



Advanced TV Matrix:

A Market Snapshot

JUNE 2019

ACKNOWLEDGEMENTS

LIST OF WORKING GROUP COMPANIES

A&E Networks	Essence	Nielsen
ABC	Experian Marketing Services	Philo
AccuWeather	Extreme Reach	Placed
Ad-ID	Flashtalking	PlacelQ
Adobe	FreeWheel	Premion
AMC Networks	Gamut	Simulmedia
Amobee	GfK North America	Sizmek
Beachfront Media	Google	Sony Pictures Television
Cadent	Hulu	Spectrum Reach
CBS Interactive	Integral Ad Science	SpotX
Cheddar	IRI	SundaySky
Comcast Spotlight	KERV Interactive	Telaria
Crackle	Kochava	The Media Trust Company
Cuebiq	Liquidus Marketing	Verizon Media Group
Dataxu	LiveRamp	WarnerMedia
Dentsu Aegis	MediaMath	Xandr
Digitas LBI	Medicx Media Solutions	ZypMedia
Discovery Communications	Modi Media	
Dish Network	NBCUniversal	
Epsilon	NCC Media	

EXECUTIVE SUMMARY

Planning and executing a TV campaign used to be simple. Regardless of what inventory you bought, the mechanics were generally the same. Deals were guaranteed on a demo CPM and they would be measured and reported by Nielsen. Creative trafficking was usually pain-free. Time-shifting disrupted things a bit, but Commercial ratings and VOD helped buyers cope with the diminishing supply of live rating points.

But now, as a confluence of factors have brought upon us Advanced TV, we are faced with a TV industry that's more complex than ever. Addressable TV has been around for a number of years now, but with the advent of [OTT devices](#) and new streaming services popping up all the time, we as an industry are starting to view this opportunity in a new light—as part of a bigger push to eliminate wasted impressions, garner insights into TV campaigns, and finally tie exposures to outcomes for true attribution. Fueled by data, this new landscape goes beyond the age/sex demographic and into targetability and granularity in a very digital-like manner.

However, despite the obvious benefits there is still confusion in the marketplace as to how each are transacted, measured, and trafficked differently. The goal of this reference guide is to bring clarity to this space so that when there are conversations between the buy and sell side (and everyone in between) everyone is starting with the same basic level of understanding.

We have attempted to collect “just the facts” and organized this chart so that it starts with Traditional Linear TV and becomes increasingly ‘advanced’ along the way. The chart becomes more addressable, more data-infused, more on-demand, and more digital as you move from left to right. This guide will aid you in determining which avenues make the most sense for your brand. Grouped into five sections, you will gain an understanding into the transactional nature of each, the state of measurement, and even how the ads themselves are trafficked.

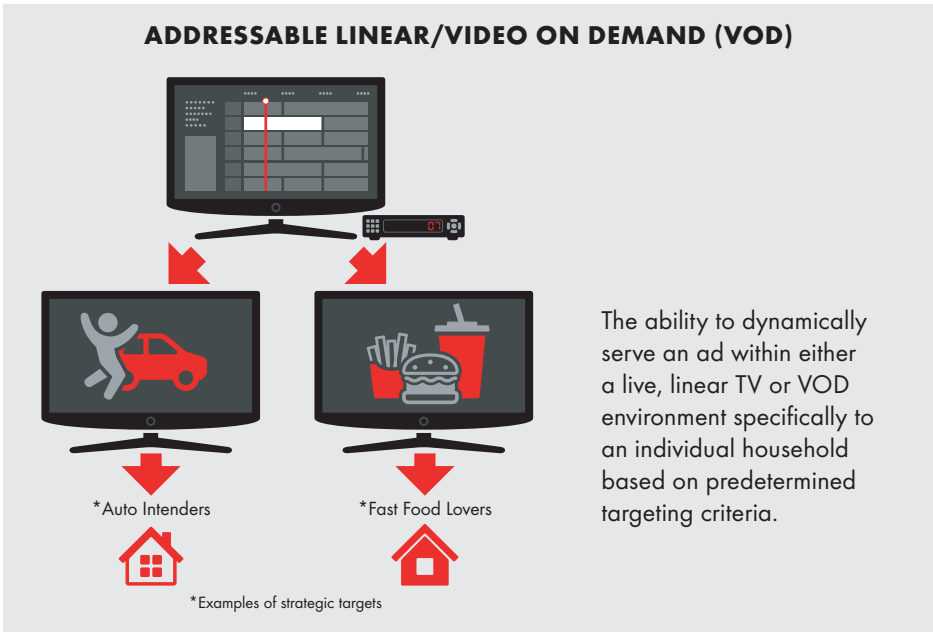
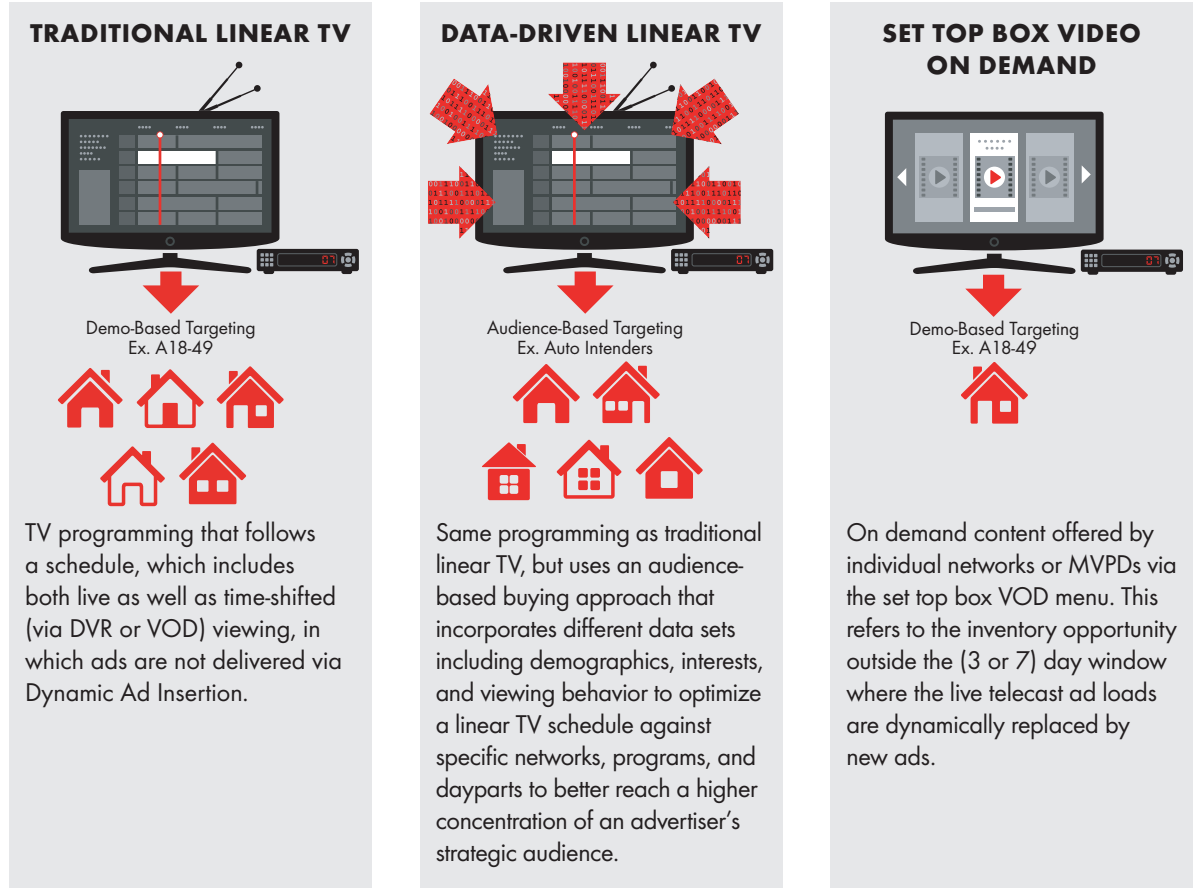
Given today's rapid pace of change, we expect to be making updates to this document as the Advanced TV space continues to evolve. Please read this as an invitation to join the conversation with us.

For more information on digital video, please visit video-guide.iab.com.

To get involved, please email digitalvideocenter@iab.com or committees@iab.com.

Enjoy!

BROADCAST/SET TOP BOX AD DELIVERY DEFINITIONS



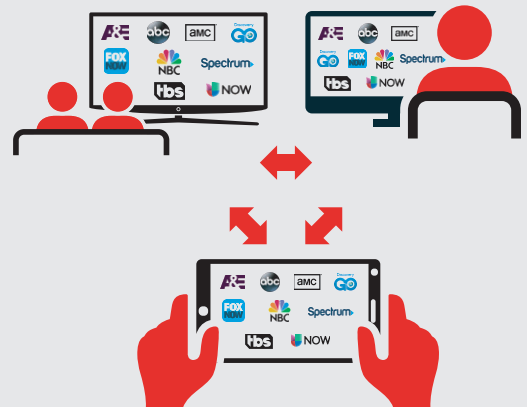
STREAMING AD DELIVERY DEFINITIONS

VIRTUAL MULTICHANNEL VIDEO PROGRAMMING DISTRIBUTOR (vMVPD)



A streaming pay-TV subscription, which provides access to traditional linear TV networks as well as on demand content delivered over the Internet without the traditional set top box infrastructure.

TV EVERYWHERE



An online business model in which television networks and MVPDs allow their paying customers to access live and/or on demand video content from their networks through Internet-based applications.

DIRECT TO CONSUMER STREAMING SERVICES



Ad-supported digitally native services that offer up TV like content directly over the Internet and completely outside of the traditional set top box infrastructure, including via Over the Top (OTT) devices*.

*OTT (Over the Top) Device - A device that can connect to a TV (or functionality within the TV itself) to facilitate the delivery of Internet-based video content (i.e., streaming boxes, media streaming devices, Smart TV's and gaming consoles).

Characteristics		BROADCAST/STB AD DELIVERY				STREAMING AD DELIVERY		
		Traditional Linear TV	Data-Driven Linear TV	STB VOD	Addressable Linear/VOD	vMVPD	TV Everywhere	Direct to Consumer Services
Ad Delivery to Consumer	How are ads delivered to the viewer?	1:Many	1:Many	1:1 HH	1:1 HH	1:1 (+co-viewing)	1:1 (+co-viewing)	1:1 (+co-viewing)
Scale	What do we know about the size or reach potential of each?	119.9MM TV HHs (Broadcast Only + Pay-TV, Nielsen ¹)		72.4MM HHs (Nielsen ³)	64 MM HHs	7.7MM subscribers (BTIG ⁵)	Total Multi-Channel subscribers (Traditional MVPD and vMVPD) - 94.8MM HHs (Nielsen ²)	89% of US Adults use the Internet (Pew ⁷)
		305.4MM Individuals (Broadcast Only + Pay-TV, Nielsen ¹)						98.3 MM Broadband HHs in US (Leichtman Research ⁸)
		Total Pay-TV subscribers (Traditional MVPD and vMVPD) - 94.8MM HHs (Nielsen ²)						74% of HH (224 MM individuals) have a connected TV device (Leichtman Research ⁹)
		Individual cable networks HH reach varies depending on distribution (the top cable network is in 89MM HHs) (Nielsen ²)						Examples - Hulu (28 million HH subscribers), Pluto TV (12 million active users), Xumo (5.5 million active users)
Consumer Profile	What do we know about the consumer profiles of each?	Median Age for Broadcast Networks - 59 (Nielsen ¹⁰)		Median Age on STB VOD - 45 (Nielsen ¹²)	N/A since this method of buying reflects individually selected HHs	Median Age for Connected TV viewership - 42 (Nielsen ¹²)		
		Median Age for Cable Networks - 54 (Nielsen ¹⁰)						
		M/F Skew for Broadcast Networks - 55/45 (Nielsen ¹¹)		Each Network's VOD median age skews younger than that Network's median age on Linear TV		60/40 M/F (IAB ¹³)		
		M/F Skew for Cable Networks - 53/47 (Nielsen ¹¹)						
Content Type	What type of content is available?	Broadcast and Cable TV Networks - Live Feed and Time Shifted via DVR/VOD		Broadcast, Cable, and VOD-Only TV Networks - On Demand access to their content	Cable TV Networks - Live Feed and Time Shifted via DVR (Linear)	Broadcast and Cable TV Networks - Live Feed and On Demand access to network content	All varieties of content available depending on streaming service - New and Old Original and Syndicated, Live and On Demand, Long and Short Form	
					Broadcast, Cable, and VOD-Only TV Networks - On Demand access to their content (VOD)			
Targeting	What type of targeting is used?	Content-Based- By network, program, daypart, and Nielsen demographics (age/sex)	Behavioral characteristics, 1st or 3rd party segments (syndicated and custom), performance targeting	Mostly by network (run of schedule). Some providers offer targeting by program, daypart, and genre.	Household Level targeted; 1st party or 3rd party segments are matched to MVPD subscriber information to identify HHs in an anonymous manner	Audience-Based - IFA, Device ID, Device Type, IP Address, Operating System, User Agent, Daypart, Network as well as 1st and 3rd party audience segments		
IAB Advanced TV Targeting Guide								
Dynamic Ad Insertion	Does delivery type allow for DAI?	No	No	Yes, some networks offer on Day 1, but a majority offer it a few days after (C3/C7 window)	Yes	Yes	Yes	Yes

For acronyms and sources view appendix on page 11.

Characteristics		BROADCAST/STB AD DELIVERY				STREAMING AD DELIVERY			
		Traditional Linear TV	Data-Driven Linear TV	STB VOD	Addressable Linear/VOD	vMVPD	TV Everywhere	Direct to Consumer Services	
USER EXPERIENCE	Ad Pod Structure	What do we know about the ad pods for each?	Broadcast Primetime avg = 14:52 minutes of ad time per hour, 25% of time (Kantar ¹⁵) Cable Primetime avg = 16:18 minutes of ad time per hour, 27% of time (Kantar ¹⁵)	On average, 1 pre-roll ad and 4 ads per mid-roll break	Viewer experiences same number of ad breaks and length as in Traditional Linear MVPDs are allotted two minutes per hour for each cable network - this is where "addressable" inventory is sold (Linear) On average, 1 pre-roll ad and 4 ads per mid-roll break (VOD)	Varies by service, but typically each ad pod is between 60-120 seconds long 4.0 ads per mid-roll break, on average (FreeWheel ¹⁴)			
	Consumer Authentication	Does a user have to input login details to access content?	Never if accessing through an antenna (broadcast networks are free to access) No login needed to access content, but MVPD has subscriber level details	No login needed to access content, but MVPD has subscriber level details	Yes, subscriber login	Yes, pay-TV service login credentials	Varies depending on service		
	Accessing Content	What devices are these consumed on and how does the consumer access it?	100% TV Set Top Box Over the Air Antenna	100% TV Set Top Box	Connected TV Apps, Mobile Apps, and Desktop Browsers Percent impressions served: 50% CTV, 33% Mobile, 17% Desktop (FreeWheel ¹⁴) Percent time spent with video outside of Linear TV: 66% CTV, 24% Mobile, 10% Desktop (Nielsen ¹⁷) vMVPD Device Share of Viewing Hours: 77% CTV, 20% Mobile, 3% Desktop (Conviva ¹⁸) Impression Distribution by Device for TV Networks, 2018 Connected TV - 65%, Desktop/Mobile/Tablet - 35% (Innovid ¹⁹)				
	Interactive Ad Capabilities	Are there opportunities to serve interactive ads?	Limited in scope and scale, but includes interactive channels (branded homepages with additional video content and/or 'Learn More' modules) as well as graphical overlays			More robust in capabilities - examples include extended looks, custom portals, choose your own creative, trivia games, request more information, and more			
	Personalized Ads	Are there opportunities to serve personalized ads?	Minimal, regional copy-splitting is allowed (serving different creatives depending on your region)	Minimal, can serve different creatives to specific strategic targets if you have multiple strategic targets in flight at the same time	Minimal, regional copy-splitting is allowed (serving different creatives depending on your region)	Higher degree of HH personalization through serving of different creatives to different HHs based on certain criteria	Yes, in real time based on pre-determined data signals and generated from the ad server level		
	Co-viewing	How often is co-viewing occurring?	96% of Linear TV consumption is co-viewed (IAB ²⁰)		90% of VOD consumption is co-viewed (IAB ²⁰)	96% of Linear TV consumption is co-viewed, 90% of VOD consumption is co-viewed (IAB ²⁰)	When consumed through a Connected TV, 93% of consumption is co-viewed (IAB ²⁰)		

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BUYING & SELLING	Inventory Sources	Where does the inventory originate from?	Networks/Programmers (National) and Stations/MVPDs (Local)	Cable Networks - Networks (~80%) and MVPDs (~20%) Broadcast Networks - Networks (100%)	MVPDs (their allocation of two minutes per hour of commercial time for cable networks may be sold as addressable inventory)	vMVPD service providers (may sell their two minutes per hour of commercial time) National linear feed is sold by the Networks/Programmers	Networks, MVPDs, and Local Broadcast Stations	Service providers themselves
	Inventory Sources	Where can you purchase this inventory?	Direct through Broadcast, Cable TV Networks, and Syndicators for National Direct through local broadcast station groups and MVPDs for local	Direct through Broadcast, Cable and VOD-only TV Networks & MVPDs	Direct through MVPDs	Direct through vMVPDs, marketplaces, and exchanges	Direct through TV Networks and MVPDs, marketplaces, and exchanges Can be packaged with Linear TV inventory (fluidity)	Direct through the streaming service, marketplaces, and exchanges
	Direct vs Programmatic	What % is purchased in a real-time, biddable environment?	Indirectly through 3rd party aggregators and platforms			Indirectly through SSPs, streaming devices, Smart TVs, and 3rd party aggregators		
	Currency	What is the currency used?	Nielsen demo-based CPMs, typically guaranteed on a C3 or C7 basis One-off specials or opportunistic buys may sometimes be negotiated on unit cost Impressions are 'equalized' against a :30 spot (:15 = 0.5 impressions)	Strategic target CPM Hybrid approach (Primary and Secondary guarantee)	HH CPM 1 HH impression counted regardless of ad length	CPMs (either P2+ or demo guarantee), CPCV, other traditional digital currencies 1 P2+ impression counted by ad server regardless of ad length Solutions are becoming available that are inclusive of co-viewing based metrics for Connected Device and Connected TV		
	Make Goods for Audience Deficiency	What happens when there is under-delivery, pre-emptions, and/or cancellations?	Like-for-like TV inventory used to make up for under-delivery TV Everywhere impressions (fluidity)		Like-for-like TV inventory used to make up for under-delivery	Digital campaigns are typically billed reflective of final delivery, so there is no concept of make-goods		
	Added Value/Sponsorship Opportunities	What are some of the common added value opportunities based on ad spend?	Highly customizable and typically includes billboards, themed sponsorships, overlays, promos, custom content, and product integrations	Same opportunities exist if dealing with networks directly	Limited opportunities - may include bonus impressions or category exclusivity	None	Limited opportunities, short form 'bonus' impressions, slates, pod ownership	

For acronyms and sources view appendix on page 11.

Please refer to the [Standard Terms and Conditions for Internet Advertising for Media Buys One Year or Less](#)

[IAB/4As Standard Addendum for Digital Video Advertising in TV Long Form Video - March 2018](#)

Characteristics		BROADCAST/STB AD DELIVERY				STREAMING AD DELIVERY			
		Traditional Linear TV	Data-Driven Linear TV	STB VOD	Addressable Linear/VOD	vMVPD	TV Everywhere	Direct to Consumer Services	
TRAFFICKING & OPERATIONAL	Trafficking Needs	How should ads be trafficked?	Master video file is uploaded to ad distribution vendor who then deploys creative to each network. Network must approve/clear creative to run. Traffic instructions are sent by agency to each network to indicate creative rotations.	Master video file is uploaded to ad distribution vendor who then deploys creative to each MVPD or Network, depending on who's handling the buy. The network/MVPD must approve/clear creative to run. Traffic instructions are sent by agency to each network to indicate creative rotations.	Master video file is uploaded to ad distribution vendor who then deploys creative to each MVPD. MVPD must approve/clear creative to run. Traffic instructions are sent by agency to each network to indicate creative rotations.	Master video file is uploaded to ad server who then deploys a VAST tag to each partner. Partners are responsible to QA and clear creatives as they come in.*			
	Trafficking Timing	How long does it take to traffic creative?	3-5 days prior to launch				3-5 days prior to launch		
	Video Ad Specs	What specs should the video ads follow?	AICP File Deliverable Specifications				Minimum video specifications vary from partner to partner. Best practice is to upload video file that is either built to the Mezzanine File specs per the IAB Digital Video Ad Format Guidelines or the AICP standards to your ad server. Ad server can then send the appropriate version to each partner, based on their requirements.		
	Invalid Traffic	What is the latest information we have on invalid traffic through these channels?	0%				IAB Digital Video In-Stream Ad Format Guidelines Alternative method is to reach out individually to each partner for their specs and have a different version of video file built for each partner, but this is more labor intensive.		
						Minimal level of invalid traffic (<.5%) since a majority of impressions served are direct or via Private Marketplaces (Paxlate ²¹ & FreeWheel ¹⁴)			

For acronyms and sources view appendix on page 11.

* See page 9 of [IAB/4As Standard Addendum for Digital Video Advertising in TV Long Form Video - March 2018](#)

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		Traditional Linear TV	Data-Driven Linear TV	STB VOD	Addressable Linear/VOD	vMVPD	TV Everywhere	Direct to Consumer Services		
MEASUREMENT & REPORTING	Measurement Source	How is each measured?	Primary: Nielsen Age/Sex Demographics		MVPDs provide impression level data		Impressions are measured via publisher-side and/or advertiser-side ad server			
			Average commercial minute audience, live + time-shifted up to 3 (or 7) days from airing	Strategic target is typically measured via Nielsen MRI Fusion or Comscore, but is ultimately agreed upon by both buyer and seller	Comscore provides program level data	ComScore provides program level data	3rd party measurement opportunities vary by publisher, but include: impression delivery, demo-verification, co-viewing factors, fraud detection, viewability			
			Alternative: ACR, STB		Alternative: ACR					
	Completion Rates	What are the completion rates for each?	n/a	n/a	99% (Canoe Ventures ²³)	n/a for Linear, 99% for VOD	CTV - 95%, Tablet - 83%, Mobile - 75%, Desktop - 75% (Extreme Reach ¹⁴)			
	Post-Campaign Reporting & Attribution Info	What is included in a post-campaign report? What level of attribution can be included?	Nielsen verified demo impression delivery for every spot	Nielsen verified demo impression delivery for every spot	Strategic target impressions measured by agreed upon 3rd party	HH-level impressions by network, daypart, day of week	HH-level impressions by network, daypart, day of week	More custom tailored but typically includes: Impressions by publisher, invalid traffic report, reach, frequency, 3rd party attribution analysis		
				Reach and Frequency						
			Network, program, date, and time for every commercial		More advanced attribution reporting via third parties because identity is known at the HH level allowing outcome matching to happen on a more deterministic basis					
Post-Campaign Reporting Timing	How long is the turnaround time for a post-campaign report?	Third party attribution reporting is nascent, but growing - methods include analyzing commercial's effects on search or website visitation in real time as well as test/control analysis using granular STB or ACR data		IAB Advanced TV Attribution: Buyer's Guide						
		60-90 days after end of quarter	3-6 weeks after end of campaign	2 weeks after end of campaign	2 weeks after end of campaign	Real-time impression and 3rd party information				
Viewability	What is the viewability (opportunity to be seen) benchmark?	Inherently viewable on a TV screen					Desktop Video Benchmark - 68.4%, Mobile Video Benchmark - 65.2% (IAS ²²)			
							There is no viewability standard across OTT devices			

For acronyms and sources view appendix on page 11.

APPENDIX

ACRONYMS

ACR	Automated Content Recognition	IFA	Identifier For Advertising
AICP	Association of Independent Commercial Producers	MVPD	Multichannel Video Programming Distributor
C3/C7	Commercial Ratings within 3 days (or 7 days) of initial airing	P2+	Total Persons (All People Ages 2 And Over)
CPCV	Cost Per Completed View	SSP	Supply Side Platform
CPM	Cost Per Thousand Impressions	STB	Set Top Box
CTV	Connected TV	VAST	Video Ad Serving Template
DVR	Digital Video Recorder	vMVPD	Virtual Multichannel Video Programming Distributor
HH	Household	VOD	Video On Demand

SOURCES

- ¹ [Nielsen Estimates 119.9 Million TV Homes in the U.S. for the 2018-2019 TV Season](#)
- ² Nielsen Custom Data Pull, Cable UEs to date Apr 2019
- ³ Nielsen Data Pull, VOD Penetration Apr 2019
- ⁴ [IAB Advanced TV Targeting Guide](#)
- ⁵ [Virtual MVPDs Account for Nearly 10% of Pay TV Subscriptions: BTIG](#)
- ⁶ Adobe Presented Stats, Q4'18
- ⁷ [Pew - Internet/Broadband Fact Sheet](#)
- ⁸ [LRG - 2.4 Million Added Broadband in 2018](#)
- ⁹ [LRG - 74% of U.S. TV Households Have at Least one Connected TV Device](#)
- ¹⁰ Nielsen Custom Data Pull, Median Age Broadcast and Cable, Apr 2019
- ¹¹ Nielsen Custom Data Pull, M and F Skew Across Broadcast and Cable, November 2018
- ¹² [Nielsen - The OTT Experience: Understanding Connected Living Room Audiences](#)
- ¹³ [IAB - Ad Receptivity and the Ad-Supported OTT Video Viewer](#)
- ¹⁴ [FreeWheel - Q4 2018 Video Marketplace Report](#)
- ¹⁵ [Kantar Media Ad Time Tracker](#)
- ¹⁶ [Extreme Reach - Video Benchmarks 2018](#)
- ¹⁷ [The Nielsen Total Audience Report: Q3 2018](#)
- ¹⁸ [Conviva's 2018 Annual State of the Streaming TV Industry](#)
- ¹⁹ [Innovid - 2018 Global Video Benchmarks](#)
- ²⁰ [IAB - The OTT Co-Viewing Experience: 2017](#)
- ²¹ [Picalate - 2019 OTT Ad Fraud Guide](#)
- ²² [Integral Ad Science - H2 2018 Media Quality Report](#)
- ²³ [Canoe Ventures - VOD Ad Impression 2018 Q2 Insights Report](#)



ABOUT US



The [Interactive Advertising Bureau \(IAB\)](#) empowers the media and marketing industries to thrive in the digital economy. Its membership is comprised of more than 650 leading media and technology companies that are responsible for selling, delivering, and optimizing digital advertising or marketing campaigns. The trade group fields critical research on interactive advertising, while also educating brands, agencies, and the wider business community on the importance of digital marketing. In affiliation with the IAB Tech Lab, it develops technical standards and best practices. IAB and the IAB Education Foundation are committed to professional development and elevating the knowledge, skills, expertise, and diversity of the workforce across the industry. Through the work of its public policy office in Washington, D.C., IAB advocates for its members and promotes the value of the interactive advertising industry to legislators and policymakers. Founded in 1996, the IAB is headquartered in New York City and has a San Francisco office.



The IAB Digital Video Center of Excellence, a dedicated unit within IAB, is devoted to the advancement of the digital video medium in the global marketplace. Its board and members reflect a dynamic mix of top television brands, original digital video content producers, prominent print publishers, digital video technology leaders, and innovative start-ups spanning across the digital video programming, marketing, and distribution spectrum.

Together with its member companies and in cooperation with the IAB Tech Lab, the IAB Digital Video Center produces technical standards, research, and thought leadership critical to the field, while identifying emergent best practices in the fast growing arena of digital video. Working with the IAB Public Policy office, the Digital Video Center also advocates to legislators on behalf of the burgeoning medium.