

Streaming Media Services

An Industry Insight Paper



Streaming Media: What it is, what it isn't, and why it all matters

We hear everywhere that streaming media is big, and getting bigger. That's true. Streaming is an increasingly important part of the media landscape. The problem is that people mean different things when they say "streaming media." Because of these differences, the big picture is confusing. Data seem contradictory, trends aren't clear and analysts use vague categories that don't always translate to real-world behavior.

We're going to clear up that big picture. In this paper, we'll tackle the basic questions about streaming media, show what the landscape really looks like, and address why it all matters to the AV world.

What is streaming media?

How does streaming affect traditional media delivery mechanisms?

Why is the difference between TV and movies important?

Streaming media is important, but it's also confusing. We'll explain what you need to know.



What is streaming?

Fundamentally, streaming is a data delivery mechanism. Streamed data is sent continuously, and it is received and viewed by the end user at the same time. For media, this means that users can view the information as it arrives, rather than waiting for a complete download, physical disc transfer or similar exchange. You're using streaming technology when you send a video from your phone to playback on your TV. And given this fundamental definition, television and radio are streaming media. DVD and digital downloads are not.

But when people talk about streaming media, they are almost always talking about something very different from the data delivery mechanism of traditional television. Usually, they mean streaming media services. In this sense, streaming media refers to a few specific subscription services that allow users to access TV shows and movies on demand, without download, over a broadband connection. To stream media in this sense you need a service (such as Netflix or Hulu), a broadband connection, and a device on which to access and/or view the content.

- **Common streaming services** include Netflix, Amazon, Hulu, Vudu, and YouTube Red.
- **Common methods of broadband connection** include cable, fiberoptic, and 4G.
- **Common devices used to access and view content** include TVs, Smart TVs, smartphones, tablets, game consoles, Apple TV, Roku, Chromecast, and many more.

“Streaming”
can refer to a
data delivery
technology or
a type of media
service.

What is streaming? (cont'd)

Next, let's clear the air about a few closely related terms. These words and concepts often crop up in conversations about streaming media, and a lot of the time they're misused. Here's what they actually mean.

OTT (Over-the-top): OTT content comes directly from a third-party provider to the end user via an IP connection. It does not pass through a multiple-system operator (such as Comcast or DirecTV), nor is it provided directly by the Internet Service Provider itself (as in the case of AT&T U-Verse). Much, but not all, OTT content is streamed.

Internet Protocol Television (IPTV): IPTV is frequently confused with OTT since both use an Internet connection as a delivery mechanism. IPTV is different because it does not use the open Internet. IPTV uses a closed, managed network provided by a specific ISP. As such, it has a higher quality guarantee.

VOD (Video On Demand): VOD is a broad term encompassing all systems that let users watch video when they choose, rather than during a specific broadcast time. Most streaming media services focus on VOD as opposed to live streaming, which streams events as they occur. (Exceptions include services like YouTube and Periscope, which can be used for streaming live events.)

Set-top box: A set-top-box is an appliance that converts incoming TV and internet content (from Ethernet, satellite, coax, etc.) for viewing on a television screen. Some content that comes through a set-top box is OTT; some is traditional TV or IPTV. Much of this content is streamed.

DVR (Digital Video Recorder): An appliance that allows live TV programming to be recorded and rewatched at a later time. There is significant overlap between DVR and set-top boxes; many appliances include both.

Store and forward: An early term for VOD over IP, store and forward technically refers to a data delivery system where data is sent to a messaging center before being transmitted to the end user. The term is still used to refer to some digital locker technologies.

MVPD (Multichannel Video Program Distributors): service providers, such as cable operators, that deliver video programming via subscription.

Ever feel like you
need a dictionary
to read tech news?
Here you go.

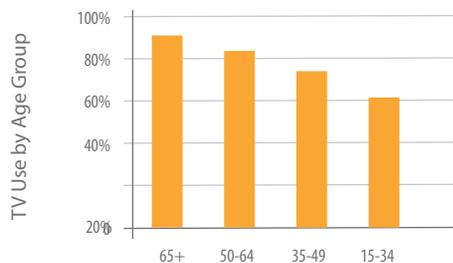
How does streaming affect TV viewership?

The short answer is that streaming media is significantly reducing the amount of time viewers spend on broadcast television. Streaming's effect on disc viewership is less clear.

First, let's tackle the TV question.

"TV" can refer to a large device for displaying media, a type of content developed for that device, or a service in which that content is sent over the airwaves to TV sets. The difference is important if you want an understanding of how streaming's disrupting the media landscape.

The TV device is not going anywhere soon. Despite the proliferation of screens that people use to consume video, 63% still think that the biggest screen is always best. And, across all demographics, the majority of respondents still watch video programming on TV:



(Data from Nielsen "Screen Wars" March 2015)

As a content type, too, TV programs are flourishing. Despite changing viewership practices, traditional TV networks as well as newer streaming services are continuing to produce content in the form of TV shows (hour or half hour episodes strung together into a series that may last multiple seasons). The stunning success of TV shows produced by streaming services such as Netflix's "Orange is the New Black" speaks to the dominance of this genre.

Television networks are no longer the sole source of short-form media, as content providers now differentiate their services and avoid expensive digital rights expenses by offering original content accessible only to their respective subscribers. In addition to seasonal series, streaming services and others offering exclusive content are developing films, documentaries, and features like comedy and news specials.

Second screens are important, but 63% still think the biggest screen is always best.

TV use is declining in younger demographics, but the device is still overwhelmingly popular.

How does cord-cutting fit in?

It is in the final sense, TV as a broadcast mechanism, that streaming media services are taking over. Whereas people used to watch the vast majority of their video on TV broadcast from local stations or via cable, streaming media and other VOD services are now significantly changing that behavior.

The latest Nielsen Digital Consumer report shows a **2hour, 44 minute drop in monthly live TV viewing** over the previous period, a trend that is all the more pronounced given the overall increases in viewership. Meanwhile, **“Almost one-half of all video viewing on the TV by U.S. broadband households today is on-demand, including OTT, physical media, operator VOD, and recorded content.”** (Parks & Associates)

From a business standpoint, this is important because a growing number of consumers is moving away from cable and satellite packages in favor of alternative means of accessing content. Yet again, there are some terms to define:

Cord cutting: Canceling pay-TV subscriptions entirely in favor of streaming. Services like Sony’s Playstation Vue and Dish’s Sling TV appeal to cord cutters who want access to live TV but do not want to get locked into expensive and inflexible cable contracts.

Cord shaving: Also known as cord trimming, this term means reducing pay-TV subscriptions to smaller packages with less channels.

Skinny bundles: These are smaller subscriptions that operators now provide to appeal to cord shavers.

Cord nevers: Those who have never subscribed to cable or satellite television and instead use streaming services.

TV Everywhere: Technology that enables access to individual networks on mobile devices through websites and apps. While a cable subscription was at first required to access TV Everywhere content, several premiere networks such as HBO and Showtime now offer direct subscriptions to consumers to access programming over the internet, independent from cable.

Many consumers are moving away from traditional cable and satellite packages.

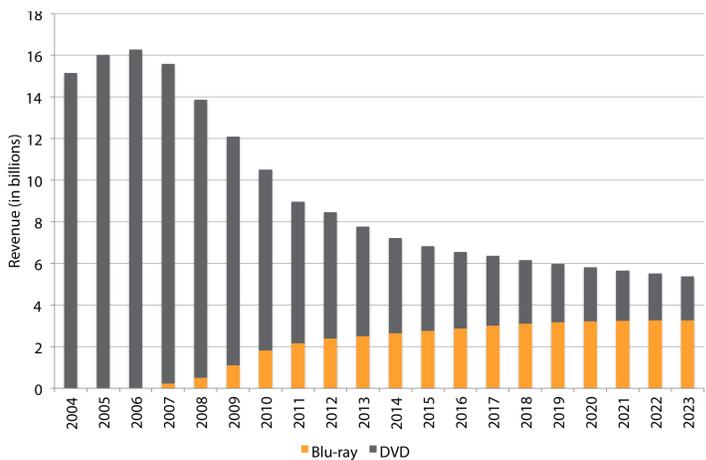
How does streaming affect disc viewership?

What about optical disc viewership?

Disc viewership has remained fairly constant for the past five years. For the past 5 years, viewers have reported watching DVD or Blu-ray for 5 to 5 and a half hours per month. Note that the Nielsen data that provides this number does not include game console time in the DVD/Blu-ray category, despite the fact that more than a quarter of time on game consoles is used watching discs ("Total Audience Report" Q1 2015). In other words, the actual amount of time spent watching DVD/Blu-ray each month is likely much higher.

Blu-ray and DVD revenue is another component of this trend. The overall revenue for optical disc media in the US is declining, and has been since about 2007. But that downward trend is due exclusively to a fall in DVD sales. Blu-ray sales have been increasing steadily since 2007, and SNL Kagan predicts them to continue increasing through at least 2023. **This data does not even account for the popularity boost likely to be provided by the new standard, Ultra HD Blu-ray. In other words, it's a conservative estimate.**

Blu-ray watching is still steadily growing, despite competition from streaming.



(Data from SNL Kagan, 2015)

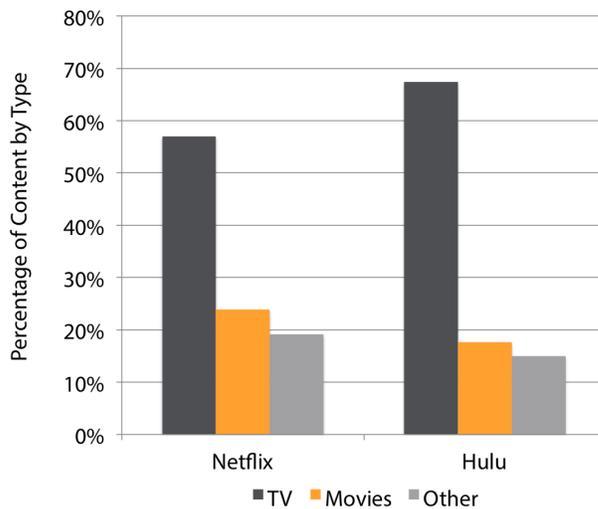
Overall optical disc revenue is decreasing, but Blu-ray revenue continues to increase.

Why is streaming affecting live TV and optical media so differently?

The answer to this one is simple: streaming media services compete more directly with live TV than they do with optical disc, which is largely used to view movies.

In the early days of Netflix, it was exclusively a borrowing service for DVDs. When the service moved online and became one of the first streaming media services, it slowly began to shift emphasis from movies to TV shows. That shift has continued, and the latest data shows that streaming media services are associated with, and used for, TV more than movies. While streaming services are known for keeping their usage data private, recent studies have shown the most valued content for Netflix and Hulu subscribers. For both services, subscribers value and view TV far more than movies.

It's often overlooked, but true: Streaming matters more for TV shows; discs matter more for movies.



The leading streaming services have content libraries that are heavily focused on TV programs.

(Data from SNL Kagan, 2015)

Why is streaming affecting live TV and optical media so differently? (cont'd)

The association of streaming services with TV shows reflects what is seen in their content libraries, too. For example, Netflix and Hulu Plus both have around 70% of the most popular TV shows (as rated by Nielsen) available to stream on their services (<http://www.tomsguide.com/us/netflix-amazon-face-off,news-17838.html>). In other words, streaming services provide many of the TV shows that viewers want--and some valued shows are available *only* via streaming.

The same is not true for movies. The movie selection on these services, and other streaming sites, pales in comparison. From Tom's Guide, which performed a comparison of content libraries across streaming services:

"No service did extremely well when it came to movies, either modern or classic. Netflix had only one of 2014's most popular movies (*How to Train Your Dragon 2*), while its competitors had two apiece (*Transformers: Age of Extinction* and *The Hunger Games: Catching Fire*). From the IMDb list [of top ten all time movies], Netflix and Amazon Prime had one apiece (*Pulp Fiction*), whereas Hulu had none."

Streaming libraries are lacking when it comes to movies. And that's where optical media shine. With an enormous collection, Blu-ray (and DVD) offer the best chance of availability for any given movie. This is particularly true for new releases, which are often made available on Blu-ray long before they can be streamed--if they're ever even made available to stream. (Want a sense of what's available to stream? Check out CanIStreamIt.com.)

If you want to watch hit movies from the past decade, you'll almost certainly need to purchase a disc or pay for a digital download, not stream them.

Content libraries offer insight into how services are used.

What are the takeaways about the changing media landscape?

1 Streaming is changing the way people watch TV programming.

Between time-shifting and on-demand viewing, viewers are increasingly watching content when they want, not when it's broadcast.

2 Streaming has little effect on how people use optical discs to view movies.

The best, most reliable way to watch a film is still on disc. That's not likely to change anytime soon.

3 TV is adapting.

TV technology is in a state of flux. Cable companies are restructuring their offerings, and streaming services are developing content. The number of business strategies in this world is exploding.

4 Access to content is the limiting factor for services and for viewers.

Media companies are limited by the content they can offer, and negotiating deals with studios is difficult and expensive. Viewers migrate to the services that provide the content they most value, when they want it.