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NETFLIX MOVIES AND TV SHOWS

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*Abstract*—When Netflix launched in April , Internet video was in its infancy. Eighteen years later, Netflix has developed into the first truly global Internet TV network. Many books have been written about the five broadcast networks – NBC, CBS, ABC, Fox, and the CW – and many about the major cable networks – HBO, CNN, MTV, Nickelodeon, just to name a few – and this is the fitting time to undertake a detailed analysis of how Netflix, as the preeminent Internet TV networks, has come to be.

# INTRODUCTION

Video Streaming and broadband connections help users around the globe download and watch large video files from the comfort of their homes.  Taking advantage of this technology, the American company Netflix launched a video streaming website on 2009 where users could watch the most recent Television episodes and Hollywood Blockbusters.   Netflix changed content consumption models in the entertainment industry and led to the disappearance of the mainstream video rental store in North America.

All of these demands are being fulfilled with the help of video streaming as well as the proliferation of devices that gives the user access to it.  Now if you want to play movies, music or watch an episode of your favorite TV show you can easily do it wherever you may be.

If we want to fully understand the impact of video streaming in society and the entertainment industry we must first look at the technological advancements that paved the road so companies and services like Netflix, ITunes or Hulu could become successful.

**2. – Streaming video: Connections in the digital age**.

Streaming Video accelerates everything.  Now movies are released on streaming services just a few months after their release on theaters.  A whole season for a TV show can be found on the web and binged watched in just one weekend.  With his new service, users now have a voracious appetite for new content.

The media industry much like the print industry when e-books first appeared has to adapt to this new consumption model. Long gone are the days where movie enthusiasts started a DVD or VHS collection and showed it proudly to visitors.  With streaming technology and online movies when you buy something you don’t really own it. Now everything resides within a cloud storage service where we have a false sense of belonging. **(Dix** a live radio broadcast of a baseball game between the Seattle Mariners and the New York Yankees using technology developed by a company named Progressive Networks.  A few years later the company would change its name to Real Networks.  **(Zambelli, History of Media Streaming)**Users would become familiar with the name while using the *“Real Audio Player”.*And while the Real Player was a revolutionary technology more would follow.  Names like Adobe Flash, Apple QuickTime, Microsoft Windows Media and Silverlight would soon offer streaming services.

**A new way to tell stories**

Whenever a new technology is introduced in the market, both industries and consumers make changes in order to adapt to it.  Digital delivery of movies has affected the way we watch movies by transforming the living room into our own personal movie theatre.  Social Media now influences how we promote, discuss or share our thoughts on the media industry new releases.

Now the screen has become mobile, individual spectators are now capable of watching their personal library of films, television shows and videos wherever they wish, from crowded subway trains to treadmills at the gym.**(Tryon, 59)**We are entering an era of platform mobility where content can be accessed with a smart phone or tablet as long as wireless connection is available.[](http://blogs.commons.georgetown.edu/cctp-748-fall2014/files/2014/05/netflix-streaming-ipad-2012.jpg)

There are certainly “evangelists” that have embraced digital delivery with ease. They would probable list the benefits of this technology as mobility, flexibility and even convenience. Being able to do most of your tasks or chores with the help of mobile devicesmakes things relatively easier, but how does this affect everything else?

Movies are shifting from a social experience to a mean to fill time in public spaces, to alleviate the boredom of waiting for time to pass, easing the potential discomfort of being alone in public.  Are we perhaps sacrificing social interaction in order to consume more content?  After all, it’s not an odd sight to see people glued to the screen of mobile devices and wearing headphones.  This digitization of the moving image has radically changed cinema, and that the characteristics of this transformation leave open an entirely new field of usual figuration.

This shift we are witnessing can be referred as an **“Inter-media fragmentation”.**We are seeing the growth of new delivery platforms.  These new delivery platforms not only facilitate the delivery of additional content options, but also multiply the platforms in which any piece of content can be accessed.

**New Media for new generations**

Six years ago, when the Apple IPhonex was gaining momentum; there was an advertisement In the ad, the narrator explains how easy it is to make the transition from watching Pirates of the Caribbean on this mobile device to looking for seafood restaurant options**.  (**

[](http://youtu.be/4rcR1PyICz4)

The advertisement’s intention was to explain audiences how easy it is to navigate through content when you have the appropriate tool, and audiences really listened to this message.  The idea here, for instance, is that people will watch more DVD’s when offered the easily searchable cornucopia of Netflix than when confronted with the more limited, and more difficult to navigate, selection at a video store.

This content cap is referred, as the “Bandwagon Effect” where consumers will gravitate to content they know is popular. The most popular items are shown first, so they are the most likely to be accessed.  So popular content becomes even more popular and niche content becomes harder to find.

One can only wonder if our consumption decisions are becoming automatized? Is the whole process shortening audience’s attention spam?  Today’s movie watching ritual may include pausing movies to take phone calls and then send e-mail while hearing some music.   Content abundance and Digital Delivery may be affecting us in ways deeper than we think of.

Content libraries such as Netflix and Hulu provide users with access to numerous titles, changing how movies and television shows are distributed by altering the speed with which content is made available for repeat or catch up viewing.

[](http://blogs.commons.georgetown.edu/cctp-748-fall2014/files/2014/05/HouseofCardsNETFLIX_large_verge_medium_landscape.jpg)Take for instance Netflix’s original programming.  Hit television series like “House of Cards”, “Orange is the New Black” and “Hemlock Grove” have become popular with viewers because the whole season (12-13 episodes) for each series is released at a time.  That completely challenges the model built by other networks where a season is longer *(24 episodes)* and is released on a weekly basis for months.

[](http://blogs.commons.georgetown.edu/cctp-748-fall2014/files/2014/04/Netflix-Streaming-Xbox.jpg)Netflix’s instant streaming service over the Internet is witnessing escalating growth.  There are various devices worldwide that can stream content from Netflix instantly. These include the Microsoft Xbox 360, Nintendo Wii and Sony PS3 Consoles; Blu-Ray disc players, Internet-connected TVs, home theater systems, digital video recorders and Internet Video Players; Apple iPhone, iPad and iPod touch, Android devices, as well as Apple TV and Google TV.  Devices such as the iPhone, iPad and iPod touch enable viewers to watch movies and TV shows while on the move.  Netflix’s business model provides customers with the most convenient way to view DVD’s as they are delivered to their addresses and the subscribers can return them through pre-paid envelopes. **(Netflix, Inc. SWOT Analysis)**

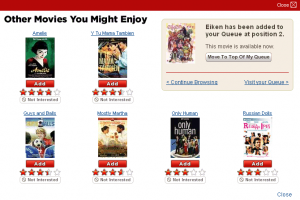
Audiences are now part watching television shows and movies on their own time schedules.  In case you missed an episode of your favorite show you can use your DVR (Digital Video Recorder), Apple TV; Netflix Account or even buy a DVD boxed set to watch it whenever you want to.  It isn’t just television, the time-span between a theatrical release and a DVD release is getting shorter so people don’t have to worry if they missed a movie in the movie theater.

By 2011, Netflix had 23.6 million subscribers, or more than 7% of all Americans.  It had replaced Apple’s ITunes Store as the top U.S. online seller of movies and T.V. show –its signature subscription service claiming 44% of total online movie business to 32% for Apple (Keating, 255)

[](http://blogs.commons.georgetown.edu/cctp-748-fall2014/files/2014/05/6a00d8341c630a53ef01539191da0b970b.jpg)Netflix has consolidated its lead on streaming downloads of films and television programs. Six out every ten digital movies streamed and originated from Netflix.  By January 2012, its more than 20 million subscribers in 45 countries worldwide have streamed more than 2 billion hours of TV shows and movies, the average user consuming more than a gigabyte of data per day.

Business is booming for Netflix.  Thousands of users are subscribing daily to the video streaming service.

Part of Netflix’s success is “The Cine-Match Algorithm”.  A computer algorithm, Cine-Match gives users movie and television show recommendations.  A recommend system is a prime example of the mainstream applicability of large-scale data mining.

[](http://blogs.commons.georgetown.edu/cctp-748-fall2014/files/2014/04/netflixRecommendations.png)By giving out recommendations, Netflix has personalized the experience as much as possible. Most of the personalization in the site’s interface is spread out in rows, what is included and what order those items are placed in. The system is not only optimizing for **accuracy**, but also for **diversity**and **awareness.**   With all these elements falling into place, the users should be aware that the system is adapting to their tastes.

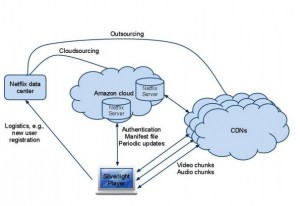
While building up recommendations, the Netflix system uses different data in order to build up a recommendation that tailors itself to every users needs.  Among the key factors that come into place we may find some of the following: **(Princeton,   How does Netflix Recommend)**

1. **Film Quality**: A fundamental component of all recommendation systems.
2. **Genres & Movie Elements:** How much users tend to like or dislike genres and detailed elements of films.
3. **Anchoring:**The idea behind anchoring is that the order a viewer watches movies in also matters. If a viewer watches several movies in a short period of time, the view will anchor his ratings around the first movie he watched.
4. **Movie Fads** Movies fluctuate widely in popularity, especially in response to news about the actors in the film or when sequels are released.
5. **Rating** If a viewer rates several movies at the same time; the ratings follow significantly different patterns than when movies are rated immediately after each movie is watched.

**Creating the online movie experience.**

Most people don’t know it, but Netflix only uses its own IP address and hostname Netflix.com for two key functions.

1. Registration of new user accounts and capture of payment information (credit card or PayPal Account
2. Redirection of users to movies.netflix.com or signupnetflix.com based on whether the user is logged in or not respectively.

[](http://blogs.commons.georgetown.edu/cctp-748-fall2014/files/2014/04/Netflix_architecture.jpg)After the user signs up or registers a new account Netflix’s system will usually tell the user to start download depending where they are trying to watch movies from. If they are a desktop user, they will have to download Microsoft Silver light; if they are using a mobile device they will have to download an app in order to star streaming.

Netflix’s servers are based of the Amazon Cloud technology, where the data encoding/decoding process will begin for those who are trying to watch a movie or a TV show.  So this video streaming website has risen to fame despite working with outsourced resources because it sells the audience and comfort.

Netflix’s content is not stored in one single server, but instead it’s distributed between multiple CDN´s (Content Delivery Networks) or a collection of ¨servers in different points that transfer content to the computer that made that request.

**Conclusion**

Video Streaming is a technology that has completely changed the entertainment industry as well as consumption models among audience members. A lot has changed since that very first Real Player transmission in 1995.  Since then, technology has been constantly improving, making content delivery and access easier no matter the platform trying to access it.

Netflix, Inc. is one of the best examples regarding commercial applications for Video Streaming.  With millions subscribing to the service all over the world, the company has found a way to capitalize it services using it’s title stock and outsourced infrastructure.

Recently, Netflix sparked some debate around the “open internet” topic.  Other companies have complained that Netflix is getting revenue by using Internet services provided by third parties.  And while the discussion appears to be settled, Net Neutrality and Open Internet is now in everybody’s mind.

We have seen some repercussions appear regarding Video Streaming. Film experts fear audiences may be turning “platform agnostic” consuming content regardless the size of the screen or the image quality. Nonetheless, audiences have proven they are willing to return to cinemas if the movie is worth the price of admission.

However, content abundance has made audiences “socially autistic”.  Always connected to a device and somehow always isolated from others.  Apparently audiences are willing to sacrifices social experiences “offline” in sake of personalized content.

With other big players like HBO, Amazon and XBOX starting to produce their own versions of original content and streaming service the competition for audience’s attention is just starting.

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