

FREEWHEEL
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COUNCIL FOR
PREMIUM VIDEO

THE EVOLUTION OF STREAMING

Insights for advertisers on a decade
of change and the future of OTT

DECEMBER 2020

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THE EVOLUTION OF STREAMING

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OVERVIEW

Streaming as we know it today has undergone a massive evolution, growing in importance for marketers throughout its rise to mainstream media. The viewing platform continues to grow as ad spend in the space is projected to surpass \$10 billion in 2021, eMarketer predicts.

“About twenty-five percent of households skewing younger are OTT/streaming/digital delivery-only, about another twenty-five percent average older and are more accustomed to the broadcast TV format... and that leaves about the other half of people somewhere in the middle.”



Jonathan Steuer
EVP, TV Strategy & Currency, VideoAmp

Once a nascent platform in the 2010s, streaming video platforms have matured technologically and grown to deliver engaged audiences at increased scale. The streaming marketplace is cluttered though, and laden with poor-quality, non-sophisticated platforms.

For marketers, working with streaming partners who are transparent in their advertising experience and house premium-quality video content is of the utmost importance when activating OTT (or “over-the-top”) campaigns. Even more essential is to incorporate streaming and OTT into a balanced media mix, inclusive of linear TV, in order to maximize reach to the intended audience.

Strategies that accommodate the overlap of how audiences are showing up in the video ecosystem—inclusive of streaming and more traditional platforms—are very important, or else you’ll miss or over-saturate consumers. More viewing will occur via streaming platforms over time, and many see it becoming the dominant way to view television content over the next decade. For OTT to thrive as a marketing channel and for streaming platforms to gain the economics they need to deliver premium content to their audiences, four dimensions of streaming will need to evolve: scale and unification, targeting, quality and audience measurement.

A Timeline of Streaming

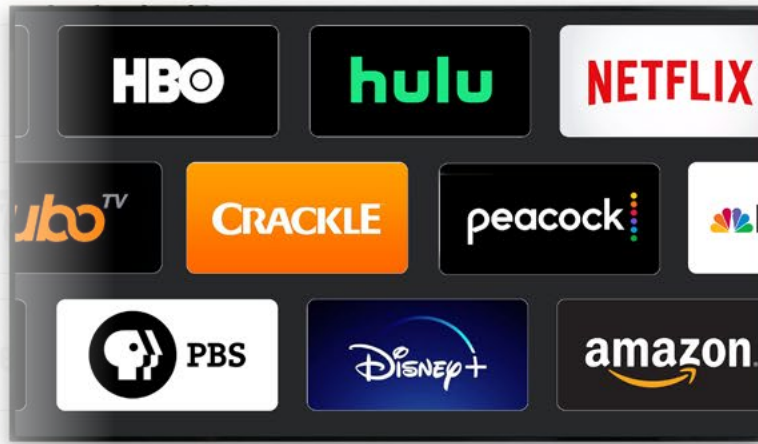
More than a decade of OTT and streaming premium video:

PRE 2010

Apple iPhone launches (2007), Netflix launches streaming service (2007), Hulu launches (2008), Roku launches (2009), TV Everywhere launched by TWC (2009)

 **hulu** **NETFLIX** **Roku**

POST 2010



For illustrative purposes only.

GET TO KNOW STREAMING

For consumers, the term streaming has been adopted as a way to describe the access of video content via digital/ IP devices (desktop, mobile, connected TV's). But before streaming became mainstream as a viewing platform, marketing channel or moniker, the media and advertising industry referred to it as OTT and still does.

The term OTT has evolved from a misunderstood term previously conflated with CTV (connected smart TVs and devices), to a more all-encompassing definition that includes all content, devices and screens outside of linear and set-top-box VOD. That is, any device, service or platform that is delivered “over the top” of the set-top-box.

In a study conducted by FreeWheel’s sister company, Effectv, in collaboration with Kantar, 90% of those surveyed were familiar with the phrase streaming, agreeing that streaming can happen on any device with an internet connection.

Note: this guide will use both terms, streaming and OTT, interchangeably when referring to the industry and consumer perspectives, respectively.

Connected TV (CTV) includes smart TVs and devices like Roku, Apple TV and video gaming consoles. CTV is a subset of OTT.

2010

Smart TVs start to gain traction in the market

2011

Amazon Prime Video launches for Prime users, Xumo launches



According to Nielsen in their August 2020 Total Audience Report, streaming viewing has scaled to 25% of total time spent with TV through better connectivity (both in home and on the move), improved services and content libraries, as well as more savvy consumers with evolved expectations on how they want to consume their favorite programming.

“

“We’ve made such incredible strides in the streaming industry over the past ten to fifteen years that it’s easy to forget how far we’ve come. Ad format innovation is a huge opportunity that’s really allowed us to introduce [different types of advanced advertising], figuring out how to incorporate ads within the product experience so we have a lot more room to play with.”



Patricia Hadden

Head of Growth Marketing, Peacock

OTT and streaming have become a far more mature and sophisticated way for advertisers to reach and measure engaged audiences than in the early days.

Still, there are many challenges to overcome as a cluttered market with a multitude of streaming players for consumers and advertisers to navigate. Emerging media business channels often attract the smartest minds, but also opportunistic and nefarious ones that threaten the integrity of the medium as a whole, to the detriment of the legitimate players. Streaming platforms have seen stark increases in

fraudulent behavior and other quality challenges in the last couple of years. For advertisers, focusing on transparency and the quality of desktop and mobile content are the keys to getting the most out of the streaming opportunity, and a great way to aggregate reach by complementing it with linear TV schedules.

2012

Connected TVs in 25% of HHs; 10M authenticated devices access 2012 Summer Olympics



THE FOUR DIMENSIONS OF STREAMING

There are four aspects that are vital to streaming advertising opportunities and progress against each one will ensure that the ecosystem scales and matures in a way that works for consumers and advertisers alike:

1. SCALE & UNIFICATION

2. AUDIENCE TARGETING

3. QUALITY: VIEWABILITY & FRAUD

4. AUDIENCE MEASUREMENT

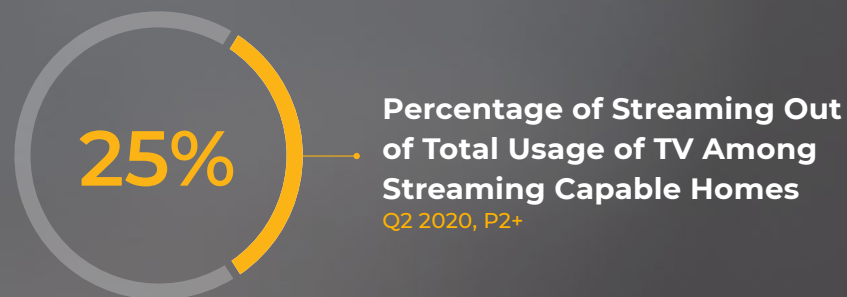
1. SCALE & UNIFICATION

OTT is now a significant part of the TV viewership equation, with 25% of total TV viewed done via desktop, mobile and CTV.

The advertising ecosystem helps fund 54% of streaming viewership, as many streaming services are based on subscription (SVOD) versus ad-supported (AVOD).

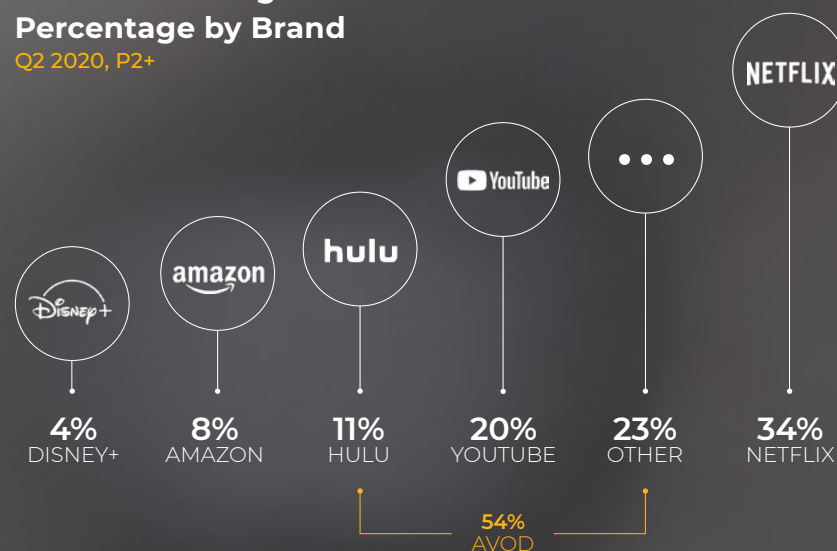
Note: of the **54% of AVOD** streaming viewership, 20% is on YouTube, which is not considered exclusively premium or high-quality content. Premium supply is still scaling for advertisers.

STREAMING = 25% BUT ONLY HALF OF THAT IS AD SUPPORTED PREMIUM VIDEO



Video Streaming Distribution Percentage by Brand

Q2 2020, P2+



Nielsen Total Audience Report, Q1 2020

CTV makes up the lion's share of streaming viewing. According to the [Leichtman Research Group](#), 80% of U.S. households have at least one smart TV or internet-connected device plugged into their TV (with almost 400 million connected TV devices being used today). According to research firm [Parks Associates](#), in July 2019, Roku and Amazon had approximately 70% share of the U.S. market for streaming media devices, with Apple in third place.

“CTV's combination of a premium TV viewing experience with advanced ad targeting capabilities, makes it a powerful platform for advertisers to reach a highly engaged and addressable audience.”



Diana Horowitz
SVP Ad Sales, fuboTV

Audiences are streaming video content as either a complement to their cable/satellite service, or in some cases (especially among younger demographics), as their primary means to access premium content. Improved content libraries and user experiences have established streaming as an advertising channel that cannot be ignored due to the scale of audiences it now attracts. The number of streaming service subscriptions in the U.S. is expected to reach 220 million by 2024 (eMarketer).

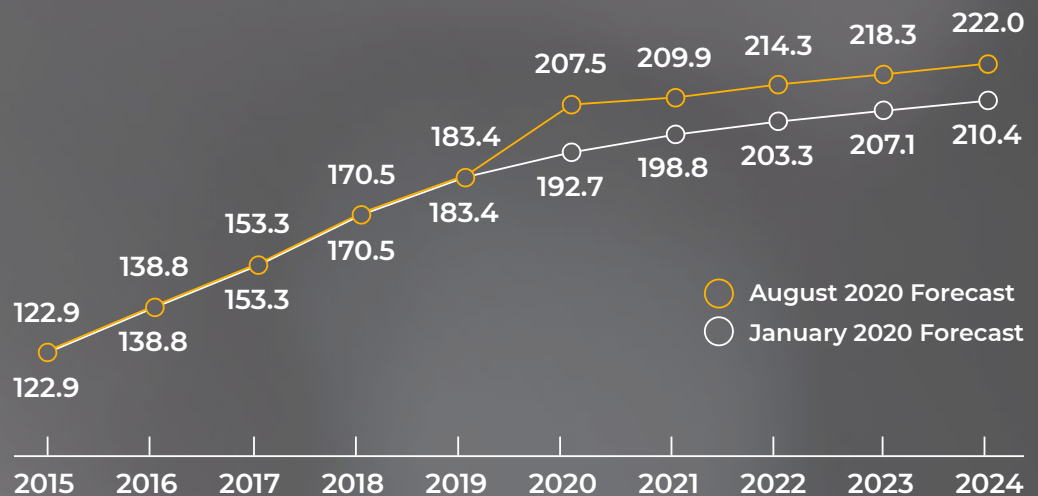
Linear TV, however, still accounts for roughly two thirds of all viewing and remains an incredibly important vehicle for advertisers to think about in combination with streaming planning and buying to maximize reach and optimize frequency. TV publishers who operate across both channels now offer advertising clients the ability to schedule and manage their campaigns across both, unifying audience reach.

How has the U.S. Subscription OTT Video Viewer Forecast Changed?

millions, 2015-2024

Note: Individuals of any age who watch video via an app or website at least once per month that provides paid subscription access to streaming video content over the internet and bypasses traditional distribution; examples include Amazon Prime Video, Hulu, Netflix, Sling TV, and YouTube Premium.

Source: eMarketer, Aug. 2020





“Premium video publishers have worked hard to organize their teams, processes and sales offerings to package up advertising solutions designed to enable advertisers to reach audiences watching their content across all platforms. This flexibility has unlocked new opportunities that map advertisers’ budgets and goals to TV audiences’ own flexibility of viewing options”



Jill Steinhauser

SVP, Ad Sales Revenue & Planning,
Discovery Communications

There are still considerable challenges related to the unification paradigm, with the alignment of systems data, ad exposure data-rights to support frequency management, equivalizing of ad units and the adoption of standards to solve for managing delivery across linear and digital environments.

For cross-device campaigns and the operations that manage them to have the flexibility they require, the systems and platforms need to work with real time data to ensure campaign optimization (duplication across linear and digital for example) can occur.

Historically ad units have been priced differently and true, fluid application of budgets to audiences viewing certain shows requires considerable advertising platform coordination to monitor and adjust delivery.

As for standards, widespread adoption of Ad ID to provide an advertiser with a universal identifier for a campaign, no matter what format and platform it is intended for, is critical for unification to work. Ad ID enables ad separation (ensuring two ads of the same category don't run back to back), allocation optimization and streamlined reporting when used by all parties across the value chain.



While there are standardization steps to take in the planning and buying stages of the campaign, the holy grail for marketers is to manage individual campaign exposure at an industry level. Robust and transparent coordination amongst multiple platforms is paramount to ensure deduplication and frequency optimization. A welcome evolution within the industry would be increased collaboration on standards and data rights.

2013

Netflix launches first successful original series, House of Cards (and wins Emmy nominations), Google launches Chromecast; Online video is over 50% of all internet traffic



2. AUDIENCE TARGETING

Much of the premium content delivered through OTT mirrors traditional linear TV content and is sold on content and context versus audiences. At the same time, advertisers have challenges mirroring OTT and linear buys precisely due to different data dynamics and content catalogs. Buyers of OTT inventory often look for audience data targeting (demo or behavioral) that does not necessarily match to linear content buys. While there are already various targeting capabilities offered primarily by TV publishers who operate across both linear and streaming, there is a huge opportunity for advertisers to bring their own first party data to the table.

“OTT’s ability to bring more sophisticated matching and activation by publishers and technology providers opens up new targeting opportunities that are table stakes in the digital arena.”



Beth Crotty

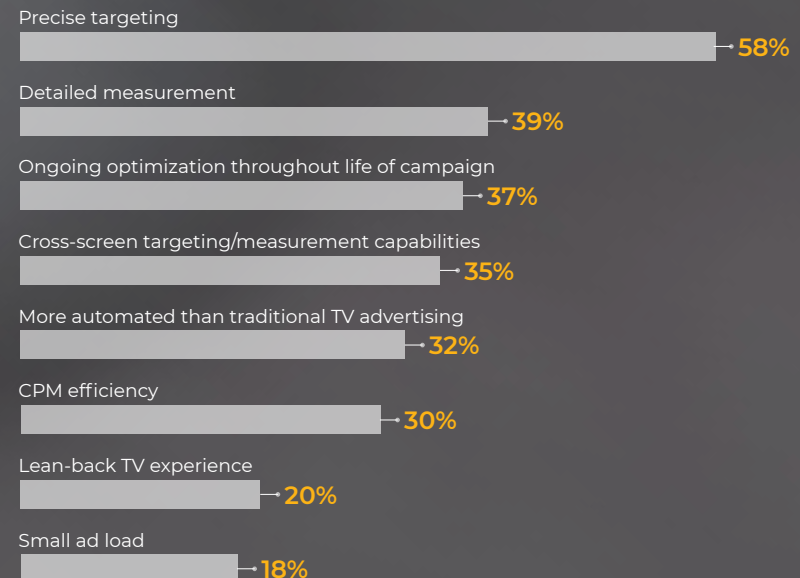
Executive Director, Product Development
& Management, Cox Media

Unique Data Sets Required

In a cookie-less environment, targeting within streaming platforms requires a unique set of data to find audiences. Audience packaging (based on more granular variables like income and purchase behavior) by publishers is more common now and it’s possible to do at a scale that is attractive to advertisers.

Even back in 2018, advertisers were most excited about the precision of targeting that was possible with OTT and CTV.

Leading Benefits of OTT/Connected TV Advertising According to U.S. Agencies and Marketers, Jan 2018 % of respondents



Note: n=171; respondents chose their top 3

Source: Videology, “Advanced TV Trends” conducted by Advertiser Perceptions, June 26, 2018

Before the pandemic hit and more general messaging was delivered to broader audiences (as we were all in the same boat), there was significant growth in targeted campaigns within streamed content. In Q4 2019, campaigns that engaged in addressable advertising across digital screens increased by 48%, compared to 2018, with 71% of all targeted campaigns using some form of advanced data sets aligned to behavioral characteristics.

Audience Segment Share of Targeted Campaigns; Targeted Ad View YOY Growth, U.S. and Europe Q4 2019



*'Demo' audience segment types are those that target based on age and gender, 'Behavioral' audience segment types are those that target more advanced segments such as auto interders, sprots enthusiasts, etc.

Source: FreeWheel Video Marketplace Report, Q4 2019

Solutions Come and Go

There are several concepts that have amplified the need for better targeting in the OTT space, with some opportunities seeing recent enhancements and others, setbacks. For instance, the use of device graphs has scaled to account for a larger cross-section of the OTT viewing population, and IP matching came about as an alternative way to make up for the fact that outside of desktop and mobile, OTT was cookie-less. It was found that more and more IPs are created dynamically and therefore are too inconsistent to be the basis for targeting and campaign management.

Device or identity management graphs map individuals to their devices like laptops, smartphones and tablets.

A true cross-device graph through the linkage of anonymized advertising device IDs across all digital channels is the only possible way to create a comprehensive view of the streaming viewer's interactions with the brand's messaging; delivering on the promise of 1:1 digital marketing.

Hail the Long-Awaited Standards

The introduction of standards like IFA (Identifier for Advertising) to help make sense of cookie-less OTT environments, and at the very least, control frequency to uphold the TV-like experience, have helped. But OTT is such a diverse channel, with multiple devices, environments and services delivering content to consumers in an ever-changing industry, so it's challenging to create and enforce standards (and often feels like trying to build a car while driving it).

2014

Netflix spends \$3B on content and wins 31 Emmy nominations

NETFLIX

2015

Dish Network's Sling launches; Comcast launches Xfinity Stream; 79% of U.S. HHs get broadband at home; 40% of smartphone owners watch video on their mobile devices; Amazon releases Fire TV device with voice search; Fubo TV launched

sling xfinity stream
fuboTV

First-Party, Please

With third party data inconsistencies, both in terms of measurement and campaign management, the promise of first party data, which echoes around the whole industry especially in light of privacy-oriented initiatives, is becoming stronger and stronger. This is where advertisers see the greatest opportunity for targeting both in terms of precision and accuracy.

The application of first party data in a TV-plus-streaming world means campaigns are truly reaching consumers across devices and screens. The importance of registration and authentication within the streaming environment cannot be understated and provides publishers with a granular way of understanding and reaching audiences through their own first party data. Premium video publishers with app registration data as well as TV Everywhere authentication capabilities have a more granular understanding of their audiences and ultimately a clearer path towards managing reach and frequency across screens.

Where first party data sets aren't available, third party data and cross-device graphs enable advertisers and agencies, as well as publishers who don't have first party data at their disposal, to provide increasingly robust targeting capabilities.

But much of the targeting equation comes down to trust. Brands know the integrity of their own data and have confidence that if applied correctly, it will give them the capabilities to engage with their audiences at known stages of their consumer journey. Applying first party data sets to targeted OTT buys with premium video publishers represents the highest quality in both the advertising environment and the likelihood to be successful in delivering the right message to the right person.

2016

DIRECTV Now launches



3. QUALITY: VIEWABILITY & FRAUD

Because OTT is an IP-based platform, marketers have carried over their concerns from desktop around viewability and fraudulent traffic, and as demand continues to grow for streaming audiences, the likelihood of fraudulent activity increases. Companies are rapidly developing solutions to certify and authenticate viewership in order to ensure viewers are in fact human audiences, not bots.

“OTT/CTV is still a fairly new channel, which means there are fewer standards in place and it can be more complex to find patterns in ad fraud issues; so, it’s critical to know where your inventory is coming from. Given how fast the OTT/CTV landscape and technologies are changing, working with high-quality partners is more important than ever.”



Carl Kalapesi
COO, FreeWheel

2017

Hulu launches Live TV service; YouTube Live launches; Disney pulls Marvel & Star Wars content from Netflix



Viewability levels within premium video, especially CTV, have always been unquestionably high due to the nature of the viewing experience: full episode and short-form premium content that is seen on a TV and therefore full-screen. The nature of OTT is far more conducive to audiences viewing the content as they have typically opted in or sought out that episodic or specific content, versus other digital content that is more conducive to skippable ads and low attention levels.

There are relatively low barriers to entry in the OTT space, where it is easy for organizations and even individuals to set up a digital channel, aggregate publicly available content and call it an OTT service. This ease of content delivery (made easier by more sophisticated search and discovery technology) creates opportunities for fraudulent behavior by individuals looking to exploit this new means of video consumption.

Another verification and tracking issue for OTT has been the dynamic stitching of ads into live streams or server side ad insertion (SSAI). In the early days of OTT with SSAI, verification companies were unable to detect these impressions as valid due to methodological and technological challenges.

Many valid, premium OTT impressions weren't counted as viewable or valid as the ads were not classified in the same way as on demand content, using ad serving technology to serve them. SSAI-enabled traffic is now more identifiable through verification providers as measurement practices have caught up with content and ad delivery. Fraud is certainly prevalent in non-premium OTT channels as opportunistic bad actors have looked to capitalize on increased demand from consumers and advertisers alike. Non-human or invalid traffic detection has also improved over time to ensure that advertisers are guarding against this nefarious behavior, but the

nature of distributed content and programmatic buying practices means that not all fraud can be detected all the time. Increased privacy legislation and data sharing restrictions have likely created additional hurdles for fraud detection, as the issuing and tracking of identifiers for legitimate users is less persistent. While technology has improved dramatically over time in the world of OTT to measure and validate traffic, every sign points towards premium partners on recognized platforms to guarantee that advertisers' investments are indeed reaching the engaged users that CTV and OTT attract.



“Companies need to start to understand what is truly invalid, as there is still a lot of noise when it comes to erroneous measurement, especially with server-side ad insertion, which is predominant in OTT and is often misclassified as fraud.”



Soo Jin Oh
Co-COO, Gamut

Some Considerations in Light of Fraud in the Space

1. Any aggregator of content that doesn't consist of 100% first party assets should be using a rigorous onboarding and ongoing monitoring process that is transparent for advertisers looking to work with them.
2. Standardized frameworks are the most trustworthy mechanisms for advertisers to feel confident about traffic and content quality. Accreditation with organizations like the Media Research Center (MRC) and TAG Brand Safety/JICWEBS are important to consider.
3. Partnerships with invalid traffic (IVT) detection providers are also a good signal that OTT partners are not leaving anything to chance or hearsay.
4. For programmatic buying of OTT inventory, pre-bid bot protection capabilities are vital to ensure that non-human traffic is eliminated before it even becomes a problem for advertisers. In the same vein, selecting premium publishers to work with, where inventory quality is assured through their own high-value programming, internal controls and authentication practices.
5. On the flipside, where supply sources are unknown, untested or unclear, buyers should monitor inventory using established industry frameworks for non-brand suitable categories and vet new inventory supplies by reviewing the actual content.

4. AUDIENCE MEASUREMENT

OTT audience measurement has faced a number of challenges over the years. As a digital channel, buyers' expectations for digital-style measurement doesn't match up perfectly, with a cookie-less environment and verification providers initially unable to validate human traffic and viewability. Third party measurement providers use co-viewing methodologies to align impressions to linear style measurement, but there is a certain level of flexibility that advertisers need to apply to assess their delivery and return on investment.

Incremental & Automated

From an incremental reach perspective, OTT is the other piece of the jigsaw puzzle to reaggregate audiences that were once just found on linear TV. Initially, advertisers were concerned about overlap of audiences but many viewers use CTV and OTT as their primary means of accessing TV content, and those that use both will watch different services and devices at different times of the day or in different locations, either within or outside of the home. Technologies and data sets now exist to start evaluating the combination and deduplication of viewers across specific pieces of content, as well as brand advertiser exposure to audiences across both linear and digital.

Programmatic channels, which use first and third party data sets to find audiences, are helping to advance measurement in OTT, as they rely less on legacy third party measurement providers and more on specific audience delivery. Device ID targeting enables advertisers to reach their identified audiences through first party data or a data management platform (DMP). There are other emerging solutions that build audience profiles using IP addresses and a user-agent string, but there are also growing concerns related to privacy and personal data collection.



"In the last two years we have seen a breaking down of walls between the platforms. Becoming more similar to linear with it's premium content and increasing scale, OTT/CTV offers marketers additional value through an unduplicated audience and enhanced targeting capabilities. For buyers it is all TV, and creating an omni-video strategy across both linear and digital is the way forward."



Dave Antonelli

Director, Ad Strategy & Revenue, Sling

2018

76% of U.S. households have a connected TV device; Average daily time spent with connected TV increases to 15% of daily media consumption; Quibi launches; IAB launches IFA and apps-ads.txt



2019

Crackle Plus launched; OTT subscribers reach 182M (>50% of population); Disney+ launches; Apple TV+ launches; Viacom purchase Pluto TV



Cross-Platform Impressions

Developments in privacy regulations have only exacerbated the challenge of holistic digital and linear measurement. There seems to be an inevitability towards an impression-based framework that is able to equalize gross rating points (GRPs) and target rating points (TRPs) into impression delivery against desired audiences. The rise and maturity of addressable TV enabling linear to look and act a lot like digital in terms of audience targeting is accelerating the need for a path to merge impressions with legacy linear currency.

There are a number of industry initiatives and solutions in various stages of maturity to address the cross-platform measurement challenge. NBCUniversal developed a framework called C-Flight which implements a uniform impression-based metric that equates linear and digital viewing. The framework uses third party partners to raise the bar on viewability, ad completion and co-viewing. While this is a single publisher's solution, there has been interest from other publishers to adopt C-Flight, while others are developing their own.

The WFA's cross-media measurement initiative is an example of an industry effort, coordinated by global brands and leading national advertiser associations. Its framework outlines principles for a privacy-compliant, cross-media measurement methodology for audience reach and frequency. Standardized approaches that have advertiser support can have major impact in terms of moving cross-screen measurement forward, which makes it essential to take into account the quality and timing of impression delivery. Premium OTT content offers a level of quality and ad choreography on par with linear TV, but not all OTT or other digital video impressions deliver comparable levels of attention and impact.

Bridging Through Attribution

The increase and enhancements of attribution services are also a major factor in the OTT measurement equation. Most major attribution companies have focused their methodologies on a "total TV" approach, so they can measure exposure across linear and digital and attribute business outcomes to the appropriate marketing channel. Through the deduplication of audiences appearing in both flavors of TV, not only can they measure reach and frequency but also the connection between exposure and actions.

When it comes to the aggregation of total TV audience measurement, there is still work to be done. Ultimately, all cross-platform impressions should be verifiable, measurable and attributable, and there are positive strides being made to ensure that the OTT piece of the puzzle plays its part in making that happen.

"Measurement has evolved from probabilistic to deterministic data sets and attribution techniques can link both linear and OTT exposure to actual business outcomes. We are seeing significant value in the incremental reach of streaming audiences, not only to drive additional exposure to linear but also to bring lift to website engagement and actions."



John Hocter

Co-founder, Data Plus
Math (LiveRamp)

CONCLUSION

OTT is a huge area of opportunity for advertisers looking to incrementally reach more of their desired audience. At the same time, the whole advertising industry has some work to do in order to catch up with these ever-increasing streaming audiences. Alignment on audience unification, targeting capabilities, ad exposure data rights to enable frequency management, quality standards and an audience measurement framework will be instrumental to the future of advertising in this environment.

Content is king, and as more consumers discover and engage with premium video across the streaming ecosystem, there will be increased demand from advertisers to reach those audiences where they show up. The quality and transparency of the ad experience matters a great deal and the verification and measurability of media is crucial at a time when accountability is essential.

The world of streaming may be over a decade old, but with new entrants (both legitimate and otherwise), and viewing and advertising standards still evolving, this next decade is sure to be a fascinating journey for all stakeholders. TV will continue to be redefined in this decade but what is clear is that streaming will be central to its future.

2020

Streaming is 25% of total time spent with video (Nielsen); OTT companies spend over \$105B on producing original content; HBO Max, Peacock launched





COUNCIL FOR PREMIUM VIDEO

DECEMBER 2020

The FreeWheel Council for Premium Video (FWC) serves the interest of those in the premium video industry through leadership positions, research and advocacy to promote the premium video economy. The FWC operates as an educational and organizing resource to assist marketers to reach desired audiences in premium video environments, conduct research documenting the benefits of premium video and represent the interests of member publishers and the market. The FWC is comprised of today's leading premium video publishers including A+E Networks, Effectv, Discovery Communications, Fox, NBC Universal, Turner Broadcasting System and Univision Communications. For more information on the FreeWheel Council for Premium Video please visit www.FreeWheel.tv/FWCouncil and follow us on Twitter @FWCouncil.

For More Information

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