


# State of play

**Data-driven personalization:** *The future of streaming content discovery*



In just three short years, the amount of content available to TV viewers has grown by more than 1.1 million individual programs<sup>1</sup>. Combined with an explosion of streaming services, the video landscape has become vast in a very short amount of time.

**Overwhelmed by choice:**

**20% say they don't know what to watch beforehand and couldn't find something to watch—so they did something else instead**

Source: Nielsen Streaming Content Consumer Survey, June 2023

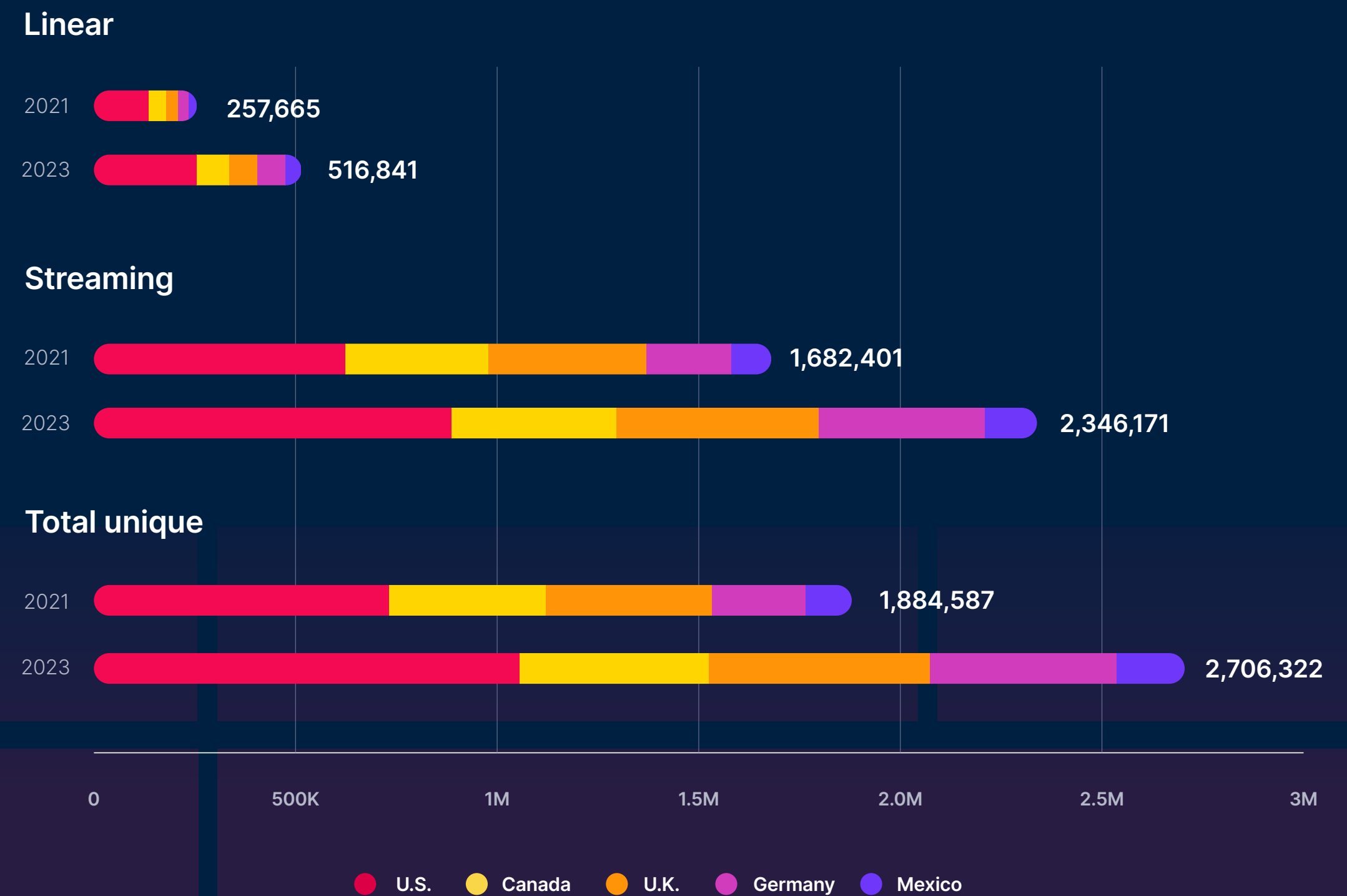
The abundance of choice has put the audience in control like never before. But the expanding streaming landscape has become overwhelming for viewers. It's taking longer for viewers to find content they're interested in, and audiences know that if they don't see something they like, a different option is just a click away. This reality highlights the importance of the user experience within individual services, especially amid the trend away from content exclusivity.

<sup>1</sup>Gracenote Global Video Data; 1.6 million unique titles available February 2020; 2.7 million available in June 2023.

# Audiences now have more than **2.7 million** individual video titles to choose from

For context about the breadth of choice available today, audiences across the U.S., U.K., Canada, Mexico and Germany now have more than 2.7 million individual video titles<sup>2</sup> to choose from across broadcast, cable and streaming. That's almost 1 million more than they had just two years ago. While the number has increased across both linear programming and streaming services, 86.7% of the total now reside on streaming services.

## Distinct video titles across linear and streaming services



Note: Numbers reflect availability over a 14-day period.  
Source: Gracenote Global Video Data; July 2021 and June 2023

<sup>2</sup>Gracenote Global Video Data; numbers reflect availability over a 14-day period.

To tap into the bounty of streaming content, adoption of connected television (CTV)<sup>3</sup> devices, including smart TVs<sup>4</sup>, continues to rise. Earlier this year, [Digital TV Europe](#) published a prediction that global smart TV penetration will reach 50% by 2026. In the U.S., where audiences streamed more than **19 million years' worth** of content last year, 85.8%<sup>5</sup> of TV households have at least one TV-connected device (smart TV, internet-connected device, game console).

Traditional broadcast and cable programming remains the primary option for TV content outside of the U.S., but streaming is gaining ground.

- In Australia, for example, 70% of audiences<sup>6</sup> say they watch streaming video, with the average viewer watching 1.7 hours per day.
- In Mexico, streaming had grown to account for **21.4% of TV usage** in June 2023, up from 15.2% in December 2022.
- In Thailand, streaming had a reach of 50.7%<sup>7</sup> during the second half of 2022, and audiences spent just under an hour per day watching streaming content.
- In the U.S., streaming has been the dominant TV option since November 2022, growing to account for 37.7% of TV usage<sup>8</sup> in June of this year.



<sup>3</sup> CTV refers to any television that is connected to the internet. The most common use case is to stream video content.

<sup>4</sup> A smart TV is an internet-enabled television

<sup>5</sup> Nielsen National TV Panel, May 2023

<sup>6</sup> Australia Consumer and Media View, Q4 2022

<sup>7</sup> Thailand Cross Platform Ratings

<sup>8</sup> [The Gauge](#), June 2023

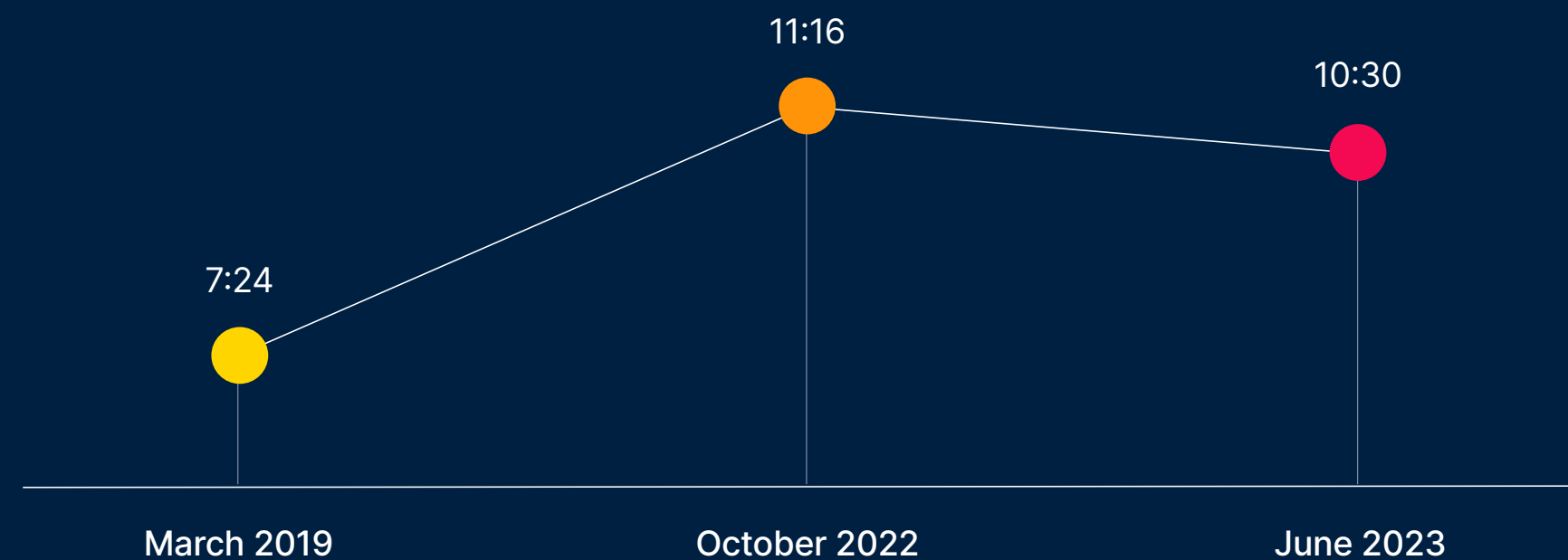
# ***Without traditional boundaries, content sources have exploded***

Compared with traditional cable packages and schedules, digital media has few, if any, confines. There is seemingly infinite space for new services, channels, content creators and business strategies. The flipside, however, is that the audience is finite, and it fragments across every new platform and channel that debuts.

This dispersal of engagement presents a significant challenge for an industry that has historically relied on monetizing content by attracting large audiences to a single place with aggregated, provider-chosen options. The growing abundance of content and content sources has become overwhelming for audiences, who say they now spend an average of 10-and-a-half minutes searching for something to watch, which is up from nearly seven-and-a-half minutes back in early 2019. Compared with strategies focused on adding more content to engage audiences, focusing on personalization and user experience can help audiences find what they're looking for more quickly.

## **Average time to find something to watch**

*In minutes and seconds*



Source: Nielsen U.S. streaming content consumer surveys

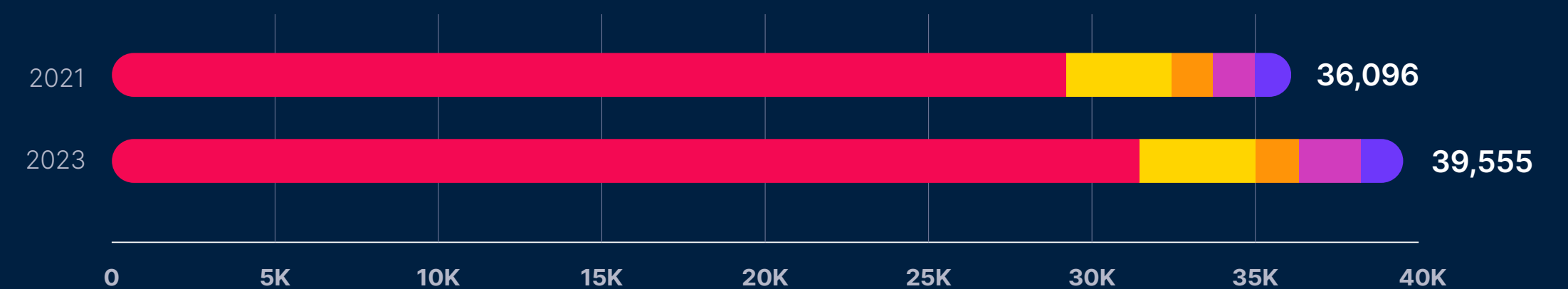
**Audiences now spend an average of 10-and-a-half minutes searching for something to watch**

To compound the complexity of audience engagement, Gracenote Global Video Data had a record of more than 39,500 distinct channels for audiences in the U.S., U.K., Canada, Mexico and Germany as of June 2023, with the U.S. accounting for nearly 80% of them. Each channel represents a unique source of linear programming, such as ABC and Flicks of Fury, an original channel on Pluto TV. Separately, there are more than 167 unique streaming video sources, with each representing an individual provider, such as Netflix and Disney+. This view of where video engagement is taking place is much different than a consolidated list of channels within a single cable package.

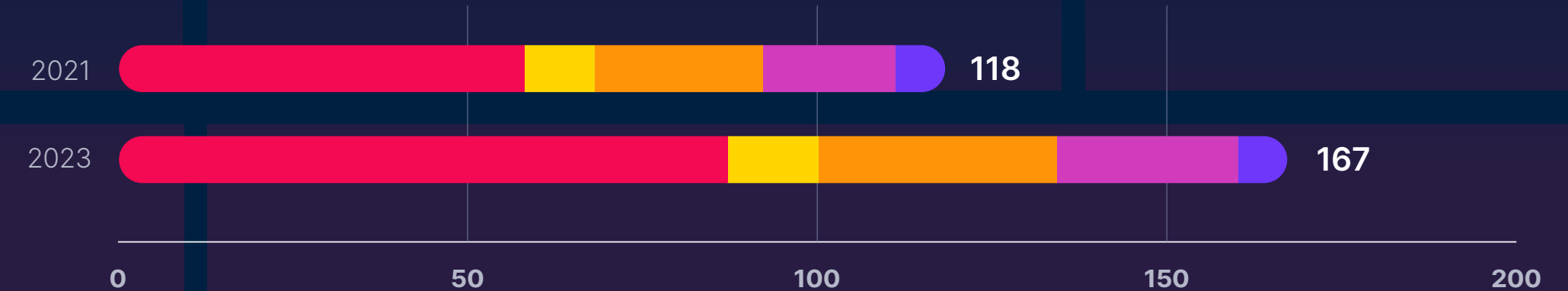
**Audiences have nearly 40,000 different channels and streaming sources to find content on**

## Distinct video channels and catalogs across linear and streaming services

### Channels



### Catalogs



● U.S. ● Canada ● U.K. ● Germany ● Mexico

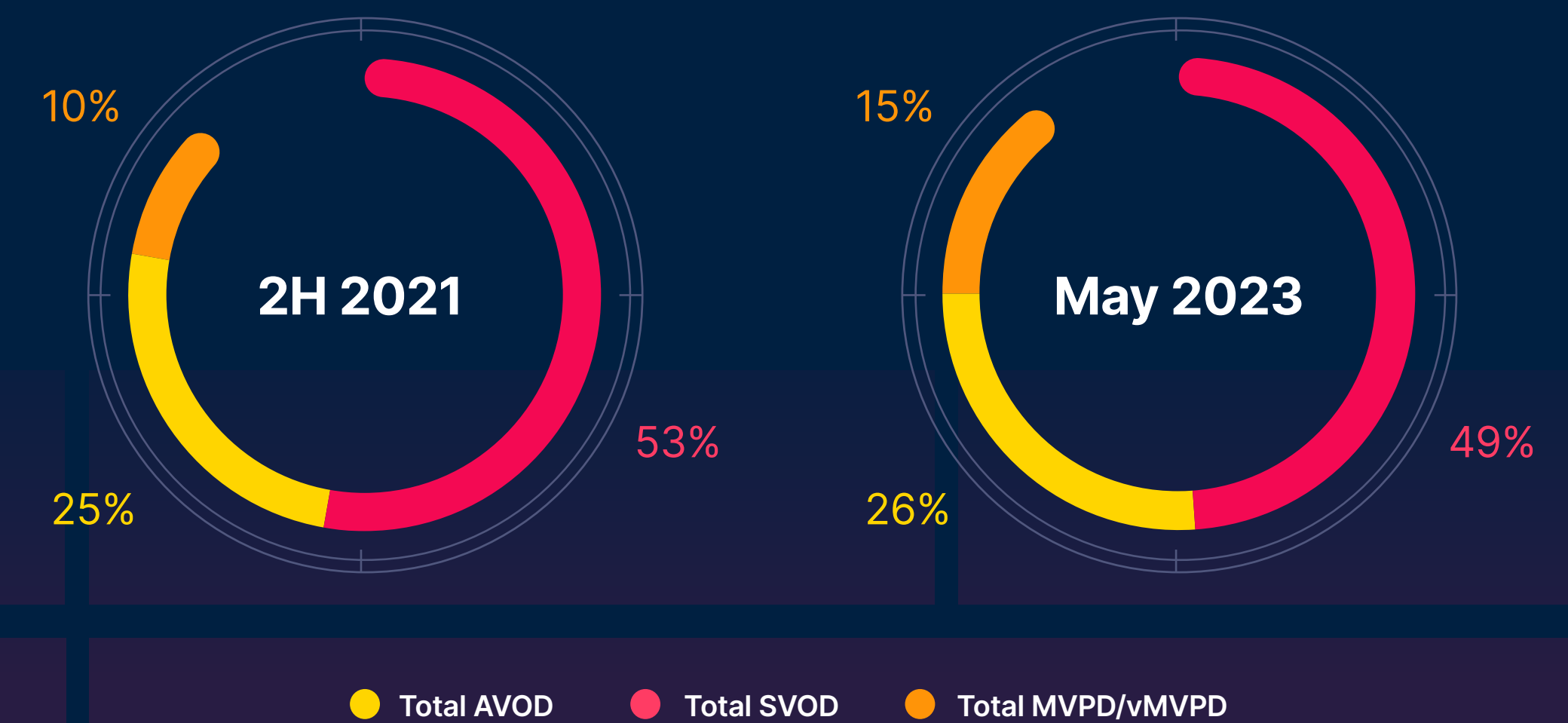
Source: Gracenote Global Video Data; July 2021 and June 2023

# The rise of ad-supported streaming

From a monetization standpoint, streaming content distribution has evolved from its ad-free, subscription-focused roots. Today, platforms and services are increasingly including advertising. In more recent cases, advertising has become the primary go-to-market strategy.

Traditional media companies have also joined in by distributing their linear content through digital channels (MVPD<sup>9</sup> apps and vMVPDs<sup>10</sup>). As ad-supported options become more prevalent, audiences—many of whom are scaling back on their paid subscriptions—are rallying. In the U.S., for example, subscription video-on-demand (SVOD) viewing had fallen to account for 49% of all streaming<sup>11</sup> at the end of May 2023, while ad-supported VOD (AVOD) had grown to account for 26%, and MVPD/vMVPD streaming had grown to account for 15%.

## Percent of streaming minutes watched in the U.S.



Notes: "Other" categories are not included  
Source: Nielsen Streaming Platform Ratings

<sup>9</sup> Multichannel video programming distributor (e.g., Xfinity, DISH Network, DirecTV, Spectrum, and Time Warner Cable).

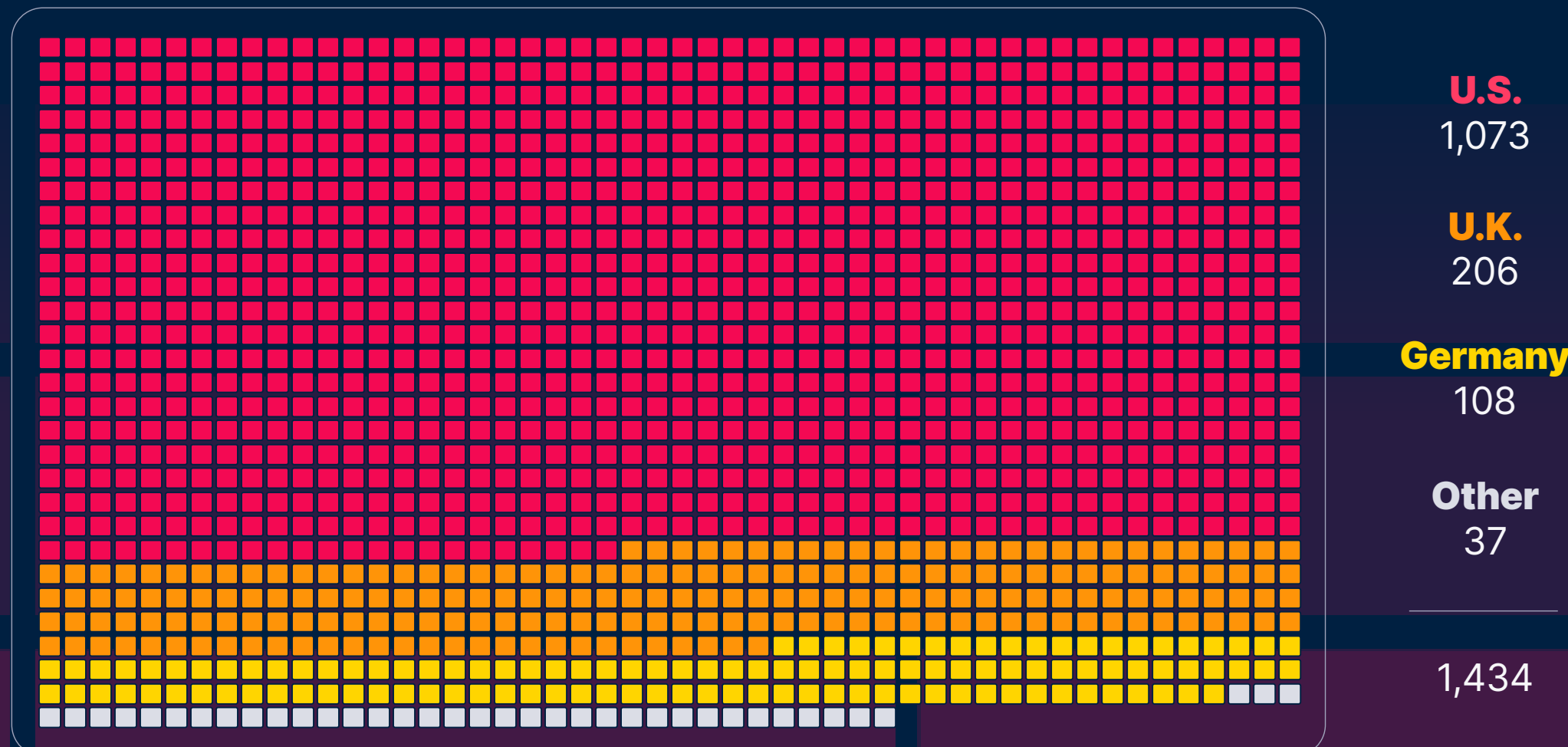
<sup>10</sup> Virtual MVPDs deliver video content through an internet connection (e.g., DirecTV Stream, FuboTV, YouTube TV).

<sup>11</sup> Streaming Platform Ratings

Now, the playing field is shifting again, especially in the U.S., as audiences are gravitating to the latest iteration in the streaming space: free ad-supported television (FAST) channels. Unlike VOD services like Netflix and Hulu, FAST services, like Pluto TV, Tubi TV and XUMO, offer programming that is presented very much like traditional cable or satellite services do—live and on a schedule. Many complement their scheduled programming with on-demand content, providing the best of both worlds.

In addition to presenting audiences with a familiar, cable-like experience, FAST channels are built to be adjusted very quickly—based on shifting demand. Said differently, new channels can be developed and added very rapidly, especially when media companies and other creators seek to add new channels to existing services. In late June, for example, **NBCUniversal announced** plans to launch 48 FAST channels to Amazon Freevee and Xumo Play. In addition to genre-specific programming, the lineup will include dedicated channels for *Saturday Night Live*, *Top Chef* and *The Real Housewives* franchises.

## Unique FAST channel distribution by country



Source: Gracenote Video Data, June 2023

Given the speed in which FAST channels can be developed and launched, industry stats about how many actual FAST channels exist are varied. As of June 2023, Gracenote Video Data had a record of 1,400+ individual FAST channels in its database, with 1,050+ of them available in the U.S.

Available to audiences via internet connection without a paid subscription, FAST channels are ad-supported, and they lean into a trend that isn't discussed much in the industry press: the appeal of classic TV. Compared with traditional SVOD services, which typically offer a mix of high-profile originals and titles acquired from other sources, FAST channels are predominantly set up to showcase library content—programming that originally aired somewhere else (usually on traditional TV).



# Streaming audiences spend more time with classic TV than original programs

Importantly, the rise of FAST channels isn't an experiment in streaming audience engagement. While Netflix's *House of Cards* was groundbreaking in bringing original content to SVOD in early 2013, time spent with acquired content is steadily rising. In the U.S., for example, 60% of time spent streaming in May 2023<sup>12</sup> was dedicated to programming that first aired on linear channels. That's up 5.2% from October 2022.

For additional context, 18 of the 25 most-watched streaming programs by U.S. women 18-34 in 2022 were classic TV titles<sup>13</sup>, with *Grey's Anatomy* and *Gilmore Girls* beating out *Stranger Things* for the top spots. In total, this audience watched just under 77 billion minutes of these shows, which is 73% of the total for all 25 titles. Comparatively, 17 of the 25 most-watched streaming titles by U.S. men 18-34 in 2022 were acquired titles, and this audience watched nearly 43 billion minutes of these titles—64% of the total time spent with all 25 titles.

The appeal of library content bodes well for FAST services, and the three FAST services that are independently reported in *The Gauge* (Roku Channel, PlutoTV, Tubi) already account for more viewing per month than all but the two top cable networks. In June of this year, these three services accounted for 3.3% of total TV use in the U.S.

**73% of the time U.S. women 18-34 spent watching the top 25 streaming programs in 2022 was dedicated to classic TV**



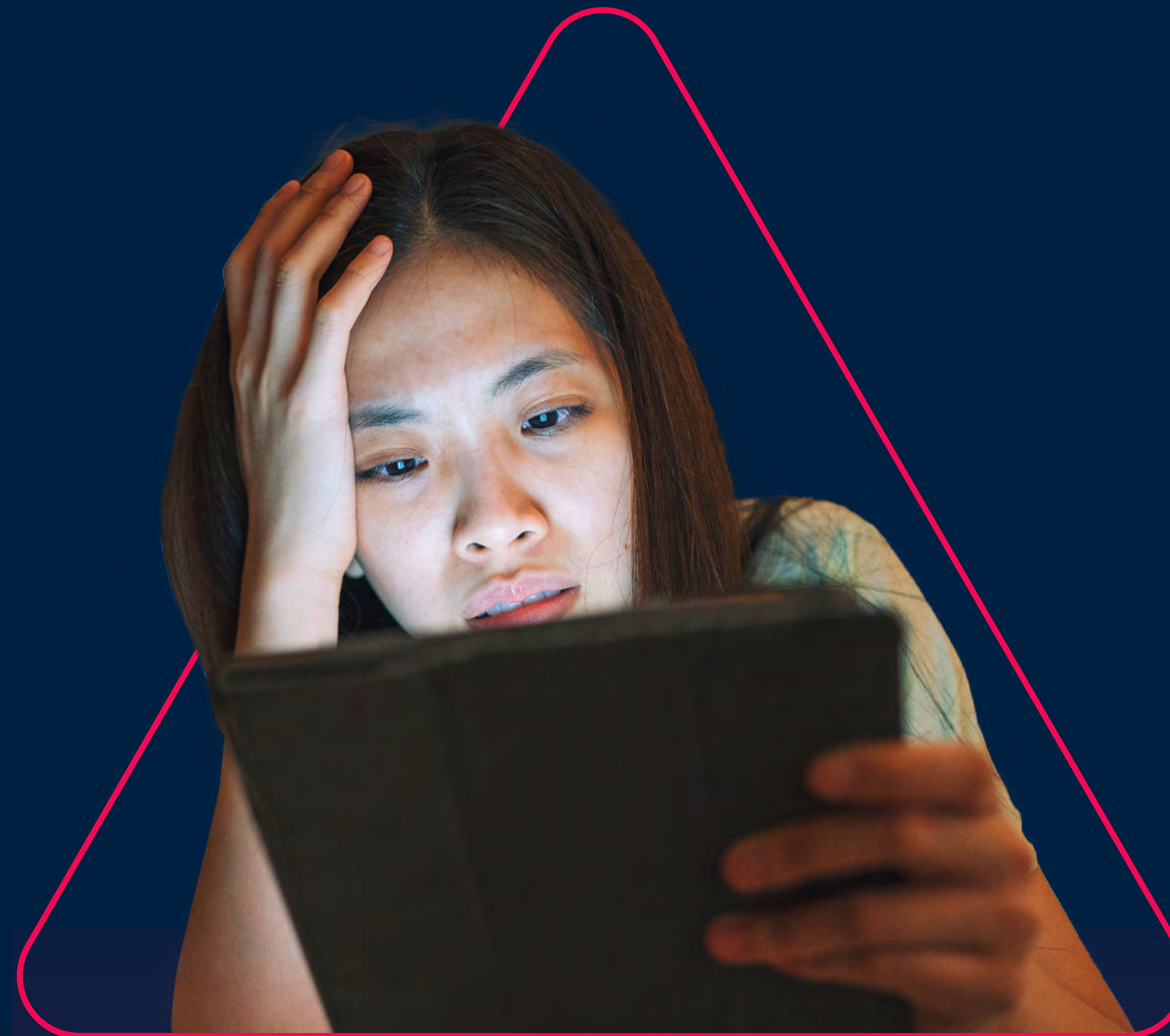
<sup>12,13</sup> Streaming Content Ratings

## **Personalization will attract audiences at the channel level**

The streaming industry's wealth of choice now puts the fate of any platform, service or program in the hands of the audience. And with the rise of FAST services, creators, distributors and advertisers have a new consideration with respect to audience engagement: channels.

As individual FAST services increase their channels—many of which include several hundred—success will hinge on their ability to quickly connect viewers with content they're looking for. That point, which is critical across all streaming services, becomes even more critical when you consider that many channels and programs are not exclusive to individual services.

Just a few years ago, Netflix paid to be the exclusive streaming home of *Seinfeld* for a period of five years that started in 2021. Fast forward to this year and we see Warner Bros. Discovery (WBD) and MGM cement a deal to bring 23 FAST channels to Amazon Freevee, including *Cake Boss* and *Say Yes to the Dress*, which are also available on the Roku Channel and Tubi.



**“FAST services offer an array of experiences, but very little personalization.”**

Filiz Bahmanpour, VP of Product, Gracenote

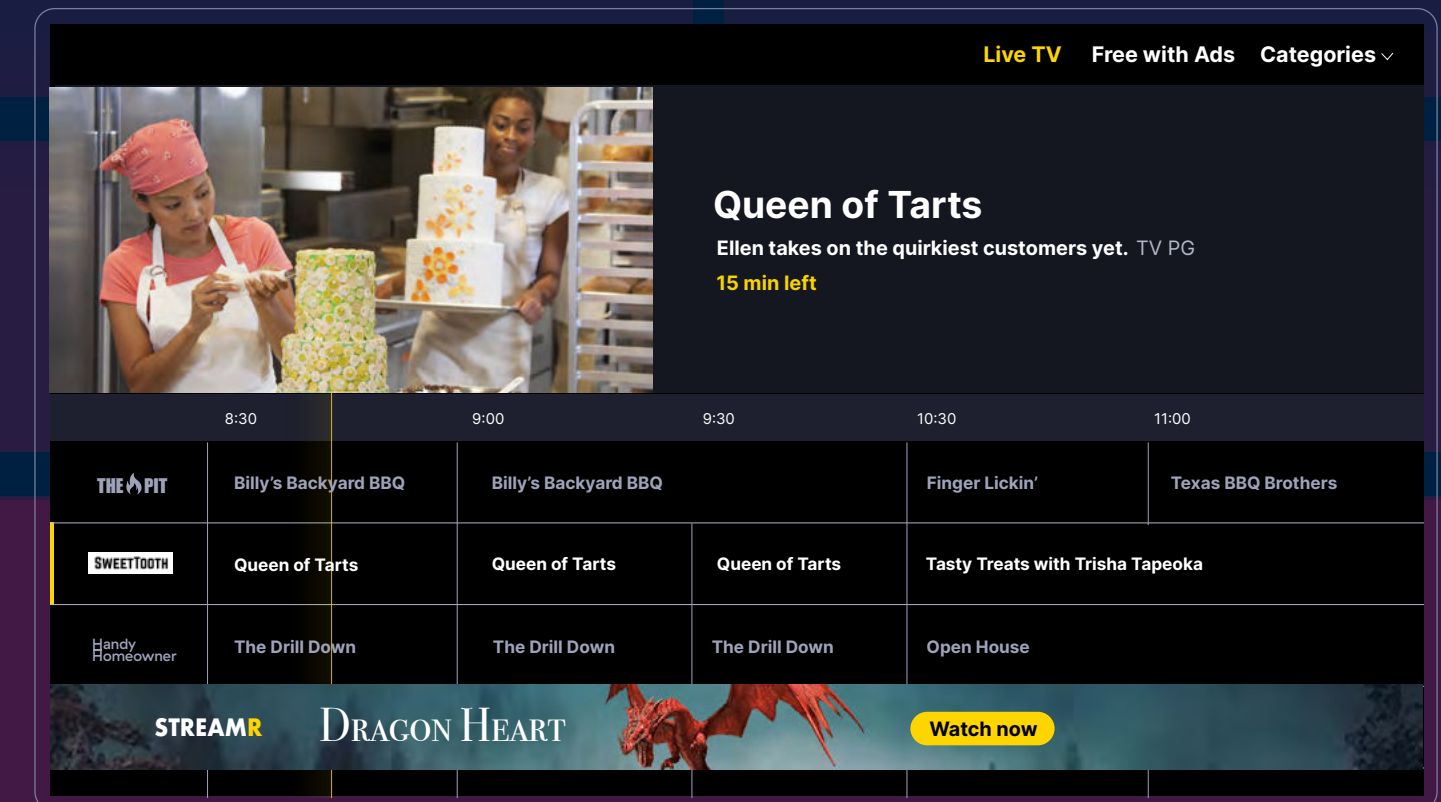
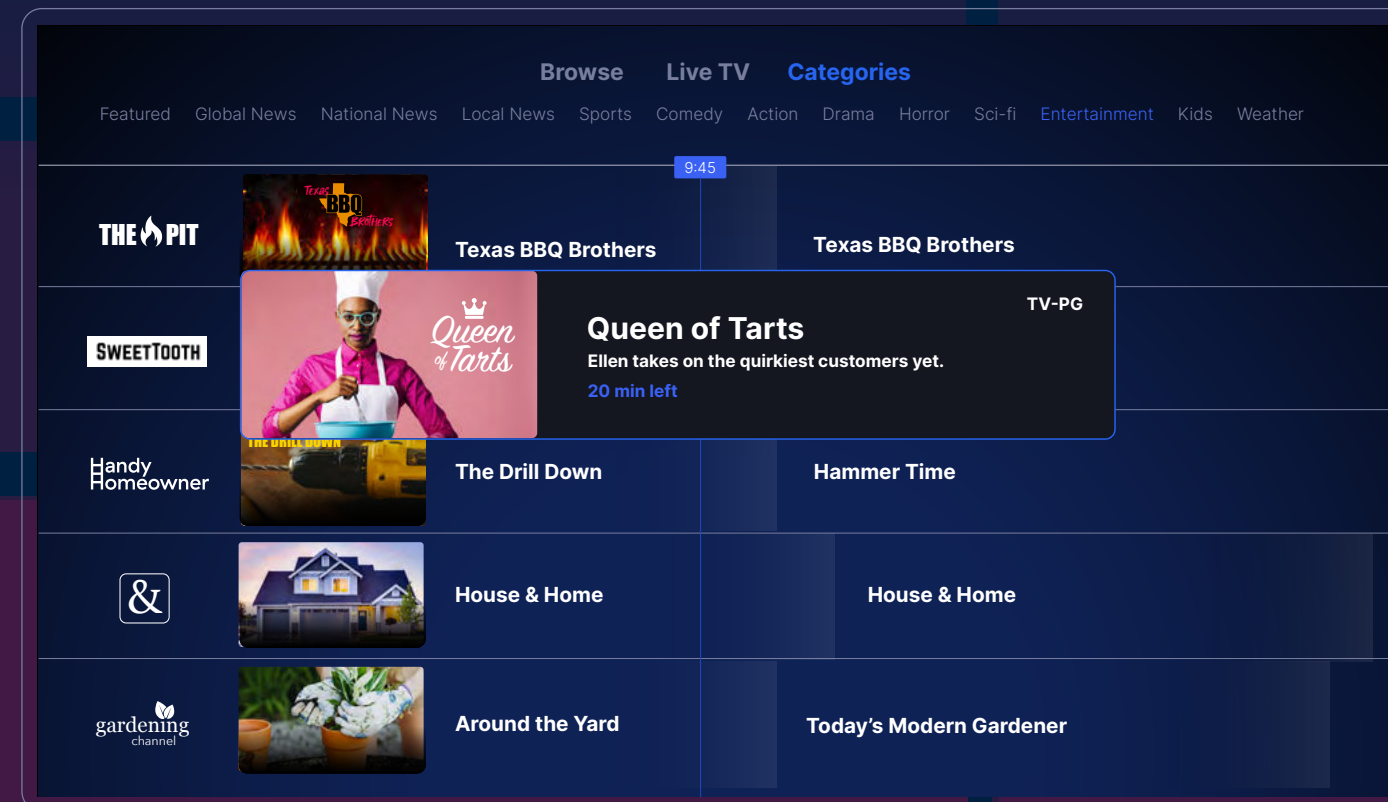
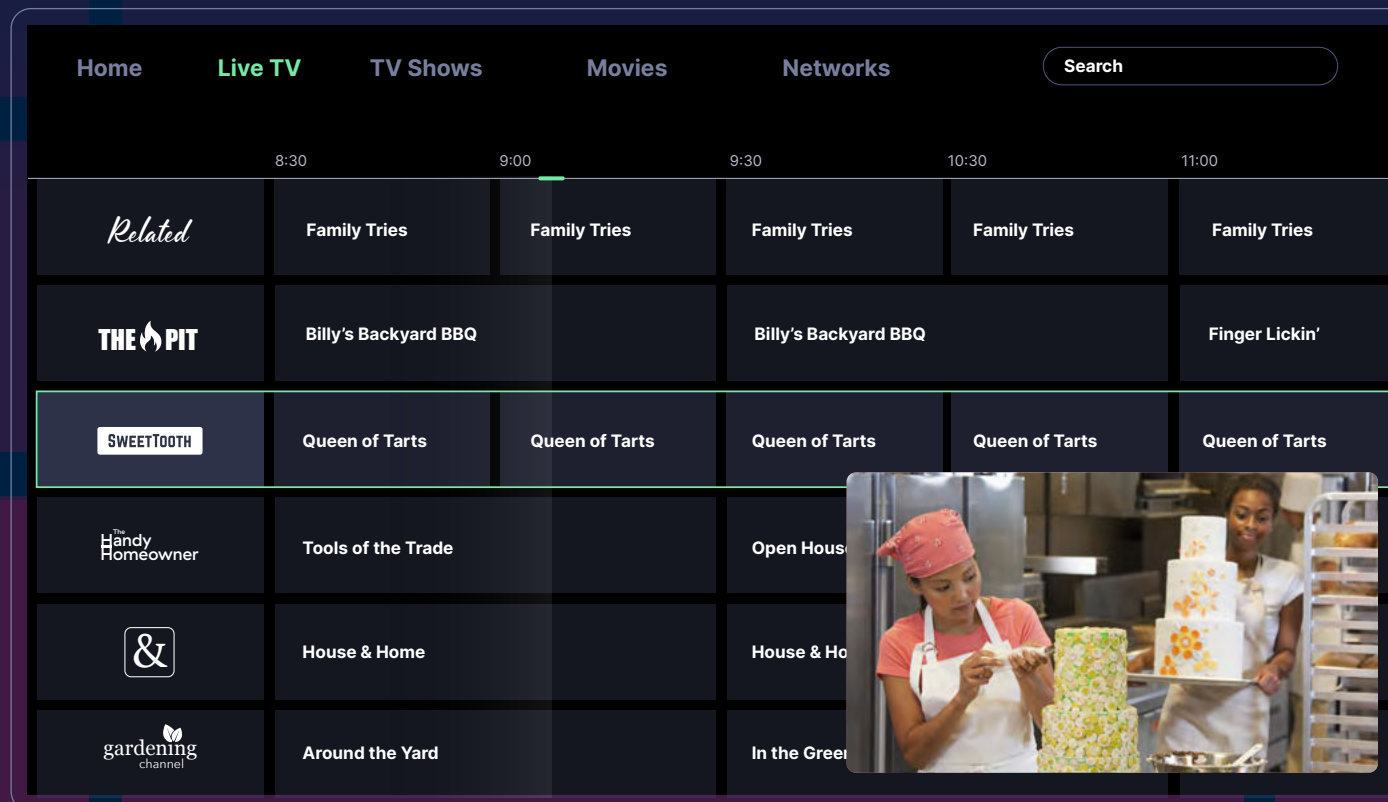
The proliferation of FAST services that offer non-exclusive content puts the onus of audience engagement in the hands of individual services. Said differently, any service that offers the same content as a competing service will need to lean on something other than content to attract and keep audiences engaged. While this is largely unique to FAST services, HBO (via WBD) recently broke character by licensing the distribution rights to **several of its high-profile original titles** to Netflix—a move that followed WBD’s **announced FAST partnership** with Roku and Tubi involving a handful of titles that were previously exclusive to HBO.

This trend away from exclusivity highlights the immense importance of a platform’s user experience.

“Right now, there are tons of experiences, but very little personalization,” says Filiz Bahmanpour, VP of product at Gracenote, a Nielsen company. “Many say that FAST services will need exclusive content, original programming and marketing to succeed, but I think user experience and personalization will be the real differentiators. FAST services need to get the right piece of content and ads to the right user through merchandising, curation and algorithms.”

## Personalizing the FAST experience

*Which experience would drive the most engagement with the same program?*



# ***The reason it's taking audiences longer to find something to watch***

The growing range of content that audiences have access to presents a challenge yesterday's TV and film production wasn't built to address: personalized content discovery. That's why it's taking audiences longer to find something to watch.

To catalog a TV show or movie, individual titles are encoded with information that provides the essential details of the content. Basic information includes program title, program summary, genre, production date, country of origin, run time, primary actors, etc.

Now think about whether that information will help audiences determine if a program is something they want to watch when they log into Google TV's live TV service, which has more than 800 free channels to choose from (following the addition of Plex, Tubi and Haystack in April).

Traditional program information isn't capable of helping audiences zero in on the programs that interest them at a personal level—and the challenge will only grow as the options multiply. To put the concept into perspective, consider the Showtime drama series *The L Word*, which aired on traditional TV from 2004-2009.

***As of April, Google TV's live TV service touted more than 800 free channels***



When *The L Word* debuted, content distribution was different, and learning about the program or where to watch it wasn't contingent on traditional program metadata. To watch the show, audiences simply checked a schedule and turned to the right network. Today, however, the 73 programs in the series are available across an array of streaming catalogs globally, and viewership has experienced a second wind in recent years due to a sequel that just completed its three-season run in January of this year.

Viewed as groundbreaking at the time for featuring television's first ensemble cast of lesbian and bisexual female characters, the show is now among the more than 3,190 video titles<sup>14</sup> that include some dimension of LGBTQ+ inclusivity. So how can distributors and platforms help audiences who might be interested in this program find it? We know they can't rely on the show's original program information.

This is where content metadata enrichment is critical. There are 31 individual Gracenote Video Descriptors for *The L Word* that platforms and services can use to deliver desired audience experiences. In total, Gracenote has approximately 15,000 Gracenote Video Descriptors that can help facilitate content discovery.

## Video descriptor metadata is critical in delivering personalized content experiences

**Original metadata**  
 Description: A group of friends lives in Los Angeles.  
 Genres: LGBTQ, Drama  
 Country: U.S.  
 Language: English  
 Original Network: Showtime  
 Original series airing: 2004-2009

**Video Descriptors:** Friendship, Stylish, Betrayal, Passionate, Love, Self-Discovery, Romantic Relationships, Family Members, Sensual, Homophobia, Love Story, 2000s Decade, Bisexuals, Heartbreak, Falling In Love, Coming Out, LGBTQ Issues, Personality Clash, Lovers, Friends, Cafés, Original Concept, Lesbian Bars, Writers, Personal Relationships, Lesbians, Big Cities, West Hollywood, Homes, Feelings Of Love.

**Gracenote has approximately 15,000 video descriptors that can improve content discovery**

<sup>14</sup> Gracenote Global Video Data, April 2023

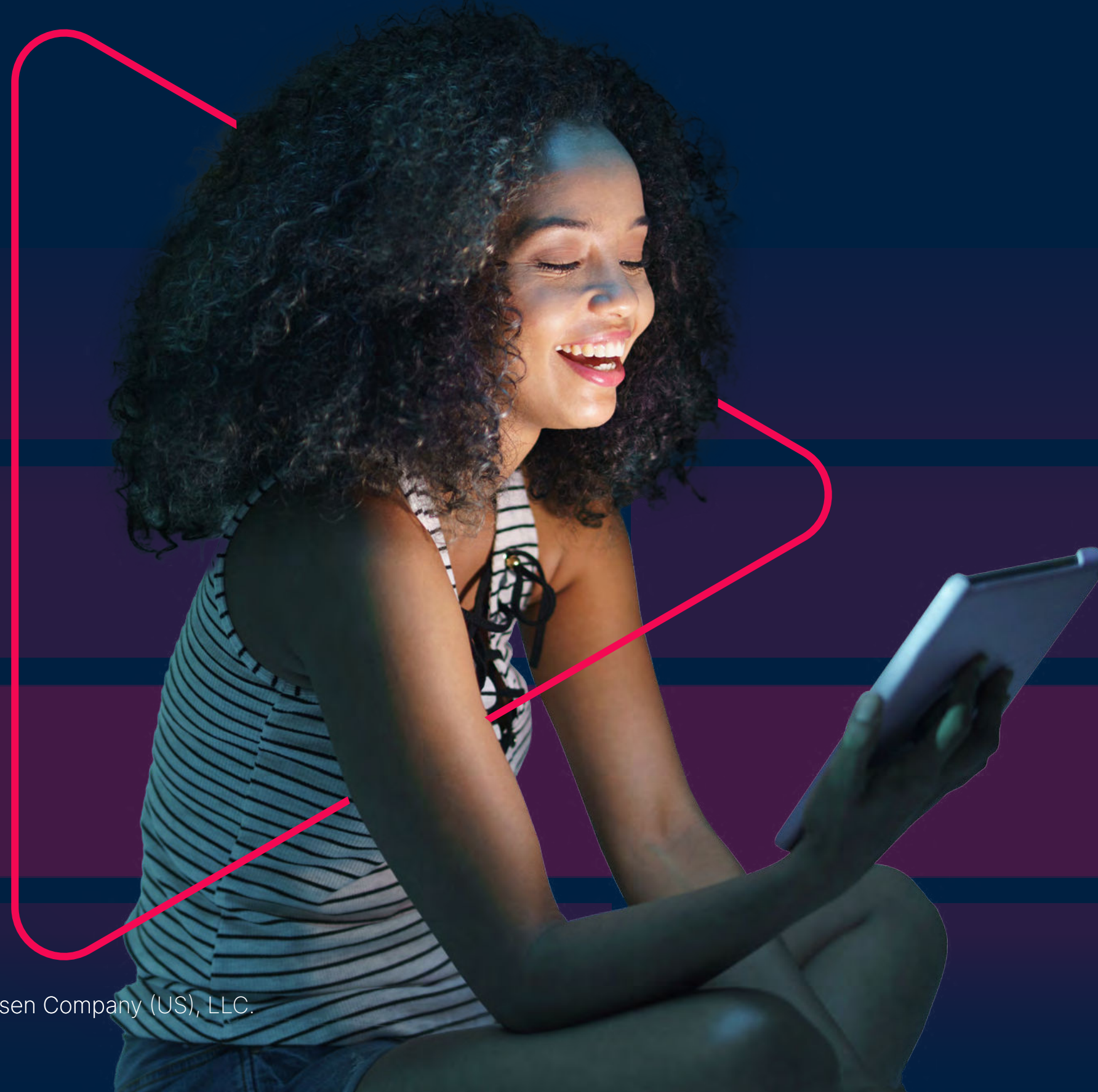
# *Content discovery happens everywhere*

The other shortcoming of basic metadata is that it lacks the depth to facilitate modern content discovery across the entire media landscape. In essence, traditional metadata was one-dimensional—meant for a specific media type, like television.

But media is no longer defined by specific channels. Audiences no longer need to leave their homes to see a movie, for example, and podcasts are no longer just audio experiences. The proliferation of technology and device capability has broken down the walls between once-unique media types. The same needs to happen with content discovery, and tools like Gracenote IDs (unique content IDs), when paired with granular metadata, will be critical in aiding content discovery across the entire media landscape.

## *Basic metadata can't aid content discovery across media types*

“The power of metadata isn't limited to the content or the platform,” says Nielsen Gracenote's Bahmanpour. “When you do an internet search, it becomes a tool that looks at deeper metadata that helps identify why an audience member might want to watch something. And with metadata today, descriptors even involve things like mood, theme and scenario.”



# Content discovery now spans the entire media landscape



**The Graham Norton Show**  
Series (TMS) ID: SH012609270000  
Series (Studio) ID: 4780271



**Season 23 Episode 10**  
June 8, 2018  
Jennifer Saunders, Channing Tatum,  
Usain Bolt, Florence + the Machine  
Episode (TMS) ID: EP012609270440  
Episode (Studio) ID: 8079320



**Jennifer Saunders**  
Celebrity (TMS) ID: 71045  
Celebrity (Studio) ID: 4013415



**Channing Tatum**  
Celebrity (TMS) ID: 321547  
Celebrity (Studio) ID: 4290864



**Usain Bolt**  
Athlete ID: 485385  
Celebrity (TMS) ID: 609024  
Celebrity (Studio) ID: 3626198



**Florence + the Machine**  
Music Artist ID: GN87RPCB4ZR2YJ9  
Celebrity (TMS) ID: 556923  
Celebrity (Studio) ID: 5234642



**Absolutely Fabulous**  
Program (Studio) ID: 4754704  
Program (TMS) ID: SH012694310000



**Kingsman: The Golden Circle**  
Movie (TMS) ID: MV010594360000  
Movie (Studio) ID: 5496674

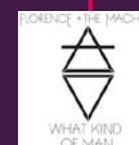


**Rio Summer Olympic Games - Men's 100M**  
Olympic Event ID: 898618  
Program (TMS) ID: EP024344400503



**How Big, How Blue, How Beautiful**  
Album ID: GND1M09XGCGPCEX

**What kind of man**  
Recording ID: GNCAFJVRXGMVEP



Fans of the English indie band Florence + The Machine, for example, might be aware of the group's music catalog, touring schedule and social media activity, but a view into those specific channels doesn't always provide everything a fan might want to know—especially things that have already happened. But when both the band and the BBC's *Graham Norton Show* have a Gracenote ID, a fan can do a quick search on the internet (well outside of a search within a specific platform or service) and find out that their favorite act appeared on the popular British talk show back in June of 2018 just before releasing their fourth studio album. These IDs can also tell audiences who else was on the show at the same time, and what each guest is famous for.

Audiences today expect seamless discovery and search across media types. Platforms and content owners can deliver on this expectation across digital channels by leveraging linked content IDs. For example, if someone watches *A Star is Born* starring Lady Gaga and Bradley Cooper, they can easily navigate to the music featured in the film, jump to the video for “Shallow,” watch clips of Lady Gaga’s appearances on late night TV, or search for which podcasts she has appeared on.



When combined with viewership data, the “scenario” video descriptors within Nielsen Gracenote’s Advanced Discovery suite can also help inform creators and distributors about which scenarios are trending from a viewer engagement perspective—and which ones aren’t—which can help identify whitespace development opportunities.

## Video descriptor classifications

- Video Mood** Tone of the work, as expressed through the combination of story, characters, setting, dialog, art direction, cinematography, music, effects, etc.
- Theme** An abstract concept of human experience that the work addresses
- Scenario** A specific situation, often personal or interpersonal, that sets the plot into movement, or moves it forward
- Concept Source** The type of original source material that provided the inspiration or story for the work
- Character** Actual or fictional person/being/group relevant to the work
- Setting** When and where all, or a portion, of the plot is set:
  - Time
  - Place
  - Occasion
- Subject** A specific topic that the work addresses:
  - Issue
  - Personal Issue
  - Activity
  - Practice
  - Event
  - Location
  - Milieu
  - Being/Group



# Advertisers are seeking their audiences: metadata can help

While engaging audiences is paramount, the latest evolution in the streaming industry brings us back to very familiar go-to-market territory: ad-supported programming. And knowing that audiences continue to migrate to streaming services, brands and agencies are following suit with significant ad spend.

## Ad revenue from AVOD and FAST is expected to hit **\$109 billion** by 2028

Media research house Digital TV Research recently forecasted global AVOD revenue to **hit \$91 billion** by 2028, up from \$41 billion last year. It then forecasted FAST ad revenue to hit **\$18 billion in the same year**, triple the \$6 billion it attracted in 2022. These forecasts align with the sentiment from the global marketers surveyed for **Nielsen's 2023 Annual Marketing Report**, which cited that 45% of ad budgets are shifting to CTV. Additionally, 84% of marketers say their marketing mixes now include streaming services.

Much like in traditional media, audience measurement will be critical for advertisers and agencies as streaming continues expanding. But as video content becomes increasingly digital and unified through standardized IDs, metadata can help advertisers as well.

### 1. Improve transparency.

Proper metadata to describe content helps ensure buy and sell side parties speak the same language. As buys are efficiently and transparently served against the content and services expected, increased advertiser trust can translate to higher spend.

### 2. Get contextual.

Access to and distribution of content-level metadata, such as network, genre and parental rating, can add context to decision making process, improving overall targeting and monetization.

# ***The user experience becomes critical to streaming success***

A clear shift is underway within the streaming industry. Media companies are no longer solely focused on subscriber acquisition to fuel growth. They're also thinking about financial efficiency amid the growing pains of the latest phase of the streaming wars. Audiences still have a bounty of choice; that won't change. And that fact, complemented by a developing shift away from content exclusivity, puts the burden of audience engagement on each individual platform and service.

In the burgeoning FAST space, two factors will be critical for success and enabled by advanced content metadata:



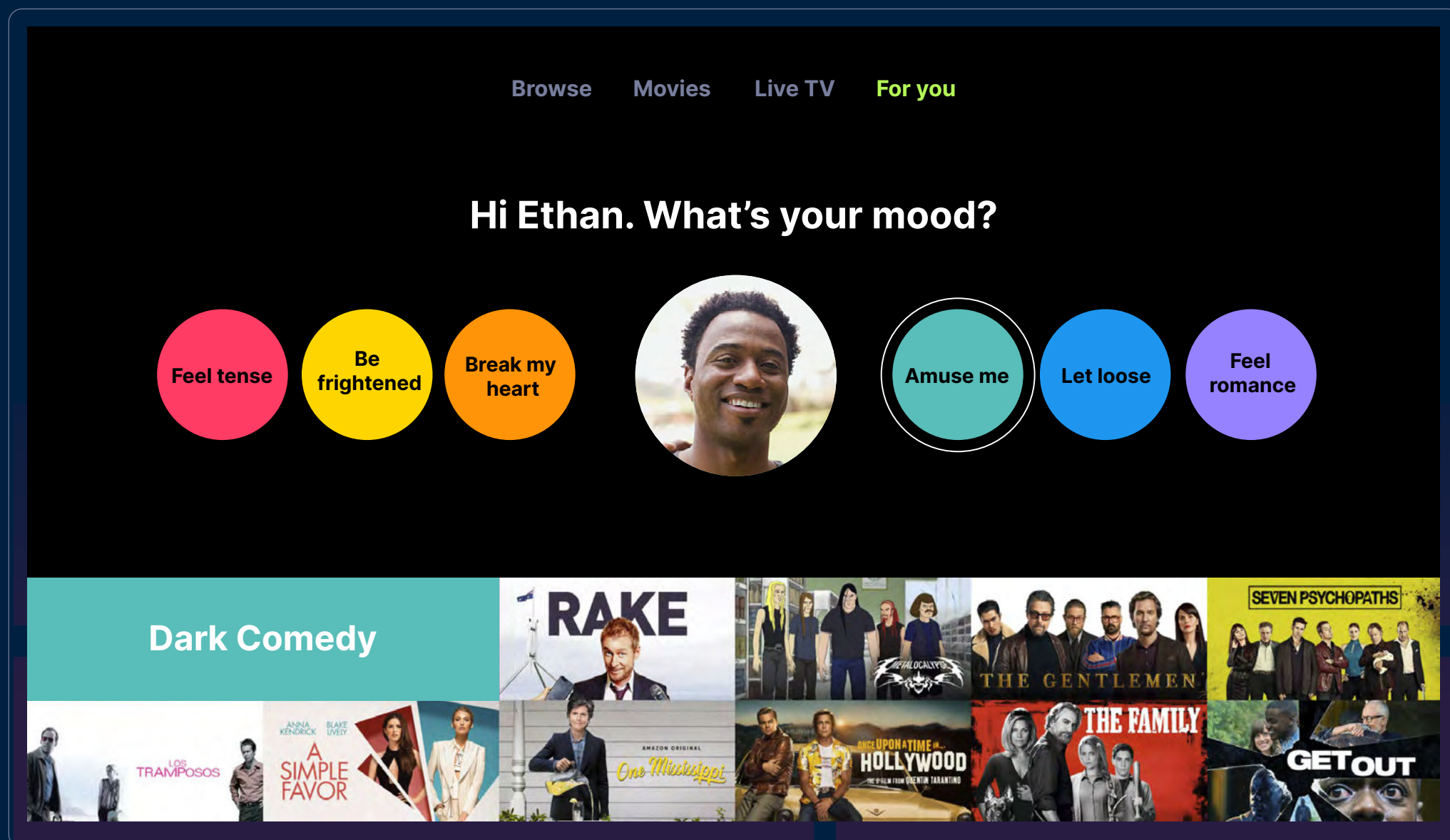
***Personalization of channels and guides to keep the viewers on a specific platform.***



***Advertising precision that matches the brand premise to the content that is being watched.***



Outside of advertising, media descriptors and personalization are just as beneficial for VOD platforms, especially if popular titles become more widely available across services. Personalization has always been the promise of a data-rich digital environment. Recommendations and “other people who watched” options are table stakes across platforms, but platforms have just barely scratched the surface of what a truly audience-centric experience could be.



In the FAST space, some providers don't even feature recommendation capabilities, while others purposefully showcase the content they have paid to license instead of leveraging data about audience preferences. And every experience is currently a grid.

To truly deliver on the promise of the Spotifyzation of television—and not just within the FAST space—creators and distributors will need to lean into the personalization power that descriptive metadata can facilitate. Channel programming, personalized recommendations and user experience can be as customized as any platform chooses. Within such an expansive environment, it's clear that user experience will become the most important ingredient for success in the years ahead.



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