

Contextually relevant:

Program data and TV schedules bring transparency and scale to addressable advertising

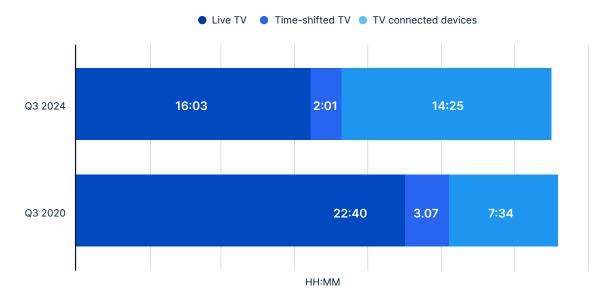


Much like we're seeing in the TV industry with the rise of free ad-supported streaming television (FAST), advertising is set to take a cue from its past.

Contextual advertising is regaining the spotlight as marketers seek privacyfocused strategies to engage with consumers across digital media channels. This is particularly the case across connected television (CTV1), which is becoming the dominant way that audiences engage with their TVs.

How U.S. audiences spend their time with TV

Weekly time spent; persons 18+



Live TV is any traditional broadcast or cable programming that is watched in real-time, including programming watched through a vMVPD (e.g., YouTube TV, Sling TV). Source: Nielsen National TV Panel

Weekly time spent with CTV has increased more than 90% over the past four years

¹CTV refers to any television that is connected to the internet. The most common use case is to stream video content

In advertising, the impact of ongoing CTV usage is twofold:

- 1) Video inventory rises dramatically as channels and platforms proliferate; and
- 2) TV audiences disperse across the breadth of content options.

Without physical limitations, the CTV landscape is an ever-growing ecosystem of platforms and channels with a fragmented inventory that is too expansive to monetize through traditional single-platform buys. As a result, programmatic transactions are on the rise. In the U.S., market research company EMARKETER expects programmatic advertising to account for more than 84% of this year's \$32 billion in CTV advertising.

CTV includes any long-form video that can be watched with an internet connection, which means that content characteristics, attributes and quality can vary significantly. More importantly, those variations aren't always evident through programmatic buying and selling platforms. This can limit inventory transparency, as well as the perceived effectiveness of CTV advertising. It can also affect brand safety.

34% of CMOs say it's difficult to understand the value of the new video marketplace

- Dentsu December 2024 Global Ad Spend Forecast

Metadata, the descriptive information about digital content, can provide muchneeded transparency, benefitting both advertisers and publishers alike.

All CTV is streaming, but not all streaming is CTV. Streaming video content is much broader than what vMVPDs², FAST channels and VOD platforms distribute. User-generated content (UGC), for example, is a big part of the streaming video landscape: YouTube has captured more than 10% of total TV time in the U.S. since July 2024, and it grabbed a record 12.4% in April 2025³.



² Virtual multichannel video programming distributors deliver live TV programming and on-demand content to viewers through an internet connection (examples include SlingTV, fuboTV and DirecTV Stream)

³ Nielsen's The Gauge



YouTube captured 12.4% of overall U.S. TV viewing in April 2025

Understanding the variety of content that makes up the CTV landscape is crucial, as both UGC and studio-produced content are often positioned as CTV, but not all CTV is created equal. That's why it's critical that video inventory includes the right level of metadata to facilitate meaningful programmatic ad transactions and confidence in their outcomes.

With respect to premium CTV inventory in April 2025, **Gracenote Global Video Data tracked:**

- 1.7 million individual programs, episodes and movies distributed by SVOD catalogs in 28 countries.
- More than 584,200 individual programs, episodes and movies distributed by the five global SVOD providers* tracked in the Gracenote Data Hub.
- 1,665 active FAST channels that distribute more than 182,170 individual programs, episodes and movies.
- More than 70,500 individual linear TV channels across more than 80 countries, many of which are carried by vMVPDs.

Takeaway #1

The television remains dominant in our daily media diets, accounting for more than four-and-a-half hours of use each day4. But more importantly, TV viewers are increasingly accessing content through an internet connection for both linear and on-demand content. This unlocks addressable advertising, allowing for increased personalization and relevance.

- In fourth-guarter 2024, 78% of Americans had access to CTV, capitalizing on access to anything the internet has to offer4.
- As of April 2025, 84.7% of U.S. households had at least one SVOD subscription⁴.
- Streaming content, including programs on FAST channels, has accounted for more than 40% of daily TV usage since June 20243.
- More than 18% of U.S. homes subscribe to a vMVPD to watch traditional live and on-demand programming4.

The amount of CTV content—and audiences' time with it highlights the ongoing viewership shift to digital channels. While content remains king, context has become critical to monetize it.



^{*} Amazon Prime Video, Apple TV+, Disney+, Netflix and Paramount+ have scaled to distribute video globally and are tracked in at least nine countries within Gracenote's video database.

⁴ Nielsen National TV Panel

The role of contextual data in CTV advertising

While the premise of contextual advertising is as old as advertising itself, its applicability in CTV is very nuanced. That's because the addressable nature of every video allows marketers to make both user-level and content-specific marketing decisions in real time, at scale. In the purest sense, programmatic platforms are looking for signals in the form of text (i.e., code) to inform buying and selling transactions. As a result, the availability—and granularity—of those signals has never been more important.

More than 50% of all CTV content has two or more genres, and almost 20% has three to four genres

In CTV, basic metadata, such as genre, year of production, mood and parental rating, are key attributes that can be used to inform ad tech buying and selling decisions. In many cases, however, these key data points aren't there. In others, the data doesn't follow a standardized taxonomy, which can create inconsistency across the industry.



Contextual data ensures brand alignment and campaign goals





With respect to metadata uniformity, Rain the Growth Agency's position has been that standardization and data transparency in CTV advertising can benefit media buyers and agency clients alike. To illustrate, the agency recently shared a sample of sports programming from several publishers that lacked the information needed for ad tech to properly evaluate buying and selling opportunities.

Of the 28 entries in the sample, only four included league information, and only five specified which teams were playing in the listed programs. Because show-level data (the competing teams, in this example) isn't typically present in bidstream data, the agency conducted an analysis of CTV inventory to understand the importance of standardized metadata with respect to conversions. The agency found that, in the absence of show-level data, program genre, along with hour of day, was the second-most impactful driver of conversions.

Gracenote's video descriptor data includes 300 proprietary mood descriptors to enable robust content discovery and relevant ad targeting

Drivers of conversion when show-level data is not available



The impact percentages represent how much each individual data signal contributed to predicting conversions for optimization Source: Rain the Growth Agency



As the amount of premium CTV content increases, however, basic metadata won't be enough to differentiate individual programs. This is particularly relevant for live sports, which are among the few program types that can command large audiences for scheduled viewing.

On March 27, 2025, for example, a tennis match in the Miami Open and a college basketball game in the Sweet 16 round of the NCAA March Madness tournament were televised at the same time. Both were live sports competitions, but they're very different otherwise—but not to programmatic platforms, unless they have data that distinguishes them from one another.



The different layers of program metadata

How content IDs and schedule data enhance program transparency for programmatic advertising

Alabama vs. BYU in the Sweet 16 round of March Madness 2025



Basic program metadata

Program genre: Sports Language: English



Content ID-driven metadata

Program genre: Sports Title: College basketball Subtype: Team event Language: English



Schedule-driven metadata

Program time: 7 pm EST

Program date: March 27, 2025
Program genre: Live sports

Subtype: Team event

Event qualifiers: Playoffs, March Madness



TV listing data unlocks premium inventory across CTV

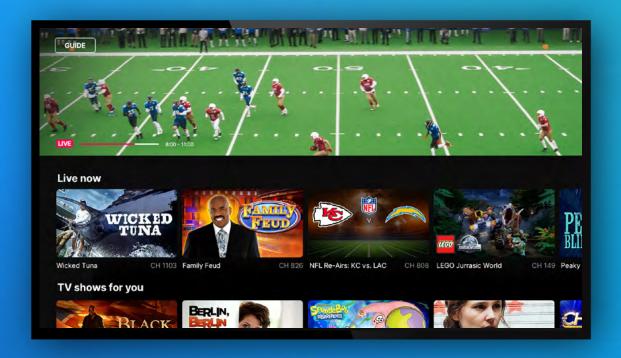
The transition of sports rights to streaming is ongoing, amplified by an array of new rights deals that span both SVOD services and FAST channels. While many examples highlight the shift, none stand out like the livestream of Super Bowl LIX on Tubi this past February, which drove over 10 million new signups to the FAST service.

Sports is the second-largest program category on FAST channels

Given the premium nature of televised live sports, they're always broadcast according to a linear schedule, regardless of distribution channel. TV listing information, however, isn't present in the data that informs buying and selling decisions in programmatic ad platforms.

In addition to the benefits of standardized metadata, TV listing and program availability provide a more granular level of transparency that otherwise doesn't exist in CTV. This data identifies the most premium video programming, including live sports. From a transparency perspective, the availability of TV listing data provides advertisers with the validation they need to invest in key tentpole live sporting events, like March Madness. It also allows ad buyers to participate in cross-publisher deals at scale. On the supply side, it allows publishers to participate in larger ad deals.

FAST channels distribute more than 16,000 sports programs, episodes and movies





Here's an example scenario:

In March 2025, Gracenote Global Video Data had a record of 1,653 active FAST channels. These channels distributed more than 172,600 individual programs, episodes and movies. Of the total channels, 221 were dedicated to sports.

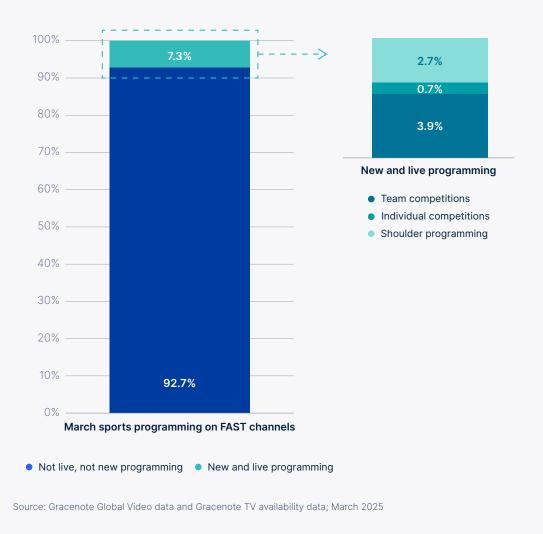
In aggregate, these sports channels distribute more than 16,000 programs, episodes and movies. Very little, however, was new and live sports competition events—the most premium of sports content. This is where TV listing data becomes vital.

TV listing data identified the 4.6% of sports competition programming on FAST channels in March that was new and broadcast live

In March, only 3.9% of sports programs were live team sports (e.g., baseball, soccer, basketball) and 0.7% were live individual sports (e.g., poker, darts, racing).

TV listing data identifies specific program attributes

Content identification in sports programming on FAST channels





To illustrate the advertising appetite for sports in programmatic, a single week of recent bid volume as recognized by Gracenote segments included 362.8 million bid requests for just seven televised, live sports competitions. The bid data also included an additional 1.6 billion bid requests for sports-related programming.



Program titles, including team matchups, aren't always included in the data available in programmatic platforms, but qualifier information from TV listings and availability data can distinguish events and leagues within the same sport (e.g., UEFA vs. Premier League). As programmatic transactions increase, program attribute data will provide game-changing results for advertisers and publishers.

The keys to a holistic metadata strategy in CTV

The information about digital content has never been more important. In addition to fueling personalized and engaging discovery experiences for consumers, metadata is gaining ground as a privacy-forward way to pair advertising with relevant video content. With the ever-expanding realm of CTV, metadata needs to be functional across platforms and channels.

Here are three qualities of content IDs and metadata for CTV:

Industry validated

Content identifiers (IDs) sit at the root of a comprehensive, scalable metadata strategy. There are billions of content IDs across the digital landscape. For scalability, widely used and industry-accepted content IDs ensure standardization and applicability across all platforms and channels within the growing CTV ecosystem.

Gracenote IDs and metadata offer ubiquitous interoperability across the video landscape:

- Seamlessly transition from powering content discovery and personalization to advertising.
- IDs and metadata are normalized and applicable across platforms.

Standardized taxonomy

Information about digital content can be as varied as the content itself. Al-driven, human-validated metadata taxonomies ensure standardization throughout the entertainment ecosystem.

Gracenote's standardized, industry-adopted video metadata

40M+ program titles, 35+ languages, 80+ countries, 260+ streaming catalogs, 1,600+ FAST channels

Metadata enrichment

While foundational program information like year of production and genre is the cornerstone for any video metadata strategy, greater specificity about programming, such as mood, theme, character, scenario, setting and parental rating, enhances discovery options and facilitates advanced targeting opportunities.

Takeaway #2

As CTV becomes the dominant way people access TV content, the information about each video—the inventory that ads are bought and sold against—becomes paramount.

While powering robust content discovery experiences for viewers, metadata provides transparency into CTV inventory. Outside of VOD, TV listing and program availability data adds additional information about scheduled, high-profile programming, including live sports competitions.



Exploring the expanding opportunities of televised WNBA games

In addition to its ability to inform contextual ad placements, metadata can help uncover missed opportunities, even in live sports. Here, the WNBA is a particular standout.

From an engagement perspective, the WNBA made headlines throughout its 2024 season, fueled by young stars like Caitlin Clark, Angel Reese and Cameron Brink. As a result, year-over-year viewership across Disney-owned channels and ION during the league's regular season grew more than 200%. And at the end of the season, game 5 of the playoffs between the New York Liberty and Minnesota Lynx topped 3.3 million viewers, a 25-year high.

Only 1.7% of fourth-quarter 2024 ad investment in U.S. sports programming was dedicated to women's sports

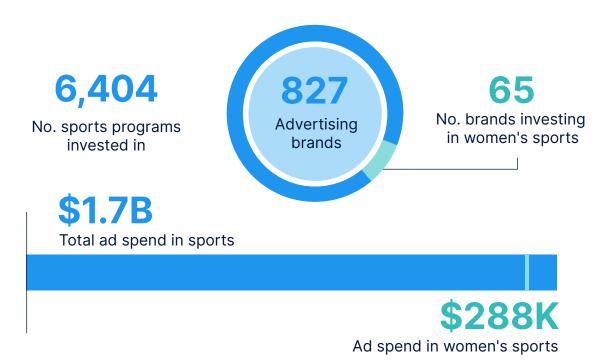
Despite the surge, however, ad investment in women's sports, including the WNBA, significantly trails spending across all sports. Specifically, a recent Gracenote analysis found that 827 brands invested in U.S. sports programming during the fourth quarter of 2024—including the WNBA playoffs. Only 65 invested in women's sports. In total, however, the ad investment in women's sports from these brands represented just 1.7% of the total.





The 65 brands advertised across only three unique sports programs inclusive of women, while spending across all sports spanned more than 6,400 programs. In aggregate, more than 130 brands across 11 industries did not invest any advertising dollars in women's sports during the period.

U.S. ad investment in women's sports in fourth-quarter 2024



Source: Nielsen Ad Intel and Gracenote Inclusion Analytics

Given last year's momentum, the WNBA is going bigger this season, which kicked off on May 16. Boasting more than 175 televised regular season games, the league offers brands an increasing number of opportunities to get involved in the action action that's taking place across a growing number of channels and platforms.

Industries that did not advertise in women's sports in fourth-quarter 2024

| Industry | No. brands tracked in industry |
|--|--------------------------------|
| Jewelry, optical goods, cameras | 4 |
| Sporting goods, toys and games | 11 |
| Travel, hotels and resorts | 23 |
| Food and food products | 50 |
| Pets, pet foods and pet supplies | 12 |
| Horticulture and farming | 3 |
| Electronic entertainment and equipment | 4 |
| Household furniture supplies | 5 |
| Building materials, equipment and fixtures | 4 |
| Computers, office equipment and stationary | 10 |
| Freight, industrial and agriculture | 5 |
| Total | 131 |

Source: Nielsen Ad Intel and Gracenote Inclusion Analytics



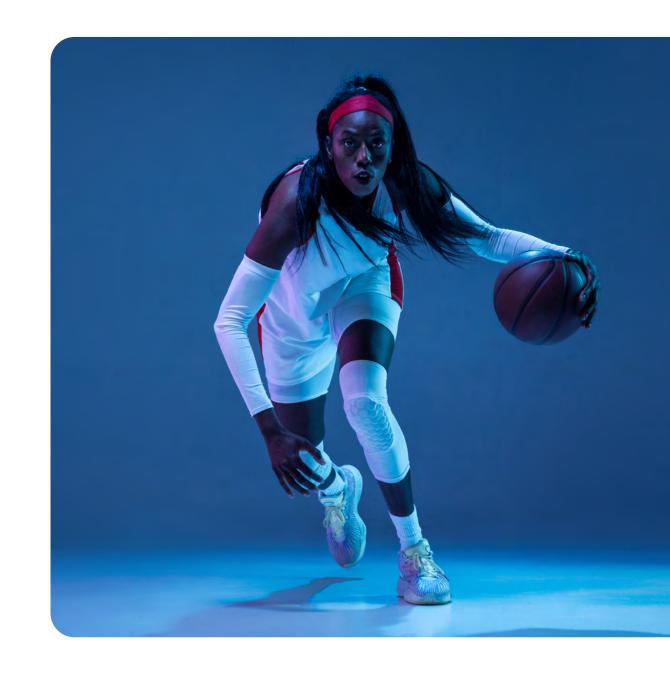
Mapping out WNBA game distribution enables CTV ad buying at scale

While relatively straightforward from a TV rights perspective, individual WNBA games will be aired across a growing, fragmented landscape of traditional networks and over-the-top (OTT) platforms (vMVPDs, streaming services). This decentralization makes it difficult to buy and sell WNBA ad inventory at scale, especially across CTV.

Seven different networks and platforms will distribute the nationally televised WNBA games during the 2025 season

To illustrate, let's look at the broadcasting of the home opener for the Indiana Fever on May 17 against the Chicago Sky. ABC had the national TV rights to broadcast the game, but as a result of fragmenting TV distribution, the game was carried by nearly 2,000 individual channels across traditional television and streaming services.

Importantly, there was 21.4% more ad inventory across CTV than traditional TV.



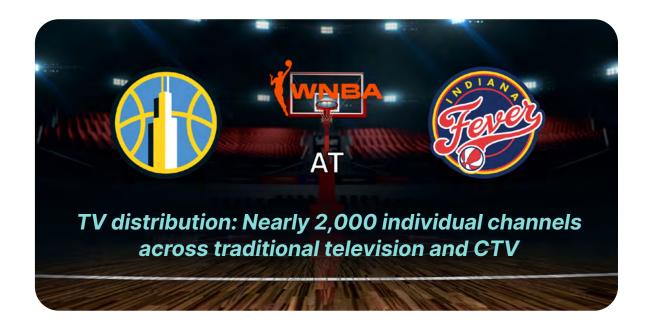


Here's the breakdown. As of late April:

Gracenote TV listing availability data had a record of **859 ABC affiliate networks** that were scheduled to carry the May 17 Fever-Sky game across traditional television.

Gracenote streaming availability data had a record of **1,043 individual OTT channels** that were scheduled to carry the game. These OTT channels included vMVPDs like YouTube TV and DirecTV Stream, DTC streaming offered by local TV stations and FAST channels operated by traditional TV stations.





From a programmatic perspective, TV listing data is a game changer. Specifically, the qualifier data distinguishes individual programs within the same category. Basic metadata indicates when a program is a team sports event, but the "WNBA" designation for the May 17 game, coupled with the "live" and "new" qualifiers, differentiates it from the more than 25 other new and live team sports that were broadcast at the same time.

Brands interested in sports want to buy inventory at scale across platforms, not just on a single channel



TV listing data provides programmatic platforms with significant program transparency



Team Event

Chicago Sky at WNBA Basketball > Indiana Fever

May 17, 2025 3:00pm - 5:00pm

120 mins • 2025

New | CC | Stereo | HDTV | Live | HD 720p

Genre: Basketball

Description: From Gainbridge Fieldhouse in Indianapolis

TV audiences have an overwhelming amount of individual programs to choose from across platforms and channels, and the number of channels that distribute them is equally staggering. If a single WNBA game is available across nearly 2,000 individual channels, imagine the fragmentation for an entire WNBA season—or for every professional basketball game across all leagues. With this degree of fragmentation, sophisticated programmatic signals that include TV listing information provide brands and advertisers with effective, scalable targeting solutions.

Takeaway #3

Transparency into CTV inventory remains a key factor in perceived effectiveness and ROI. While 53% of the marketers surveyed for Nielsen's 2024 Annual Marketing Report planned to increase their CTV budgets, they ranked the effectiveness of their CTV spending behind all other paid media channels except podcasts and native advertising.

The perceived effectiveness of CTV advertising trails all paid media channels except podcasts and native advertising

- Nielsen 2024 Annual Marketing Report

Insight into all upcoming programs across CTV (not just sports), along with granular, event-specific data, provides much-needed transparency. It also opens up larger reservoirs of demand, which is pivotal for live sports.



Contextual advertising in action

As CTV gains in prominence, especially with highprofile content, an array of brands are using contextual data to inform their cross-platform advertising strategies. Let's look at two recent examples.

Case study 1: Winning with CTV

A direct-to-consumer packaged goods brand recently looked to CTV to amplify brand recognition following a successful spot during a live sports event. Collaborating with Rain the Growth Agency, the brand developed a campaign to advertise within the 2025 NCAA March Madness basketball tournament and programming relevant to its key audience, women 18-45.





Strategy

To ensure targeting efficiency and brand suitability, the brand and Rain the Growth Agency partnered with Gracenote to run a programmatic CTV campaign that ensured relevant ad placements. With a list of target programming informed by Gracenote Contextual Video Data, the brand was able to place its ads within men's and women's March Madness games in addition to a curated segment of 500 TV shows and movies that aligned with the brand's intended audience.

Results

On the heels of its first live sports ad, the brand and its partners acted quickly to extend its brand reach among its key TV audience segment. Contextual targeting enabled the brand to efficiently and effectively insert its ads into desired TV programming and high-profile sports, avoiding the typical blind spot of not having visibility into specific programmatic inventory. Additionally, show-level targeting and transparency provided the brand with much-needed confidence in where its ads would appear—a major benefit from a brand suitability perspective.





Case study 2: Tapping into CTV, naturally

With a well-established position in the direct-to-consumer market, a leading natural supplement brand recently expanded its advertising strategy to increase reach and engagement with its target audience of adults 50+. With its media agency, Cannella Media, the brand identified CTV as a key channel to complement its existing efforts across traditional television.

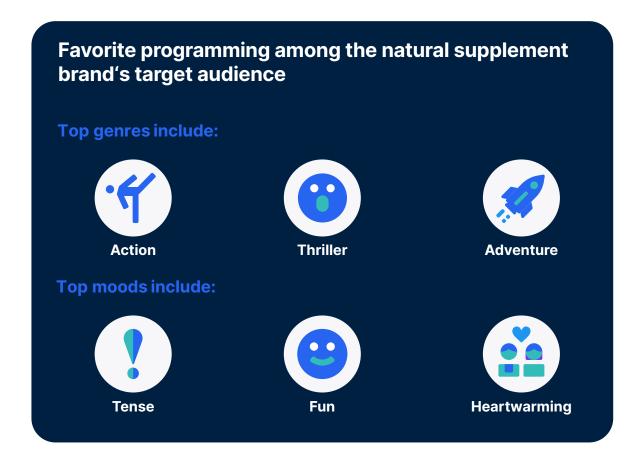
Looking to drive ad engagement, website visits and supplement orders, Cannella Media and the brand kicked off its first CTV venture with DIRECTV, building on an established relationship with DIRECTV Advertising for its traditional TV campaign. The brand aimed to gain incremental reach among people 50 and older by targeting health and wellness programming, along with other content known to engage its intended audience.





Strategy

To activate the campaign, Cannella Media collaborated with Magnite, DIRECTV Advertising and Gracenote to expand the brand's reach across CTV through the use of multidimensional contextual targeting in a private marketplace of available inventory.



Rather than relying on a broad, singular genre, Gracenote identified programs with granular themes, settings, characters and subjects that aligned with the interests of the supplement brand's intended audience. The program profile included health, wellness, lifestyle, crime and western content.



Results

The execution and results of the campaign validate the effectiveness of contextual targeting in CTV advertising, offering upside for publishers and advertisers alike. The strategy and results highlight how advertisers can use contextual signals in existing CTV inventory to accurately and efficiently engage with desired audiences. For publishers, the campaign and its results highlight how helping advertisers reach new customers ultimately increases their advertising revenue.



In a very short period of time, CTV adoption and usage have become nearly ubiquitous among TV viewers. As a consequence, advertising dollars are steadily heading to digital channels, with the Interactive Advertising Bureau forecasting that digital video will account for 58% of all TV and video ad spend this year, up from just 29% in 2020.

Ad buyers, however, need greater transparency into the inventory they're investing in. The immense fragmentation of content highlights the need for standardized metadata—the contextual signals needed to facilitate informed buying and selling decisions in programmatic systems. The use of technology to make these decisions is rising fast. Global media agency Dentsu, for example, expects that algorithms will drive 60% of ad spending this year, rising to nearly 80% by 2027.

For advertisers, the use of contextual signals provides the much-needed transparency to make informed, cross-platform investment decisions in CTV, ensuring program-level targeting and brand safety. By leveraging contextual content signals, publishers are able to provide advertisers with insight into available CTV inventory, including high-profile, scheduled programming such as live sports and TV premieres.

For information about how Gracenote is helping brands and publishers activate contextual ad campaigns in CTV, please visit gracenote.com/products/contextual-video-data/



