







Executive Summary

The State of Streaming in 2025

Streaming TV continued its rapid ascent in 2024; DV video ad monitoring on connected TV (CTV) grew 66% year-over-year across the globe, solidifying its role as a premium, high-growth channel for advertisers. Yet, even as dollars pour in, persistent challenges — such as lack of transparency, viewability issues and fraud — continue to drive media waste and undercut performance.

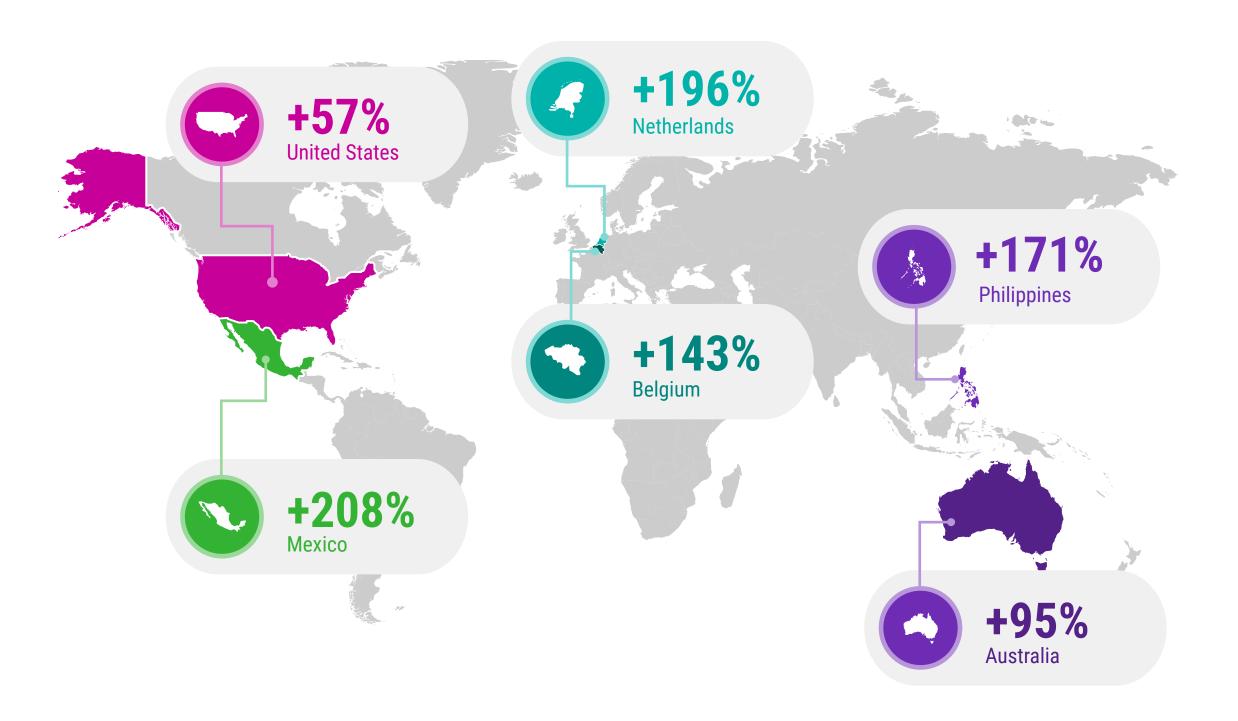
Despite these challenges, advertiser confidence remains strong. Brands are responding to shifting consumer behavior, with viewers spending more time streaming live content and embracing ad-supported models. Marketers report better campaign performance on CTV, though they continue to demand greater transparency, better measurement and more control over content alignment.

Regional growth patterns and device trends also point to streaming TV's expanding influence. In 2024, CTV ad impression volumes increased significantly across all regions, with particularly strong growth in Mexico, the Netherlands, the Philippines and Belgium.

CTV Consumption and Quality Verification Grows Globally

Year-over-year Growth in CTV Ad Impression Volume

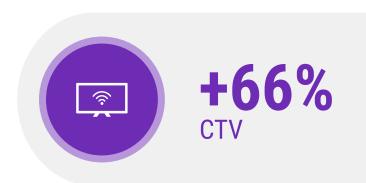






When comparing device types, CTV impression growth outpaced desktop twofold, and even surpassed mobile app growth, highlighting its growing share of the digital video ecosystem. These significant increases underscore the shifting consumer preference towards CTV, making it a crucial platform for advertisers aiming to maximize their reach and engagement.

Video Impression Growth Year-over-year by Device



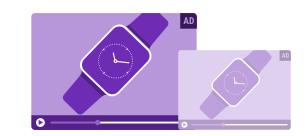






The takeaway? Streaming's growth is unstoppable, but unlocking its full potential requires addressing its most significant vulnerabilities.

2024 Streaming Highlights to Know:



Video ads saw a

66% year-over-year increase

in global ad verification investments (DV's volume of monitored impressions)



Only

50% of CTV impressions

offered full app transparency in 2024



63% of marketers who advertise on CTV

say it's hard to tell if their buys reach real viewers



DV's Fraud/SIVT Filter Rate

increased 110%

year-over-year driven by an increase in bot fraud — the most common fraud type in CTV environments





Table of Contents

Understanding the Streaming Shift What this report covers						
Habits of the Digital Consumer Looking at consumer behavior	6					
How Marketers Manage the New TV Era Nailing down marketer priorities	8					
Streaming Challenges: Clearing the Path to Performance						
Transparency Get behind the stream	12					
Viewability See the stream	15					
Fraud Secure the stream	17					
Where It's All Headed: Streaming in 2025 and Beyond						
2024 Global Streaming Benchmarks						
Glossary	23					
Methodology	24					

Understanding the Streaming Shift

In the last decade, streaming has reshaped how people consume content, and therefore, how advertisers reach those people. As streaming shapes into a primary portal for digital video consumption, it becomes a magnet for ad dollars. But while the shift from traditional TV to streaming has created these new opportunities, it's also introduced a complex set of challenges. Complexities like opaque inventory, brand unsuitable content, fraud and viewability issues can all result in media waste.

This report provides a glimpse into the streaming advertising ecosystem — with data focused on CTV environments — to discover consumer behavior and advertiser investment trends. Through a combination of survey data, platform trends and DV measurement insights, we aim to help marketers understand how to navigate, invest and improve outcomes in this evolving landscape.

Before diving in, it's important to clarify terminology that's often used interchangeably in the industry — streaming TV and CTV refer to different (but overlapping) concepts. To ground our focus, here is an outlined distinction between the two.

Streaming TV: TV content consumed across devices connected to the internet including desktops, laptops, smartphones, tablets and more.

CTV: Under the streaming category, CTV is a TV screen connected to the internet, either directly (via smart TV) or through a device like Roku, Fire TV stick or gaming console.

Streaming offers expanded opportunities for TV-run campaigns, giving direct campaigns significantly more inventory across a variety of screens beyond TVs, including smartphones, tablets and more.

What This Report Covers

Our report begins by looking at how consumer behavior is evolving, including what people are watching, how much time they spend streaming and how they feel about ads in streaming environments.

We'll then turn to the advertiser perspective, looking at how marketers are allocating spend, what's performing and what's getting in the way.

Next, we'll examine three persistent challenges that continue to impact CTV advertising:

- Lack of app transparency: There is an ongoing need for visibility into where ads are running and how inventory is categorized.
- Viewability issues: Ads running on CTV screens that aren't fully viewable continue to drain media budgets.
- Ad fraud: High CPMs on CTV make it a prime target for sophisticated fraud schemes, requiring robust protection.

Finally, we'll take a look at what advertisers can do to improve streaming TV ad investments as we move further into 2025.

As advertisers look to scale streaming TV performance, solving these challenges will be critical to maximizing media efficiency and performance.



Habits of the Digital Consumer

A big factor in the maturity and value of streaming TV inventory is the end user — the consumer. As consumers spend more time on connected devices, their content preferences and viewing habits are shifting in ways that create new opportunities and challenges for advertisers.

DV surveyed 22,000 consumers spanning key global markets to unveil the latest trends in:





Attitudes toward ads on streaming platforms

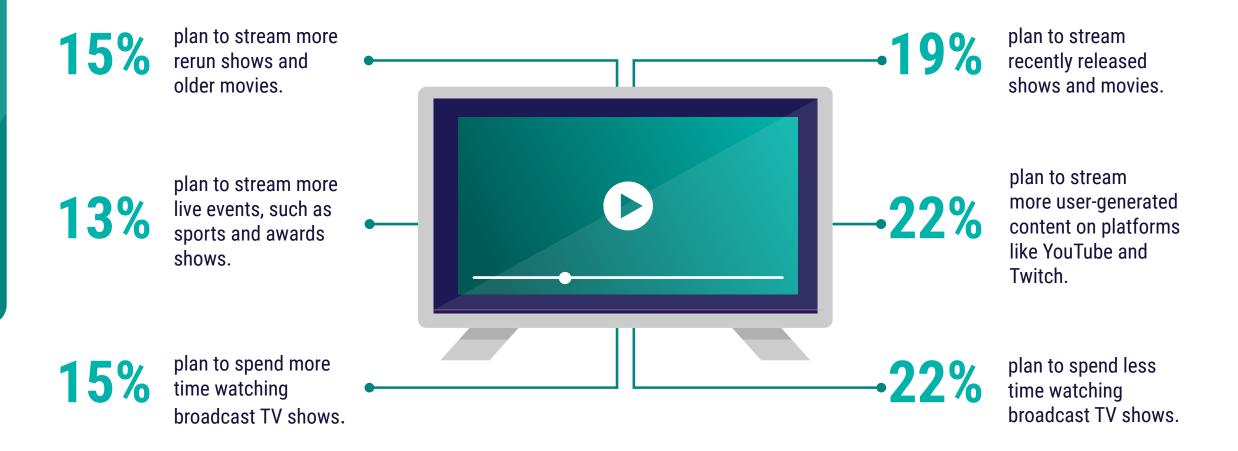


The impact of content genres on advertising effectiveness

How Consumers Are Watching

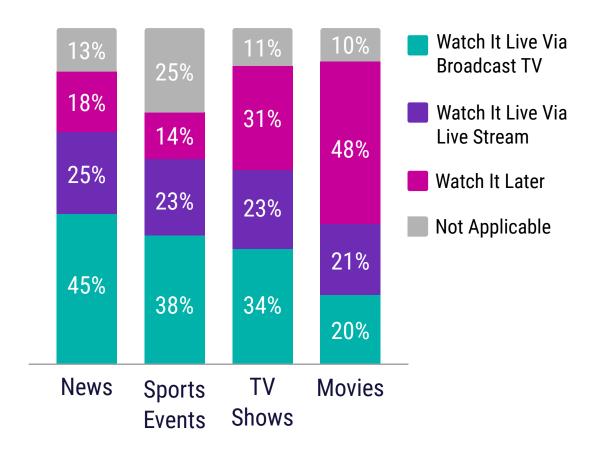
Streaming content has become a dominant force in consumers' daily media routines. On average, consumers report spending 3.5 hours each day consuming content in their leisure time, and looking ahead, many consumers expect to further adjust their media habits in the coming year.

How Consumers Think They'll Spend Time with Streaming Content in the Next 12 Months



These trends suggest that while traditional TV maintains a role in consumers' routines, streaming — both for professionally produced and user-generated content — claims a larger share of time and attention. When it comes to live viewing, preferences are also shifting. For example, while 34% of consumers still prefer to watch shows via live broadcast TV, a majority (55%) now either stream or watch them later. This underscores the growing demand for flexibility and convenience in content consumption.

How Consumers Typically Watch Content



What Consumers Think About Streaming Ads

As streaming grows, we're starting to gain better insight into how consumers feel about ad-supported streaming models. A significant 41% of streaming consumers say they prefer adsupported video content over paying for subscriptions to see fewer ads. This preference is especially pronounced among lower income tiers, suburban/rural residents and older adults.

We also discovered preferences between regions. North America has a higher preference for ad-supported content, while LATAM prefers subscriptions that remove ads.

40% of consumers

say ads next to long-form content improve brand awareness and make them more likely to make a purchase.

Streaming Consumers' App Preferences by Region More ads, lower Fewer ads, higher No preference subscription cost subscription cost 36% 40% 48% 39% 20% 21% 16% 21% 43% 43% 41% 31%

EMEA

However, these trends do depend on content type. While 39% of consumers don't want ads to appear during shortform content like TikTok, YouTube Shorts and Instagram Reels, more than two-thirds (67%) don't mind ads accompanying longform content such as YouTube videos, podcasts and traditional TV shows.

LATAM

North

America

What does this tell us? While short-form platforms offer valuable reach, long-form content — such as streaming TV — may provide a more conducive environment for building brand affinity and driving purchase consideration.

APAC

Genres That Impact Consumer Ad Perception

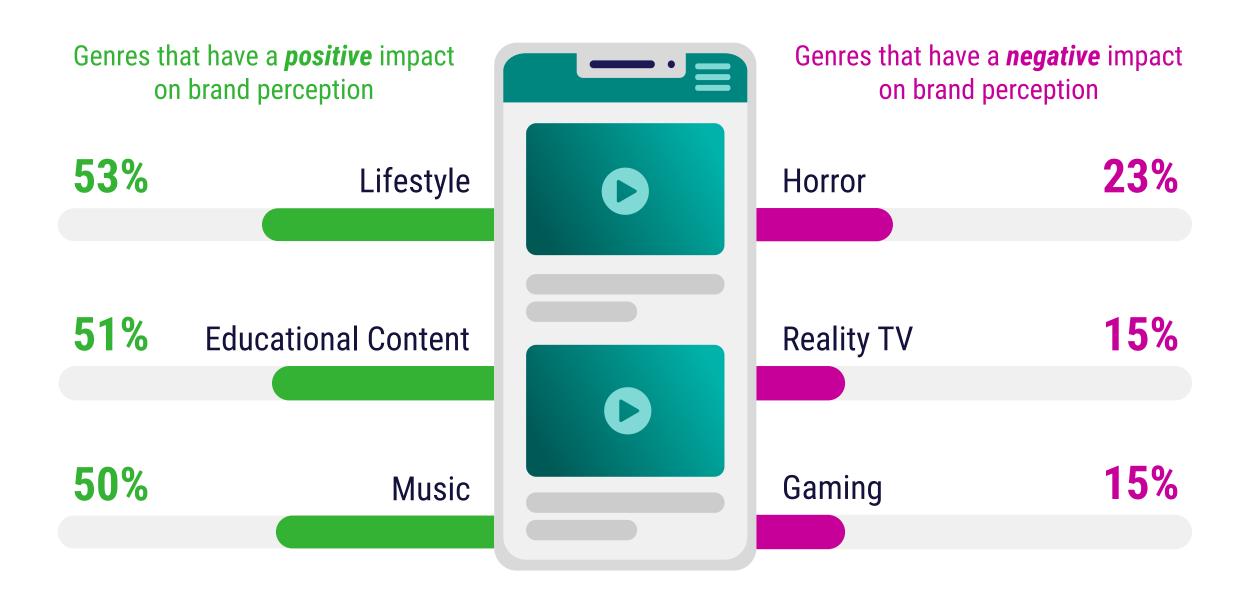
The type of content consumers watch also impacts their perception of adjacent advertising. In fact, we found that 64% of consumers say genre influences how they perceive the brands advertised during streaming content.

64% of consumers say genre influences how they

say genre influences how they perceive the brands advertised alongside streaming content.

Context is critical in CTV advertising strategies. By aligning ad placements with

content genres that enhance brand perception, advertisers can better engage audiences and foster positive brand associations. Drilling down to specifics, consumers said that ads running on certain genres can create a positive or negative image of brands.



How Marketers Manage the New TV Era

Consumer embrace of streaming TV means advertisers continue to increase their investment in streaming environments to capitalize on its growing reach and capabilities. But while enthusiasm is high, marketers continue to navigate challenges related to transparency, measurement and media quality.

DV surveyed nearly 2,000 marketers to explore:







What's holding marketers back from reaching their full potential

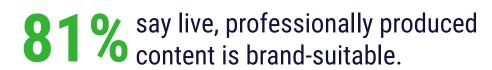
Marketer Priorities on CTV

Media buyers increasingly view CTV (which makes up the majority of streaming inventory) as a high-performing channel. According to our survey, 72% of marketers say ads placed in CTV environments outperform their campaign baselines, underscoring the value advertisers see in the channel's ability to drive results. This is particularly strong in APAC and LATAM.

Marketers continue to emphasize the importance of brand safety and suitability in CTV environments. Our survey revealed that a large majority of media buyers say professionally produced or recently released content generally meets their brand suitability standards. Still, 65% express concerns about ensuring their ads are aligned with appropriate content in CTV environments.

What kind of streaming do media buyers see as brand-suitable?







79% say recently released content is brand-suitable.

As the streaming TV landscape evolves, marketers are keenly focused on optimizing their strategies to maximize performance. But as marketers commit to refining their approach, they must also navigate complexities such as brand suitability, transparency and media quality to unleash CTV's full potential.



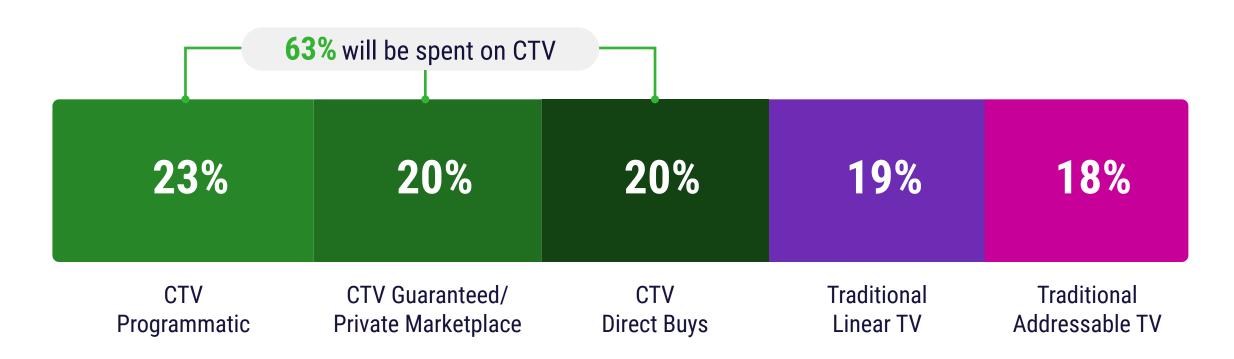


Where Marketers Are Putting Their Money

Over the past year, 54% of media buyers have increased their investments in CTV advertising. And 66% of media buyers that said they aren't currently spending on CTV plan to do so in the next 12 months. Global marketers named top platforms such as YouTube, Netflix and Amazon Prime as key drivers of growth.

When it comes to the allocation of TV budgets, marketers are taking a diversified approach — but the majority of spending (63%) is on CTV.

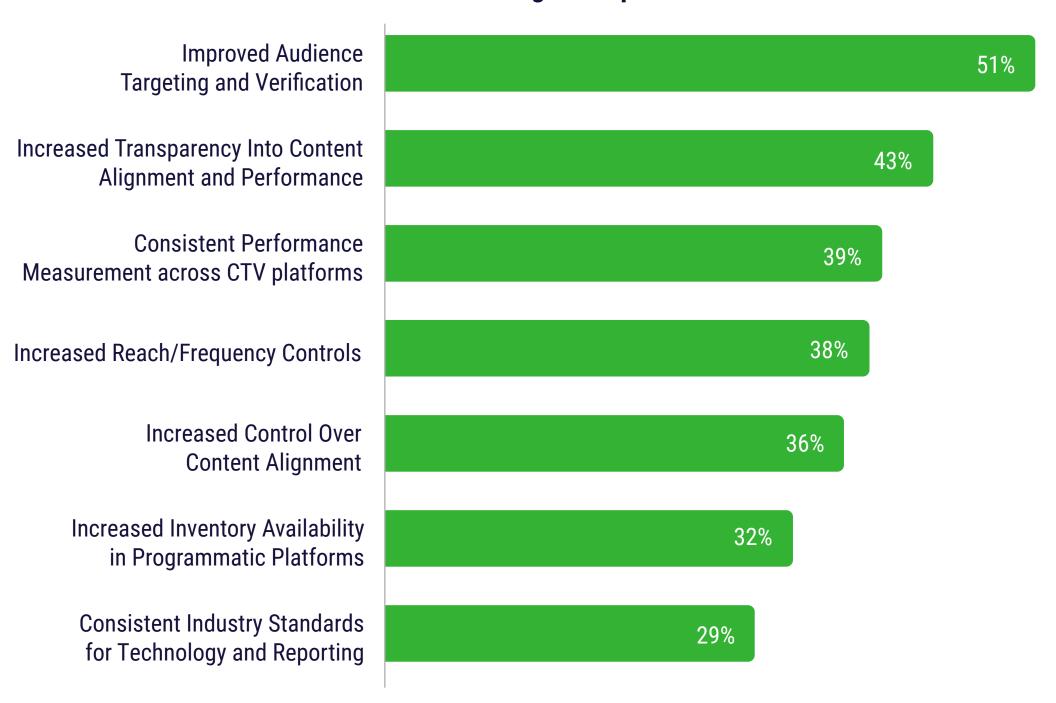
Division of Spend Between CTV and Traditional TV



Notably, 65% of marketers are willing to pay premium CPMs for ad placements alongside live, professionally produced content. And more than one-fourth are willing to pay 50% premiums or more. This illustrates the value placed on high-quality, live programming in advertisers' media strategies.

What would encourage advertisers to increase their CTV spend further? Here are some of the top factors:

Motivators for Increasing CTV Spend



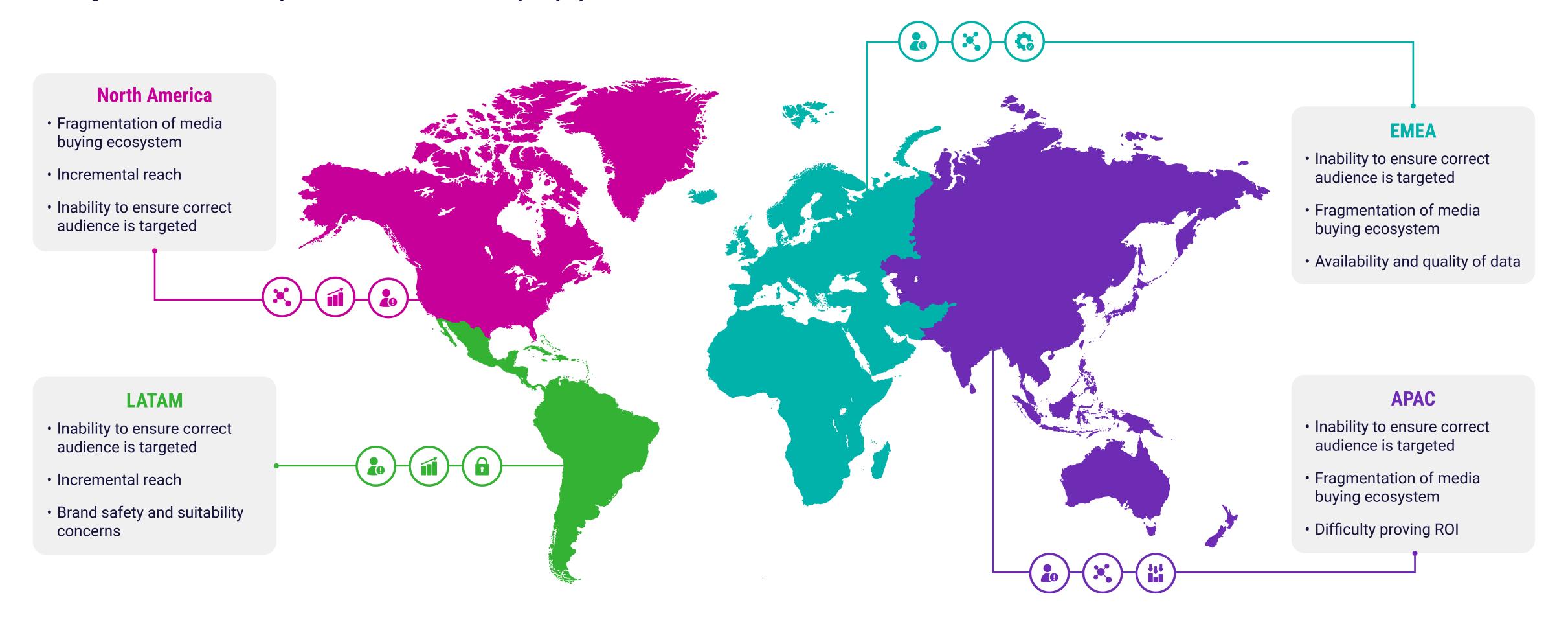
These priorities highlight the industry's desire for tools and practices that make CTV easier to navigate, measure and optimize.





What's Holding Marketers Back

Despite its promise, CTV is not without its hurdles. Advertisers cite a range of challenges that limit their ability to scale investment, and they vary by market.







Streaming Challenges:

Clearing the Path to Performance

In late 2024, EMARKETER reported that U.S. digital ad budgets continued shifting toward CTV, with projections indicating they'll soon surpass traditional TV ad spend. Our own data reflected this trend, showing a 66% year-over-year increase in CTV impressions in 2024.

Streaming is undoubtedly rich with

opportunity for advertisers, but it's not

without its growing pains. As investment
surges, persistent issues around
transparency, viewability and fraud—
all factors that contribute to media waste—
remain significant challenges within the CTV ecosystem.

Without protections in place, advertisers stand to lose an average of \$700,000 per billion impressions on CTV inventory that was not served in a fraud-free, viewable, safe and suitable environment.

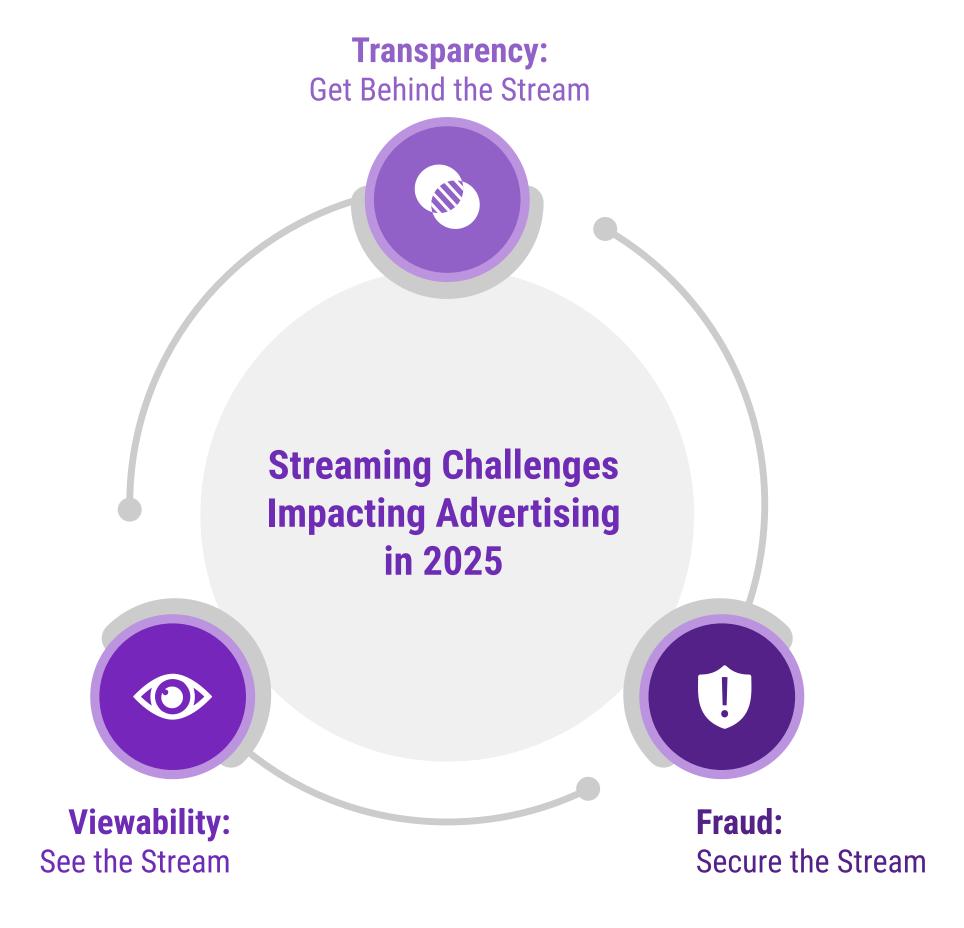
What Is Media Waste?

We define media waste as the estimated cost associated with total media violations, including:

- Brand safety and suitability violations
- Fraud/sophisticated invalid traffic (SIVT)
- · Ads placed in incorrect geographic locations
- Ads that do not meet IAB viewability standards

To demonstrate the impact of these factors, DV ran a test campaign with zero protective measures in place. This allowed us to measure the ad's media waste and compare it to our benchmarks.

Regardless of the stakes, ad dollars will follow consumer attention — so what's happening with CTV transparency, viewability and fraud and how will they shape advertising in 2025 and beyond?







Transparency: Get Behind the Stream

Transparency is essential for advertisers looking to optimize performance and ensure

media quality in streaming environments. According to our survey, 68% of marketers say they must have transparency in order to justify the high cost of CTV advertising.

Unlike traditional digital advertising, where site- and URL-level transparency in bidding and reporting allows advertisers to see

exact ad placements, most streaming advertising operates within app-based environments, especially on CTV. While transparency at the app level varies by publisher — making it difficult for buyers to understand where their ads are running — the industry is making steady progress to improve visibility and measurement.

68% of marketers say they must have transparency in order to justify the high cost of CTV advertising.

As the streaming TV ecosystem continues to evolve, efforts from advertisers, publishers and technology partners will be critical in driving greater transparency and standardization. With continued improvements, the industry is positioned to strengthen measurement capabilities and create a more trustworthy streaming advertising environment.

What Is Transparency

in Advertising?

Transparency means knowing where your ads

Transparency gives you confidence that your

media investment is reaching real people in

environments that align with your brand.

When it comes to CTV environments, app

specific app where your ad appeared, not just

transparency goes deeper, revealing the

the device or platform.

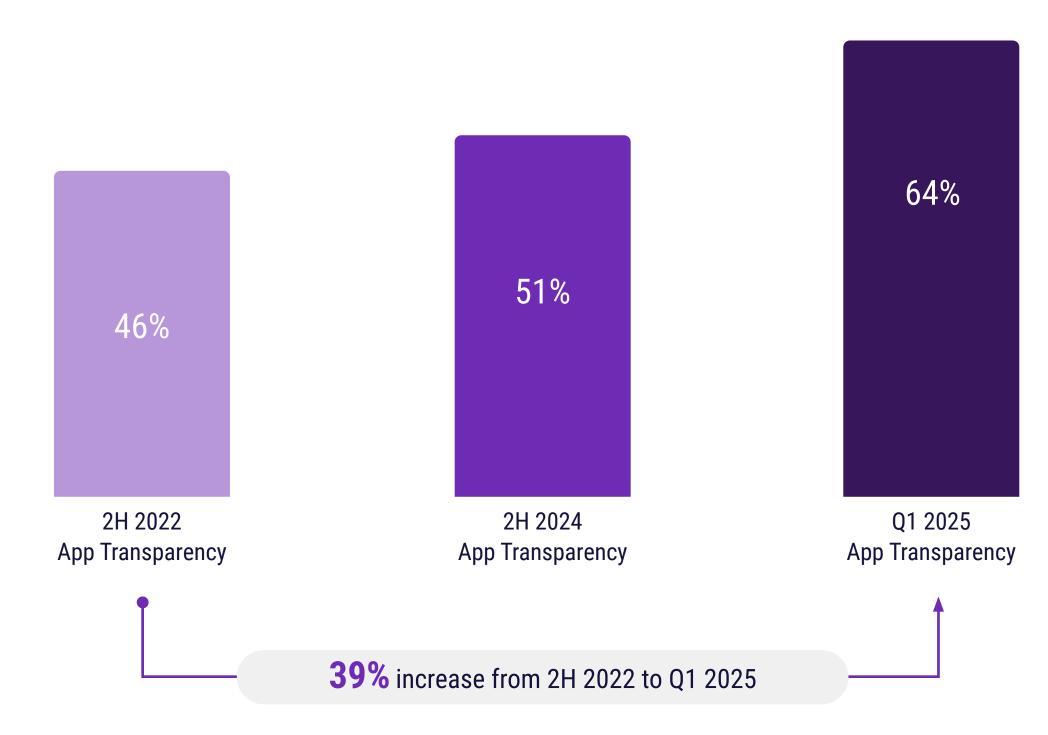
run, who sees them and how they perform.

Real Progress — Real Gains

As it stands, streaming TV currently lacks full transparency. For example, many ad placements are bundled within publisher portfolios and with inventory from external platforms. This limits visibility into the type of content and screens where ads are served, creating challenges in measuring ad effectiveness, ensuring compliance with brand guidelines and avoiding low-quality inventory.

However, the industry is making strides in improving app-level transparency as education and awareness around its importance grow.

DV's CTV App Transparency Progress Since 2022







Factors Driving Improvement

- Growing Industry Awareness: As the streaming market expands, advertisers are becoming more informed about the importance of transparency and have pushed for better reporting and visibility.
- Increased Adoption of Third-party Tags: More advertisers are incorporating third-party measurement tags to enhance transparency, and this advertiser demand has resulted in publishers accepting them.
- Streaming Market Maturity: The growth of streaming platforms and market maturity in key regions especially in countries that experienced rapid CTV adoption during the pandemic has contributed to improved transparency.

Regional Highlight: Transparency

APAC Growth

Emerging markets are making progress in transparency as they catch up with more developed CTV markets. In 2024, APAC app transparency increased by 13% from January to December, demonstrating how industry-wide initiatives and growing advertiser demand are driving improvements in transparency.

13% increase

in APAC app transparency
from January to December 2024.

If It's Transparent, It Can Be Measured

With transparency improving, how does that impact viewability metrics? We found that DV's Video Effective Measured Rate (the proportion of viewability-measured impressions relative to monitored impressions) has also seen notable improvements across all devices, with CTV showing the largest gains.

This increase is attributed to improvements in app transparency, better tracking capabilities and increased adoption of bundle IDs — which provide clearer insights into ad placements within streaming apps.

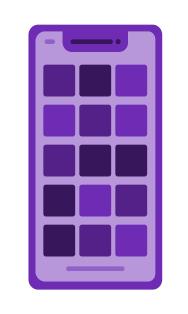
Effective Measured Rate

2024 Year-over-year Improvement













+25%
Mobile Web

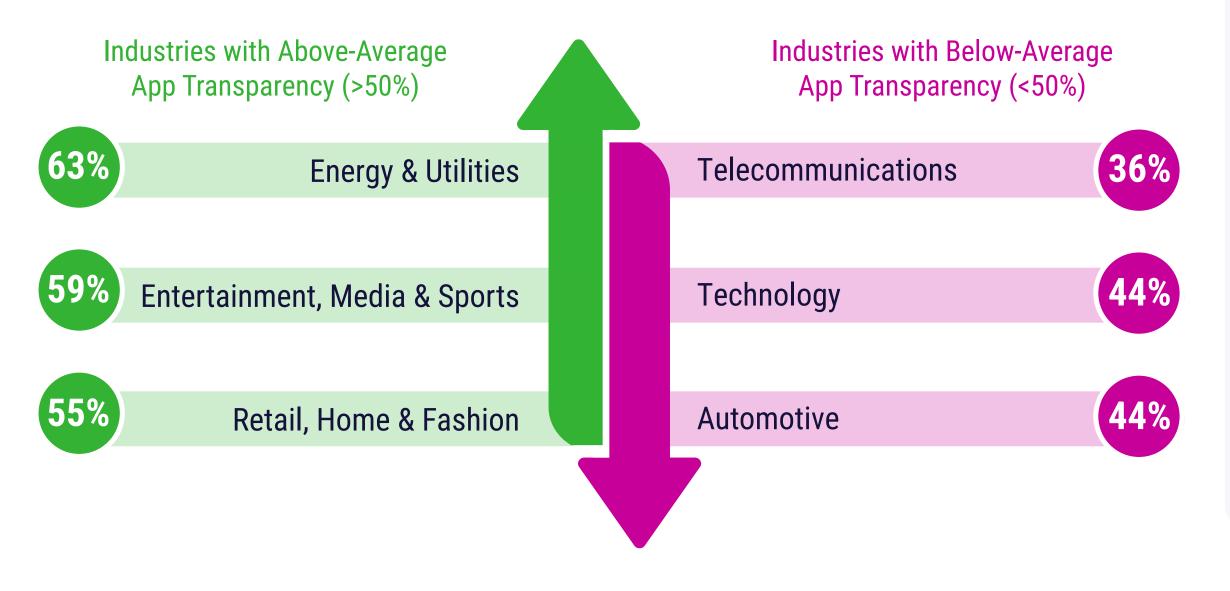
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Industries That Are Leading (and Lagging)

DV

Not all industries have achieved the same level of app transparency. Certain verticals demonstrate stronger transparency rates, while others lag behind.



Transparency

Advertiser Takeaway

While streaming advertising transparency has historically lagged behind traditional digital environments, the industry is making progress as the channel matures. Improved measurement tools, increased adoption of third-party tags and greater awareness among advertisers are all

Transparency is expected to improve further, helping advertisers make more informed buying decisions and ensuring greater accountability across the ecosystem.

contributing to better clarity. As the market continues to mature, particularly in emerging regions, transparency is expected to improve further, helping advertisers make more informed buying decisions and ensuring greater accountability across the ecosystem.





Viewability: See the Stream

Delivering a seamless streaming experience with minimal disruption is essential for both

consumers and the advertisers trying to reach them. Yet, CTV apps still have several technical kinks to work out. Advertisers aren't just asking if their ad reached the right audience, they're also asking: Was it even viewable? Or more fundamentally, was the TV even on?

Despite the common assumption that CTV ads are always viewable, problems with ads being cut off or playing on screens that are turned off still persist. In CTV environments, content can still be displayed and ads can

Viewability issues are prevalent across the industry and even occur in major apps from leading TV publishers.

Why Do Ads Play When the TV Is Off?

Not all CTV apps respond to the "TV Off"

signal sent by the TV. When functioning

properly, this signal should prompt the app

to pause or stop playback when the TV is

not in use. But this doesn't always happen

as expected.

continue to run long after the TV screen has been powered down, sometimes for hours or even days. As a result, advertisers end up wasting budgets on ads that consumers might never actually see.

63% of marketers who advertise on CTV say it's

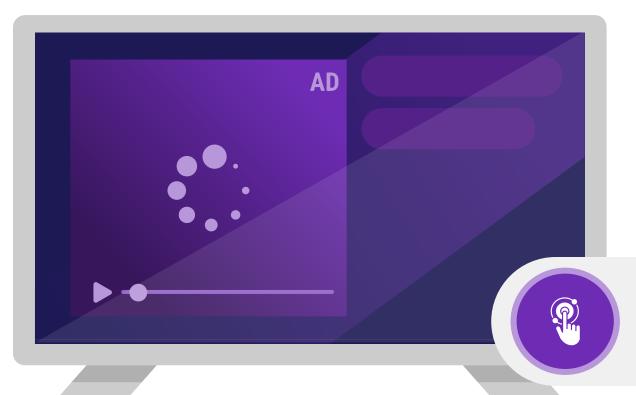
who advertise on CTV say it's hard to tell if their CTV buys reach real viewers.

The viewability problem isn't limited to niche or lesser-known streaming apps. It's prevalent across the industry and even occurs in major apps from leading TV publishers. It can affect all types of CTV devices, whether connected via HDMI or built into smart TVs.

Addressing Viewability Challenges

Historically, traditional methods for measuring viewability have not been supported in CTV environments. And Open Measurement SDK a newer tech standard to measure viewability, has only recently become available and is not yet widely adopted.

A robust CTV viewability solution enables advertisers to enhance budget efficiency by optimizing for environments with the most viewable inventory, which are more likely to yield successful outcomes. DV's MRC-accredited solution does this by combining Fully On-Screen (FOS), where DV tests and certifies environments for serving ads that are fully on-screen and while the TV is on, with quartile measurement to determine if an ad meets the IAB's viewability standard.



CTV environments are retested every 90 days

From October to December 2024, DV conducted FOS testing on apps covering an average of

450 million impressions daily

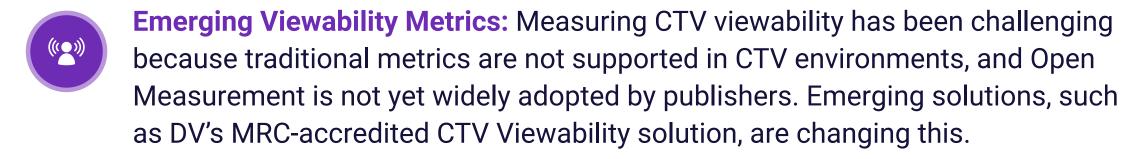


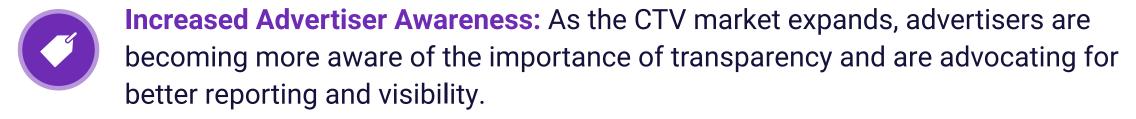


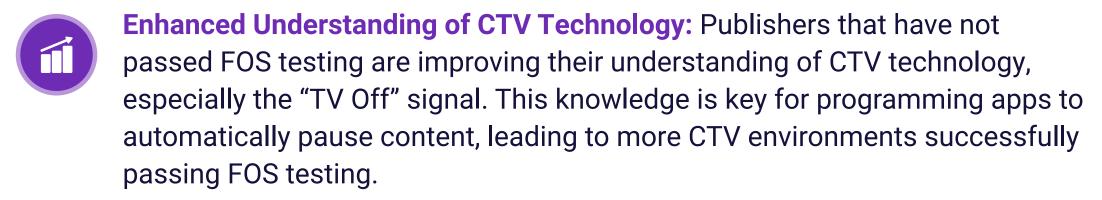
Strides in Viewability Measurement

As the CTV environment matures, data shows that FOS certifications, which correlate to higher viewability rates, are improving across all regions within the DV network.

Factors Driving Maturity







Even within 2024, we observed notable improvement in CTV inventory management. In July, approximately 11% of all CTV inventory was served to apps with "TV Off" issues. However, by December — the busiest month of the year when advertisers compete for ad placements and inventory quality typically declines — this dropped to around 3%.

Viewability

Advertiser Takeaway

As the demand for CTV impressions is high and continues to be sold at a premium, advertisers need insights into which platforms and environments provide the most viewable inventory. Understanding these factors can help optimize advertising strategies and enhance campaign effectiveness.

DV has been collaborating with publishers and platforms to mitigate CTV viewability challenges as they arise, leading to an increase in FOS-certified environments. Additionally, advertisers are encouraged to:

- Ask publisher partners to ensure that apps automatically pause when the TV screen is turned off.
- Request publishers to provide app transparency via bundle IDs for viewability measurement.
- Continuously measure CTV viewability, as challenges may still emerge with new app updates, even if previous inventory showed no issues.

Implementing these measures will provide insights into whether ads consistently have the opportunity to make an impact across digital environments.





Fraud: Secure the Stream

Fraud is a source of significant media waste, and because streaming TV — especially CTV — commands premium-priced CPMs, media waste is particularly costly on this ad channel. While we observed more investment, we also observed a need for more protections to those investments.

Unless otherwise noted, all data contained in this report is based on DV-generated data that is post-bid. Our post-bid monitoring and blocking technology records violations tracked after an ad has been purchased, which also means that while directionally accurate, these numbers don't show the full scope of DV's protection, which includes pre-bid protection.

Advertisers Are Bullish — and Bearish

Without protections, advertisers and fraudsters have equal opportunity to make an impression. Fraud protections help advertisers maintain healthy confidence in their streaming TV investments by redistributing opportunities back to advertisers and away from media wasters.

In 2024, DV noticed increased video filter rates on CTV.

DV Video Filtering is an additional layer of protection that works in conjunction with existing controls such as blocking and pre-bid avoidance. This solution enables advertisers to further reduce waste and minimize video infractions across devices, including CTV, mobile and desktop.

At a broad level, the DV Video Filtering rate for CTV increased 55% year-over-year and, specifically, the fraud/SIVT filter rate increased 110% year-over-year. Both of these spikes

1 1 0 % increase in DV video fraud/SIVT filter rate year-over-year

were the highest on CTV compared with any other measured device, including mobile app, mobile web and desktop.

For advertisers, this suggests three things:



Filters are imperative to reducing actual violations, which is why violation rates on CTV remain low compared to other devices, as we'll see later in the report.



While CTV investments climb — projected to increase by 15% to \$38.4 billion by 2026 in the U.S. alone — fraud is still an issue at large, causing advertisers to invest with caution.



Fraud will likely continue to be an issue within the CTV environment; inventory, especially streaming inventory, is expensive, motivating fraudsters to hijack media buys and advertisers to protect their media investments.

This also falls in line with marketer sentiment, which is that of caution, as 57% of marketers who advertise on CTV worry that a significant portion of their CTV ad spend is wasted due to fraud.

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Fraud, In All Its Forms

To inform your understanding of how fraud interferes with streaming TV investments, here are the different types of fraud and how they operate.

Fake Traffic/ Server Farms

Fraudsters easily create servers, generate fake traffic and pass it on as premium impressions.

Fraudulent Apps

Hundreds of apps exist today with a few downloads generating millions of impressions.

Spoofing

Fraudsters buy low-price inventory and resell it as premium CTV video inventory at high CPMs.

Battling the Bots

Bot fraud is a significant challenge in the digital advertising landscape, evolving and iterating rapidly and creating new threats for advertisers. In the last quarter of 2024 alone, DV identified 12 new bot variants, including new forms of ViperBot, CycloneBot and BeatSting. These sophisticated bots are not static; they continuously morph and adapt, making it increasingly difficult for advertisers to protect their investments without proper tools in place.

In 2024, bot fraud was the most prevalent type of fraud on CTV, accounting for 65% of its total fraud and around 14% more than the share that bot fraud took up in all other environments.

The scale of this problem is staggering, with 4 million infected CTV bot devices generating extreme volumes of invalid traffic daily. This relentless wave of bot activity can lead to wasted budgets, with losses exceeding \$7.5 million monthly from just one bot variant, based on industry CPM estimations.

Advertisers who implement pre-bid protection measures are better equipped to safeguard their investments against these evolving threats. This underscores the critical need for robust and adaptive fraud prevention strategies in the ever-changing digital advertising ecosystem.

The good news is that filtration efforts are mitigating fraud; fraud/SIVT violations in the CTV environment remain one of the lowest compared with other devices at 0.54% of all monitored impressions, compared with 0.46% in 2023. This especially pales in comparison with the Fraud/SIVT Rate on mobile apps, which sits at around 2.6%.

Desktop Mobile App Web

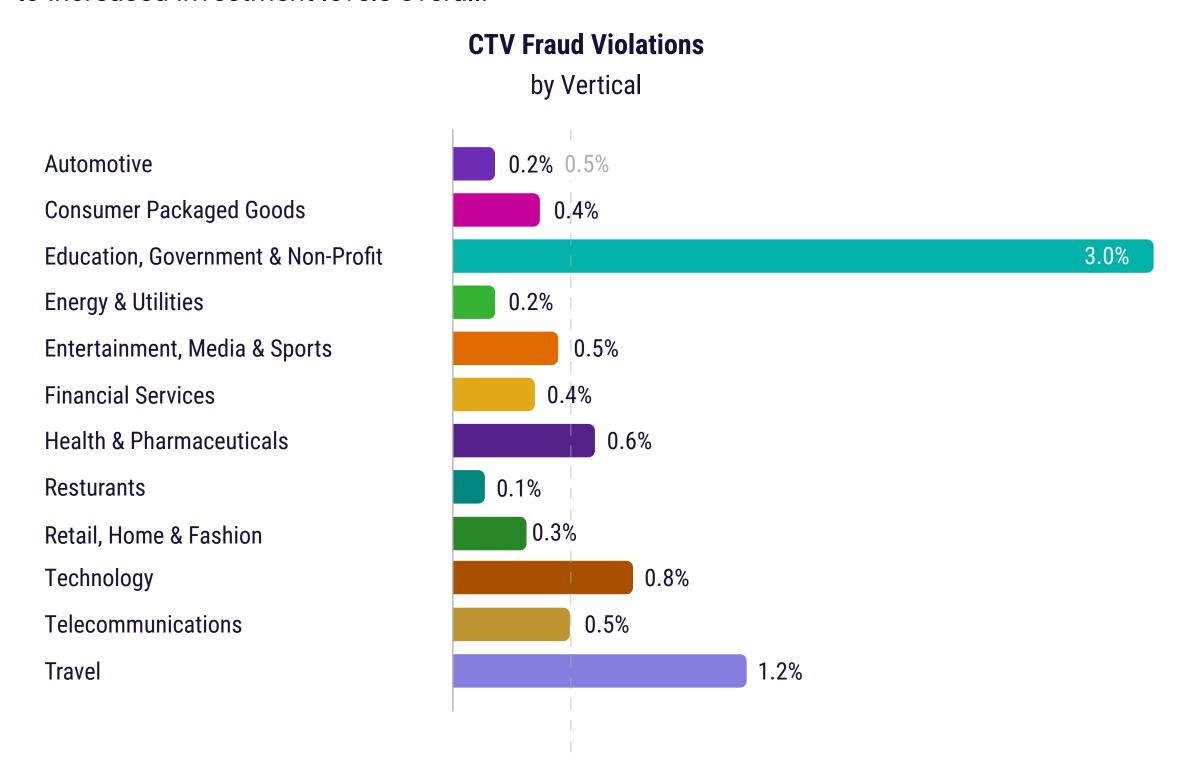
CTV Fraud Violations

As mentioned earlier in the report, the cost of zero protections on CTV ad impressions is high. To put this into perspective, without protections in place, over 25% of CTV video impressions would not be served into a fraud-free, viewable, brand-safe and suitable environment.



Fraud Rates Based on Industry

The Education, Government & Non-profits vertical showed a much higher fraud violation average than the global rate, 3% versus 0.5%, respectively. This could, in part, be attributed to the fact that CTV's share-of-video ads increased across the majority of the verticals, due to increased investment levels overall.



While 65% of CTV fraud in 2024 was bot fraud at a bird's-eye view, a closer examination into specific verticals revealed that the makeup of fraud differs based on the vertical. For example, in the Restaurants industry, 65% of fraud violations in CTV are attributed to data center fraud. But in the Travel industry, 83% of CTV fraud is attributable to app fraud.

Mapping the Threat

CTV fraud is a global phenomenon, but certain regions, particularly those with less market maturity and streaming adoption, will often see greater instances of fraud. These will likely fluctuate as maturity develops and as protective measures increase.

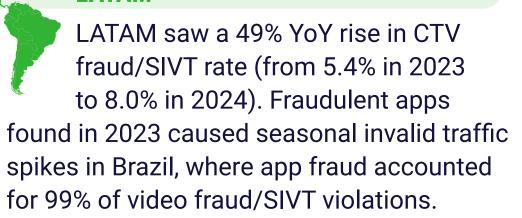
APAC



APAC's CTV fraud/SIVT violation rate dropped 64% YoY (from 2.2% in 2023 to 0.8% in 2024). In particular, saw a 60% improvement in fraud/SIV

India saw a 60% improvement in fraud/SIVT violations.

LATAM



EMEA

EMEA saw a 94% YoY spike in CTV fraud/SIVT violations (from 0.4% in 2023 to 0.7% in 2024), driven by Germany's more than 900% increase (from 0.1% to 0.9%). The U.K. also saw a 56% rise.

North America

Despite North America having a slight increase in CTV fraud/SIVT violations (+14% year-over-year), the region is still ahead with the lowest rate globally, at 0.4%.

Fraud

Advertiser Takeaway

In general, advertiser behavior around streaming TV and video investments indicates cautious optimism; spend is increasing year-over-year, but based on DV data, the spend is accompanied by an increase in filtered impressions.

Though potential is high on the business front, so is the risk of media waste due to high CPMs. As advertisers acclimate to the CTV environment, they will leverage DV Video Filtering to evaluate which impressions to filter out and which apps are worth the investment.

Where It's All Headed:

Streaming in 2025 and Beyond

Streaming TV remains one of the fastest-growing channels, with rapidly rising viewership and ad spending. It's evolved from a niche market to one of the most compelling options for reaching consumers.

There are still major gaps in how content and audiences are verified — problems that have already been solved in traditional TV but persist in streaming. However, as the streaming ecosystem matures and the channel continues to attract ad dollars, the industry is making significant strides in ensuring CTV ads are viewable, fraud-free and brand-safe.

Advertisers have more encouraging news: with many premium, ad-supported streaming services now available, ad inventory is more plentiful than ever. According to a recent EMARKETER report, "The increase in supply is not just ensuring advertisers are able to easily get seen — it's also driving down ad costs. With so much additional CTV inventory now available, marketers are paying less money for streaming ad space than they used to."

What's on DV's Horizon?

Eliminating media waste and maximizing outcomes will be the name of the game in 2025. Achieving these goals requires advertisers to have more granular control and insights, which has often been challenging due to a frequently opaque marketplace.

DV is a leader in CTV advertising measurement and performance. To enhance ad accuracy and improve the ROI of advertisers' media investments, DV has made strategic acquisitions, such as DV's Scibids AI™. Additionally, DV has introduced metrics like DV Authentic Attention™, which help track viewer engagement and capture the nuances of consumer behavior.

As advertisers prepare for Upfronts and NewFronts, they can rely on DV innovations to enhance media buying strategies and maximize CTV media investments.

- Content-Level Transparency: DV is developing a content-scoring methodology for streaming TV that enables advertisers to maximize their reach while maintaining alignment with their media quality standards at the program level, thereby enhancing confidence in the performance of their campaigns.
- Enhanced Reporting: Advertisers will soon be able to glean stronger insights for their streaming campaigns to make more informed optimization decisions, validate that inventory is delivering where they expect and ensure campaigns are aligned with brand standards.
- **Expanded Measurement:** The measurement of media quality and performance will be expanded to include new inventory types, such as native ads on streaming TV, across three leading publishers in the industry. This expansion will focus on fraud protection for native ads, while also enabling viewability and on-screen time measurement.

These tools go beyond basic measurement; they will empower advertisers to evaluate whether their campaigns are generating meaningful results.





2024 Year-over-year Video Benchmarks

		Video Authentic Viewable Rate	Video Fraud/SIVT Violation Rate	Video Brand Suitability Violation Rate	Video Filter Rate
APAC	ANZ	69% ↓ 1%	0.5% ↓ 43%	3.1% ↓ 48%	3.4% ↑ 74%
	India	85 % ↑ 27%	0.3% ↓ 44%	2.9% ↓ 44%	13.8% ↑ 922%
	Japan	57% ↓ <i>13%</i>	0.2% ↓ 55%	7.4 % ↑ 2%	3.6% ↑ 155%
	Total	80% ↑ 12%	0.3% ↓ 41%	3.3 % ↓ 32%	8.5% ↑ 56%
EMEA	Central Europe	76 % ↑ 2%	0.6% ↑ 45%	5.0% ↓ 19%	5.7% ↓ 46%
	Eastern Europe	73 % ↓ 2%	0.4% \(\psi \) 44%	8.4% 10%	11.1% ↑ 18%
	France	76 % ↑ 3%	0.3% ↓ 59%	4.8 % ↓ 32%	12.5% ↓ <i>18</i> %
	MENAT	77 % ↑ 9%	0.5% ↓ 46%	7.4 % ↓ 18%	11.1% ↓ 8%
	Southern Europe	79 % ↑ 3%	0.2% \(\psi \) 24%	5.8% ↓ 18%	8.9% 163%
	Sub-Saharan Africa	71% ↓ <i>1</i> %	0.2% ↓ 58%	11.0% ↓ 37%	7.7% ↓ 35%
	U.K. & Northern Europe	75% ↑ <i>4</i> %	0.4% ↓ 55%	7.5% ↓ 13%	11.8% ↓ 36%
	Total	76% ↑ 4 %	0.4 % ↓ 38%	6.6 % ↓ 16%	10.0% ↓ 23 %
LATAM	Brazil	75% ↑ <i>4</i> %	3.5% ↑ 251%	5.3% ↑ 24%	3.4% ↓ 50%
	Spanish-Speaking	71% ↑ <i>16</i> %	0.4% 1 2%	10.4% ↓ 20%	8.9% 17%
	Total	73 % ↑ 8%	1.7% ↑ 129%	8.3 % ↑ 5%	7.4 % ↑ 2%
North America	Canada	74 % ↑ <i>4</i> %	0.5% ↓ 29%	13.6% 14%	14.9 % ↓ 3%
	United States	76% ↑ 8%	1.0% ↑ 45%	3.4% ↓ 24%	6.1% ↓ 1%
	Total	76% ↑ 8%	1.0% ↑ 43%	3.6 % ↓ 21%	6.3 % ↓ 3%
Global		76 % ↑ 8%	0.9 % ↑ 35%	4.0 % ↓ 21%	7.1% ↓ <i>7</i> %





2024 Year-over-year CTV Video Benchmarks

		CTV Authentic Viewable Rate	CTV Completion Rate (VCR)	CTV Video Filter Rate	CTV Fraud/SIVT Violation Rate
APAC	ANZ	74 % ↑ 140%	97% 1%	0.6% ↑ 610%	0.2% \(\square 80\%
	India	75 % ↓ 5%	93% 1%	1.8% ↓ 79%	1.6% ↓ 60%
	Southeast Asia	94 % ↑ 17%	78% ↓ 2%	11.7% ↑ 2194%	0.6 % ↑ <i>757</i> %
	Total	84% ↑ 40%	91% ↓ 2%	3.4 % ↑ 1853%	0.8% ↓ 64%
EMEA	Central Europe	66% ↓ 1%	95 % ↑ 1%	3.1% ↓ 73%	0.9% ↑ 794%
	France	88% ↓ 4%	96% ↑ 3%	3.7% ↓ 86%	0.5% ↓ 64%
	MENAT	80% ↑ 51%	94 % ↑ 0%	1.6% ↑ 541%	0.4% \(\psi \) 29%
	Southern Europe	84 % ↓ 2%	96% ↓ 1%	1.4% ↑ 16%	0.1% ↓ 1%
	U.K. & Northern Europe	73 % ↑ 6%	95% ↓ 1%	4.1 % ↓ 75%	0.5% 146%
	Total	77% ↑ 8%	95% ↑ 0%	3.2 % ↓ 63%	0.7% ↑ 94%
LATAM	Brazil	62 % ↑ 18%	94% 1%	2.0% ↓ 66%	15.3% ↑ 82%
	Spanish-Speaking	88 % ↑ 56%	97% ↓ 0%	0.6% ↑ 64%	0.4% \(\psi \) 10%
	Total	78 % ↑ 42%	95% ↑ 1%	1.0% ↓ 67%	8.0% ↑ 49%
North America	Canada	69% ↑ 18%	97% ↑ 0%	14.3% ↑ 474%	0.3% \(\square 36%
	United States	78 % ↑ 17%	97% ↓ 0%	3.8% 156%	0.5% 15%
	Total	78 % ↑ 17%	97% ↓ 0%	3.9% ↑ 158%	0.4% ↑ 14%
Global		78 % ↑ 17%	97% ↓ 0%	3.8 % ↑ 55%	0.5% 16%

Glossary

App Transparency: App transparency refers to the ability to identify and track specific apps where ads are served within CTV environments. This transparency is crucial for ensuring that advertisers understand where their ads are being displayed, which helps combat fraud, ensure brand suitability and optimize ad performance.

Bundle ID: A Bundle ID is a unique identifier assigned to an application, typically used to identify the app in various app stores and within the operating system. It is essential for mapping app metadata and ensuring accurate reporting in app-based ad environments, such as mobile apps and CTV apps.

CTV: A TV screen connected to the internet, either directly (via smart TV) or through a device like Roku, Fire TV stick or gaming console.

CTV Device Name: The CTV device name refers to the device on which an ad is displayed, such as Apple TV, Fire TV or Roku. This information helps DV report on the specific devices where ad impressions are served.

Effective Measured Rate: The Effective Measured Rate is the proportion of impressions that can be measured for viewability relative to the total monitored impressions. It indicates the technical capability of viewability measurement solutions in capturing and reporting ad impressions.

Filtered Evaluations/Filters: The number of evaluations deemed non-compliant due to the client's brand suitability, geo and fraud profiles. This reflects the number of ad calls that were filtered.

Fully On-screen (FOS): DV offers FOS Certification to help advertisers tackle viewability issues in CTV environments. This certification ensures ads are shown only when they are fully on screen and the TV is on. CTV platforms that meet these standards receive the FOS Certification, allowing advertisers to trust that their ads have a genuine chance of being viewed.

Incidents: The IAB defines "incidents" as the served impressions that violated an advertiser's brand safety, fraud, or geo parameters.

Media Waste: Media waste (as defined by DV for the purposes of this report) is the approximate calculated cost associated with total media violations (Brand Suitability, Fraud/SIVT, etc.). This cost figure is derived by multiplying the total violations by an estimated \$21.50 "cost-per-mille" (CPM), which reflects the cost per 1,000 impressions.

Protected Campaigns: Protected campaigns, in this context, refers to DV benchmarked customer campaigns in aggregate, which employ varying services across our suite of verification solutions.

Streaming TV: TV content consumed across devices connected to the internet including desktops, laptops, smartphones, tablets and more.

Viewability: Viewability is the measure of whether an ad had the opportunity to be seen by a user.

Unprotected Campaigns: DV's test campaign with monitoring services active but no pre- or postbid protections in place.



Methodology

Data Notice

Unless otherwise noted, all data contained in this report is based on DV-generated data. All data is post-bid unless otherwise indicated. Post-bid monitoring and blocking technology record violations. Violation rates are post-bid metrics because violations are tracked after an ad has been purchased. Pre-bid technology stops an advertiser from bidding on an unsuitable impression, thereby preventing violations from occurring in the first place. That is why many of the numbers we report, while directionally accurate, do not represent the full scope of DV's protection. DV Video Filtering is an additional layer of protection that works in conjunction with existing controls, such as blocking and pre-bid avoidance. This solution enables advertisers to further reduce waste and minimize video infractions across devices, including CTV, mobile and desktop. Filtering occurs early in the ad's lifecycle, allowing suppliers to continue monetizing any filtered inventory with other campaigns.

Unless otherwise noted, comparative data points should be interpreted as year-over-year comparisons that span January 1, 2024, to December 31, 2024, versus the same time period for the prior year.

All data in this report is DV tag-based data from the open web, except impression growth statistics which include all DV media transactions measured (including integration-based data points).

DV Streaming

DV's classification of streaming content, including OTT (over-the-top), involves several layers of analysis. OTT includes a variety of content delivery environments, referring to video delivered over the internet rather than through traditional cable TV boxes. This can encompass both premium and non-premium content. It's device-agnostic, meaning it can be accessed on various devices, including TVs, smartphones, tablets and computers. DV uses a combination of automated and manual reviews to classify content based on its nature and context.

App Transparency

App Transparency in the context of connected TV (CTV) refers to an advertiser's ability to see the exact apps where their ads are being displayed. This transparency is crucial for ensuring brand safety, optimizing performance and mitigating risks of fraud.

TV Off

This refers to a viewability challenge that's unique to CTV, and it's the most common reason for failing FOS testing. A signal is provided by the CTV device to inform the app when the TV screen is turned off.

Unprotected Campaign

As a point of comparison to DV customer campaigns (the majority of which use a combination of pre- and post-bid protections), DV created a test campaign with no protections. We collected monitoring data on the unprotected campaign for the full year and compared it alongside our 2024 benchmark data, which is referenced throughout the report as protected campaign data and spans January 1, 2024, to December 31, 2024.

Media waste refers to the estimated cost associated with total media violations, including brand suitability, fraud/SIVT and other related issues. This cost figure is derived by multiplying the total violations by a \$21.50 "cost-per-mille" (CPM), which reflects the cost per 1,000 impressions.





Sapio Survey Methodology

DV contracted with Sapio Research to conduct multiple surveys cited in this report.

The "consumer survey" surveyed 22,000 consumers from 21 countries across APAC (Australia, India, Indonesia, Japan, the Philippines, Singapore, Thailand, Vietnam); EMEA (France, Germany, Italy, Netherlands, Saudi Arabia, Spain, U.A.E., U.K.); LATAM (Brazil, Colombia, Mexico); and North America (Canada, U.S.). The survey outcomes are referenced throughout this report, cited as the trends of consumers.

The "marketer survey" surveyed 1,970 marketing and advertising decision-makers from APAC (Australia, India, Indonesia, Japan, New Zealand, the Philippines, Singapore, Thailand, Vietnam); EMEA (Austria, France, Germany, Italy, Netherlands, Poland, Saudi Arabia, Spain, Switzerland, U.A.E., U.K.); LATAM (Brazil, Colombia, Mexico); and North America (Canada, U.S.). The survey outcomes are referenced throughout this report, cited as the opinions of marketers or media buyers.

Sample data was collected from online partner panels. The interviews were conducted by Sapio Research in March 2025 using an email invitation and online survey.

Results of any sample are subject to sampling variation. The magnitude of the variation is measurable and is influenced by the number of interviews and the level of precision in the percentages used to express the results. In the consumer survey, the chances are 95 in 100 that the survey result does not vary, plus or minus, by more than 0.7 percentage points from the result that would be obtained if interviews had been conducted with all persons in the universe represented by the sample. In the marketer survey, the chances are 95 in 100 that the survey result does not vary, plus or minus, by more than 2.2 percentage points from the result that would be obtained if interviews had been conducted with all persons in the universe represented by the sample.

