TV DECONSTRUCTED: LATEST FINDINGS FROM THE DASH STUDY

November 2024

The ARF DASH TV Universe Study is a nationally projectable enumeration study of consumer behavior in TV and digital media. DASH records in detail how U.S. households connect to and consume TV, use video-capable digital devices, and interact with and share streaming media and ecommerce accounts. DASH is a syndicated study fielded in partnership with NORC at the University of Chicago, a premier polling firm, and supported by measurement experts at our licensees. Pooling resources produces a higher quality and more widely accepted study.

DASH is conducted online, face-to-face and by phone in two waves each year against a national probability sample of U.S. adults. The most recent full year study, DASH 2023, contains responses representing 10,504 households, and the Spring wave of DASH 2024, released to licensees in September, contains 5,924 responses. The findings in this report draw on both data sets. DASH panels also include significant longitudinal subsamples of adults who took the DASH survey in successive years. The longitudinal data enables robust analysis of switching.

DASH addresses the acute need for an unbiased standard in TV universe sizing. The digitization and fragmentation of TV, the proliferation of streaming services and video-capable mobile devices, and rapid shifts in consumer behavior have complicated measurement and attribution, in turn roiling advertising and TV economics. Big data streams from set-top boxes and smart TVs allow deep and quick examination of viewership but introduce new limitations and biases into what is already a massively complex situation.

Major measurement companies use DASH data to calibrate their big data sets and to model household demographics and persons' viewing. A highly granular, direct survey study, DASH mimics many of the signals that measurement companies collect electronically, allowing users to model data not contained in those big data sets. A technical paper on using DASH for big data calibration, a description of common use cases and other resources are available on the DASH site and on request.

DASH also supports an array of use cases beyond measurement, in strategy, program distribution, identity, and advertising planning, activation and sales. A battery to support the analysis of retail media networks was added to the Fall 2024 wave, which will be released to licensees early next year.

DASH entered its fourth year with the launch of the 2024 Spring wave. We are pleased to report that the study methodology is proving robust, and the trends seen so far are logical. A more detailed explanation of methodology and content follows the findings.

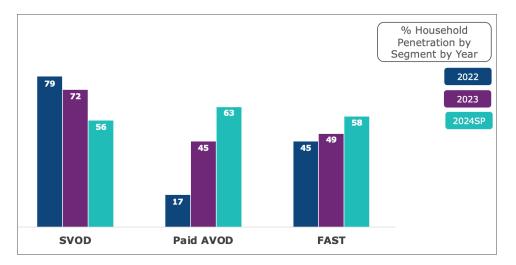
FINDINGS

Key Takeaways

- The penetration of paid AVOD services has exploded over the past two years, from 17% in 2022 to 63% in Spring 2024
 - The two largest streaming services, Netflix and Amazon Prime, accounted for the vast majority of the most recent year gain
 - SVOD penetration has fallen over the same time period, though not at the same rate
- Free ad-supported streaming TV (FAST) continued to grow
- vMVPD penetration is flattening out, but adoption has picked up among older (55+) households, suggesting that the technology is mainstreaming
- More than 40% of Pay TV households use apps to receive all or some of their TV signals, blurring and effectively outmoding the concept of BBO (Broadband Only)
- The ARF is proposing a new framework for user-level TV connection to replace the old Pay/BBO/OTA scheme
 - The proposed framework has six distinct segments that together define the entire US TV universe
 - Subsets of the segments can be aggregated to produce estimates of the total Linear and Pay TV universes

The Rise and Rise of Paid AVOD Penetration

The aggregate household penetration of paid AVOD (ad-supported subscription streaming TV) services more than doubled in 2023, to 45%, from 17% in 2022, then repeated the feat in the Spring of 2024, rising to 63%. Over the same time periods, the penetration of SVOD (non-ad-supported subscription TV) services fell, from 79% in 2022 to 72% in 2023 and 56% in Spring 2024.



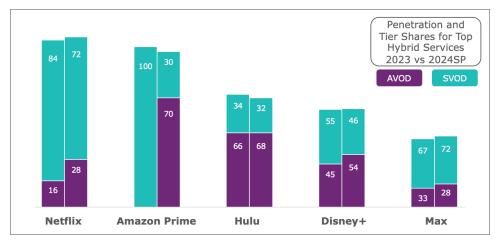
While the Spring drop in SVOD seemed almost too much to believe, a structural shift in the Amazon Prime offer explained a lot.

The Dominant Role of Amazon Prime and Netflix

On January 29, 2024, Amazon Prime notified its subscribers that continuing to view ad-free would cost an additional \$2.99 per month. Thirty percent of its subscribers paid the upcharge, but 70% did not. In a matter of days, the second largest streaming service shifted from 100% SVOD to 70% AVOD.

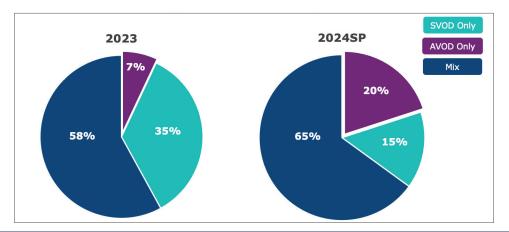
The largest streamer, Netflix, also contributed significantly to the big consumer shift to AVOD. In our Spring 2024 wave, 28% of Netflix subscribers were AVOD, up from 16% in 2023. This 12 p.p. growth, along with the Amazon Prime shift, explained most of the SVOD-to-AVOD shift observed in the streaming industry. Disney+ also increased its AVOD base, while Max gained marginally and Hulu held even.

The stacked bars in the chart below show the SVOD-AVOD breakdown for five major streaming services for 2023 and Spring 2024. The overall height of the bars reflects the total household penetration of that service in each time period.



The Shifting Portfolio Dynamics of Paid Streaming

Another way to look at the shift to AVOD is through the lens of household-level streaming portfolios. From 2023 to Spring 2024, SVOD-only households fell from 35% of paid streaming households to 15%, a dramatic 20-point drop. Increases in AVOD-only (+13 points, from 7% to 20%) and AVOD-SVOD households ("Mix," +7 points, from 58% to 65%) made up the difference. While a handful of households trimmed their portfolios of paid streaming services, the distribution of households by number of services did not change appreciably. Thus the effect shown below reflects the massive AVOD-to-SVOD shift.



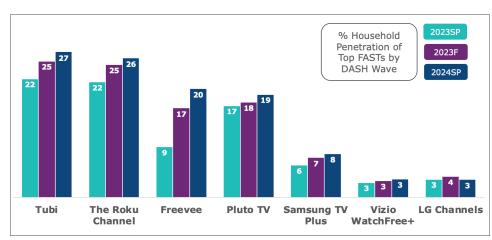
The Continued Growth of FAST

There are many who feel that free adsupported television (FAST) is the future of television advertising or at least a big part of the future. The number of FAST services is vast. The segment comprises free subscription offers, like Tubi and Pluto; standalone channels, like Amazon's Freevee; and menubased services offered by smart TV manufacturers, notably

		Samsung TV Plus							
	News & Opinion		Little House on the Prarie		Reality TV		Journy		
110	CBS News		Get TV	1004	All-Out Reality		Localish		
	ABC News Live	1460	Shout! TV		Kitchen Nightmares	2150			
114	NBC News NOW		Action & Drama		Little Women: LA	2152	HSN		
116	LiveNOW from FOX		Action & Drama		Dance Moms		Sports & Outdoors		
119	Scripps News	1505	ALL ACTION	1912	E! Keeping Up		sports & Outdoors		
	Local News 1	1510	ION	1919	Real Housewives Vault	2315	MLB Channel		
	Local News 2	1511	ION Plus	1921		2330	CBS Sports HQ		
	Local News 3	1515	Stories By AMC		Matched Married Meet	2334	FOX Sports		
	Local News 4	1520	ElectricNOW		MTV Pluto TV	2338	NBC Sports		
	Local News 5	1530	Numb3rs		Perform	2346	The Jim Rome Show		
	FOX Weather	1535	Scorpion		Bad Girls Club	2352	ONE Championship		
135	WeatherNation	1540	Bounce XL		All Reality WEtv	2358	DraftKings Network		
140	BBC News	1545	ALLBLK Gems		All Weddings WE tv	2362	SportsGrid		
145	Sky News	1550	Ebony by Lionsgate		Bring It!	2368	FIFA+		
	CBC News International	1555	BET Pluto TV		Love & Hip Hop	2372	beIN Sports XTRA		
155	Bloomberg TV+ UHD	1560	Shades of Black		Cheaters	2380	fubo Sports Network		
160	Bloomberg Originals	1565	Drama Life		Operation Repo	2384	Stadium		
	Yahoo Finance	1580	Heartland		Dog the Bounty Hunter	2388	Unbeaten Sports Channel		
170	NEWSMAX2	1590	Baywatch		Intervention by A&E	2392	Pac-12 Insider		
175	Real America's Voice	1595	TV Land Drama		Hoarders by A&E	2396	ACC Digital Network		
	The First	1600	21 Jump Street		Duck Dynasty	2400	Origin Sports		
	TYT Network	1605	Highway to Heaven		Swamp People	2408	TNA Wrestling		
		1610	K-Stories by CJ ENM		Mountain Men	2424	MSG SportsZone		
	Movies	1615	MHz Now		INFAST	2436	PGA Tour		
		1620	Dove Channel		Danger TV	2438	GOLFPASS		
	Movie Hub	1625	Degrassi		Caught on Tape	2442	T2		
	Movie Hub West Movie Hub Action	1630	Brat TV		Road Renegades	2444	PickleballTV		

Samsung TV Plus (see exhibit), Vizio WatchFree+ and LG Channels. Most FAST services provide access to dozens of other FAST services, either by name or "wrapped" under an umbrella brand. These digital channels run the gamut from major network offerings (NBC News NOW, FOX Sports) to local programming to niche channels dedicated to specific interests and content.

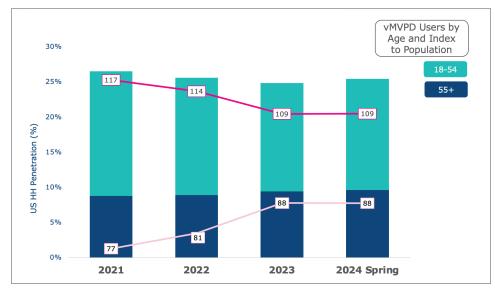
DASH data showed that the penetration of FAST services overall, and of most services individually, continued upward through Spring 2024. Note in general the difference in penetration levels reported in DASH for the distinctively branded FAST networks on the left side of the chart and offers prepackaged in new smart TVs on the right. The smart TV, or OEM, networks are distributed, not marketed the way the standalone networks are. As a result, people who have access to OEM networks often do not know they do – and people who watch them cannot necessarily identify them as FAST services in the way, say, Tubi users can.



As an example, more than 30% of US households can access Samsung TV Plus through their Samsung smart TVs, but less than a third of them reported using the service.

The Mainstreaming of Virtual MVPDs

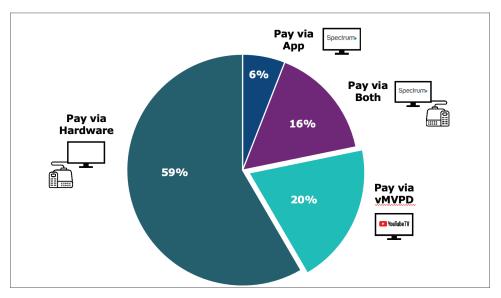
The penetration of vMVPDs, such as YouTube Live and Hulu+Live, has flattened out at around 25% of US households. Interestingly, though, adoption of vMVPDs among households headed by adults 55+ has gone up. In 2021, the first year of DASH, older households indexed at 77 (or -23% underrepresented on a population basis) in the vMVPD universe. In 2023 and Spring 2024, older households indexed at 88, suggesting that older Americans were increasingly abandoning their traditional pay TV subscriptions in favor of of app-based live TV services. This shift indicates the continued "mainstreaming" of vMVPDs, once dominated by the young and tech savvy.



Last year, the industry shifted its classification of homes with vMVPDs from BBO to Pay. Both vMVPD and traditional Pay TV homes subscribe to Pay services through which they access live TV and cable networks. The difference is not in the what, but in the how: a vMVPD replaces the set-top box with an app. And it's apps that are reshaping Pay television.

The "Appification" of Pay TV

In Spring 2024, just 59% of homes currently classified as Pay received their linear signals through hardware (set top boxes) on each television. The rest – 41% – accessed their linear signal at least in part through an app. Households using vMVPDs accounted for 20% of the US Pay universe. A small, but increasing, percentage (6% of Pay households) subscribed to "traditional" MVPDs, but used the apps provided by the service instead of the hardware; and the remaining 16% received their signals through a combination of hardware, primarily on the main set, and apps on other sets slaved to that hardware.



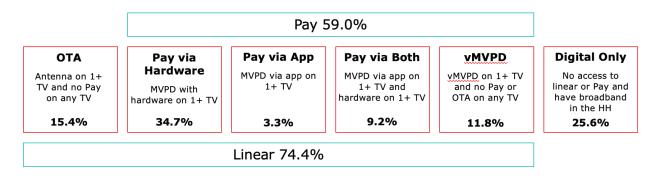
It's important to recognize that these figures apply to traditional linear and pay TV only – not to paid SVOD and AVOD streaming services, which are delivered exclusively through apps.

Is It Time to Retire BBO?

Since TV first digitized, the industry has relied on a three-way paradigm to define connection at the user level: Pay, Broadband Only (BBO) and Over-the-Air (OTA). Digital antennas have blurred the distinction between OTA and BBO, but the appification of Pay TV, first by vMVPDs and more recently by MVPDs, has put paid to BBO: 26% of homes classified as Pay are also BBO, meaning that framework we have used to classify television reception is no longer logical or viable. Many in the industry now agree that it's time to sunset BBO and the old Pay/BBO/OTA scheme and adopt a framework that more closely reflects the new realities in television.

A New Framework for TV Connection

The ARF proposes a new framework for user-level TV connection, depicted below.



This framework, made up of six mutually exclusive and collectively exhaustive (MECE) segments, is based on *what* signals a household receives, rather than on how it receives them. Five of the segments can be combined to produce an estimate of the Linear TV universe (74.4% US), and four can be aggregated to define the Pay TV universe (59.0%). These two categories, Linear and Pay, are by far the most important for weighting and sample controls in measurement.

Of note, this framework also unifies the edit rules, eliminating the need for separate household- and set-level classification schemes.

While the ARF proposal is a MECE scheme, some have suggested control for the nonexclusive categories: any antenna, any Pay or any Streaming service. Our data is highly granular, so these universes can be easily calculated with DASH. For example, the Spring 2024 wave shows total households with an antenna on any TV to be 16.7%, or more than a point higher than total OTA (15.4%).

We believe that the framework proposed here will be very useful. Ultimately, though, the framework adopted by the industry should reflect the results of methodological research into the best weighting and sample control models. DASH is built "bottom up" – on device-by-device and service-by-service data – which means DASH can support whatever framework the industry chooses.

METHODOLOGY & CONTENT

The DASH 2024 Spring Wave comprises a national probability sample of 5,924 persons, ages 18 and over. Data was collected online, face to face and by phone to achieve balanced representation and to allow for an analysis of interviewing modes. A complete description of methods, as well as sample composition and response rate analysis, is available on request.

The chart below illustrates the broad content of the study. Granularity makes DASH a uniquely robust source of signals for modelers. For example, the study gathers, for each television and device in the household, *who owns it, who uses it, what it's used for, and what its usage was yesterday*.

Demographics	TV sets Locations, brands, smartness, service modes and connections	Connected devices Game consoles, video players and streaming devices	Mobile devices Owners, sharing, uses
Internet Service Modes Internet connectivity by device	Streaming TV SVOD/AVOD tiers and sharing FASTs	Live TV Modes of access, including casting from devices	Yesterday viewing Daypart, TV/device, genre, outlet, co- viewing, OOH
Streaming audio	E-commerce	Email accounts and apps	Social media

Importantly, DASH creates an opportunity to standardize measures of coverage bias across the industry. Many companies have access to a limited number of TV datasets, such as Vizio and one or two MVPDs, or to transactional data from a set of ecommerce sites, which generally does not include the biggest players, like Amazon. DASH is a comprehensive source – a full view of the universe – to help users understand the differences in behavior across these channels and make corrections for the limited coverage.

Each DASH wave includes "infrastructural" questions that are core to the study, but the survery evolve to stay on top of the market and to respond to the needs of licensees. The Spring 2024 survey features new batteries on most-watched televisions, and time spent with different media, as well as revisions to streaming tiers, FAST services and other variables match changes in the ecosystem.

A complete history of wave-over-wave changes to the DASH survey since the inception of the program is available on request.

To learn more about the DASH study and the options available to license the data, please contact Jim Meyer, General Manager, DASH, and Paul Donato, ARF Chief Research Officer, at DASH@ theARF.org, and we'll arrange a call. You may also visit our public website at theARF.org/DASH, which contains program summaries, reports, technical papers, press coverage and more.