T>>>VISION

The State of CTV Advertising

FEBRUARY 2023



The State of CTV Advertising 2H 2022 Report

There's no question, 2022 was a busy year for Connected TV. The industry's embrace of ad-supported subscription models finally reached a tipping point as traditional SVODs like Netflix and Disney+ began to roll out ad-friendly tiers. Even as new services hit the market, the industry began to show signs of consolidation as HBO Max and Discovery+ announced their merger. Lines between Linear TV and CTV continued to blur for viewers and programmers alike for live sports viewers and programmers alike as *Thursday Night Football* made a historic shift to streaming on Amazon Prime Video. Meanwhile, viewers had no shortage of high-quality content to stream as apps continued to invest in hits like *Wednesday* on Netflix.

These rapid changes are creating many new opportunities for the industry but also equal parts uncertainty. Marketers are often held back by a lack of universal measurement standards and transparency from walled gardens. In this transitional period, publishers need a way to identify what best engages viewers and ensure they gain share.

Media buyers and sellers need answers to important questions as they strive to keep up:

How does my CTV performance compare?

How many people are co-viewing CTV ads?

Where are the most valuable impressions?

How does programming impact engagement?

Which apps are delivering incremental reach?

These are questions TVision answers every day for our partners. We provide universal measurement standards that accurately reflect the new way people are watching video. In this deep dive into the CTV landscape, we're pleased to offer insight for all marketers to leverage.



INCREASE IN SHARE OF TIME SPENT WITH AD-SUPPORTED APPS SINCE H2 2020

1.44

AVERAGE NUMBER OF VIEWERS IN THE ROOM FOR CTV (VPVH)

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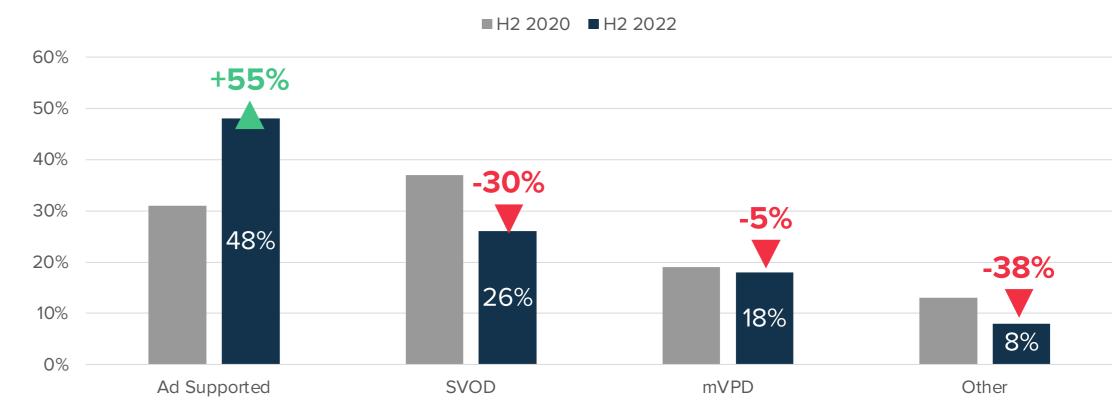


Ad-Supported Models Lead the Future of CTV

Over the last few years, TVision has tracked the increasing amount of time Americans spend on Ad-Supported Apps such as YouTube and Hulu. In the second half of 2022, 48% of Time Spent Viewing CTV went to Ad-Supported Apps (up 55% from the end of 2020) and just 26% to SVOD (down 30%).

Last year, subscription leaders Netflix and Disney+ surprised the industry by announcing ad-supported models. We expect the share of time spent on ad-supported apps to continue to grow now that these ad-friendly subscription tiers are available.

DISTRIBUTION OF TIME SPENT VIEWING CTV



The Number of Apps Settles

Though 2022 was a big year for CTV, the sharp upticks in app adoption seen just a year or two ago have finally settled. The number of CTV enabled households has remained steady at 83%. Similarly, the number of apps viewers actually watch has also remained consistent and notably lower than during the peak pandemic highs. Households have gone from watching an average of 7.7 apps in Q4 2020 to 7.3 in 2022, while the number with 10 or more apps hovers at 29%.

CTV By The Numbers

83%

AMERICAN HOUSEHOLDS
ARE CTV ENABLED

7.3

APPS PER HOUSEHOLD

29%

OF HOUSEHOLDS
USE 10+ APPS

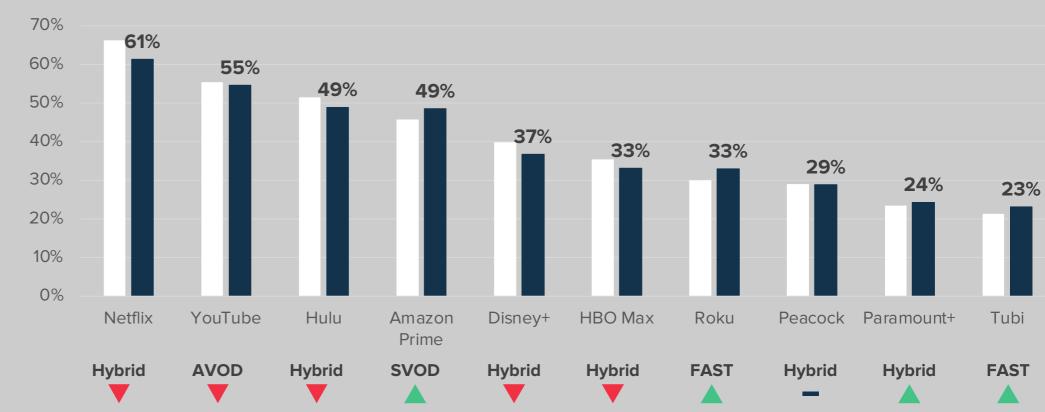
The Apps On America's TVs

In the second half of 2022, Netflix continued to draw in audiences with splash hits like Wednesday, The Watcher, The Sandman, Harry & Meghan, and the blockbuster Glass Onion. Netflix original programming consistently tops our monthly lists of the most popular CTV content. Their steady lineup of new premium content brings in viewers and is part of the reason that Netflix continues to top our list of apps ranked by Household Reach, charted here. Household Reach indicates which apps viewers have installed on their TV screens and have logged into once within the last six months.

Notably, with the exception of Amazon Prime Video, many of the biggest apps, Netflix and YouTube included, saw slight decreases in household reach. This may be an early sign that the heyday of CTV content exploration may be coming to a close as viewers settle into their go-to apps.

HOUSEHOLD REACH BY APP

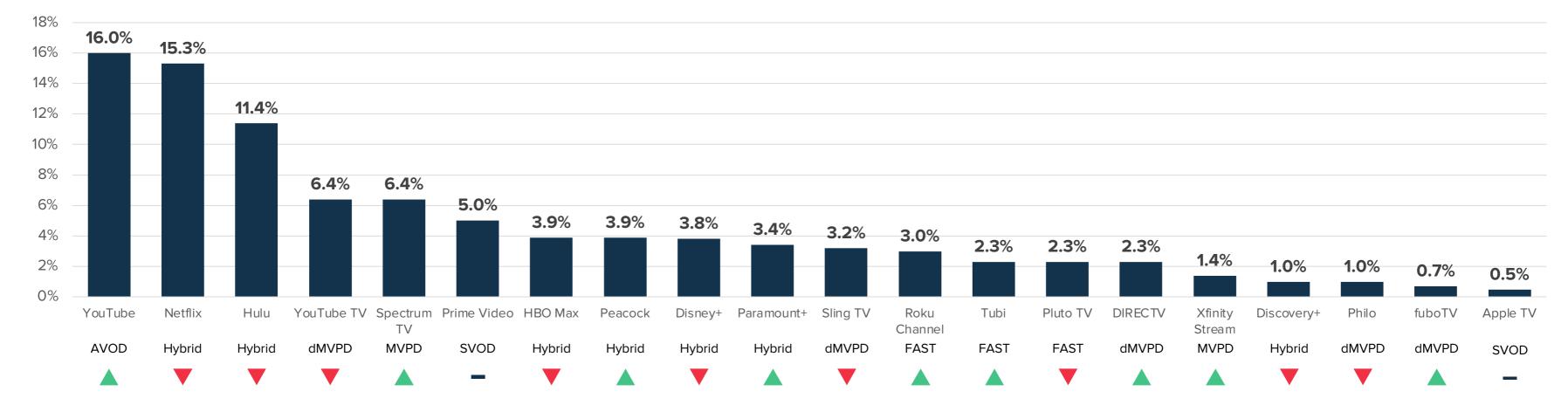
1H 2022 ■ 2H 2022



Viewers Spend More Time on YouTube Than Netflix

Netflix may be bringing in more monthly viewers, but interestingly, they are no longer the leader for capturing share of time spent. YouTube has officially supplanted Netflix as the app where viewers spend the most of their time. This is partially due to an increase in time spent with YouTube - up 7% since the first half of 2022. At the same time, Netflix's share of time spent has decreased by 10% - giving YouTube the advantage for the first time in the back half of 2022. It will be interesting to see if long-tail content available on YouTube continues to compete with the high-quality and expensive content developed by apps such as Netflix in the months to come.

RANKED SHARE OF TIME SPENT VIEWING BY APP



The First App In a Viewing Session Matters

To understand YouTube's rise to the top, we took a closer look at viewing session behavior. CTV viewers are commonly thought to be more intentional, and our data confirms that the vast majority of CTV viewing time is spent playing content, and not browsing or switching between apps (78.8% vs. 4.3%, respectively).

In addition, across the board, users were more likely to spend more time each tuning session with their first app than with any other app along their viewing journey. This makes that first selection critical as there are fewer meaningful opportunities to pick up share after the viewer has tuned into their first app.

When we looked at the top 20 apps viewers started with, YouTube was the clear leader with 24.2% of time spent on first sessions coming from YouTube. In fact, throughout the viewer journey, whenever a viewer navigates to another app, YouTube retains its #1 rank as the top app choice. This preference is giving them a clear edge in share of time spent.

YouTube: Most Users' First App Choice

24.2%
OF TIME SPENT ON FIRST SESSIONS

RANK AS THE TOP APP CHOICE

SELECTED AS THE VIEWER'S FIRST APP

YouTube ————	24.2%
The Roku Channel ————	10.1%
Netflix —————	8.7%
Amazon Prime Video ————	7.7%
Peacock ————	6.3%
Hulu ————	5.3%
Disney+ ————	5.3%
YouTube TV ————	5.3%
Sling TV ————	5.3%
HBO Max	4.8%
Pluto TV —————	4.3%
Paramount+ ————	3.4%
Spectrum TV	2.9%
Discovery+ ————	2.4%
Tubi ————	1.9%
All Others In Top 20 ————	2.1%

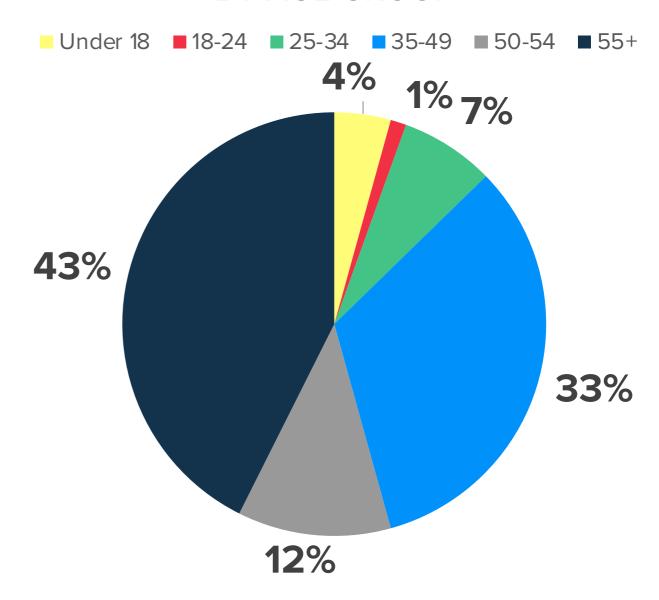


The Rise of FAST Apps

FAST apps such as Pluto, Tubi, and The Roku Channel all also experienced significant increases in Share of Time Spent Viewing. But just because viewers are spending more time on these free, ad-funded apps doesn't mean they're staying engaged. Our data shows that FAST apps almost universally index lower for both viewer presence and eyes-on-screen Attention compared to CTV industry averages.

In terms of who is spending time on FAST apps, viewers are generally older than average CTV viewers and skew female. Viewers under 35 and high-income audiences tend to spend less time on FAST apps.

FAST APP SHARE OF TIME SPENT BY AGE GROUP



Co-Viewing: How Many People Are In The Room?

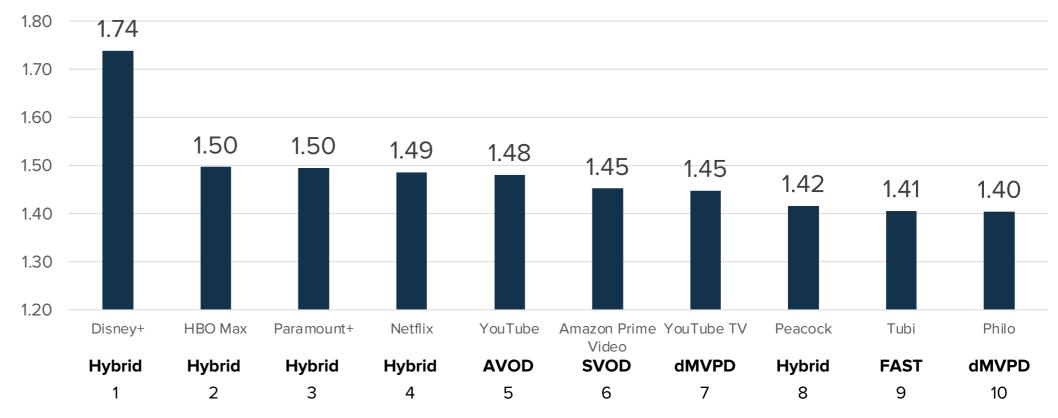
Co-Viewing rates provide insight into the real reach of CTV applications and programming. They serve as a multiple that can help both marketers and platforms better value CTV ad inventory. With person-level data for TV viewing behavior, TVision is the only company that can provide accurate co-viewing rates for CTV.

Co-Viewing by App

Apps with high Viewers Per Viewing Household (VPVH) offer greater reach per impression as well as more engaged viewers. Our studies have also shown that when viewers watch TV with at least one other person, they pay more attention.

Time and time again, we have seen family viewing applications top our co-viewing lists. This year was no exception as Disney+ well surpassed other apps for VPVH. HBO Max and Paramount+ also made a strong showing with the latter's Nickelodeon content delivering high co-viewing rates.

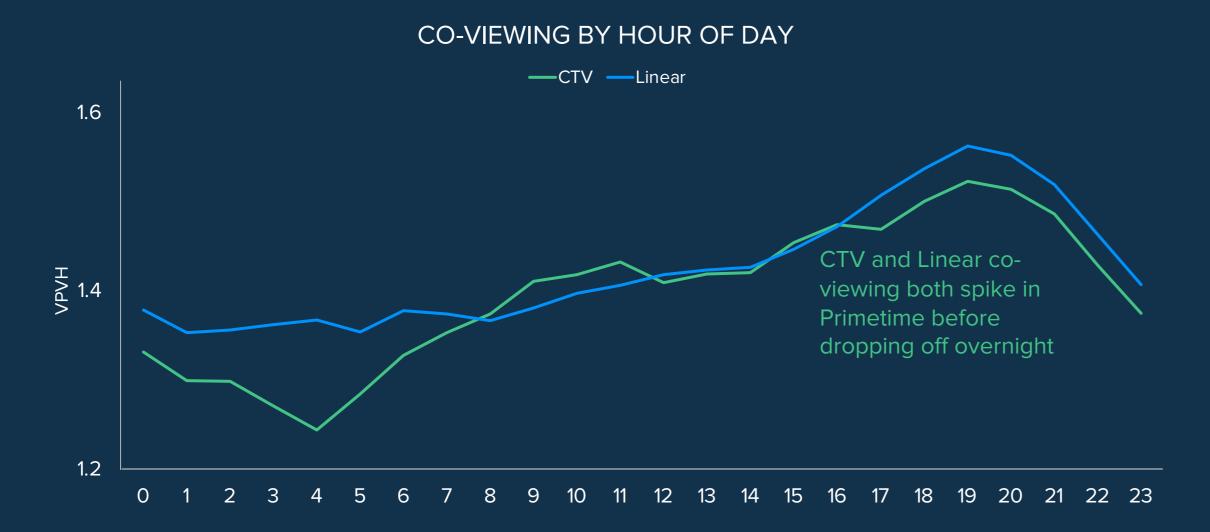




Note: Includes apps where share of time spent >1%

The Best Time for Co-Viewing

Overall, viewers are almost as likely to watch CTV content with friends and family as they are to watch linear TV together. Linear TV typically sees Viewers Per Viewing Household (VPVH) averages of 1.46, while CTV falls only slightly lower at 1.44. This holds true when looking at co-viewing throughout an average day. In fact, when we look at co-viewing trends by hour, CTV follows similar patterns to linear—notably spiking in primetime when VPVH reaches a high of 1.52.

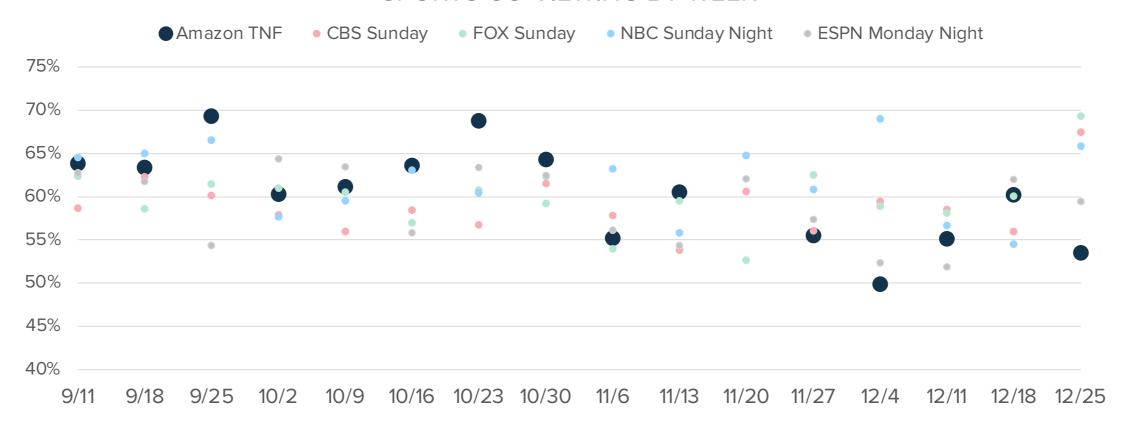


Note: Includes top apps by volume

Co-Viewing and Live Sports

Since live sports traditionally draw in groups of viewers watching together in Linear, we wanted to see if the trend would hold true in CTV. In 2022, Thursday Night Football began airing exclusively on Amazon Prime. When looking at how often viewers are likely to be watching together, our data shows that whether viewers are watching an NFL game in Linear TV or CTV, they're equally likely to watch with friends and family. Co-Viewing rates for Thursday Night Football Games remained generally in line with games that aired live on linear TV those same weeks. This suggests co-viewing is driven by the team or game itself vs. the medium.

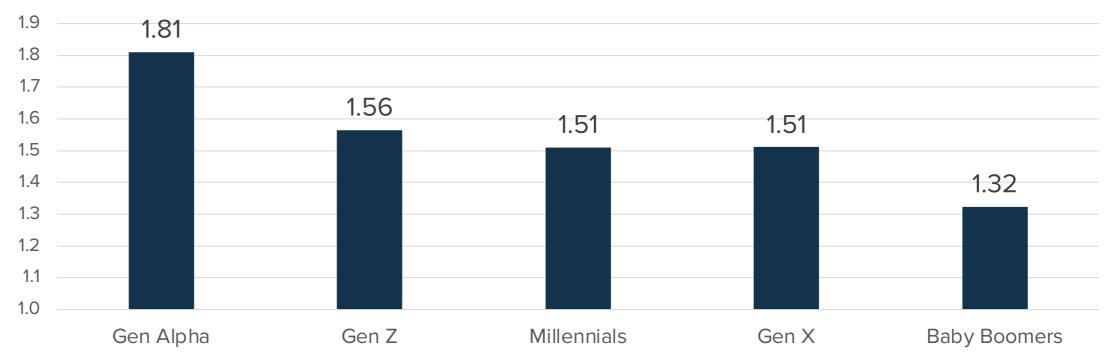
SPORTS CO-VIEWING BY WEEK



CO-VIEWING BY AGE GROUP IN CTV

Co-Viewing Across Demographics

In general, younger audiences are more likely to co-view CTV content, with Gen Alpha and Gen Z showing the highest Co-Viewing rates of all demographic groups.



Note: Includes apps where share of impressions >1%

APPS WITH MOST CO-VIEWING BY HOUSEHOLD TYPE

Households With Kids

1. Disney+: **2.07**

2. Amazon Prime Video: 1.79

3. Hulu: 1.74

4. Peacock: 1.74

5. HBO Max+: 1.73

Households Without Kids

1. Disney+: **1.46**

2. Paramount+: **1.42**

3. YouTube TV: **1.41**

4. HBO Max: 1.40

5. Netflix: **1.36**

Co-viewing may depend on who is watching and with whom. It turns out that CTV is often a family affair. Co-viewing rates for households with children under 18 are significantly higher than they are for households without children. In fact, households with children have 42% more viewers in the room when watching Disney+ compared to adult only households. Meanwhile, those without children are almost as likely to co-view Paramount+ or YouTube TV as they are Disney+.

How to Achieve Incremental Reach

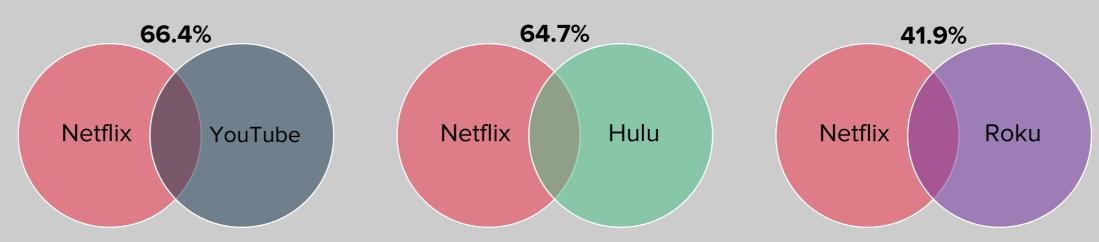
Is CTV ad spend driving incremental reach? Walled gardens and a lack of standard metrics make it difficult for marketers to determine which apps are actually providing additive reach and exposing their brand to more people. With our single-source panel, TVision is able to provide standardized metrics across all apps—including walled gardens. We can see viewer behavior across the entire CTV landscape and determine each app's incremental reach.

Will Netflix & Disney+ Extend Marketers' Reach?

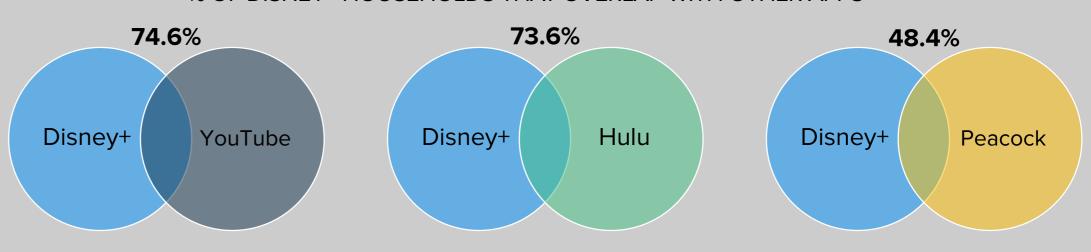
With new ad-supported subscription tiers now available for Netflix and Disney+, many in the industry are wondering about the potential for crossover as they place their ads on these platforms.

As you can see in the chart, there is a good bit of overlap between some of the largest ad-supported apps and either Netflix or Disney+. For example, over 74.6% of Disney+ households also watch YouTube, as do 66.4% of Netflix households. However, with strategic planning, there are opportunities for marketers to advertise on these apps to add incremental reach. For instance, only 48.8% of Disney+ households currently overlap with Peacock.





% OF DISNEY+ HOUSEHOLDS THAT OVERLAP WITH OTHER APPS



Which Apps Add Value With YouTube?

As a walled garden, it is often difficult for marketers to determine if their YouTube audience overlaps with other viewers in their CTV campaigns. In this chart, we show the top ten ad-supported apps where marketers can expect to receive incremental reach beyond YouTube. Interestingly, free-ad supported apps like Roku, Tubi, and Pluto TV made a strong showing alongside apps that offer both premium subscription and ad-supported tiers.

Note, all incremental reach analysis is done based on each app's total reach and not as a percentage of their ad-supported tiers.

TOP 10 APPS FOR INCREMENTAL REACH BEYOND YOUTUBE

% INCREMENTAL REACH

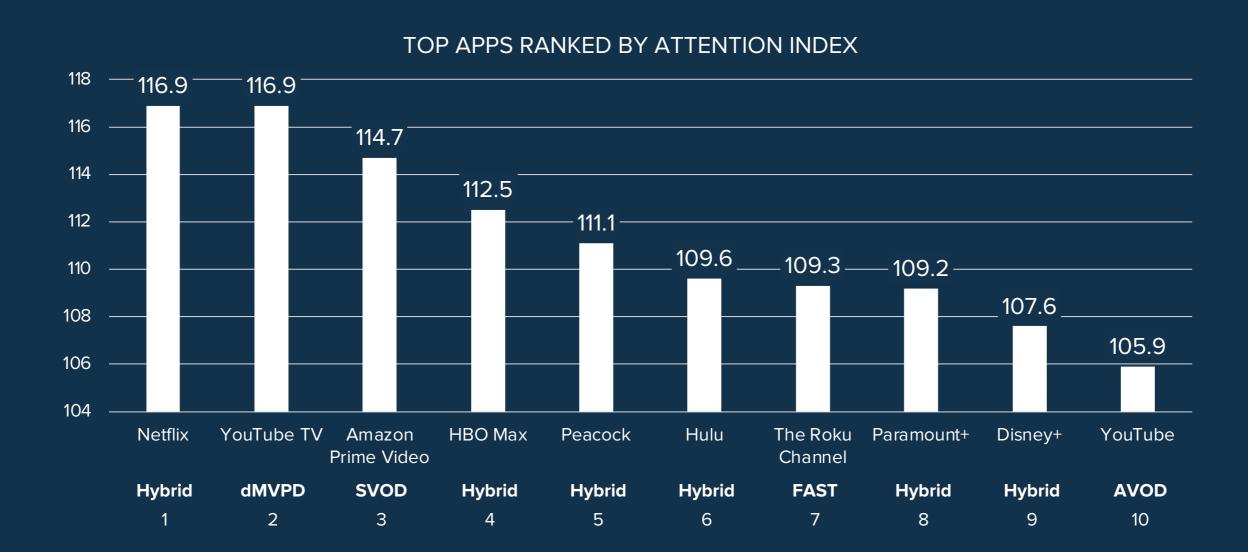


Attention:

What Apps Keep People's Eyes on Screen

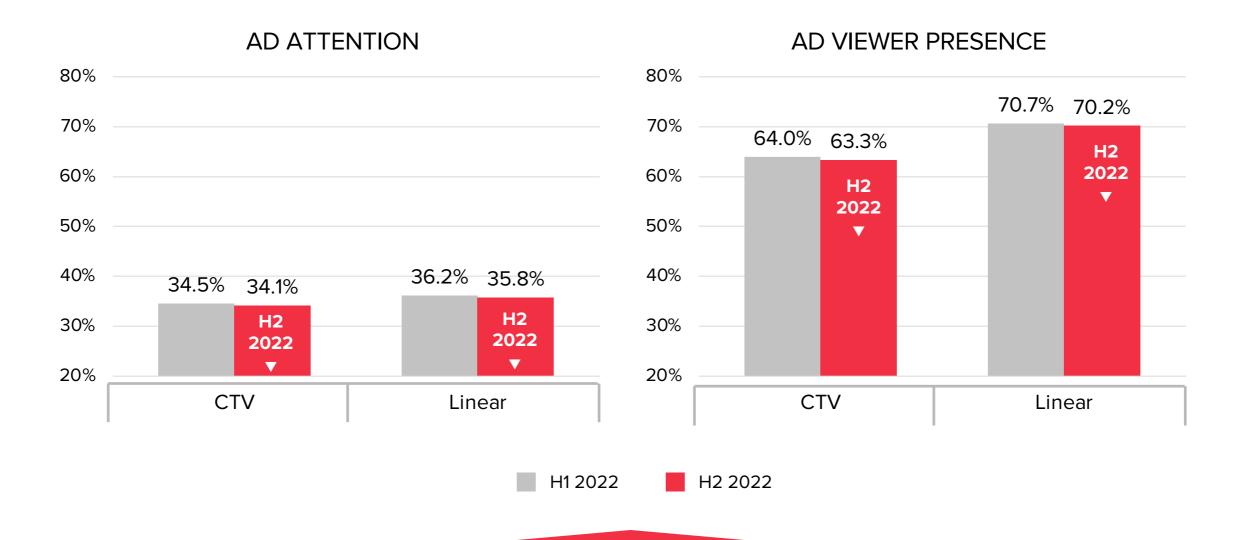
How well viewers pay attention to content is a critical metric for driving meaningful results across the marketing & sales funnel and cutting across media. Whether for in-content placement or commercials, ads work best when people pay attention. When we look at the top applications for Attention, we see that Netflix and YouTube TV tied for the first spot on the list. While Netflix attracts viewer attention with premium content, YouTube TV boasts a strong lineup of cable channels.

Our Attention to Visible Index reveals how likely audiences in the room are to be paying eyes-on-screen Attention to the programming.



Attention and Viewer Presence Are on the Rise for CTV Ads

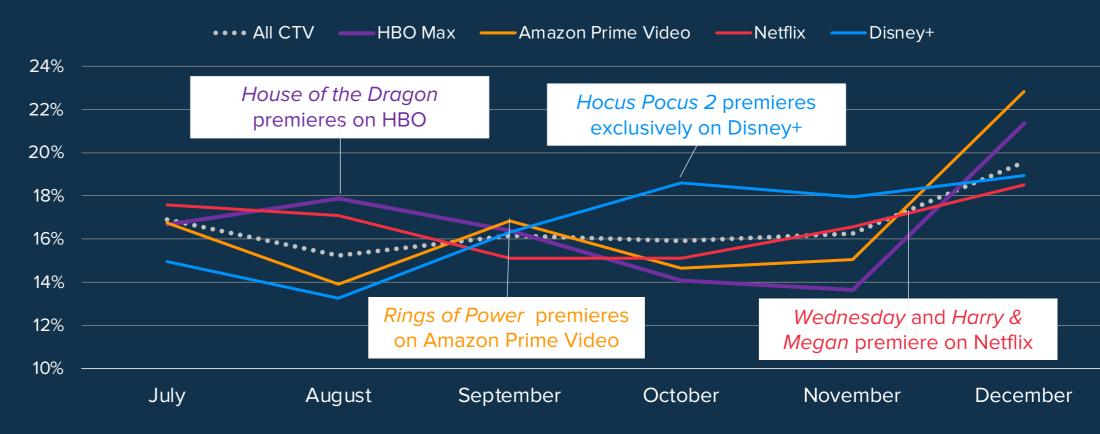
Historically, ad attention and viewer presence have been lower on CTV than linear TV, but CTV is closing the gap. While it's typical for attention and viewer presence to dip in the later half of the year as the holiday season approaches and viewers need to multitask, what's notable here is that the difference between Linear and CTV is barely a difference at all.



How Programming Impacts Viewer Engagement

There was no shortage of excellent premium content to engage viewers in 2022 as many highly anticipated shows and films premiered on CTV. These programs caused spikes in share of time spent on their respective app platforms throughout the back half of 2022. While premium content certainly contributed to the sharp spikes in the last months of the year, it's notable that CTV overall saw an increase in share of time spent across most major apps as people had more time at home for the holidays and caught up on shows both new and old.

SHARE OF TIME SPENT BY MONTH AND APP



Original vs. Syndicated Content

While premium content captures significantly more attention than syndicated content on CTV, the latter still provides value as filler content for application providers looking to attract more viewers. When looking at the top 20 programs in 2H 2022, we saw viewers spent 52% of their time with syndicated programming vs. only 48% with original programming. Viewers of syndicated programming were twice as likely to binge it (consume in sessions of three or more episodes at a time), suggesting these types of programs can often serve as background noise.

Top Original Content

48%
SHARE OF TIME SPENT

130.1
ATTENTION INDEX

25% BINGE RATE

Top Syndicated Content

52%SHARE OF TIME SPENT

109.7
ATTENTION INDEX

45%
BINGE RATE

Many in the industry want to understand how the quality of ad impressions for user-generated content differs from original, premium content. Using YouTube as a proxy, we see that ads in user-generated content see lower engagement as measured by viewer presence in room and attention when compared to CTV industry averages. However, we also see slightly higher-than-average co-viewing rates as viewers enjoy YouTube content together.

YouTube Ad Engagement

23.2%

ATTENTION (VS. 34.1% CTV AVERAGE)

50.7%

VIEWER PRESENCE (VS. 63.3% CTV AVERAGE)

VPVH (vs. 1.44 CTV average)

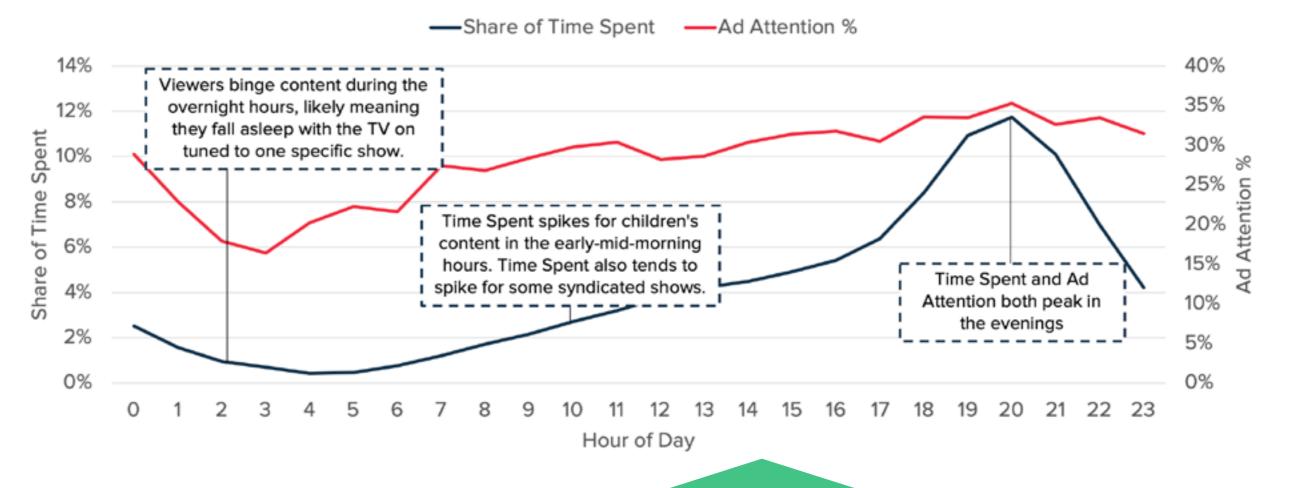
	TOP ORIGINAL CONTENT BY TOTAL IMPRESSIONS		TOP SYNDICATED CONTENT BY TOTAL IMPRESSIONS
1	Wednesday (Netflix)	1	The Big Bang Theory (HBO Max)
2	Monster: The Jeffrey Dahmer Story (Netflix)	2	Family Guy (Hulu, fuboTV)
3	The Watcher (Netflix)	3	Modern Family (Peacock, Hulu, fuboTV)
4	Glass Onion: A Knives Out Mystery (Netflix)	4	Criminal Minds (Netflix, Amazon Prime Video, PlutoTV)
5	Hocus Pocus 2 (Disney+)	5	South Park
6	Lord of the Rings: The Rings of Power		(HBO Max, Amazon Prime Video, Comedy Central, fuboTV)
	(Amazon Prime Video)	6	NCIS (Paramount+)
7	She-Hulk: Attorney at Law (Disney+)	7	Law & Order: Special Victims Unit (Peacock, Hulu, fuboTV)
8	House of the Dragon (HBO Max)	8	Seinfeld (Netflix)
9	Stranger Things (Netflix)	9	Bob's Burgers (Hulu)
10	Day Shift (Netflix)	10	The Office (Peacock)
11	Harry & Meghan (Netflix)	11	Friends (HBO Max)
12	The Sandman (Netflix)	12	The Simpsons (Hulu, fuboTV, Disney+)
13	Andor (Disney+)	13	King of the Hill (Hulu, fuboTV)
14	Cobra Kai (Netflix)	14	Shark Tank (Hulu, fuboTV)
15	Lightyear (Disney+)	15	Catfish: The TV Show (MTV, Hulu)
16	Echoes (Netflix)	16	Blue Bloods (Pluto, Hulu, fuboTV)
17	Prey (AppleTV+)	17	Dancing with the Stars (Hulu, fuboTV, Disney+)
18	Devil in Ohio (Netflix)	18	Grey's Anatomy (Hulu, Netflix, fuboTV)
19	White Lotus (HBO Max)	19	Schitt's Creek (Netflix)
20	Dead to Me (Netflix)	20	Bones (Hulu)

SOURCE: TVision Panel and TV Guide; note: many of the syndicated programs are also available on YouTubeTV and SlingTV or for purchase/rent on Amazon Instant Video, iTunes, Google Play, and Vudu.

A Day in the Life of a CTV Viewer

The daily viewing experience of CTV audiences tracks closely to that of a linear TV viewing experience. During morning hours, we see a spike in time spent with children's programming. As primetime approaches viewers increase their share of time spent, though interestingly, attention to ads holds fairly steady regardless of the daypart. Later in the evening, binging increases, while time spent and ad attention drop sharply overnight as audiences fall asleep in front of the TV.

CTV VIEWING THROUGHOUT THE DAY



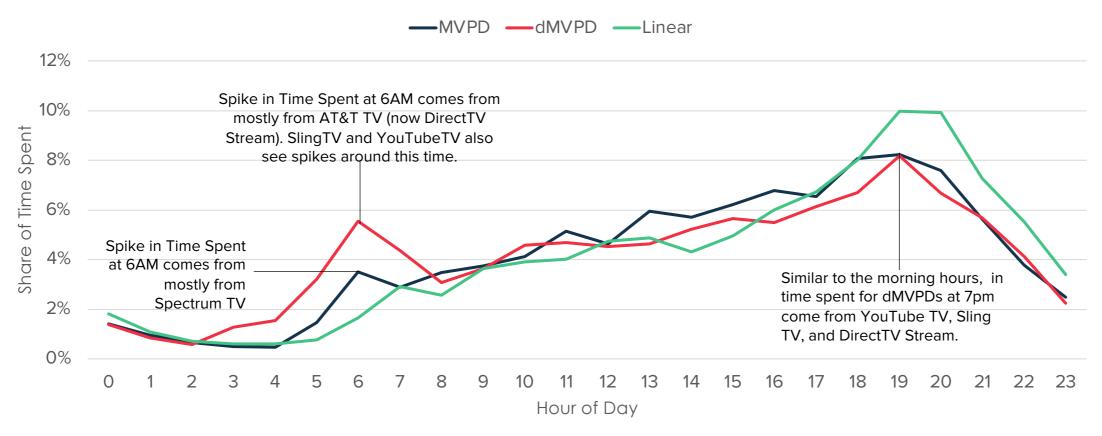
A CLOSER LOOK:

Digital Environments That Mimic Linear TV

Do viewers respond differently to digital environments that mimic the linear TV experience than they do to true linear TV? To answer this question, we looked at share of time spent in MVPD and dMVPD environments compared to linear TV.

When looking at viewer behavior throughout the day, time spent on MVPDs and dMVPDs closely mirrored linear with a few small exceptions. Viewers were much more likely to tune into MVPD and dMVPDs in the early morning compared to linear TV and slightly more likely to tune in throughout the day. True linear viewers showed a more pronounced increase in share of time spent during primetime hours.



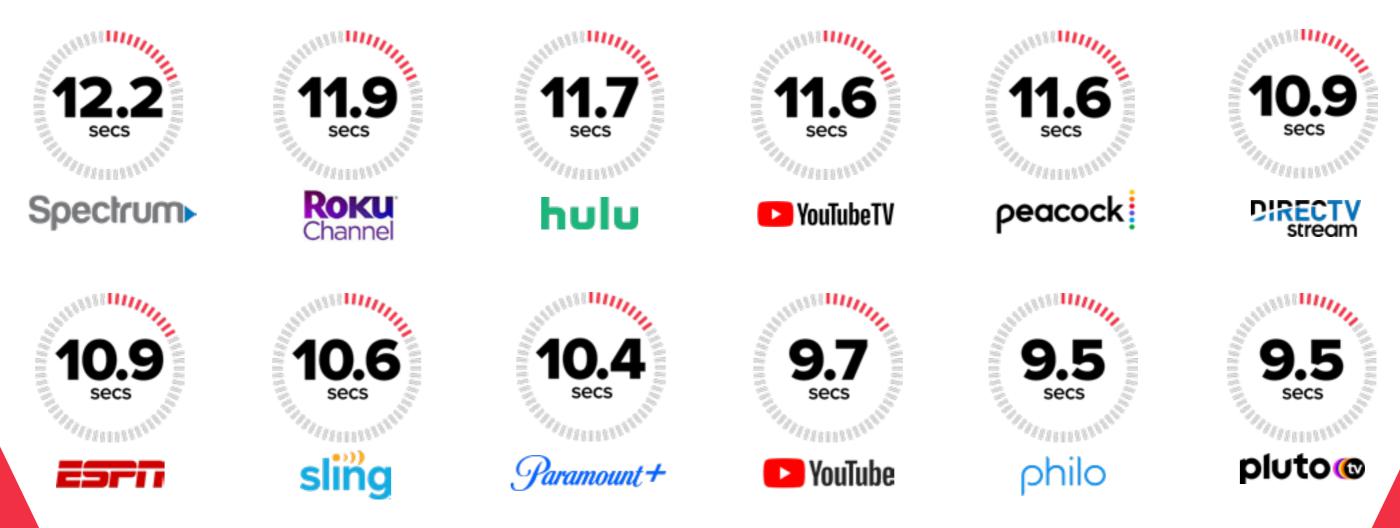


Which Apps Deliver the Most Attentive Ad Seconds?

Viewers in ad-supported platforms appear to be getting more accustomed to ads. 30-second ads now make up the majority of impressions served in CTV. In the data below, we ranked apps by the percentage of 30 second ads viewers watched.

We've historically seen MVPDs take the lead in terms of ad attention, perhaps because the viewing experience is similar to a linear TV experience. While MVPD Spectrum TV took the overall lead, hybrid apps like Hulu and Peacock also delivered strong ad attention to 30 second ads. New additions to this list in 2022 include ESPN and Philo. Two more notable mentions include Roku and YouTube TV. Of the list below, they are the only apps that delivered more attentive time to 30 second ads in the back half of 2022, than at the start of the year.

LARGEST AD-SUPPORTED APPS, RANKED BY ATTENTION TIME TO 30 SECOND ADS



Maximize Attention with Short, Concise Ads

Traditionally, longer ads have given marketers a greater opportunity to reach their audience. Interestingly, 15-second ads make up most of the impression share in linear while longer, 30-second ads make up more of the impression share in CTV.

Our data continues to show that while viewers do pay attention to more total seconds of the longer the ad, the growth is not proportional. Across the board, viewers pay more attention to larger portions of shorter ads. Assuming each second of ad time costs the same (for example a 60 second ad is 2X the cost of a 30 second ad), this means that shorter ads may deliver a better value. CTV advertisers may find greater efficiency by delivering a full message in a shorter ad.

Attention By Creative Length







Viewer Presence By Creative Length



65.6% 23.5 SECONDS



18.7 SECONDS

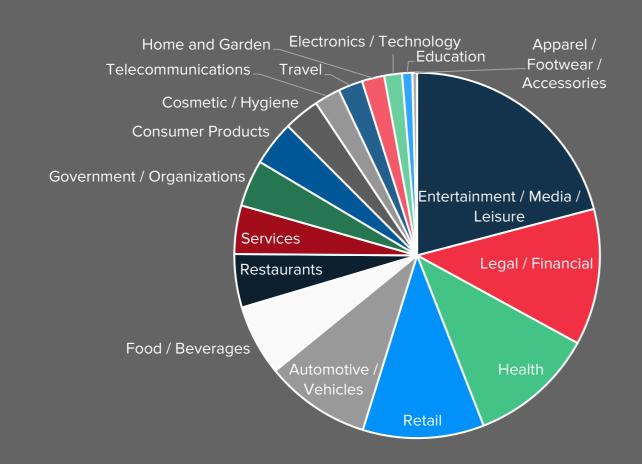


11.5 SECONDS

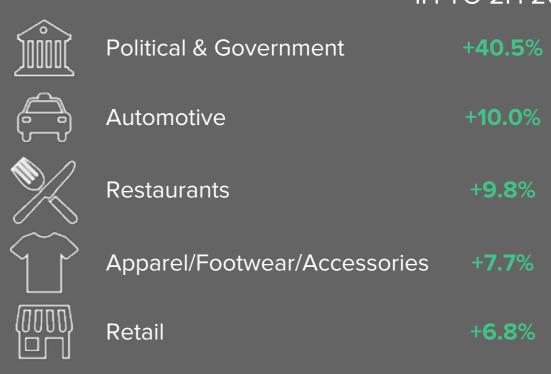
The Industries Investing in CTV Advertising

CTV ad volume continues to increase as marketers invest in CTV inventory. While the Entertainment industry, which includes the apps themselves and featured programming, continues to hold the largest share of CTV advertising by far, Government and Political advertisers saw the biggest percent increase in share of ad volume from the first half of 2022 to the second half as November midterm elections approached. Another category to see a large increase in ad volume was Automotive. This could reflect returning inventory levels as automakers and dealers encourage customers to make purchases. Restaurant, Apparel, and Retail also saw notable increases in ad volume—likely due to increased shopping and socialization associated with the winter holidays.

% OF CTV AD VOLUME



% CHANGE IN AD VOLUME SHARE 1H TO 2H 2022



CTV ENGAGEMENT BENCHMARKS BY INDUSTRY

INDUSTRY

Apparel / Footwear / Accessories ————	1.63
Restaurants ————————————————————————————————————	1.62
Entertainment / Media / Leisure ————	1.61
Automotive / Vehicles ————————————————————————————————————	1.61
Electronics / Technology —————	1.61
Travel ————	1.61
Legal / Financial ————————————————————————————————————	1.59
Government / Organizations ————	1.57
Telecommunications —————	1.57
Food / Beverages —————	1.57
Retail ————	1.56
Education —————	1.54
Consumer Products ————————————————————————————————————	1.52
Cosmetic / Hygiene —————	1.52
Services —————	1.51
Home and Garden ————————————————————————————————————	1.51
Health ————	1.48

Top CTV Advertisers by Co-Viewing Rates

As you've seen earlier in the report, CTV ad attention is catching up to linear as ad-supported apps grow in popularity. Want to see how your ads stack up against competitors? Here are some quick benchmarks for co-viewing. Notably, Apparel, Footwear, and Accessories as well as ads that cater to group experiences such as Restaurants and Entertainment were best positioned to reach audiences with multiple viewers in the room.

Introducing TVision's CTV Campaign Measurement

Measure the Quality of CTV Campaigns

TVision's CTV Campaign Measurement provides a unified look at where CTV ads ran and the quality of those impressions. Our post-campaign reporting helps reveal, which apps and impressions are driving CTV performance.

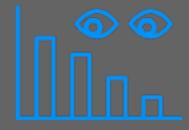
We provide comprehensive, independent measurement of CTV so you can answer questions like:

- Where do I get the most value for money on CTV?
- What co-viewing multiple should I use for my impressions?
- Were viewers engaged with my ads?
- Did my target demographic see my ads?
- · How much incremental reach did CTV deliver?

CTV Campaign Measurement is now available for both marketers, as well as for media sellers who want to provide clients a trusted, third-party performance report.



Accurate **co-viewing multiples & campaign demo reporting** - including walled gardens



Eyes-on-screen attention measurement across all CTV apps in your campaign



Incremental reach trends for your brand on linear, CTV, and YouTube CTV properties

"TVision's CTV Campaign Measurement allows us to deliver transparent insights to our advertisers."

BOB CHRISTENSEN SVP, Global Advanced TV Vevo Ready to get comprehensive, unified reporting for your campaign across all major CTV apps and save your team time?





About TVision

The leader in TV engagement metrics

TVision measures what was once unmeasurable— how people really watch TV. Using cutting-edge computer vision technology, only TVision measures person-level, second-by-second TV engagement. Marketers and media seller's access TVision's TV performance metrics via its software-as-a-service platform. TVision's customers include some of the largest brands in the world, top media networks, and CTV applications. TVision's single-source panel enables measurement across both Linear TV and CTV, providing critical metrics such as Attention, Viewer Presence, Co-Viewing, and more.

Visit us at www.tvisioninsights.com



Methodology & Metrics

TVision measures Viewer Presence and Attention for every second of programming and advertising on television. Every time a person walks into the room, our technology detects who the viewer is, where they are in the room, and what their eyes are looking at. We do all this without personally identifying individual users, and without transmitting any images or videos. TVision's data is collected from an opt-in panel of 5,000 homes across the United States and weighted to represent the country. All demographic data is self-reported by the respondents. Linear and CTV ad impressions data in this report is from July 1 – December 31, 2022, unless otherwise indicated.

Attention Index

Measures the average amount of seconds that viewers engage with an ad or program

Attention (%)

Measures the percentage of ad impressions where a viewer was watching the TV screen for two or more seconds

Average Frequency

The average number of times a viewer is exposed to a brand's ads per month

Co-Viewing Rate (%)

Measures the proportion of episode or app views that occur with another viewer present for 5 or more minutes

Overlapping Reach (%)

This measures the percent of households that are viewers of two given apps as a percentage of all households in our panel

Overlap - Main App (%)

When comparing a given app's audience with that of another specific app, this identifies the percent of households that have access to the first app

Overlap - Cross App (%)

When comparing a given app's audience with that of another specific app, this identifies the percent of households that have access to the second app

Share of Time Spent

Compares the amount of time spent viewing the app or program

Viewer Presence Index

Measures the average amount of seconds that viewers were present in the room for an ad or program

Viewer Presence (%)

Measures the percentage of all ad impressions in which a viewer was in the room for two or more seconds.

Viewers Per Viewing Household (VPVH)

This represents the average number of viewers present in the home when the TV is on with the content tuned.