own missteps) seems to indicate this is not a major problem. Either way, Netflix has moved to rectify this by signing content deals with CBS and Disney amongst others.

The biggest development on the content front however is their foray into original programming, with the first season of their own production *House of Cards* released exclusively on Netflix. The reviews and critical reception has been rapturous, and the positive response could pave the way for how the TV industry could move forward. While it is too early to judge the monetary effect of the show, with Netflix having spent \$100million to produce and develop the show, the early signs of success are extremely revealing. Netflix added 2 million subscribers in the first quarter of 2013 when the show came out – as many as it did in the whole of 2012. Robert Wagner in his blog for Metro sums it up perfectly: "people would rather watch a series on

[23] "Netflix: SEC Filings." Netflix: Overview. N.p., n.d. Web. 3 Jan. 2013. <http://ir.netflix.com/sec.cfm>.
[Revenue and profit numbers taken from 2013 annual report]

their own terms, without ads, and they're willing to pay a nominal fee to do so."[24] By releasing the entire season at once with no commercials, Netflix's move is unprecedented and could be a sign of things to come.

This is extremely worrying for broadcast networks, as this model is the diametric opposite of what network television has been built on. A feature of Netflix is that it features no advertising of any kind, and they have indicated that they plan to keep it this way. Since majority of broadcast networks' revenues come from advertising, this is a drastic switch that they need to adjust to.

Interestingly, digital advertising has been growing tremendously – reaching $39bn in revenue in 2012 and surpassing print advertising[25]. Netflix's massive customer base makes it an obvious target for online marketers, and it will be intriguing to note how long Netflix can resist the lure. Other video streaming sites like Hulu Plus does feature video and pop-up advertising – perhaps a more realistic route for networks.

Hulu uses a similarly priced subscription scheme ($7.99/month) but also includes about 6 minutes of advertising per 30-minute episode. While hosting a much smaller inventory of shows, a major advantage for Hulu is that they host episodes of currently running shows and seasons, as early as 24 hours after the on-air screening. Hulu has also experienced tremendous subscriber growth, doubling their subscriber base in the past year ago to 3 million[26].

Hulu's ability to stream current programming is a result of their ownership, as they are a joint venture between NBC-Universal, Fox, and Disney-ABC. Coupled with a content deal with

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[24] Wagner, Robert. "Why House of Cards is the best show on TV. Hint: It's the technology." *Metro Blogs*. Metro - Associated Newspapers Limited, 12 Mar. 2013. Web. 3 Apr. 2013. <http://blogs.metro.co.uk/tv/why-house-cards-best-show-tv-hint-its-technology/>.
[25] Indvik, Lauren. "Online Ad Spending to Surpass Print for First Time in 2012 [STUDY]." Mashable. N.p., 19 Jan. 2012. Web. 2 Feb. 2013. <http://mashable.com/2012/01/19/online-advertising-surpasses-print-2012/>.
[26] See Fig. 7 in Appendix for Hulu and Netflix's consumer growth trends

The CW signed last year, Hulu has access to 4 of the 5 major broadcast network's current shows – along with archived CBS shows. Despite this, Hulu is still struggling to compete with the vast array of options that a competitor like Netflix offers for the same price. As such, Hulu has also entered the original programming to help address this issue.

Hulu actually began airing original content more than a year before Netflix, however their shows followed a similar format to web-series with weekly episodes uploaded – a concept that we will come back to later. The genre of shows they offered were also typically documentary, variety or reality shows as opposed to dramas or sitcoms. As such, these shows tend to have a less widespread following – possibly another explanation for their relatively low subscription level. However, the rapid growth in users as well as monetary success – nearly $700 million of revenues at 2012[27] – mean that Hulu will be a major online streaming player for years to come.

Although Netflix and Hulu are the two dominant players, they face strong competition from many different sides. Amazon is moving in the direction of a similar subscription model, and is gaining customers quickly due to its hybrid model and layered offerings (see Section 3.2 for more detail on Amazon). Coinstar, operator of Redbox DVD kiosks around the country, has also entered online streaming with a private beta launch of 'Redbox Instant' and indications that they are also looking towards original content. The industry is growing increasingly competitive – but the important thing for the networks to note is that it is growing with no signs of slowing down.

[27] Gutelle, Sam. "Hulu Now Over 3 Million Paying Subscribers; 2012 Revenue Nears $700M ." *Tubefilter.com*. Tubefilter, Inc., 26 Dec. 2012. Web. 12 Mar. 2013. <http://www.tubefilter.com/2012/12/26/hulu-plus-subscribers-revenue-700-million/>.

4.2. Electronic sell-through and VOD: Apple, Amazon and Microsoft

In contrast to the unlimited subscription models described in Section 3.1, the other main form of online streaming is known as electronic sell-through (EST). This model is similar to purchasing digital DVDs, where users purchase individual titles – either episode-by-episode or entire seasons – and then download the video file that is theirs to own forever. Alternatively, users can also choose to 'rent' episodes, where they have streaming or download access to the file only for a limited time (usually 1 week). This is typically referred to as Video-on-demand (VOD), and works in much the same way as VOD movie offerings by cable operators like Time Warner and Comcast.

Apple is by far the largest player in this space, with nearly two-thirds the overall market share in 2011. However this is down from 75% in the previous year as Microsoft, Sony and Wal-Mart continue to grow their presence[28]. An important development that has allowed this sector to expand is the ability of gaming consoles like the Xbox and PlayStation (owned by Microsoft and Sony respectively) to double up as internet-enabled computing and storage devices – which can be used to purchase, download and stream media. This is a technological advancement that has also benefited the subscription-based companies, as mentioned in Section 3.1.

EST and VOD combined generated $480 million of sales in 2011, a $95 million increase from the previous year. The continuing addition of more new entrants, and the ability of users to build their own digital libraries that can be accessed offline once downloaded means that this is also a steadily growing market – despite being much smaller than the subscription streaming business.

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[28] Lawler, Ryan. "iTunes Tops Online Movie Sales, But Competition Is Heating Up." *GigaOM - Tech News and Analysis*. N.p., 7 Feb. 2011. Web. 13 Mar. 2013. <http://gigaom.com/2011/02/07/itunes-est-ivod/>.

Amazon provides what I would term a 'hybrid service', with a combination of EST and VOD titles along with a subscription-type model for Amazon Prime customers. Their EST/VOD service is very similar to what the other major competitors offer, with individual titles, episodes or seasons that can be purchased or rented. Their subscription service is different however because it is currently an add-on benefit to Amazon Prime subscription, as opposed to a standalone service. An Amazon Prime membership costs $79 annually, and the main attraction is that it offers free or discounted shipping on a large selection of items from Amazon's marketplace – be it books, clothing, jewelry, or anything else.

However since February 2011, Amazon Prime members are entitled to free access to about one-third of Amazon's movie and TV streaming catalogue. Economically, this makes Amazon an attractive proposition for customers. If viewed solely as a streaming service, Amazon's pricing equates to $6.58 a month, lower than both Netflix and Hulu. Alternatively, if we assume an existing customer base that were already Prime members for the shipping benefits alone – this is effectively a free service.

Where Amazon loses out in comparisons to Netflix and Hulu is their content. At present, Amazon lacks both quality and quantity with about 2000 shows and movies. They have also faced minor consumer backlash due to misleading advertising efforts – claiming they carried over 17,000 titles by counting every single episode of a show separately. Another issue is a lack of current or recent shows that can draw in more subscribers. While they have inked a deal with cable network Epix to access their movie library, their TV library remains relatively scarce. Moreover, Amazon is presently only compatible with PCs, Kindles and Xbox, limiting their potential subscriber growth relative to Netflix.

Nevertheless, Amazon has the scale, resources and desire to provide serious competition in both EST and subscription streaming markets. There are rumors that 'Prime Instant Video' will eventually be spun-off into its own service, providing direct competition to Netflix and Hulu. It is also foreseeable that their support of different devices will only increase over time. Perhaps their biggest advantage is the fact that they are not limited to either model, but can continue to successfully leverage both to provide a perfect blend of current programming, older archives, and original content.

4.3. User-generated content: the emergence of YouTube and internet celebrities

YouTube is arguably the single most influential and revolutionary innovation of the 21st Century to date. It was founded in 2005 under a simple premise – take videos of yourself and share it. Registered users can upload an unlimited number of videos for free. Whether these are kids with camcorders playing pranks on each other, aspiring musicians creating their own songs, compilations of cats performing zany tricks – anything goes. There were no limits or restrictions (barring age-sensitive content), and the best part was that it was open to anyone with a video camera, a computer and an Internet connection.

YouTube capitalized on the social phenomenon that fueled the growth of social networking platforms like Facebook after it – people want to capture and share everything they did. By 2006, the site boasted metrics such as 100 million video views and 65,000 new video uploads – per day[29]. Its meteoric rise led to a 2006 purchase by Google who have since taken the platform to the next level. By 2013, the site boasted more than 1 billion unique visitors every

[29] Reuters. "YouTube serves up 100 million videos a day online." *USATODAY.com*. USA Today, 16 July 2006. Web. 27 Feb. 2013. <http://usatoday30.usatoday.com/tech/news/2006-07-16-youtube-views_x.htm>.

month[30] – with nearly three quarters from outside the United States. It is the third most visited website on the Internet, behind Google and Yahoo.

In terms of the economic model, YouTube has stayed away from charging users and customers – either for views or uploads. Their revenue is entirely advertising based, with pop-up ads or 30-second video commercials often accompanying videos. Approximately 77% of users have revenue sharing agreements, where they receive a percentage of the advertising revenue, but the bulk goes to YouTube. Google does not disclose how profitable the website is, but a YouTube statement prior to the takeover in 2006 stated that the company earned approximately $15 million in revenues a month.

So why is YouTube's success a potential threat to broadcast and cable networks? There are two distinct yet interlinked phenomena that have propelled YouTube into the forefront of television. Firstly, major TV content distributors realized that YouTube was a quick and easy platform to reach a large number of customers. As a result, they decided to take their programming online – at the very least as a supplement to their on-air television programming.

In 2007, CNN and YouTube co-produced the presidential debates and allowed YouTube users from across the country submit questions for the candidates. 5 years later during the next presidential election, the debates were streamed live on YouTube as part of an agreement with ABC. In the interim, the site hosted live streams of events such as the Indian Premier League cricket tournament, the Ultra Music Festival, and other live events – typically the domain of cable television or premium pay-per-view television.

Major media outlets including the broadcast and cable networks, news networks, record labels created their own accounts and began uploading content. YouTube reached an agreement

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[30] "Statistics - YouTube ." *YouTube*. Google, Inc., n.d. Web. 13 May 2013. <http://www.youtube.com/yt/press/statistics.html>.

with MGM, Lionsgate and CBS whereby the companies posted full-length movies and episodes – of course getting a cut of advertising revenue in return. Other networks posted shorter clips and segments: sports highlights, behind-the-scenes segments, promotional videos, music videos, and interviews – the list goes on and on.

Despite this commercial invasion, YouTube has maintained a balance between its core of early adopters and the new breed. Grainy home videos of kids blowing up Coke bottles with Mentos coexist alongside slickly packaged, high-definition shorts from CBS, ESPN and others. This leads me to the second phenomenon that I mentioned earlier. In addition to the mainstream content offered by the traditional media powerhouses, the appetite for user-generated content remained. While the odd one-off individual video would become wildly popular, or go 'viral' as the terminology goes, an increasing trend was for users to set up accounts or 'channels' and update them with weekly videos. This became increasingly popular, and viewers were able to 'subscribe' to specific user channels and would regularly tune in to watch at their convenience once a video was uploaded.

One of the most successful examples of this was Keenan Cahill, who in 2010 when he was aged 15 started posting videos of himself lip-synching popular, top-40 songs. His comical facial expressions made his videos extremely popular, to the point that he was even able to get the original artists of songs to feature in his video. The most notable example is 50 Cent, who guest starred in Cahill's 'rendition' of his hit song *Down on Me*. Other notable guests have included the cast of Glee, the San Francisco Giants and Lil Jon. His videos have amassed over 720 million views, he has appeared on numerous talk shows and has even had short documentaries made about him. When one keeps in mind that this was simply a kid who recorded videos on his webcam in his basement, his ascent to celebrity status was and is truly remarkable.

Cahill was one of many, and it wasn't long before YouTube caught on to the tremendous opportunity that their own platform offered. Coupled with the influx of mainstream content from licensed providers, YouTube redesigned their interface and officially launched the concept of channels. There was one major difference though. While independent user-created channels continue to exist, the launch of 150 YouTube-sanctioned channels was announced. What distinguishes these channels was that YouTube provided them with funding to create and develop content – effectively acting as a production studio[31].

The range of channels varied. Some were pre-existing channels created by users that YouTube took under its wing; others were partnerships or agreements with established networks like ESPN. A third tranche of channels were developed from scratch, and featured a combination of unknown home video makers and reputable celebrities. Michael Cera and Sarah Silverman for instance, have their own comedy channel.

These channels feature original programming that can serve as a viable alternative to traditional television – in not right now then definitely in the near future. The advantage of YouTube is that it is easier for content creators to gather and acquire a following without having to spend hundreds of thousands of dollars on promotions and marketing. In fact, a growing number of producers prefer this route. YouTube's VP of programming Robert Kyncl is very clear about the company's vision: "Quality can come from anywhere. It can come from users, pros, semi-pros. We want to make sure that we have all of them, that we don't have just one class of content creators, that we have all of them."

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[31] Murphy, Samantha. "How YouTube Channel Owners Are Building Audiences [INFOGRAPHIC]." *Mashable*. N.p., 13 Nov. 2012. Web. 13 May 2013. <http://mashable.com/2012/11/13/youtube-channel-owners/>.

Take the example of *Cyanide and Happiness*, a hugely successful web comic strip whose owners decided they wanted to expand into creating a weekly-animated comedy sketch series in February 2013. Despite holding discussions with several TV networks, they decided to turn down the deals that were offered to them and run their show on the Internet. They were able raise funds through an online crowd-funding campaign[32], and will launch their show in early 2014 – either on YouTube or on their own website (probably both) – free to air. At present, the creators of C&H are the exception rather than the rule but it is easy to see this happening more and more.

It is also important to note that while YouTube remains predominantly free-to-air and dependent on advertising for revenue, the site does offer certain movie titles for rental much like Apple, Amazon and the other platforms in Section 3.2 do. If their experimentation with original channels is successful, there remains the possibility that they will begin charging for specific channels or combinations of channels to provide an additional revenue stream – in other words replicate what satellite and cable operators do now. This is a fascinating thought, as it could be the foundation of what the television industry looks like in a few years.

4.4. Cable and Telephony: AT&T, Verizon, DirecTV and others.

The Telecommunications Act of 1996 was an important event in the history of television, as broke the monopolies in the telecommunications and allowed for cross-ownership of media companies. The Act removed many of the barriers between the telecommunications industry and the cable industry, and therefore made it possible for consumers to receive local telephone service from their cable company and vice versa. Although designed to encourage competition, the Act actually led to more consolidation in the industry with AT&T, Verizon, Sprint and T-Mobile now the major players.

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[32] DenBleycker, Rob, Dave McElfatrick, Matt Melvin, and Kris Wilson. "The Cyanide & Happiness Show." *Kickstarter*. N.p., 15 Feb. 2013. Web. 17 Feb. 2013. <http://www.kickstarter.com/projects/explosm/the-cyanide-and-happiness-show>.

Until now, the telecom industry has stayed away from the cable business – but with more internet-based calling services like Google Voice, Skype and FaceTime eating into their margins, these firms are now looking to cable as the next expansionary step. Verizon FiOS and AT&T U-verse both offer bundled telephone, Internet and cable services in the same way that traditional cable operators like Time Warner and Cablevision do. However, their attractive pricing and more extensive phone coverage have enabled them to capture a lot of cable customers. The pair has around 4 million subscribers each, double what it was 5 years ago.

As they grow in size however, it is likely that they may play a more active role in creating content than simply distribution. As mentioned earlier, Verizon has already tied up with Redbox Instant and is searching for original programming. While currently not as big a threat to broadcast and cable networks as the Internet companies are, the telecom industries may yet provide additional competition for the networks to deal with. The same holds true for the traditional cable and satellite operators, with DirecTV scheduled to premiere their original production titled 'Rogue' in April 2013.

V. The Response: can the networks stay competitive?

It is therefore clear that the success and rapid adoption online streaming and VOD leaves the broadcast and cable networks teetering and increasingly vulnerable. That being said, each of these networks are large entities with significant resources at their disposal to counter this effect and maintain their present levels of success and following. There are therefore two key questions that need to be asked: what is the best strategy for the networks to adopt, and what impact will this have on them and the industry as a whole?

5.1 Premium networks

Since on-air advertising revenues have been impacted most severely, one possibility is a shift to an almost entirely subscription-based model where advertising income is meagre to non-existent. This point is best illustrated and elucidated by Jeff Bewkes, the CEO of Time Warner who says "Two to three years from now, every network will look like HBO."[33] It is an intriguing thought from a man with first-hand knowledge of the market – HBO is a subsidiary of Time Warner and a major chunk of their profitability.

Bewkes' HBO has undoubtedly been the most successful network in coming to terms with the surge in online viewing. The network introduced HBO GO in 2010 as a beta launch, followed by an official launch in January 2012. HBO GO is an online service that features 600 hours of programming from its catalogue of movies, comedy specials and most importantly its highly acclaimed original programming. Classic shows such as *Six Feet Under* and *Entourage* along with current hits like *Boardwalk Empire* and *Game of Thrones* are exclusively available through HBO's online platform in high definition.

Access to the service is dependent on a cable subscription – all cable subscribers to HBO also have access to HBO GO across all their devices. According to Bewkes, if people are subscribing and paying for certain content, "they deserve to have those on demand on their TV and on every other device they own." Currently, HBO GO is accessible through laptops, mobile devices (iPhone and Android), tablets (iPad and Kindle), Roku and Xbox Live. Of HBO's 28 million subscribers, one million downloaded the iPad app in the first week of its release in April

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[33] Emmich, Erika. "Predictions: The Future of TV." *CNBC - Inside Wealth*. CNBC, 12 May 2013. Web. 8 Oct. 2013. <http://www.cnbc.com/id/47285315/page/7>.

2011[34]. That number swelled to 3 million within 3 months and 6 million in a year. This only reinforces the trend that TV viewers are shifting their regular habits towards alternative platforms and devices.

The catch however is that the service continues to be linked to a cable subscription – you *must* have a cable subscription to access HBO GO on all your other devices. At present, there is no standalone version that would allow users to access HBO content online on all these various platforms and ditch their cable subscription – in other words what Netflix currently has. The reason for this has been fear of losing their existing customer base of cable subscribers – a more profitable source than web subscribers.

Using Netflix and Hulu as benchmarks, HBO would likely be forced to charge a price of $7-$8 compared to the $15-$17 they currently charge cable subscribers. There are two sides to this argument. One is that HBO doesn't actually receive the entire $15-$17 as a cut goes to the cable provider; switching to a standalone service would enable them to cut out the middle man and capture the entire amount. On the flip side, the infrastructure and marketing costs would skyrocket and reduce HBO's profitability. It is also a case of "don't fix what isn't broken" and the current model is working just fine for HBO.

There are whispers that a standalone service may be in the works[35], and this would probably hinge on the price that HBO would be able to charge. An interesting online campaign by users hosted on a website entitled takemymoneyhbo.com aimed to ascertain how much a typical user would pay for a standalone service. The average came to approximately $12 with the

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[34] Kats, Rimma. "HBO exec: HBO GO iPad app has seen more than 6M downloads since launch." *Mobile Marketer*. Napean LLC, 12 Apr. 2012. Web. 13 Feb. 2013. <http://www.mobilemarketer.com/cms/news/television/12516.html>.

[35] McMillan, Graeme. "HBO considering offering HBO Go without cable subscription." *Digital Trends*. N.p., 22 Mar. 2013. Web. 12 Apr. 2013. <http://www.digitaltrends.com/home-theater/hbo-considering-streaming-subscriptions-not-tied-to-cable/>.

higher responses being in the range of $20-$25[36]. However, this is in all probability an inflated figure as a large proportion of users' responses would have been overstated in order to encourage HBO to pursue the venture. Nonetheless, it remains a distinct possibility that would transform HBO from a traditional cable network to being a major streaming player rivalling Netflix. Notwithstanding any changes or improvements HBO GO could undergo, the underlying fact remains that HBO has successfully adapted to the advent of online programing. So why have they been so proactive and why haven't other networks been able to replicate their success?

A major consideration that we haven't yet brought up in this section is the fact that HBO is a premium cable network. Advertising has never been a consideration or a component of their revenue stream, and they have always focused on subscriptions and subsequent DVD or licensing sales. When one watches a movie or show on HBO, there are no commercial breaks. The only ads HBO runs are promos for their own programming schedule, and these are only telecast in between telecasts and not during.

In this way, HBO is more similar to Netflix than it is to a traditional broadcast or cable network. The same can apply to Showtime, Starz and other premium networks – they just lacked the scale, breadth and popularity of content that HBO possessed to launch a similar offering to HBO GO. In the future, it is very likely that this may change. The transition made by HBO is not as easy for basic cable and broadcast networks as they are still reliant on advertising. In 2011, 43% of basic cable news networks' revenue came from advertising with 54% coming from

[36] Lawler, Ryan. "How Much Would The Average Person Pay For A Standalone HBO GO Subscription?." *TechCrunch*. AOL, 5 June 2012. Web. 12 Apr. 2013. <http://techcrunch.com/2012/06/05/hbo-go-without-hbo/>.

subscriptions[37][38]. For broadcast networks of course there is no subscription revenue and they rely almost entirely on advertising.

5.2 Basic Cable networks

At this stage, it is important separate broadcast and cable networks since they operate in fundamentally different ways. Let us first talk about cable networks. Given their similarity to premium networks and their subscription-driven model, it is conceivable that networks may follow HBO's example and essentially move online. Of course, it is vital to note that grouping all cable networks together is not necessarily appropriate given the wide range of genres each network offers which makes it more or less suited to online streaming.

The way I think about cable networks is by further differentiating them into "live" and "non-live" categories. "Live" refers to networks that are constantly dealing with live events and real-time information. This primarily includes news channels and sports networks such as ESPN, CNN and Bloomberg TV. The nature of programming on these networks lends itself to advertising, and as such it is not impossible to imagine a sustainable future for these networks. All the major American sports have timeouts built in that allow for commercial breaks, while the immediacy of the news and access to information makes "live" programming palatable, and I believe these networks can continue to survive and thrive in the near term.

Over the longer term however, a shift to online streaming seems inevitable. One of the major appeals of watching sports on cable as opposed to the internet is the ability to watch on a big screen in high definition, aided by surround sound and other features to enjoy a more immersive experience. As mentioned earlier, it is becoming increasingly possible to watch online

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[37] Holcomb, Jesse, Amy Mitchell, and Tom Rosenstiel. "Cable: By the Numbers." *The State of the News Media 20132*. Pew Research Center Project for Excellence in Journalism, n.d. Web. 2 Jan. 2013. <http://stateofthemedia.org/2012/cable-cnn-ends-its-ratings-slide-fox-falls-again/cable-by-the-numbers/>.
[38] See Fig. 8 in Appendix for cable news revenue streams

content on a TV set –whether it is through a simple HDMI cable or hardware devices like Roku. With fast internet connections, picture quality can also be matched.

The National Basketball Association (NBA), for example, already has its own online service that allows the viewer to stream 40 games weekly. At present this only includes games that are not telecast on a broadcast or cable network[39], but it could potentially be expanded to encompass all fixtures. Additionally, giving users access to all matches potentially increases the network's reach and fan base. Most major sports leagues often have matches going on simultaneously. Giving people the freedom to watch the game they want, as well as increased access to games involving teams they support is extremely valuable, and something that can be monetized effectively.

In terms of news, it can be argued that the immediacy factor is more effectively captured by the internet as opposed to television. With tools like Twitter that allow people to type and transmit information in real time, the internet is by far the fastest way of disseminating information. As such, it can be argued that news networks would be better served moving online and increasing the integration between online media and on-air media. This is reflected in the steady decline in cable news viewership. The three largest news networks – CNN, Fox News and MSNBC – have seen a 20% decline in viewership between 2008 and 2012 – down from 4.1 million viewers to just 3.3 million[40]. More and more Americans now rely on the internet to get

[39] The NBA has agreements in place with ABC, TNT and ESPN to broadcast up to 10 live games every week – usually involving the most popular teams. In addition, the NBA also runs its own cable network NBA TV which also screens 5-6 games a week. There are approximately 50 games per week during the regular season.
[40] Holcomb, Jesse, Amy Mitchell, and Tom Rosenstiel. "Cable: By the Numbers". *The State of the News Media 20132*. Pew Research Center Project for Excellence in Journalism, n.d. Web. 22 Jan. 2013. <http://stateofthemedia.org/2012/cable-cnn-ends-its-ratings-slide-fox-falls-again/cable-by-the-numbers/>.

their news, and this has been reflected by the rapid drop in print media and newspaper circulation[41].

Both news and sports networks have already begun making the transition to online platforms. CNN already allows live streaming of its news network provided you have subscribed to their cable network – similar to HBO. ESPN has an online channel called ESPN3 which follows the same concept. The interesting thing about ESPN3 is that it also features live programming that is not aired on cable, such as soccer matches, college basketball and other 'non-conventional sports'. As the two largest networks in their respective fields, it is a telling indication that the online space is seen as a lucrative and viable source of future growth.

"Non-live" networks are those that offer more conventional scripted shows, variety programs, reality shows and other pre-recorded content. These include FX, USA, Comedy Central, MTV, Lifetime and others. These networks face a more difficult challenge in terms of sustaining a cable presence, as consumers are less tolerant of advertisements as they are during news and sports broadcasts. I also want to reiterate that even if the "live" networks do embrace online streaming, they are still likely to secure a large percentage of revenues through advertising given the rise of online marketing. In their case, advertising income and online streaming are not mutually exclusive and can be achieved simultaneously – an idea I will come back to later.

With regular 30-minute and 60-minute shows however, the acceptable threshold of commercial interruption has reduced drastically – especially since the introduction of ad-free services like Netflix. At present, cable networks have adopted two approaches. One is to host current episodes of shows on their website for free with some advertising – about 1-2 minutes in total. The other is to outsource this to services like Hulu, and thereby forgo any potential

[41] Daily circulation has declined 30% from 1990 to 2010 and currently stands at 43.4 million, a number that is likely to have gone down further since.

advertising revenue to them, but instead collect a licensing fee. This is an interesting option as it simply replaces one revenue stream with another. Additionally, the intrinsic focus on subscription means that cable networks can eventually also break off and create their own online service – again following HBO's example – and either eliminate advertising altogether or focus on online ads. Either way though, the signs yet again point towards a shift towards online broadcasting.

Having considered the factors above and arrived at the conclusion that online streaming is the way forward, my immediate reaction was to ask – is this really possible? If so, why hasn't this happened already? To reiterate, what I am suggesting is that consumers will eventually get rid of their cable connection and instead subscribe to a variety of standalone services. In other words, you pay for what you watch and get rid of the channels that you don't.

This 'a la carte' subscription model would be beneficial to the customer as it would lower their cable bills substantially. As mentioned in Section 2, networks sell their services to cable providers for a wholesale price – who then bundle different offerings together and sell them to retail customers. There is major discrepancy between what different networks charge, however the end product is often packaged as an "all or nothing" deal where customers have no choice but to subscribe for a large amount of channels and pay $70-$80 in the process. While having hundreds of channels is great and gives the viewer more content and options – it is less useful when placed in the context of viewing habits.

According to Dustin Rowles of Uproxx Media, most customers only watch 10-12 channels of the 100 or more channels they have access to[42]. An analysis of the wholesale prices

[42] Rowles, Dustin. "How Much Do You Pay for Each of Those Cable Channels You Don't Watch?" *The Culture of What's Buzzing | UPROXX*. Uproxx Media, 20 Mar. 2012. Web. 24 Mar. 2013. <http://www.uproxx.com/tv/2012/03/how-much-do-you-pay-for-each-of-those-cable-channels-you-dont-watch/>.

of individual networks shows that the ESPN channels[43] in sum cost $5.28 and the Fox Sports channels[44] cost $2.90. No other cable network costs more than $1, with only 8 other networks costing more than 50c[45]. In all, sports channels account for about 40% of all cable fees. For someone who doesn't watch sports, that's an immediate and substantial drop in their cable bill. Rowles goes on to create a potential basket of cable viewing where he has 14 channels including 6 of the 12 most expensive networks. He assumes a retail cost of double the wholesale price, and arrives at a bill of $17.62 – significantly lower than the $70 one would otherwise pay. Even adding 10 more channels would not take this figure past $25 so it definitely makes sense for the customer.

While this would be fantastic and preferable to most cable customers, the networks themselves would lose out. Rowles goes on to explain how this would hurt networks:

"*Let's say, in this example, that there are 100,000 cable subscribers in your city. Let's say you wanted to buy only the FX Network, and the FX Network would cost you $5 per month. Let's also say that maybe 20 percent of the 100,000 cable subscribers in your area wanted FX. In an a la carte model, FX would earn $100,000 from the 20,000 subscribers. Even if, in an a la carte model, you made subscribers pay double for individual channels, FX still earns only $200,000.*

However, in the all or nothing model, if you want one channel, you have to pay for them all, so FX earns $5 from all 100,000 subscribers, or $500,000. Eighty percent of their revenue comes from the 80,000 subscribers who don't want their channel. Changing to an a la carte model would essentially deprive FX of 80 percent of its revenue."

Although Rowles' basic idea is correct, his analysis is somewhat flawed in the cable landscape as FX would not receive the full $5 retail fee. Cable networks receive only the

43 This includes ESPN ($4.08), ESPN2, ESPN Deportes, ESPNews, ESPN Classic and ESPNU.
44 This includes Fox Sports Net ($2.37), FS College and FS Espanol. Fox Soccer is an additional $0.16.
45 See Table 2 in Appendix for wholesale prices of all cable networks

wholesale price from carriers, which for FX is $0.42. Therefore in the all or nothing model, FX would get $42,000 per 100,000 subscribers – compared to $8,500 in the a la carte model using the same assumptions as above. However in the online space – and I believe Rowles had a similar idea in mind – FX can in fact eliminate the 'middle man' and capture the entire $5. In this scenario, FX could in fact double its revenue.

A major hurdle that will prevent this from coming to fruition is the relative power of cable carriers such as Time Warner, Cablevision and Verizon. While larger networks have the resources to branch off on their own, many smaller networks like The Food Network, Travel Channel and C-Span may find it harder to survive without the support of cable. Eventually though, market forces dictate that the networks with lower viewership will be forced to exit the industry anyway. Additionally, the increasing ease of hosting and providing content online may facilitate the eventual transferal of these networks online – perhaps in a web-series format that has proved successful on YouTube and other platforms.

All things considered, I believe that cable networks will eventually move online and remain successful. This may spell the end for cable carriers, although it is possible that standalone services and bundled cable offerings may be able to co-exist. Moreover, the carriers themselves have indicated that they are willing to experiment with online programming in order to stay competitive. This picture is made even murkier by the fact that they control majority of internet and mobile access – giving them bargaining power over any networks that try to break away and move online. For this reason, the status quo is likely to continue for the next 10 years or so but it will be interesting to see what happens beyond that.

5.3 Broadcast networks

Broadcast networks face arguably the biggest threat from online streaming as they depend largely on advertising revenue. With no subscription model in place, it is harder for them to switch to an online model. The idea that broadcast networks could also move to a subscription-based method is not unthinkable, but is likely to lead to outcry over the networks' role in society. A large part of why the networks are free is to ensure equal access to content and programming regardless of economic or social standing. Additionally, broadcast networks use 'spectrum' – a public resource – to transmit their signals. The networks on their part are required to "serve the public interest, convenience and necessity" of the American population.

The flip side of this argument is that only 10% of Americans watch broadcast networks "over-the-air" without an ancillary cable connection. In the future, this number may reduce further and people's willingness to pay for broadcast networks may increase. Cablevision recently sent out surveys in which they asked their customers whether they would pay to watch broadcast networks and how much. Given the political and social implications, I think it is unlikely that a subscription model will work for broadcast networks. That being the case, they need to find different ways to position and calibrate themselves in the face of online competition.

When talking about cable networks, I alluded to the idea that adopting the internet as primary platform need not necessarily eliminate the possibility of advertising revenue altogether. I want to explore that idea further now as I believe it is integral to the broadcast networks' survival. It is undeniable that consumers' appetites are now heavily skewed towards uninterrupted viewing. For broadcast networks to continue relying on advertising revenue while providing programming with little or no commercial breaks, these two goals appear incompatible. In this respect, I believe that online advertising may be the solution.

Digital advertising has been steadily on the rise, as marketers find more and more innovative ways to reach an increasingly tech-savvy audience. Nielsen's 2013 *Advertising Audiences* report gives us some insight into how broadcast networks can tap into this phenomenon[46]. It states that 36% of viewers visited a social networking site during a program, 33% shopped while viewing, 29% looked up information related to the program on show, and 20% looked up product information of an advertisement[47]. The increase in simultaneous consumption of these two media gives marketers a unique opportunity to link television and the internet more closely together.

Comcast's X1 platform is a perfect example of this as it utilizes cloud computing to integrate social networking. According to Comcast CEO Brian Roberts, "what's exciting about X1 is that it brings the best of the Internet and the navigation and the search so you can integrate easily with Facebook [and] Twitter." Twitter itself has become an integral part of how viewers consume shows, with almost every program on the air making use of targeted 'hashtags' to encourage viewers to discuss the show online. Dick Costolo, Twitter's CEO describes the platform as evolving into a "second screen", and forecasts even tighter integration moving forward.

Broadcast networks currently have a slight online presence, with CBS for example making current episodes of their shows online after the on-air telecast for a limited period of time. These streams will feature 2-3 minutes of advertising. A major concern for all networks is to retain customers despite having ads, and therefore making the ads appealing. According to

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[46] "Advertising & Audiences: The State of the Media ." *Reports & Insights; Nielsen*. Nielsen, 19 Apr. 2013. Web. 19 Apr. 2013. <http://www.nielsen.com/us/en/reports/2013/advertising---audiences--the-state-of-the-media.html>.

[47] See Figure 9 in Appendix for in-program customer behavior

Nielsen, 46% of viewers trust television ads while only 32% trust online video ads[48]. Interestingly, 52% trust branded websites and 36% trust in-program product placements – both potential areas that broadcast networks can look to exploit.

The key to the internet however is innovation. When programming is relayed to each customer individually over the internet, networks can tailor their ads specifically towards individual viewers. For instance, 33% of mobile connected users find ads that offer custom information based on their location, while 20% enjoy ads with interactive features. The malleability of advertising opens up a whole new door for marketers, and broadcast networks should realize and capitalize on this. There is a lot of demographic information available regarding who watches which shows on what networks, and advertisers will be willing to pay a premium to reach their target audience through online television.

Online ad spending has been increasing rapidly, growing by 23% in both 2011 and 2012 to reach its current level of $39.5 billion. While this is some way short of the $64.8 billion spent on TV ads, the gap is expected to narrow tremendously. By 2016, online ad spend is expected to rise to $62 billion while TV ad spend is only expected to grow to $72 billion[49]. There is a definite shift in the balance of advertising dollars, and it is important for broadcast networks to take steps in order to cash in and stay relevant.

Given the multitude of factors at play, it is exceedingly difficult to predict exactly how broadcast networks will adapt to the internet. Since online streaming is currently more prevalent amongst younger people under the age of 35, and more than 50% of the American population is above 35 – including 13% above 65% - I predict that demand for broadcast networks will continue to remain steady. Over time though, I think that networks will tweak the focus of their

[48] See Figure 10 in Appendix for detailed metrics on digital consumers' attitudes to advertising
[49] See Figure 11 in Appendix for comparison of TV and online ad spend projections

programming towards live events such as news, sports and special events. More and more of the target primetime audience, traditionally the 18-49 age bracket will be consuming content online in the long run – hence the networks will also have to eventually develop their online presence. Moreover, I am confident that they can do so without modifying their advertising-driven model, and that this will eventually be beneficial to all parties.

VI. Conclusion and Key Takeaways

In conclusion, I believe that the television industry is on the path to a drastic paradigm shift – from satellite and cable connections to internet platforms. This is a factor of changing consumer tastes, technological progress and increasing competition. Online streaming has increasingly become the norm especially amongst younger viewers, who access programming through services such as Netflix, Hulu, YouTube and Roku. The ability to create and share content via the internet, and transmit it across different devices has made it easier for new players to enter the market and encourage innovation.

All of this has led the traditional television networks to re-evaluate the way they operate. The loss of advertising revenue suffered by broadcast and cable networks due to increased online viewership has forced their hand, and left them with no option but to engage with the internet as a medium. Keeping in mind this is an ongoing process, the amount of data and hence the quality and reliability of conclusions we can draw are limited. Nevertheless, the words and actions of all the leading networks indicate a change in mindset and an acceptance that the internet is the future. What remains to be seen is how this can best be monetized – whether through licensing, subscription fees or online marketing. The demand for traditional TV will remain, but I believe that within the next 50 years – cable as we know it will cease to exist and everyone will consume their content via the internet.

This paper has addressed the implications of online streaming only to the television networks. Despite referring to them, I have chosen to stay clear of an in-depth analysis of the service providers and how they will respond. There is simply not enough information out there as yet in order for me to give a truly informed commentary or analysis of the matter with adequate proof or evidence. While I am confident in the networks' ability to withstand pressure from the competitors mentioned in Section 3, I am much less certain about the future of service providers and where they fit in. At the end of the day, what is certain is that the next few years promises to be a defining period in the history of television – one which will no doubt be looked back upon as a transformative era.

VI. Bibliography

- Adage. "The Cost Of 30 Second TV Commercial On Primetime TV Fall 2012." *Domain Shane: Brick and Mortar Meets the Internet*. N.p., 24 Oct. 2012. Web. 22 Jan. 2013. <http://domainshane.com/the-cost-of-30-second-tv-commercial-on-primetime-tv-fall-2012-and-you-only-want-to-pay-what-for-the-domain/>.
- Bilton, Nick. "Internet Pirates Will Always Win." *NYTimes.com*. The New York Times, 4 Aug. 2012. Web. 21 Dec. 2012. <http://www.nytimes.com/2012/08/05/sunday-review/internet-pirates-will-always-win.html?_r=0>.
- Blumenthal, Howard J., and Oliver R. Goodenough. *This Business of Television*. Rev. and updated 3rd ed. New York: BillBoard Books, 2006. Print.
- "Channel Store | Roku Streaming Player." *Roku.com*. Roku, Inc. Web. 23 Feb. 2013. <http://www.roku.com/channels/#!browse/most-watched>.
- "CBS (NYSE:CBS) stock analysis and investing." *Trefis: What's Driving the Stock*. Trefis, Web. 5 Jan. 2013. <http://www.trefis.com/company?hm=CBS.trefis&from=widget%3Aforecast&ovd_urlid=1930224#>.
- DenBleycker, Rob, Dave McElfatrick, Matt Melvin, and Kris Wilson. "The Cyanide & Happiness Show." *Kickstarter*. N.p., 15 Feb. 2013. Web. 17 Feb. 2013. <http://www.kickstarter.com/projects/explosm/the-cyanide-and-happiness-show>.
- Emmich, Erika. "Predictions: The Future of TV." *CNBC - Inside Wealth*. CNBC, 12 May 2013. Web. 8 Oct. 2013. <http://www.cnbc.com/id/47285315/page/1>.
- Fixmer, Andy. "Nielsen Cuts 500,000 U.S. TV Homes on Census, Web Viewing". Bloomberg - Business, Financial & Economic News. Bloomberg L.P., 25 Sept. 2012. Web. 13 Jan. 2013. <http://www.bloomberg.com/news/2012-09-25/nielsen-cuts-u-s-tv-homes-by-500-000-on-census-shift-to-web.html>.
- Friedman, Wayne. "TV Ad Revs To Dip, More Digital Growth." *MediaPost Publications 2013 Forecast*. MediaPost Communications, 18 Jan. 2013. Web. 1 Feb. 2013. <http://www.mediapost.com/publications/article/191398/2013-forecast-tv-ad-revs-to-dip-more-digital-gro.html#axzz2MAx3GuVY>.
- Gutelle, Sam. "Hulu Now Over 3 Million Paying Subscribers; 2012 Revenue Nears $700M ." *Tubefilter.com*. Tubefilter, Inc., 26 Dec. 2012. Web. 12 Mar. 2013. <http://www.tubefilter.com/2012/12/26/hulu-plus-subscribers-revenue-700-million/>.
- Holcomb, Jesse, Amy Mitchell, and Tom Rosenstiel. "Cable: By the Numbers" *The State of the News Media 2013*. Pew Research Center Project for Excellence in Journalism, n.d. Web. 22 Jan. 2013. <http://stateofthemedia.org/2012/cable-cnn-ends-its-ratings-slide-fox-falls-again/cable-by-the-numbers/>.
- Indvik, Lauren. "Online Ad Spending to Surpass Print for First Time in 2012 [STUDY]." *Mashable*. N.p., 19 Jan. 2012. Web. 2 Feb. 2013. <http://mashable.com/2012/01/19/online-advertising-surpasses-print-2012/>.
- Jayson, Dean. "How Netflix Is Quietly Shaping the Online Advertising Industry."*Huff Post Tech*. The Huffington Post, 21 Dec. 2012. Web. 15 Feb. 2013. <http://www.huffingtonpost.com/dean-jayson/how-netflix-is-quietly-sh_b_2339132.html>.

- Kafka, Peter. "What Cable Subscribers Pay for Channels They Don't Watch."*AllThingsDigital*. The Wall Street Journal, 8 Mar. 2010. Web. 1 Apr. 2013. <http://allthingsd.com/20100308/hate-paying-for-cable-heres-the-reason-why/>.
- Kats, Rimma. "HBO exec: HBO GO iPad app has seen more than 6M downloads since launch." *Mobile Marketer*. Napean LLC, 12 Apr. 2012. Web. 13 Feb. 2013. <http://www.mobilemarketer.com/cms/ne ws/television/12516.html>.
- Lawler, Ryan. "How Much Would The Average Person Pay For A Standalone HBO GO Subscription?." *TechCrunch*. AOL, 5 June 2012. Web. 12 Apr. 2013. <http://techcrunch.com/2012/06/05/hbo-go-without-hbo/>.
- Lawler, Ryan. "iTunes Tops Online Movie Sales, But Competition Is Heating Up."*GigaOM - Tech News and Analysis*. N.p., 7 Feb. 2011. Web. 13 Mar. 2013. <http://gigaom.com/2011/02/07/itunes-est-ivod/>.
- McMillan, Graeme. "HBO considering offering HBO Go without cable subscription." *Digital Trends*. N.p., 22 Mar. 2013. Web. 12 Apr. 2013. <http://www.digitaltrends.com/home-theater/hbo-considering-streaming-subscriptions-not-tied-to-cable/>.
- Murphy, Samantha. "How YouTube Channel Owners Are Building Audiences [INFOGRAPHIC]." *Mashable*. N.p., 13 Nov. 2012. Web. 13 May 2013. <http://mashable.com/2012/11/13/youtube-channel-owners/>.
- "Netflix: SEC Filings." *Netflix: Overview*. N.p., n.d. Web. 3 Jan. 2013. <http://ir.netflix.com/sec.cfm>.
- "Play vs. Stream: The Modern Gaming Console." *Nielsen Newswire*. Nielsen, 13 Mar. 2013. Web. 1 Apr. 2013. <http://www.nielsen.com/us/en/newswire/2013/play-vs--stream--the-modern-gaming-console.html>.
- Poggi, Jeanine. "Cable TV Networks TNT, MTV, Nickelodeon Seeing Ratings Drop."*Adage.com*. The Advertising Age, 14 May 2012. Web. 16 Oct. 2012. <http://adage.com/article/media/cable-tv-networks-tnt-mtv-nickelodeon-ratings-drop/234702/>.
- Reuters. "YouTube serves up 100 million videos a day online." *USATODAY.com*. USA Today, 16 July 2006. Web. 27 Feb. 2013. <http://usatoday30.usatoday.com/tech/news/2006-07-16-youtube-views_x.htm>.
- "Roku Products | Roku Streaming Player." *Roku.com*. Roku, Inc. Web. 23 Feb. 2013. <http://www.roku.com/roku-products>.
- Rowles, Dustin. "How Much Do You Pay for Each of Those Cable Channels You Don't Watch?" *The Culture of What's Buzzing | UPROXX*. Uproxx Media, 20 Mar. 2012. Web. 24 Mar. 2013. <http://www.uproxx.com/tv/2012/03/how-much-do-you-pay-for-each-of-those-cable-channels-you-dont-watch/>.
- Shaw, Brian. "Amazon Is Taking Over the World… of Streaming Video." *The Motley Fool*. N.p., 29 Oct. 2012. Web. 22 Mar. 2013. <http://beta.fool.com/brewcrewfool/2012/10/29/amazoncom-is-taking-over-the-world-of-streaming-vi/15311/>.
- "State of the Media: U.S. Digital Consumer Report Q3-Q4 2011." *Reports and Insights: Nielsen*. Nielsen, 23 Feb. 2012. Web. 10 Oct. 2013. <www.nielsen.com/content/dam/corporate/us/en/reports-downloads/2012-Reports/Digital-Consumer-Report-Q4-2012.pdf>.

- "State of the Media: U.S. Digital Consumer Report Q4 2012." *Reports and Insights: Nielsen*. Nielsen, 09 Nov. 2012. Web. 10 Oct. 2013.
- "The Nielsen March 2013 Cross-Platform Report: Free to Move Between Screens."*Reports and Insights: Nielsen*. Nielsen, 8 Mar. 2013. Web. 15 Mar. 2013. <http://www.nielsen.com/us/en/reports/2013/the-nielsen-march-2013-cross-platform-report--free-to-move-betwe.html>.
- "United States Age structure - Demographics." *Index Mundi - Country Facts*. Original Source: CIA World Factbook, 21 Feb. 2013. Web. 4 May 2013. <http://www.indexmundi.com/united_states/age_structure.html>.
- Wagner, Robert. "Why House of Cards is the best show on TV. Hint: It's the technology." *Metro Blogs*. Metro - Associated Newspapers Limited, 12 Mar. 2013. Web. 3 Apr. 2013. <http://blogs.metro.co.uk/tv/why-house-cards-best-show-tv-hint-its-technology/>.

VII. Appendix

Figure 1: Time spent watching different mediums by age group and ethnicity

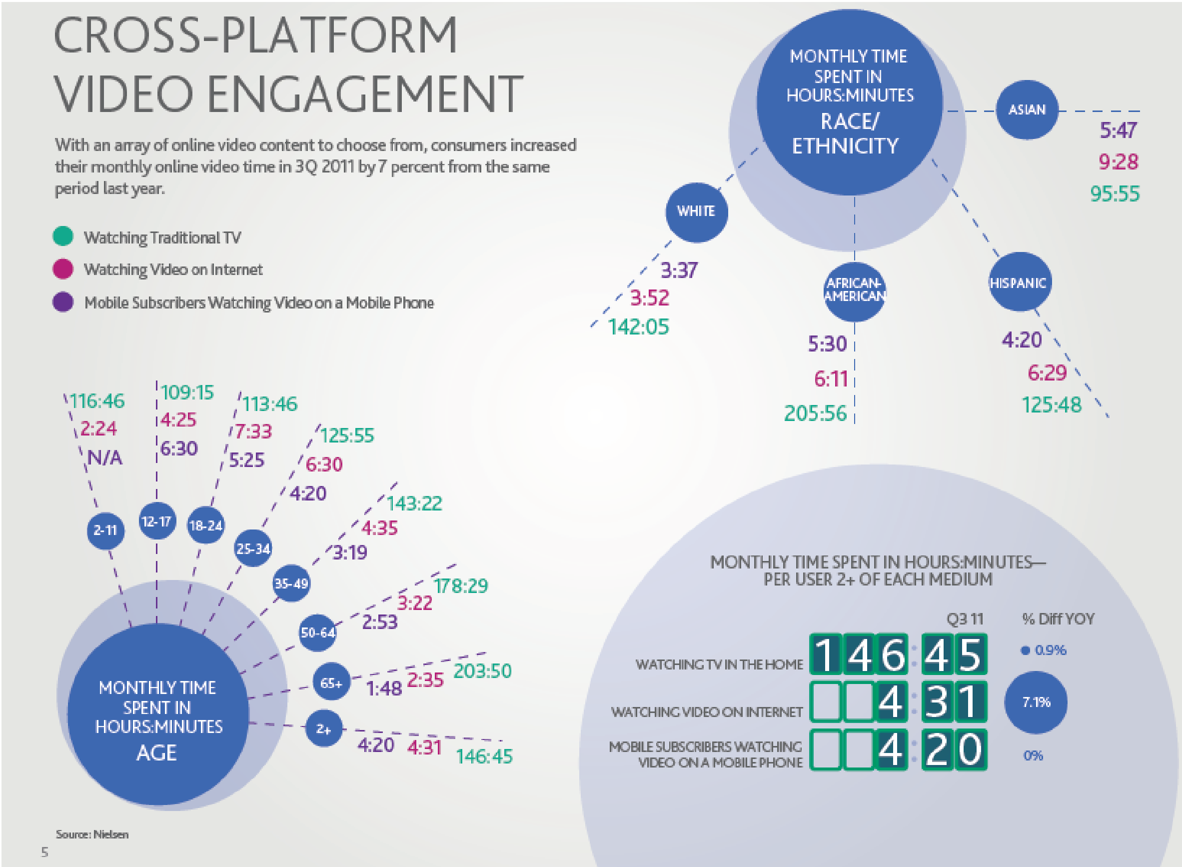


Figure 2: Share of Online Video Time by Brand

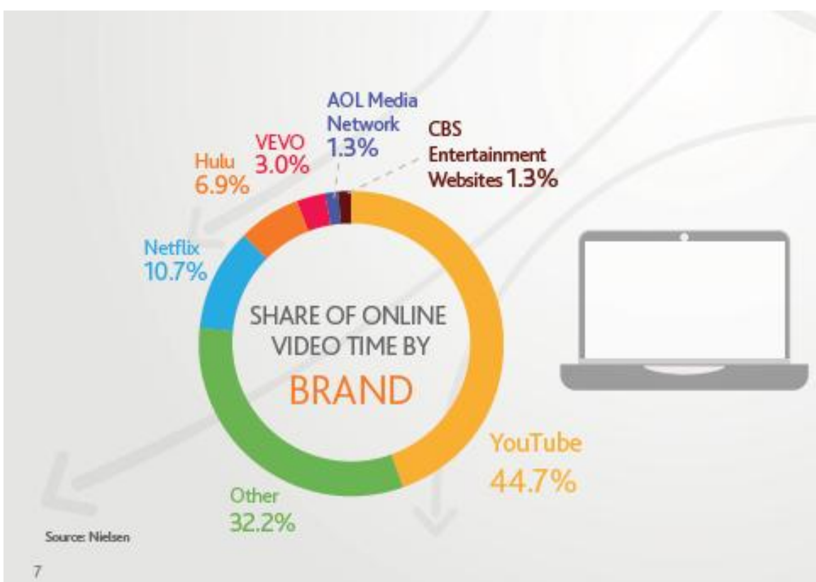


Figure 3: Different uses of Video Consoles

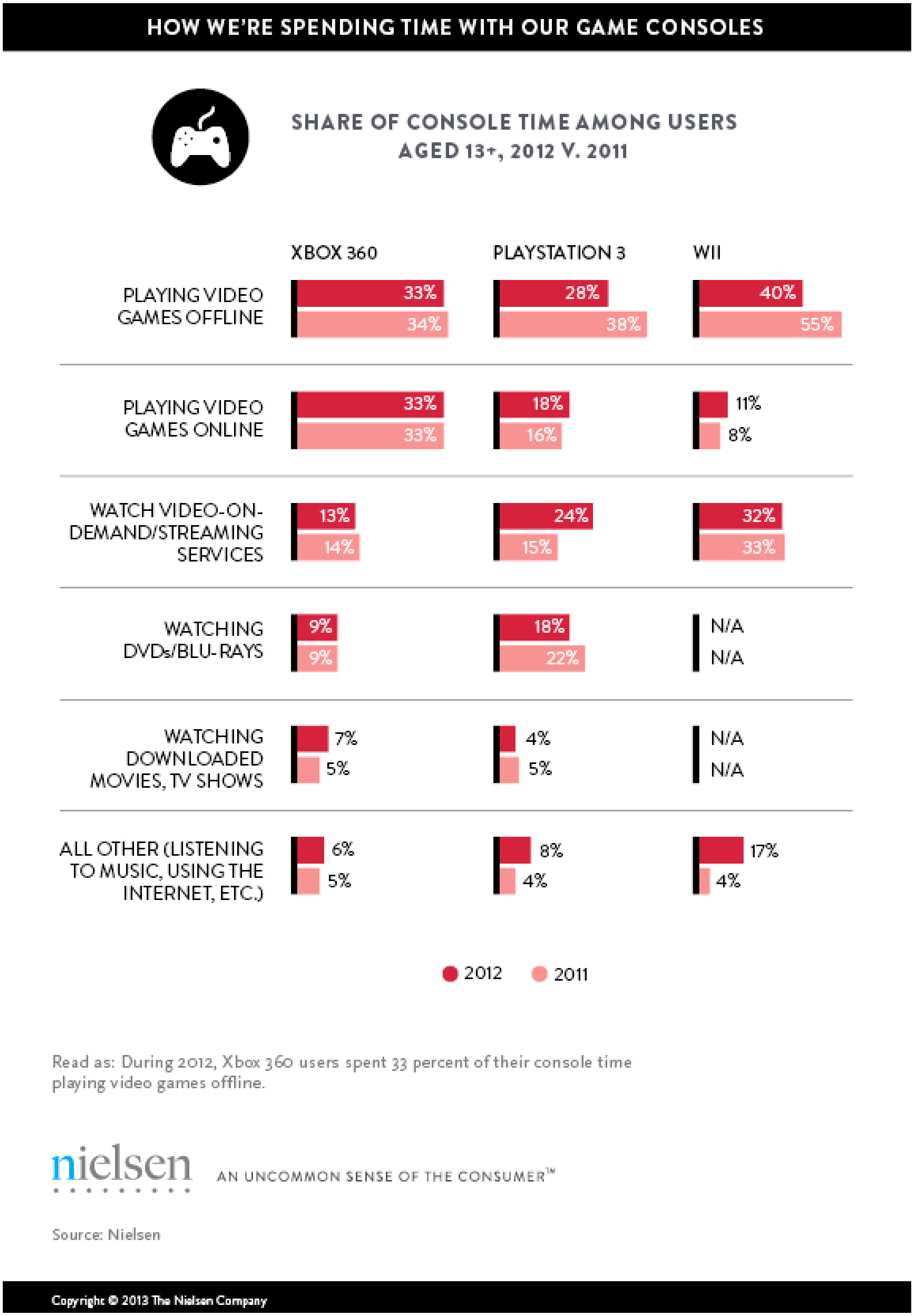


Figure 4: Simultaneous cross-platform ability

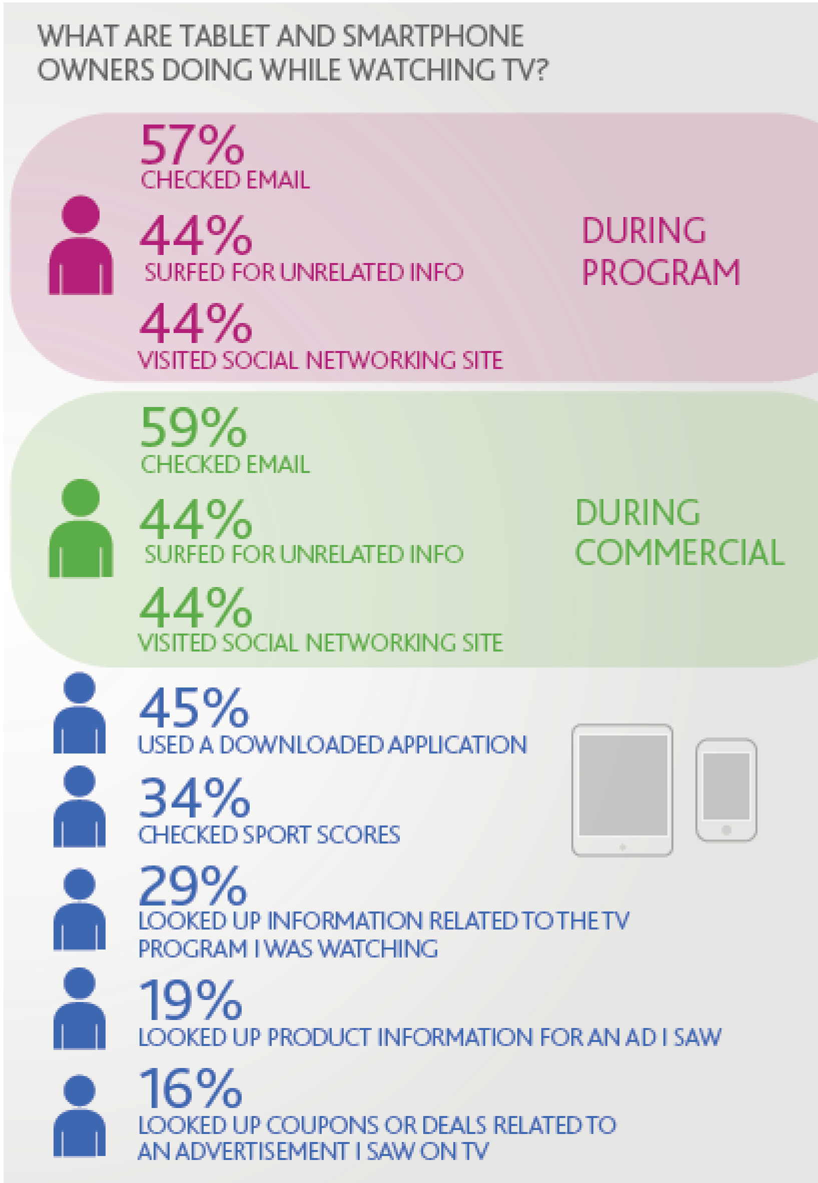


Figure 5: Zero-TV Households by age group

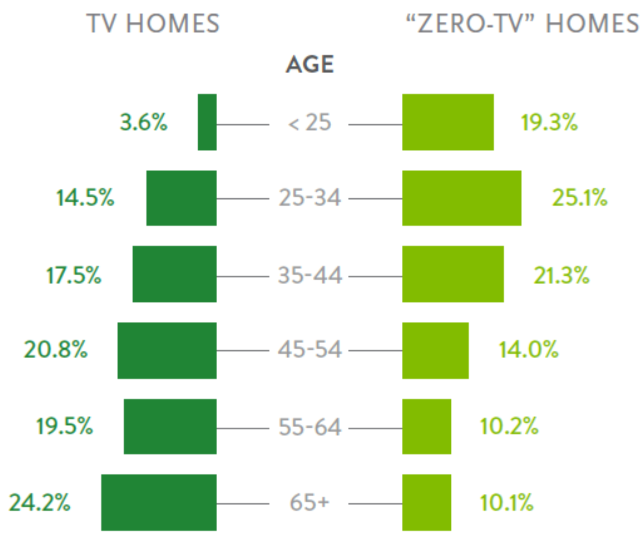


Figure 6: US Population age structure

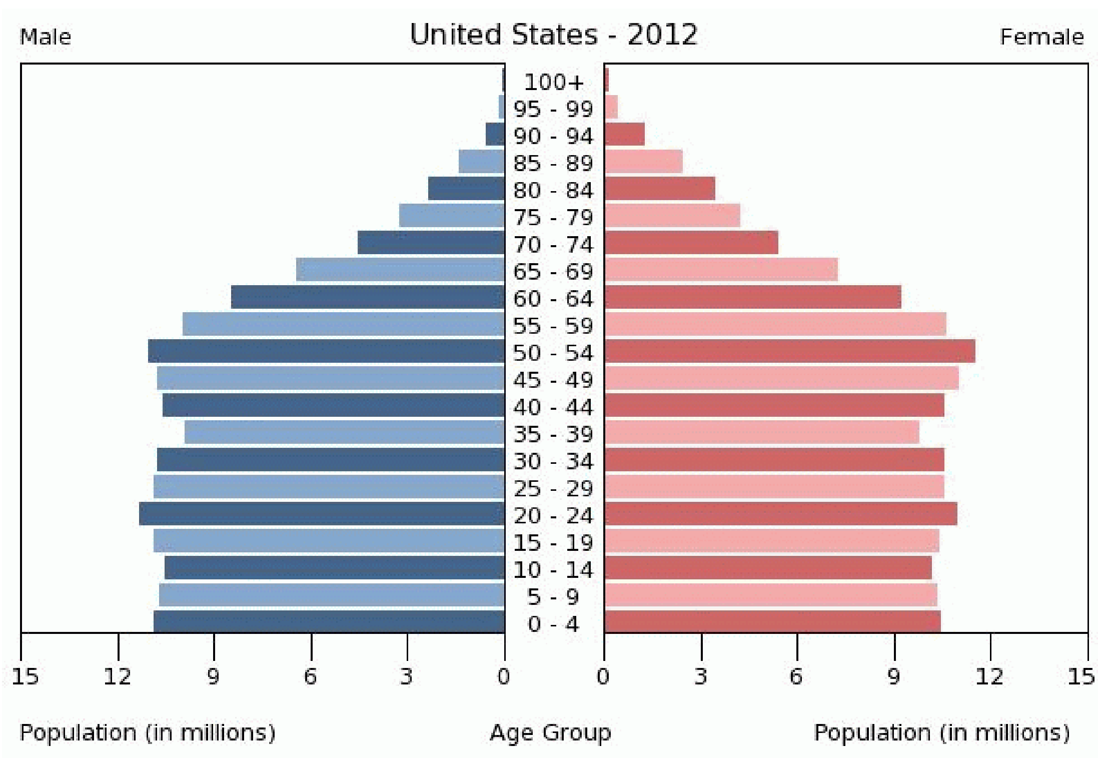
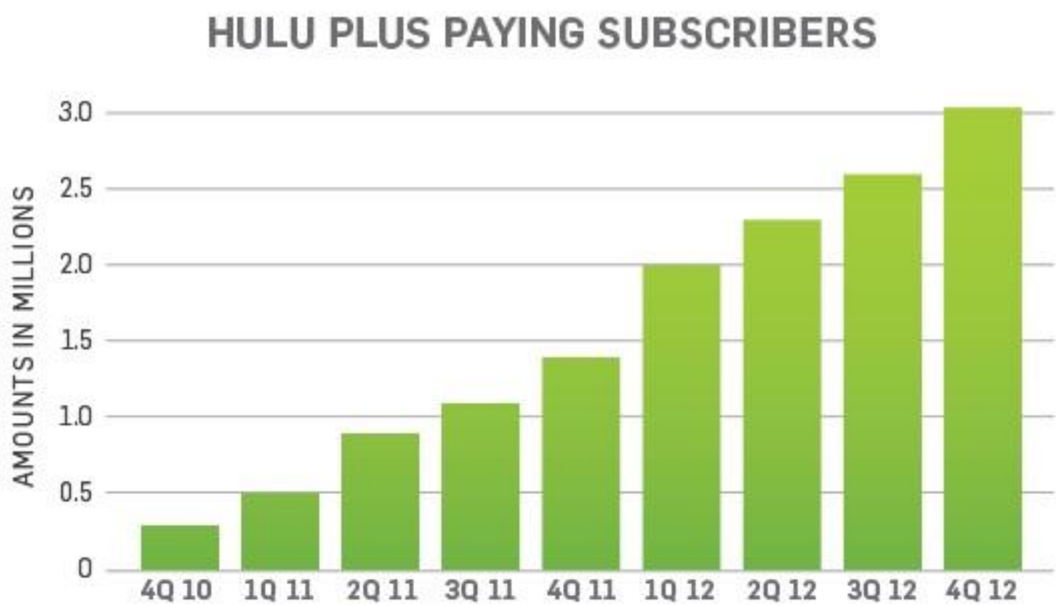


Figure 7: Netflix and Hulu Subscriber growth



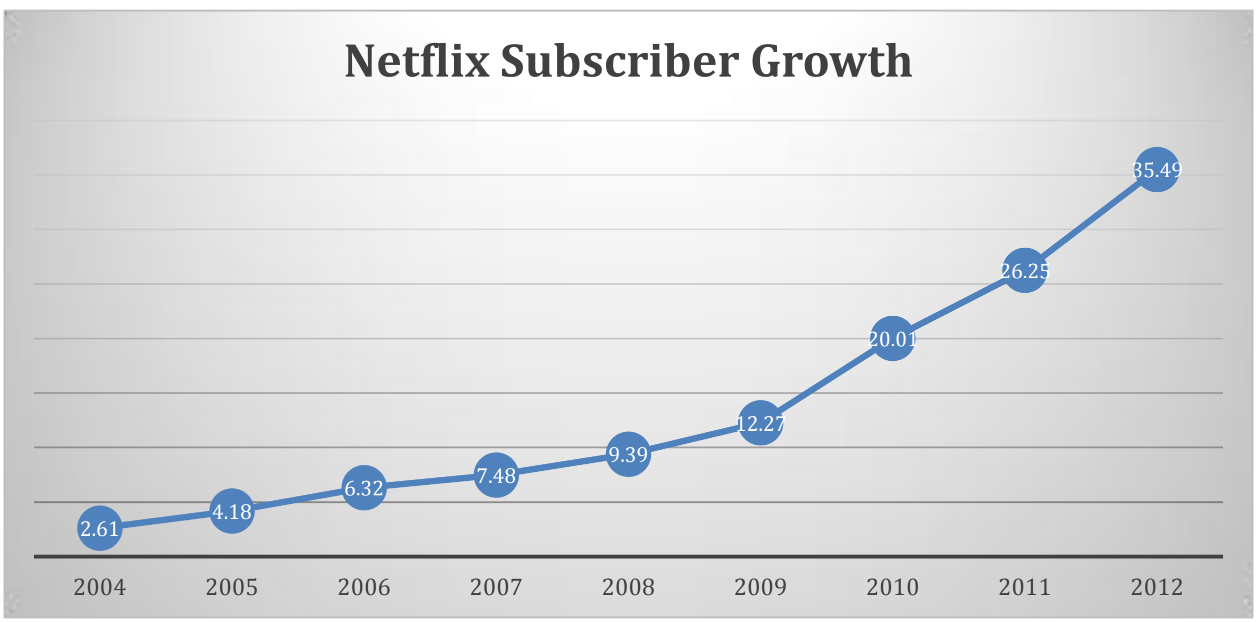


Figure 8: Revenue breakdown for Cable News Networks

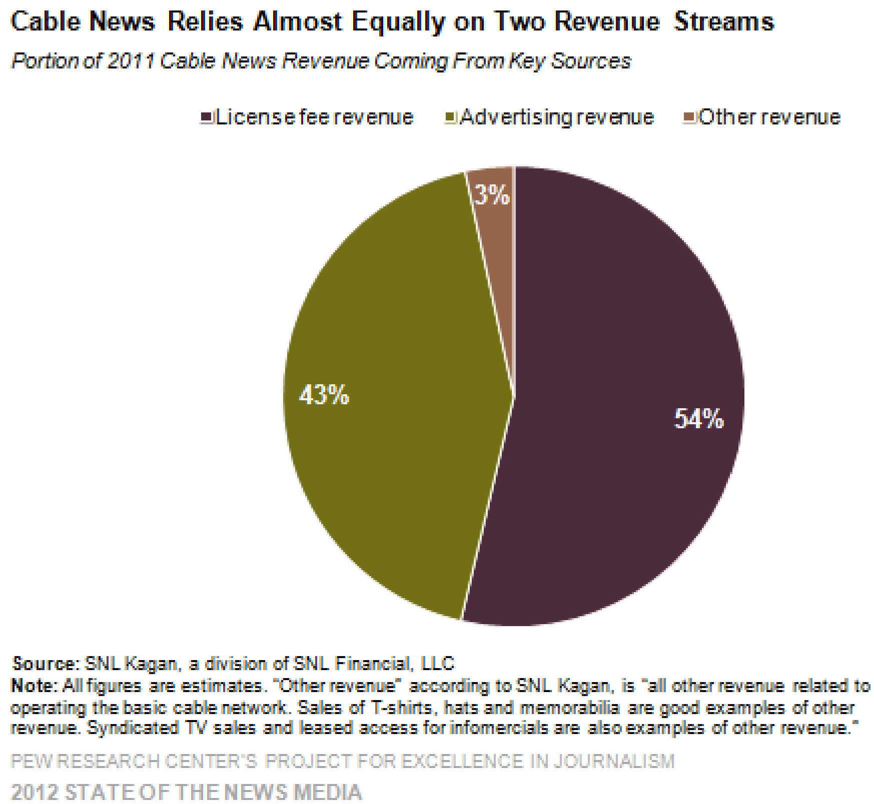


Figure 9: Simultaneous TV-Tablet activity Q4 2012

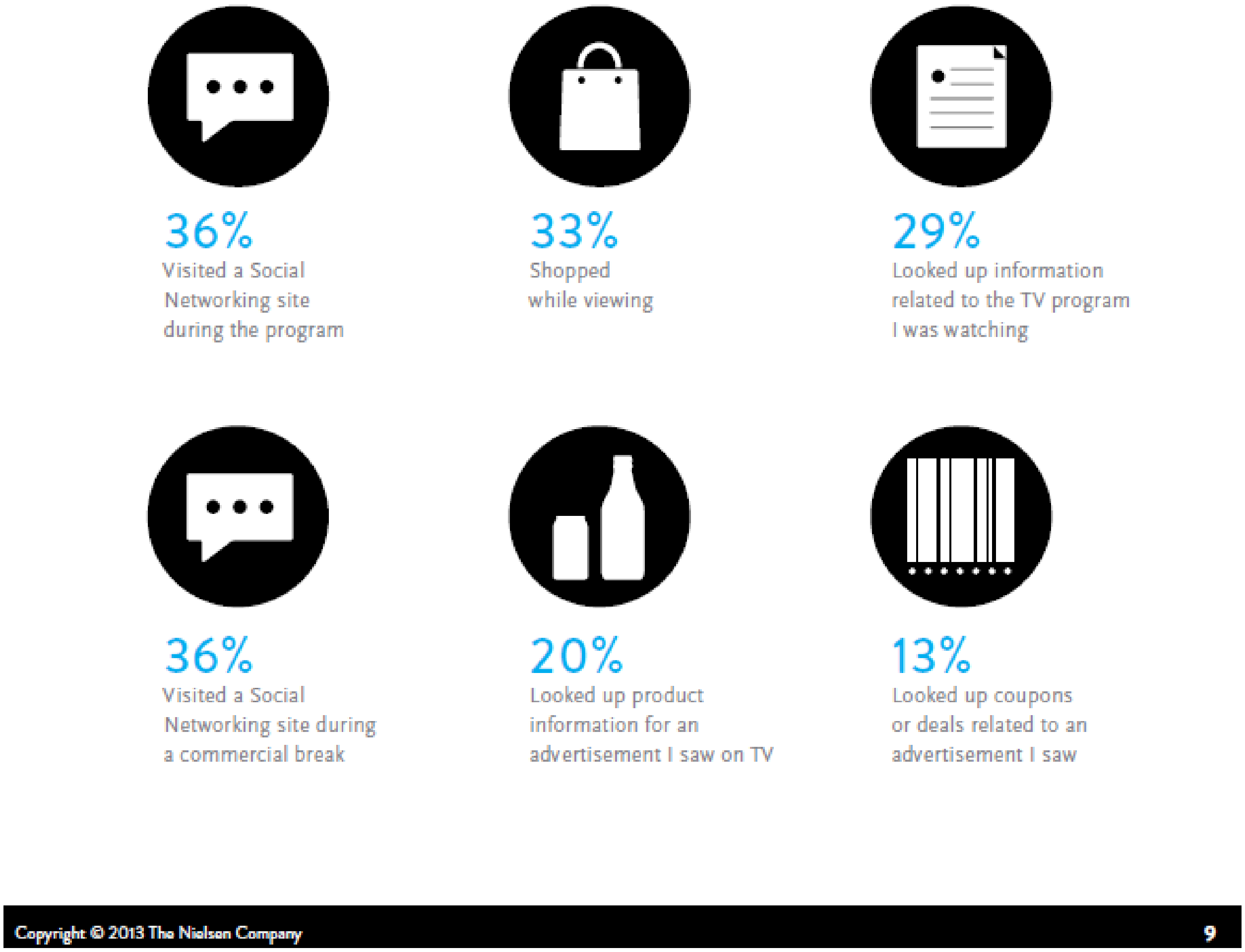


Figure 10: Consumer Attitudes to Online Advertising

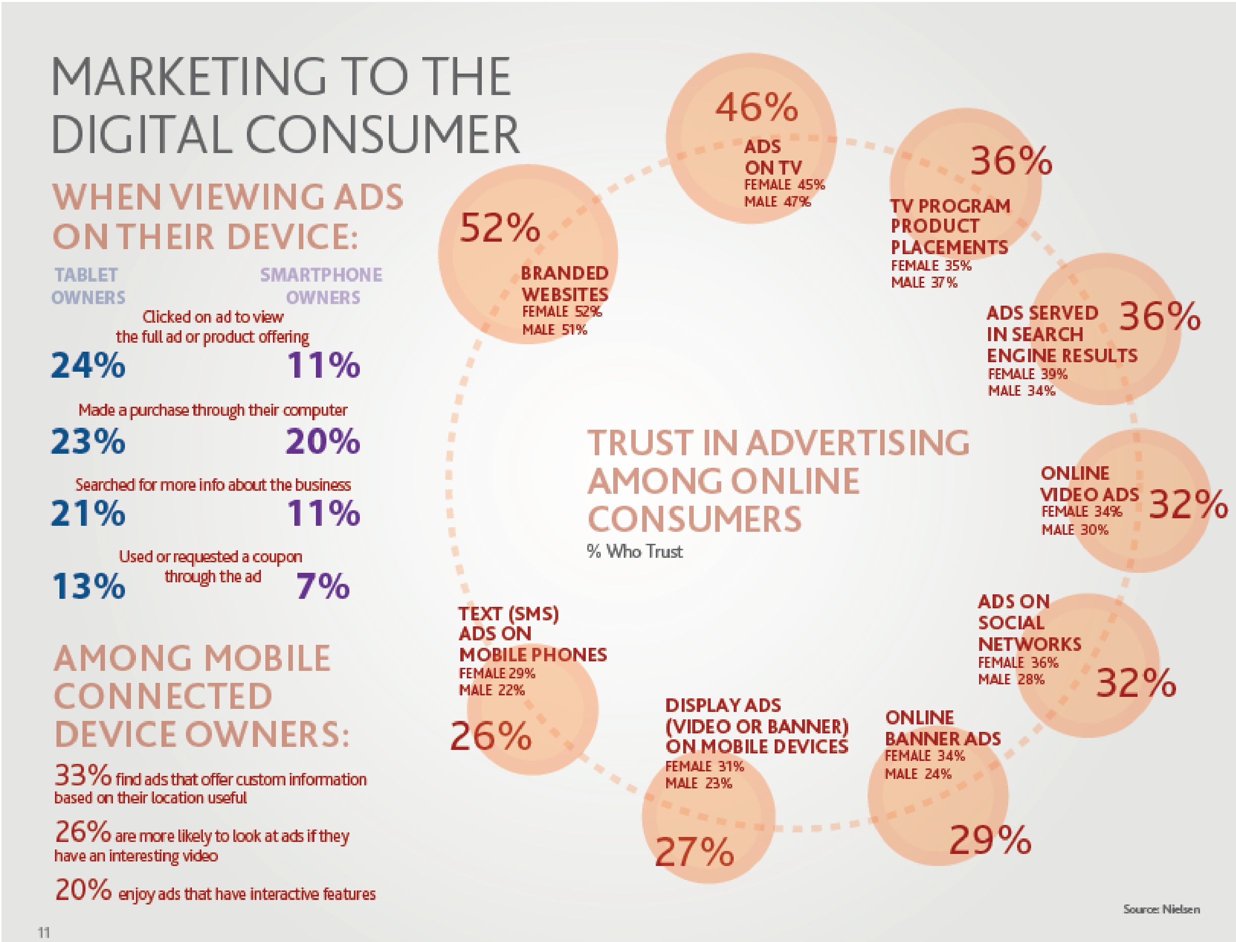
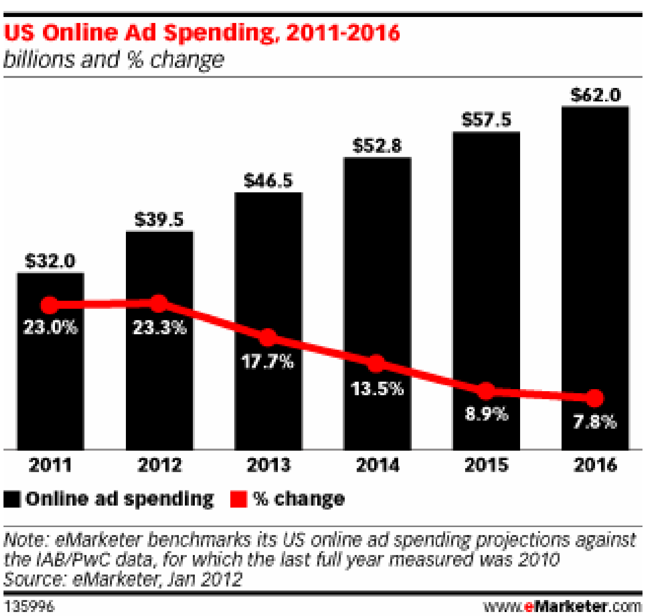


Figure 11: TV and Online Ad Spend Projections



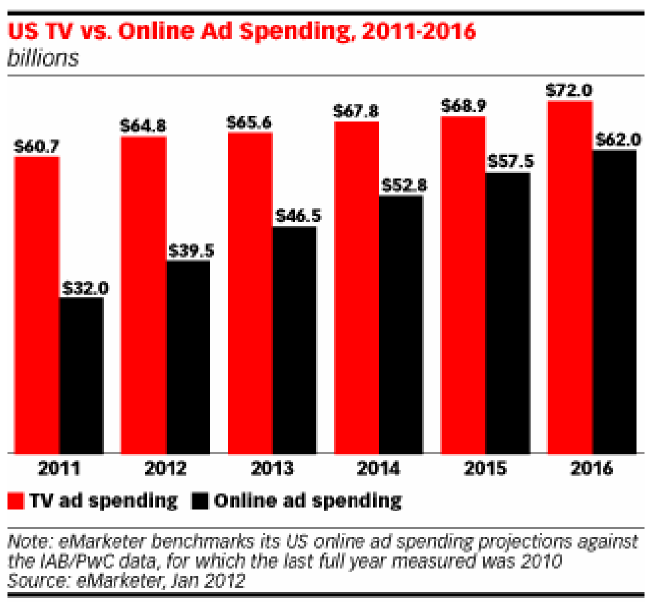


Table 1: Cost of 30-second advertising spot by Show – Top 20 shows

Name of Show	*Cost for 30 seconds*
Football Night in America	**$545,142**
American Idol	**$340,825**
Modern Family	***$330,908***
New Girl	**$320,940**
American Idol Results	***$296,062***
The Simpsons	**$286,131**
Family Guy	***$276,690***
Big Bang Theory	***$275,573***
2 Broke Girls	***$269,235***
Two and A Half Men	***$247,261***
The X Factor	***$245,335***
The Voice	***$239,866***
Grey's Anatomy	***$226,707***
The Voice Results	***$225,337***
Glee	***$224,345***
Once Upon A Time	***$203,357***
X Factor Results	***$201,872***
The Following	***$194,425***
Mike and Molly	***$192,706***
How I Met Your Mother	***$187,653***

For more shows, go to: http://domainshane.com/the-cost-of-30-second-tv-commercial-on-primetime-tv-fall-2012-and-you-only-want-to-pay-what-for-the-domain/

Table 2: Wholesale prices of Cable Networks

Figure 2. 2009 Basic and Basic Digital Cable Networks and Subscriber Fees

Network Name	Monthly Fee	Network Name	Monthly Fee	Network Name	Monthly Fee	Network Name	Monthly Fee
ESPN/ESPN HD	4.08	Smithsonian Channel HD	0.19	GolTV	0.11	LOGO	0.05
FOX Sports Net	2.37	Sur Mexico	0.19	Palladia	0.11	MTV2	0.05
TNT	0.99	Ecuavisa	0.18	The Weather Channel	0.11	Outdoor Channel	0.05
Disney Channel	0.88	ESPN Classic	0.18	TV Land	0.11	VH1 Soul *	0.05
NFL Network	0.75	MEXICANAL	0.18	WE tv	0.11	Fine Living	0.04
FOX News	0.58	Ritmoson Latino	0.18	¡Sorpresa!	0.10	Lifetime Real Women	0.04
HDNet	0.55	Telefe International	0.18	Oxygen Network	0.10	MavTV	0.04
USA	0.55	TV Chile	0.18	truTV	0.10	Tempo	0.04
ESPN2	0.54	Cartoon Network	0.17	CMT	0.09	BBC World News	0.03
MGM HD	0.53	De Pelicula	0.17	FOX Reality	0.09	Hallmark Movie Channel	0.03
CNN en Espanol	0.51	Discovery en Espanol	0.17	Lifetime Movie Network	0.09	iaTV	0.03
CNN/HLN	0.51	ESPNews	0.17	TeenNick	0.09	The Sportsman Channel	0.03
TBS	0.49	Nick Jr.	0.17	Boomerang	0.08	AmericanLife TV Network	0.02
HDNet Movies	0.44	Telehit	0.17	De Película Clásico	0.08	CNBC World	0.02
Nickelodeon/Nick At Nite	0.44	TV Colombia	0.17	Food Network	0.08	GAC	0.02
FX Network	0.42	TV Venezuela	0.17	G4	0.08	Galavision	0.02
Big Ten Network	0.36	BET	0.16	PBS KIDS Sprout	0.08	MTV Jams	0.02
NHL Network	0.35	Discovery Familia	0.16	Travel Channel	0.08	MTV Tr3s	0.02
FOX College Sports	0.34	ESPNU	0.16	Animal Planet	0.07	TV Guide Network	0.02
MTV	0.33	FOX Movie Channel	0.16	BET Hip Hop	0.07	BlueHighways TV	0.01
Antena 3	0.29	FOX Soccer Channel	0.16	Canal Sur	0.07	MTV Hits	0.01
CNBC	0.29	History en Espanol	0.16	CENTRIC	0.07	Nick Too	0.01
Lifetime Television	0.28	Latinoamérica Televisión	0.16	Chiller	0.07	**Industry Average**	**0.20**
HD Theater	0.27	MSNBC	0.16	Military Channel	0.07		
Universal HD	0.27	Sur Peru	0.16	Nicktoons Network	0.07		
TCM	0.26	TLC	0.16	Ovation	0.07		
VERSUS	0.26	CentroAmerica TV	0.15	Planet Green	0.07		
Industry	0.26	ESPN Deportes	0.15	Sleuth	0.07		
A&E	0.25	SOAPnet	0.15	VH1 Classic	0.07		
Discovery Channel	0.25	Tennis Channel	0.15	BET Gospel	0.06		
Golf Channel	0.25	TVE Internacional	0.15	Bloomberg TV	0.06		
Sundance Channel	0.25	VH1	0.15	Crime & Investigation Network	0.06		
TyC Sports International Channel	0.25	Caracol TV	0.14	Discovery Kids Channel	0.06		
MLB Network	0.24	Comedy Central	0.14	FitTV	0.06		
AMC	0.23	FUEL TV	0.14	FUSE	0.06		
WealthTV	0.23	HGTV	0.14	Hallmark Channel	0.06		
ABC Family Channel	0.22	HTV	0.14	History International	0.06		
History	0.22	The Style Network	0.14	Investigation Discovery	0.06		
NBA TV	0.22	CNN International	0.13	Military History Channel	0.06		
Syfy	0.21	Disney XD	0.13	mun2	0.06		
WAPA-America	0.21	Bandamax	0.12	Retirement Living TV	0.06		
E! Entertainment Television	0.20	BBC America	0.12	Science Channel	0.06		
Independent Film Channel	0.20	Discovery Health Channel	0.12	Si TV	0.06		
MountainWest Sports Network	0.20	GSN	0.12	The Africa Channel	0.06		
National Geographic Channel	0.20	La Familia Cosmovision	0.12	TV One	0.06		
SPEED	0.20	WGN America	0.12	Wedding Central	0.06		
Spike TV	0.20	Bio	0.11	Blackbelt TV	0.05		
Bravo	0.19	Bridges TV	0.11	CMT Pure Country	0.05		
CBS College Sports Network	0.19	Current	0.11	C-SPAN	0.05		
FOX Sports en Espanol	0.19	FOX Business Network	0.11	DIY Network	0.05		

Source: SNL Kagan.