

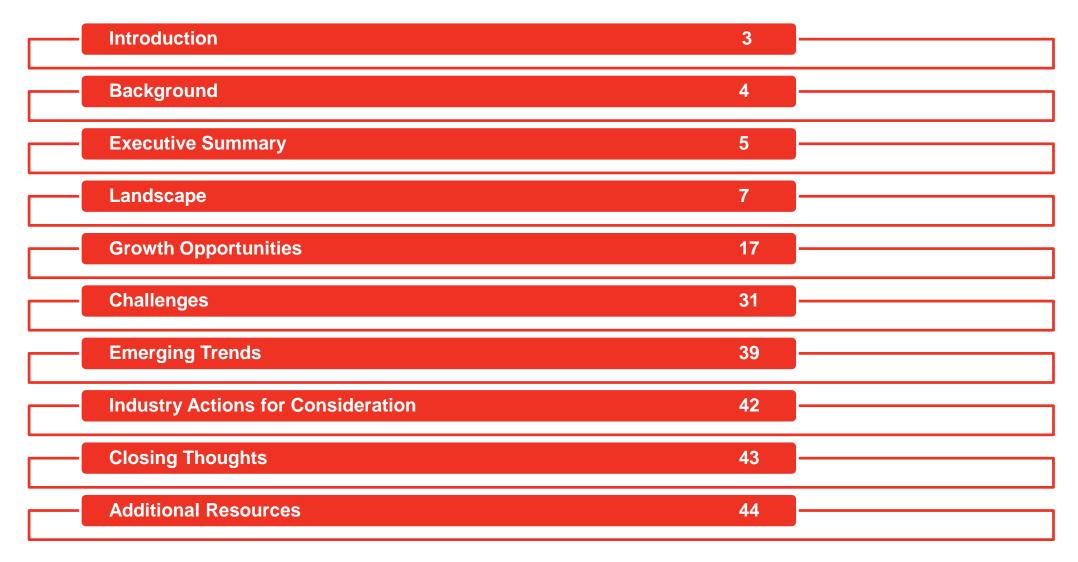
Video Landscape Report

IAB Digital Video Center of Excellence

May 2017, 2nd Edition



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Introduction

The current video landscape is being transformed by the confluence of technological innovations and consumer behavior shifts. As an industry it is critical that we monitor these trends in order to understand the on-going convergence between traditional TV and digital video and the implications for media. What does video mean? What will it become? How is video used to reach, engage, and drive attention and action? It is absolutely imperative to understand the complex and evolving ecosystem of video advertising to guide our perspectives and decisions on both the buy side and the sell side.



Background

- The IAB Video Center of Excellence created this video landscape report after reviewing and compiling existing industry research reports and publications, as well as consulting with more than a dozen industry practitioners and subject matter experts including broadcast, cable, ad tech, digital pure plays, agencies, and brands.
- The key objective of this report is to provide perspectives on the state of the video advertising ecosystem. It will
 also serve as a modular tool to simplify video and educate the advertising marketplace about the growth and
 value of video in reaching and engaging consumers.
- Given the complexity of the entire video landscape, this report is going to anchor around the confluence of consumer consumption and technology in an advertising-supported video ecosystem to provide a clear understanding to a buy-side audience of the current state of video.
- This is the second iteration of the report (initially released in October 2016).



Executive Summary

The video ecosystem has never been more complicated and exciting. We have seen an increased number of content creation sources, delivery and consumption channels, and platforms, and as a result, more video viewing time in total. While traditional TV still dominates ad revenue, digital video—especially mobile video—is the fastest-growing video type by consumption. All of these developments provide more opportunities for brands and marketers to connect with consumers.

 Looking across the video platforms and channels, traditional and new opportunities to reach and engage consumers abound in this rapidly evolving video ecosystem. This report looks into a number of opportunities including Programmatic video, Addressable TV, Connected TV/OTT, Virtual Reality, Vertical Video, Live Video, eSports, Original Digital Video, and Native Video.



Executive Summary

While opportunities to reach viewers have increased, we see challenges across traditional TV and digital video platforms due to consumers' behavior shifts and new technologies, especially advanced audience data and automation. Key challenges that the industry needs to watch out for and address as a whole include audience fragmentation, advertising experience, ad avoidance/blocking, ad fraud, and cross-platform measurement.

The interplay of technology and consumer behavior is driving current and emerging trends that push and shape this evolving video landscape. The industry needs to have a deeper understanding of the shift in consumer dynamics and technology to better leverage the trends that may have a significant impact on video advertising's future for both publishers and advertisers.



Landscape

The video ecosystem has never been more complicated and exciting—we have seen an increased number of content creation sources, delivery and consumption channels, and platforms, and as a result, more video viewing time in total. While traditional TV still dominates ad revenue, digital video— especially mobile video—is the fastest-growing video type by consumption.



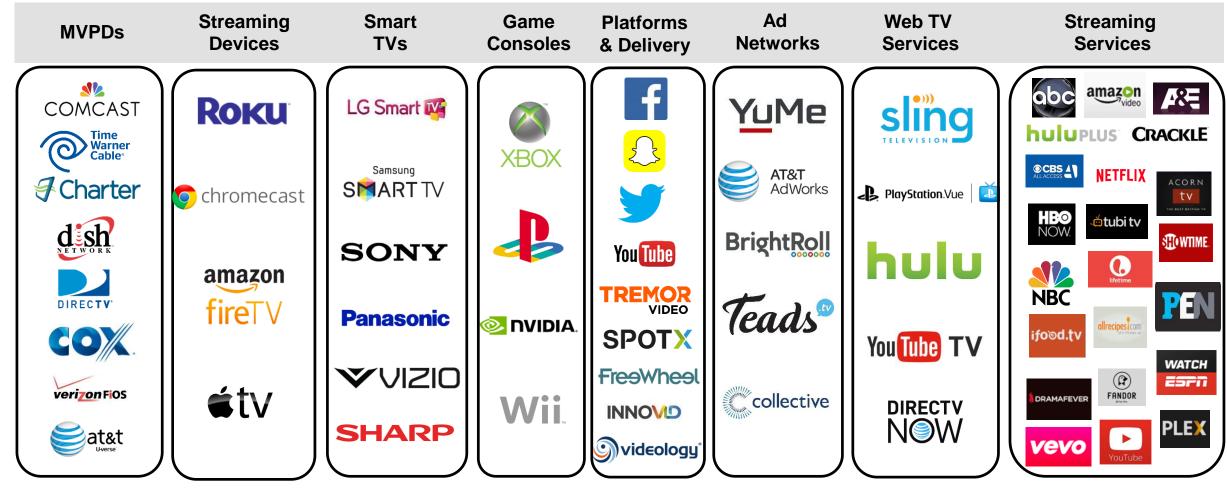
The changing faces of video in a complex ecosystem

The term video is perceived through varying yet overlapping frameworks and lenses

Viewing Distribution Video Type Device/Platform Ad Unit Mechanism Long form video Desktop Short form video Mobile Original digital video Over the In-stream Gaming console User-generated content Out-stream air/Broadcast OTT/Connected TV Vertical video Overlay Cable Social 360 video Satellite Messaging app Virtual reality **IP-based** Digital OOH Live video



Video delivery and consumption is more crowded than ever

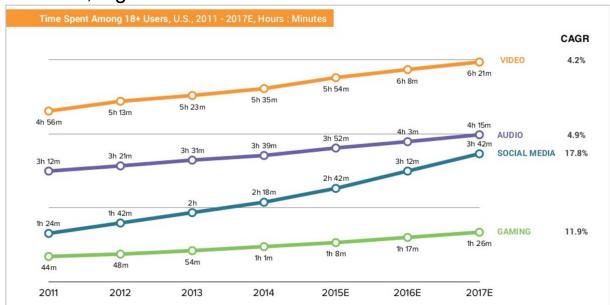


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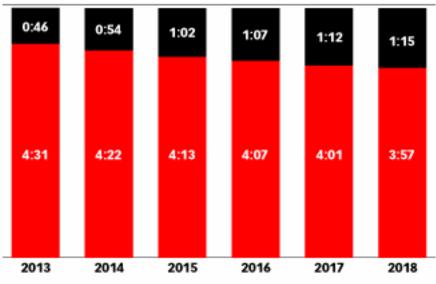
Total video viewing time continues to go up; digital video viewing time increases year-over-year

- According to research firm Activate analysis, total video viewing time among U.S. adults has continued to grow year-over-year.
- While TV still takes the majority share of total viewing time, digital video's share has increased over time.



Average Time Spent per Day with Video by US Adults, by Device, 2013-2018

hrs:mins



TV* Digital video devices**

Note: ages 18+; time spent with each medium includes all time spent with that medium, regardless of multitasking; for example, 1 hour of multitasking with digital video while watching TV is counted as 1 hour for TV and 1 hour for digital video; *excludes digital; **includes time spent watching digital video via game console, connected TV or over-the-top (OTT) device; excludes time spent with video via social networks Source: eMarketer, Sep 2016

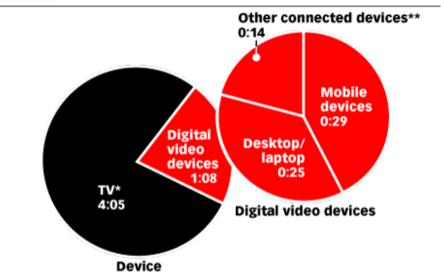
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Mobile video is taking a greater share of total digital video consumption and it continues to grow

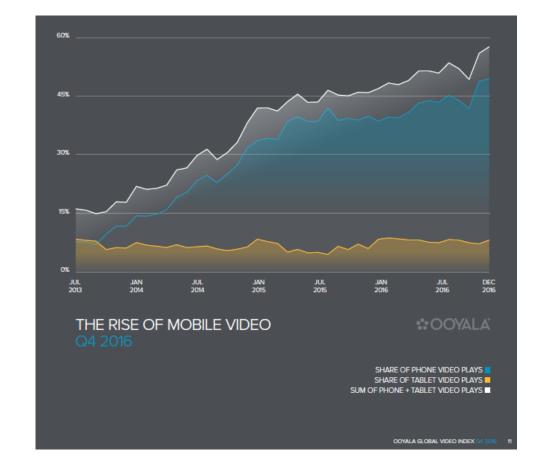
Average Time Spent per Day with Video by US Adults, by Device, 2016

hrs:mins



Note: ages 18+; time spent with each medium includes all time spent with that medium, regardless of multitasking; for example, 1 hour of multitasking on desktop/laptop while watching TV is counted as 1 hour for TV and 1 hour for desktop/laptop; *excludes digital; **includes game consoles, connected TVs or OTT devices
Source: eMarketer, April 2016

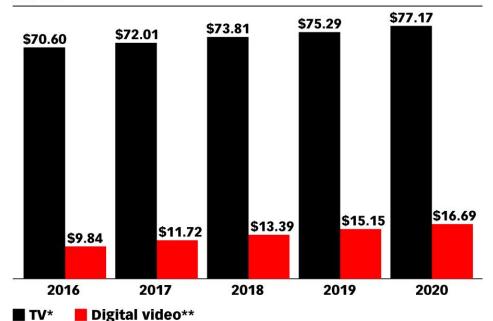
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TV ad spend remains dominant, though digital video exhibits a faster revenue growth rate

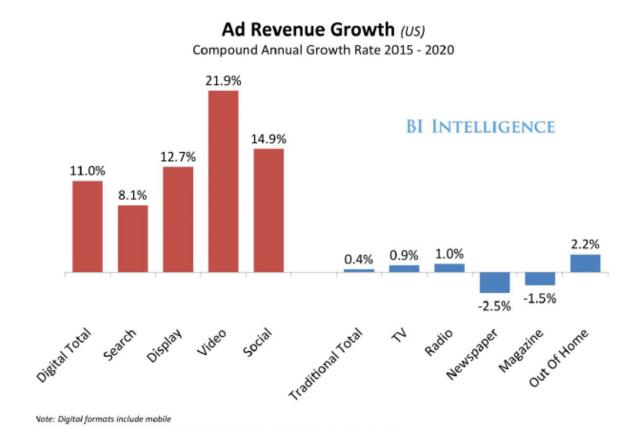




Note: *includes broadcast TV (network, syndication & spot) & cable TV; **includes advertising that appears on desktop and laptop computers as well as mobile phones, tablets and other internet-connected devices; includes advertising that appears before, during or after digital video content in a video player

Source: eMarketer, March 2016

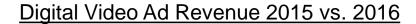
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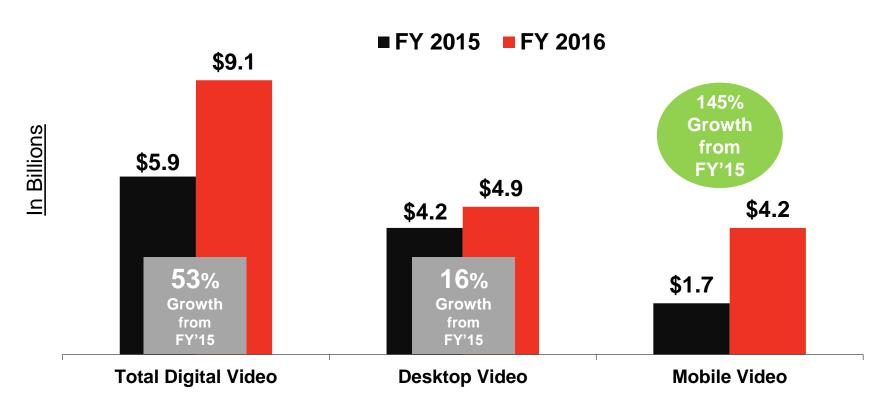




Mobile video is the primary driver of digital video ad revenue growth

The gap between desktop and mobile video ad revenue is closing.



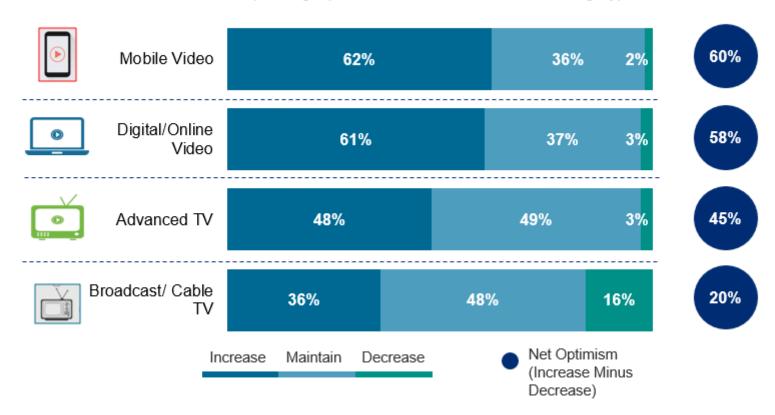




The buying community feels optimistic about investing in digital and mobile video

In the next 12 months, would you expect the spend on the following to increase, decrease or maintain the same?







Ad buyers will spend over \$9 million, on average, on their digital/mobile video advertising in 2017

The digital video ad spend has increased sharply YOY.







Streaming skinny bundles respond to consumers' cord cutting and cord shaving trends

Definition: A stand alone Over the Top live TV streaming service that offers smaller bundles of channels for a lower price than traditional pay TV packages and allows viewers to watch live television outside the home on mobile devices.

Below is a comparison across currently available streaming skinny bundles according to the New York Times. The landscape will continue to change as potential new players enter this space. These services are tailored to the growing number of consumers who have either cancelled or have never subscribed to a traditional pay TV package (cord cutters / cord nevers) as the cord cutting trend continues. In addition, they also reflect the cord shaving trends among existing traditional pay TV customers who are looking for more value from existing over-sized subscription bundles and seeking ways to reduce the number of channels, therefore reduce costs.

	PlayStation.Vue	DIRECTV	Sing	You Tube TV	hulu
Price	\$39.99-\$74.99	\$35-\$70	Starts at \$20, can add group of channels	\$35	\$39.99
# of Channels	45-95	60-120	Starts at 30, with available add-ons	40	>50
DVR	Cloud DVR	None	Cloud DVR	Cloud DVR	50 hrs. included
# of Screens	5	2	1-3, varies by tier	3	2, more can be added



Growth Opportunities

Looking across the video platforms and channels—traditional and new—opportunities to reach and engage consumers abound in this rapidly evolving video ecosystem. The report looks into a number of opportunities: addressable TV, programmatic video, Connected TV/OTT, Virtual Reality, Vertical Video, Original Digital Video, and eSports, to name a few.

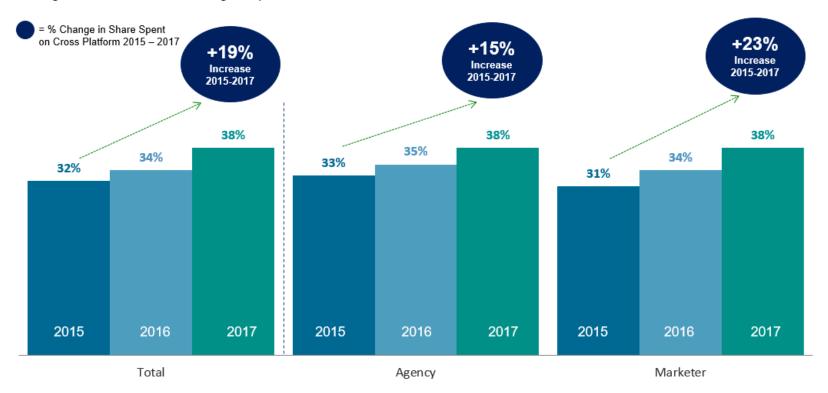


Cross-platform video buying including both TV and digital video is a common practice and will continue to trend up

Three-year Trending of Cross-platform Video (TV and digital video) Buying

(out of total ad budget %)

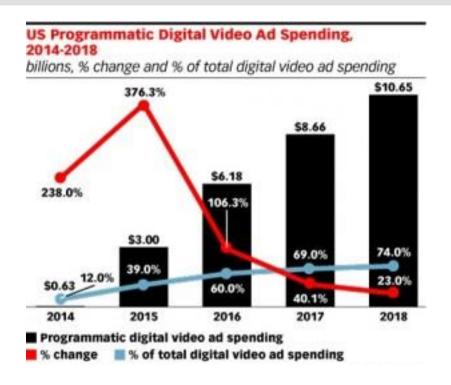
Average Percent Share of Ad Budgets Spent on Cross-Platform—3 Year Trend





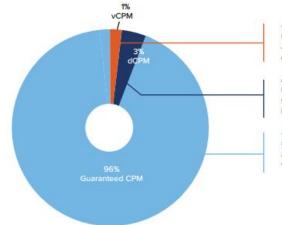
Programmatic video sees a year-over-year double digit increase, and mobile will take the lead in 2017

- Programmatic transacting of video touts the benefits of rich and diverse data sources, efficiencies of automation, and transparency of targeting and reporting.
- In 2017, programmatic digital video ad spending is estimated to reach \$8.66 billion, representing 69% of total digital video ad spending. Programmatic mobile video ad spending will surpass desktop programmatic video for the first time in 2017.
- According to Videology, the majority of programmatic campaigns are on a TV-like guaranteed basis.



PROGRAMMATIC BUY TYPE

Preferences in buying campaigns were stable from the prior quarter. Most advertisers continued to buy campaigns on a TV-like guaranteed basis. However, some also bought on reserved dynamic pricing (dCPM).



vCPM

Using this pricing model, advertisers are only charged for impressions that are deemed viewable by Videology or a third-party measurement vendor of their choice.

CPM (Dynamic CPM)

Using this pricing model, advertisers have a flexible, variable cost offering that allows for CPM control throughout the course of a campaign across both auctioned and upfront-procured inventory.

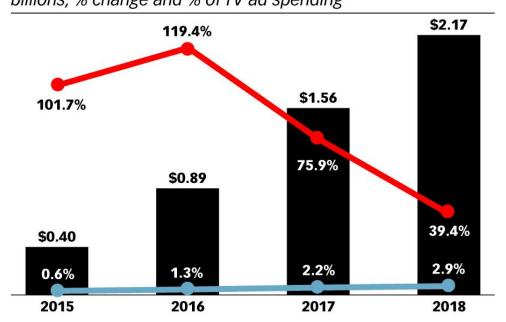
Guaranteed CPN

Using this pricing model, advertisers are guaranteed reserved inventory and fixed pricing, meaning they will know the cost of a campaign and the volume associated with that cost, before it is ever launched.



Addressable TV spending, though still a small base, is set to nearly double in 2017

US Addressable TV Ad Spending, 2015-2018 billions, % change and % of TV ad spending



Addressable TV ad spending

% change
% of TV ad spending

Note: targeted TV ads delivered on a home-by-home basis via cable and satellite boxes; includes video-on-demand (VOD); excludes connected TV. smart TV and over-the-top (OTT) Source: eMarketer, June 2016

eMarketer estimates that 100 million U.S. households subscribe to pay TV services in 2016.

- The universe of addressable TV households according to Starcom MediaVest Group is sized at 49.8 million for 2016. That translates into just under half of all pay TV households that can be reached with addressable TV ads.
- Addressable TV households are distributed across several pay TV providers in the U.S.



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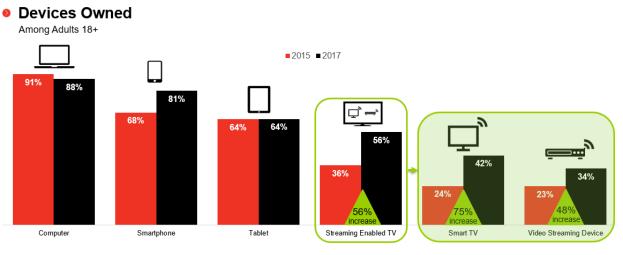
Connected TV/OTT growth opportunity is clear as device ownership to enable streaming to TV continues to increase



IAB published an overview of OTT video in 2017 and defined OTT in the following ways:

- 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 (Roku, Apple TV, Smart TV's, game consoles, etc.)
- Over the Top Video Video content transported from a video provider to a connected device over the Internet outside the closed networks of telecom and cable providers

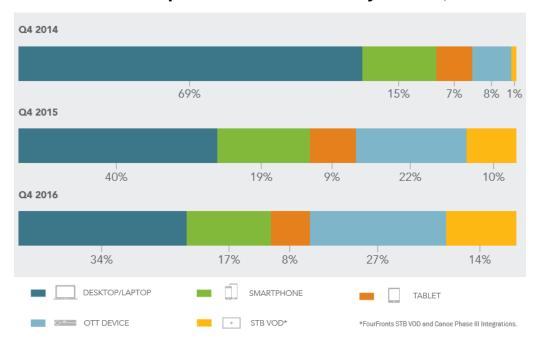
A variety of connected devices are used for over the top viewing. In 2017, the aggregated streaming enabled TV ownership has reached the majority of American adults (56%) with a 56% increase from 2015.





Connected TV/OTT ad revenue growth trajectory is proven as both publishers and advertisers understand the benefits

Ad View Composition and Growth By Device, US



According to FreeWheel, OTT's share of ad views has grown more than 3X from 2014 to 2016.

- Benefits of OTT Video Ads -

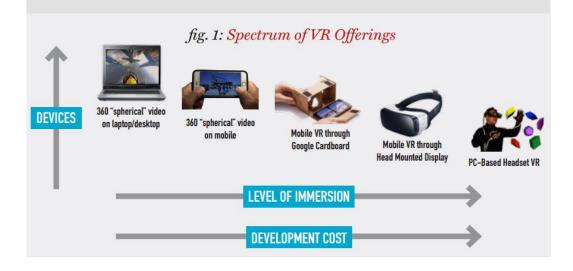
- Full-screen TV experience on a large living-room device with co-viewing
- Benefits of digital including: Advanced targeting, dynamic ad insertion, enhanced survey and audience analysis capabilities, IAB standards, and digital measurement
- Reach cord-cutters/shavers/nevers
- Reduced risk of fraud because OTT, as of today, is typically a closed, controlled ecosystem
- OTT video ads tend to be 100% in-view because there is no player to minimize in this full-screen experience. However, there is currently no established viewability standard specifically for OTT.
- Support for 3rd party ad serving and measurement

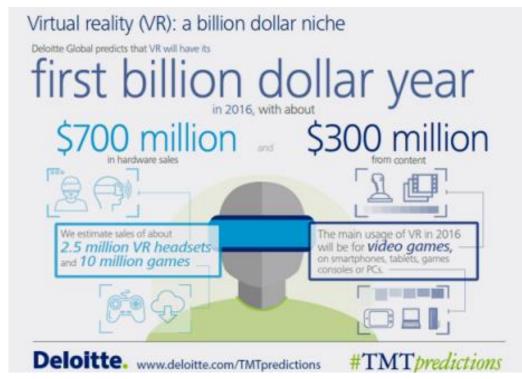


New immersive storytelling and advertising formats offer a unique experience to connect consumers and brands

Virtual Reality/Augmented Reality/360 Video

- The promise of immersive storytelling with Virtual Reality, Augmented Reality, and 360 Video has led brand marketers to experiment with these formats.
- Consumers have shown a high engagement and interactivity rate and time spent with the formats.





Deloitte predicted 2016 to be the first year Virtual Reality revenue reached \$1 billion, 70% from hardware sales, and 30% from content.

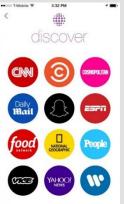


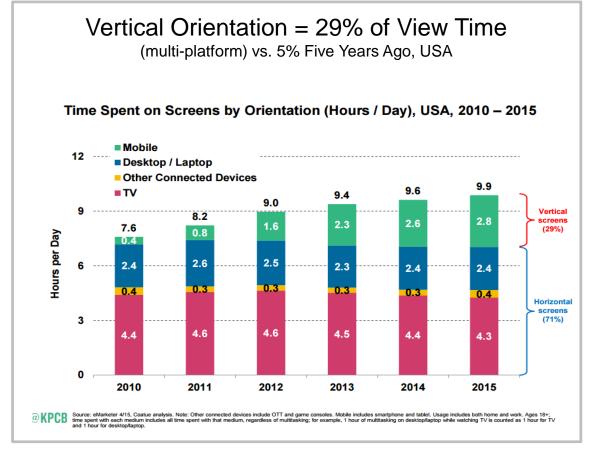
Vertical video format on mobile is increasingly embraced by content creators and brands

Vertical Video

- Changing consumption patterns make vertical viewing on mobile more common rather than the exception.
- According to the Snap research, vertical video ads gain a higher level of user attention, emotional response and purchase intent than the horizontal video ads on other social platforms.
- More data and research will be needed to determine the best creative length for vertical video.









Live video is poised to tap additional consumer engagement and consumption

- Major platforms like Facebook, Snapchat, and Twitter are making a big push into live video to increase user consumption and engagement on the platform.
 - Facebook signed contracts with nearly 140 media companies and celebrities in 2016 to create videos for its live-streaming service.
 - Twitter at its inaugural NewFronts presentation in 2017 announced partnerships with companies such as BuzzFeed, Vox Media, MLB Advanced Media and Live Nation to produce or provide live-streaming content for the platform.
 - Amazon won 2017 rights to live-stream NFL Thursday night football games.
- The actual return on investment of live video remains to be seen as the live video ad formats are still in the test and learn stage.











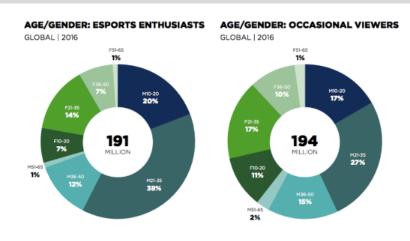
The global expansion of eSports presents a viable advertising opportunity targeting a desirable audience

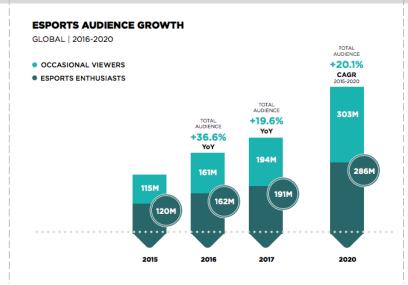
eSports is competitive multiplayer electronic video gaming, played competitively for spectators. eSports offers media companies and brands a new means of engaging with younger audiences who both play games and watch game content.

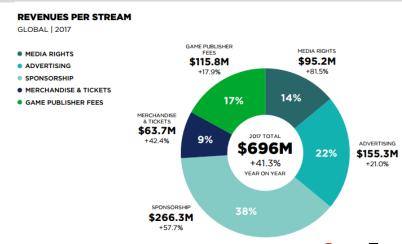
The eSports Enthusiast audience currently skews young and male, with half of them aged between 21-35 and 71% men. The majority of Enthusiasts are in full-time employment and earn a good income making them a desirable target group for a verity of marketers, especially big brands.

About 191 million people world-wide are expected to watch an eSports contest in person or online at least once a month in 2017, more than double the number in 2012. By 2020, eSports viewership is expected to reach 286 million.

eSports revenues will grow with a CAGR (2015-2020) of +35.6% to reach \$1488 million by 2020. Sponsorship is the largest revenue stream and will grow to \$655 million by 2020. Advertising generates the second most revenues and will grow to \$224 million by 2020.







Original Digital Video's annual average ad spend has doubled over three years

- Original Digital Video is professionally produced digital video content for digital delivery and consumption.
- In the context of video advertising, this report refers to ad-supported original digital video.
- In 2017 Original Digital Video is estimated to account for 47% of total digital video budget.

Three-year Trending of Original Digital Video Ad Spend

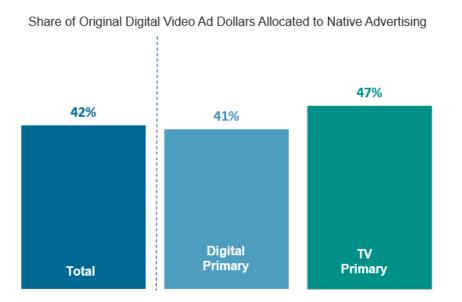
(annual average by advertiser)



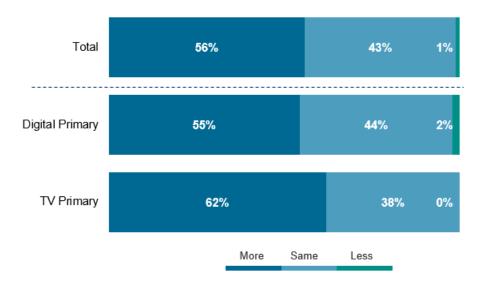


Native video advertising is growing in popularity

- **Definition:** A form of paid media where the ad experience follows the natural form and function of the user experience in which it is placed. These paid ads aspire to be so cohesive with the page content, assimilated into the design, and consistent with the platform behavior that the viewer simply feels that they belong.
- Native video advertising accounted for 42% of ad buyers' Original Digital Video spend in 2016. It is projected to grow
 as more than half of ad buyers increased their Original Digital Video budget allocation to native advertising from
 2015 to 2016.









Out-stream video advertising is taking off with noticeable benefits

Definition:

A form of video advertising that takes place outside of In-Stream Video content. The key difference between in-stream and out-stream video ads is that out-stream video ads leverage the existence of standard display ad units to deliver a video experience as opposed to another static or rich media format.

Out-stream video ads are typically not rendered in a prominent video player on the page. The ads are not the primary focus of the page. Visitors do not visit the page with the intent to view the unit nor did they actively initiate the experience.

The out-stream definition includes: In-Banner Video, In-Article Video, Native Video, In-Feed Video and Interstitial Video.

Out-Stream Video Ad Benefits:



- Perceived premium quality
- Enhanced viewability
- Broad inventory availability
- Proven format in terms of effectiveness



Interactive & shoppable videos bring the store to viewers

Definition:

- Digital video creative served on ConnectedTV/OTT, mobile and desktop that can take user input to perform some enhanced actions through elements integrated above and beyond the standard video playback controls.
- Interactions can include various calls-to-action, registration form, poll/survey, links, menus and hot-spots to support story progression and/or drill down on specific parts of the content itself.

Benefits:

- Offers advertisers opportunity to enhance a lean back video experience by adding an interaction element.
- OTT experience takes into account the nuances of TV remote control navigation / interaction.

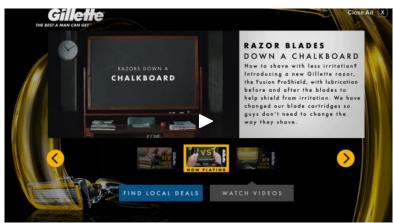
KPIs:

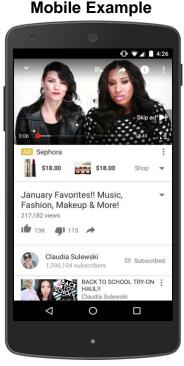
Brand interest time (duration of view), brand engagement, direct response, video completion rate

Connected TV/OTT Examples



Source: Innovid





Source: YouTube
TrueView Shopping Ad

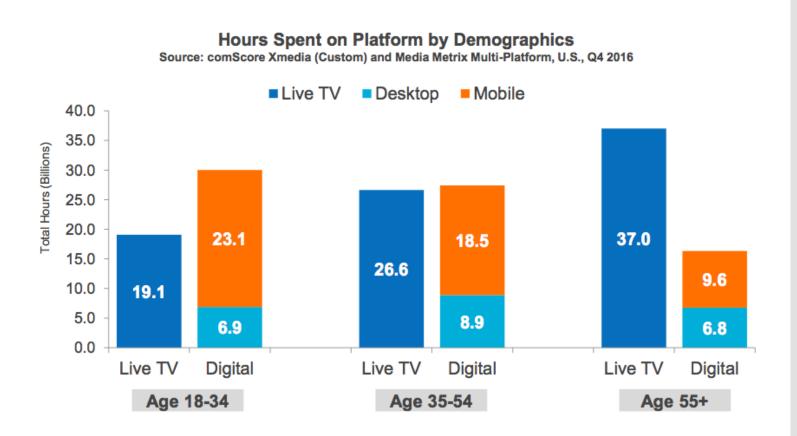


Challenges

While opportunities to reach viewers have increased, we see challenges across traditional TV and digital video platforms due to consumers' behavior shifts and new technologies including audience fragmentation, user experience, ad avoidance, fraud and cross-platform measurement.



Media consumption is fragmented – Millennials and Gen Xers spend more time on digital media than watching traditional linear TV

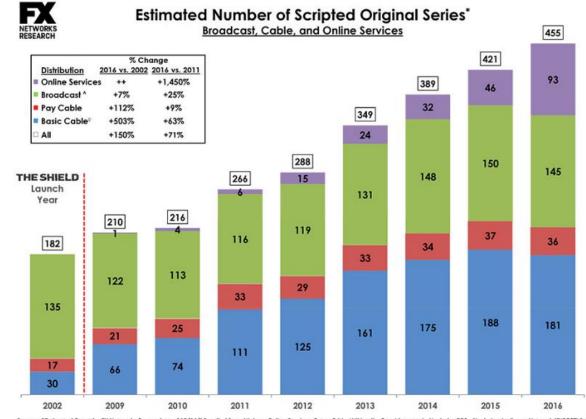


- The younger demographic segments are more likely to spend time on their mobile device – Millennials already spend more time on mobile than they do watching traditional linear TV.
- In addition to demographic and generational differences, audience fragmentation is also resulting from the proliferation of devices, platforms and content sources.



The explosive growth in quantity and sources of content also contributes to audience fragmentation

- According to FX Network Research, the number of scripted original series across broadcast, cable, and online services is on a steady increase since 2009.
- The number of scripted originals hit a record 455 in 2016, up from 421 in 2015.
- Of that total, the streaming originals category grew 1,450 percent since 2011, representing 93 shows. The number of basic cable originals dipped (down seven), as did premium cable (off one) as well as broadcast (off five)



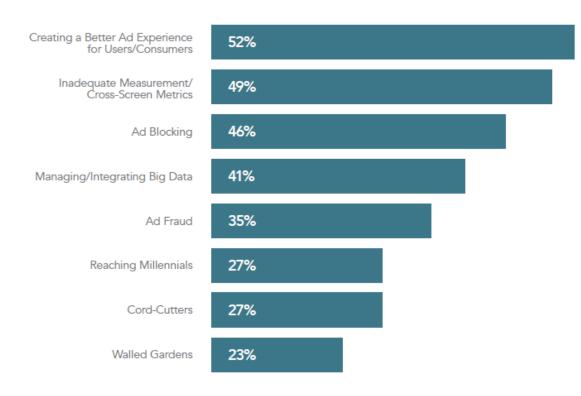
Source: "Estimated Count by FX Networks Research as of 12/14/16; culled from Nielsen, Online Services, Futon Critic, Wikipedia, Epguides, et. al. Ancludes PBS. Olncludes Audience Network (DIRECTV) Online Services = Amazon Prime, Crackle, Hulu, LouisCK.net, Netflix, Playstation, Seeso, Vimeo, Yahoo, and YouTube Red.

Excludes library, daytime dramas, one-episode specials, non-English language, children's programs, and short-form content (< 15 mins). Includes recently-produced imports



Improving the video ad experience is of vital importance to advertisers and publishers

What Are The Biggest Challenges Facing The Video Industry?

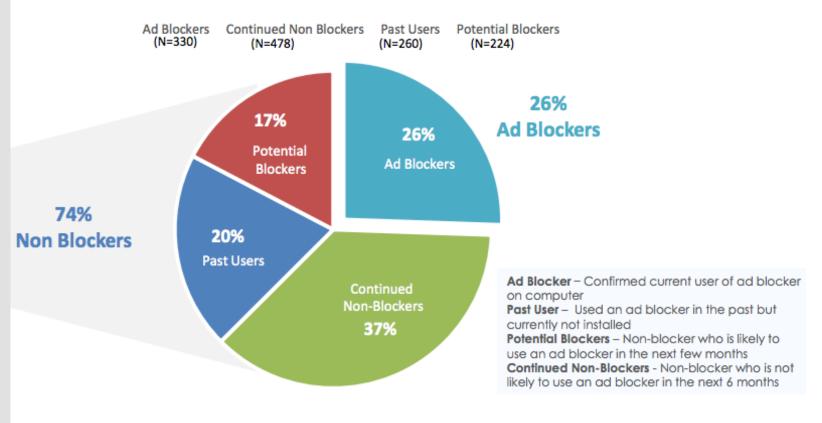


- In a FreeWheel study with 242 brand marketers and agency personnel, more than half see improving the ad experience as the number one challenge facing the video industry today, even beyond the cross-screen measurement issue.
- The data also shows 59% of respondents said that improving consumers' video ad experience is very important in helping to achieve campaign goals.
- Areas of improvement could include frequency management, the appropriate ratio of content length to advertising duration, adjusting ad delivery to content consumption patterns, and dynamic ad loads.



Consumer behavior of ad blocking/avoidance, enabled by technology, is another challenge

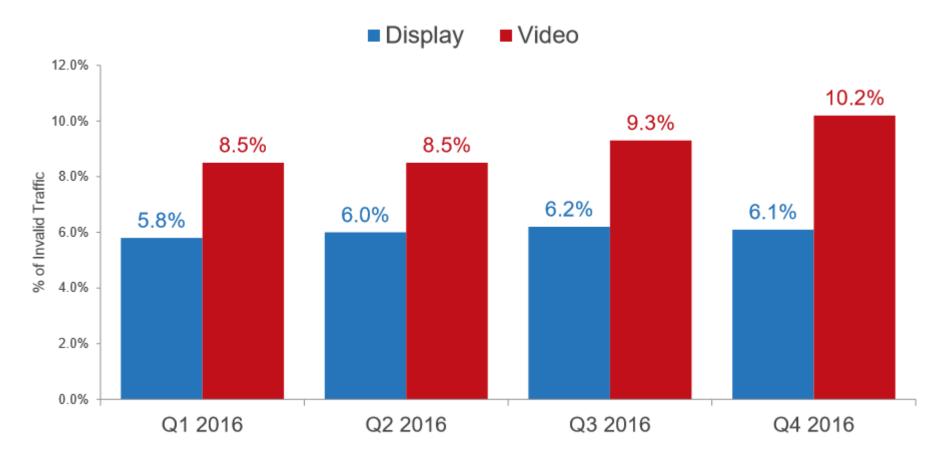
- Although ad avoidance or skipping is not completely new to video, technology has granted more power and control to audiences to enable ad blocking as a direct response to poor user experiences with digital advertising.
- IAB research identifies that more than a quarter of U.S. adults use ad blockers on a computer in 2016.





Invalid/fraudulent traffic is growing for higher-CPM video ads while staying steady for display ads

U.S. Desktop Invalid Traffic Comparison: Display vs. Video Norms
Source: comScore vCE Benchmarks, U.S., 2016

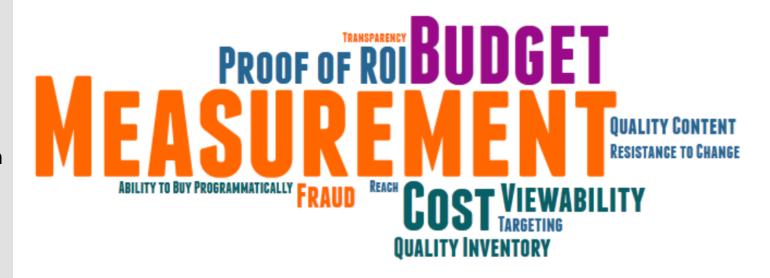




Within digital video, lack of standardized measures causes market inefficiency and confusion

- In the 2016 IAB Video Ad Spend Study, measurement is cited as the biggest challenge to digital video buying among ad buyers.
- Variances in digital measurement results and lack of standards have created friction and inefficiencies in selling and buying digital video.
- To name a few, digital video measurement challenges include varied definitions of a 'view', lack of agreement on Viewability, and metrics that matter most.

Biggest obstacles to digital/mobile video advertising to ad buyers



EXAMPLE: What constitutes a digital video ad view? Currently in the marketplace, the definition varies from publisher to publisher – some follow one second threshold, some follow three seconds; some are using the ad load, some are using the ad call; some have autoplay, some have user-initiated start.



Lack of comparable metrics between linear TV and digital video causes friction and confusion in cross-platform buying and planning

- Metrics used to measure video on linear TV and online are vastly different*. Without comparable metrics, it's hard for media buyers and planners to assess the relative value of cross-platform ad inventories.
- The lack of consensus in metrics presents a barrier and friction point to significant investment decisions which require a solid and accurate understanding of where and to what extent audiences are watching TV and digital video.
- The industry has yet to create a standardized crossmedia, cross-platform currency to measure unduplicated cross-screen video audiences in totality.

There's A Need To Reconcile Digital Metrics With TV Measurement And Speak One Common Language To Level The Playing Field

Why? Because	
<u>Digital</u>	<u>Television</u>
Streams	Average Audience (rating)
Unique Viewers	Average Audience (rating)
Video / Page Views	Average Audience (rating)
Global Stats	U.S. Audience (universe)
First Party Unaudited Data	Third Party Audited Data

- Digital video is primarily measured with impressions.
- Linear TV is primarily measured with GRPs (Gross Rating Points)



Emerging Trends

The confluence of consumer behavior and technology is driving current and emerging trends that push and shape this evolving video landscape. The industry needs to have deeper understanding of the shift in consumer dynamics and technology proliferation to better leverage the trends that may have a significant impact on video advertising's future.



Changing video consumption, creation and distribution landscape will drive new advertising opportunities

On-demand, anytime, anywhere consumption is here to stay, blurring boundaries between TV and digital video.







Creation and distribution of content is being disrupted, lowering the cost of entry and enabling new, non-traditional players.





Rapid, massive media and technology **consolidation** and partnerships will further blur the boundaries.







Data is playing a pivotal role in audience buying, targeting, and measurement for both traditional TV and digital video.







Empowered by technology and choice, consumers are in control, demanding quality content and advertising experiences

The bar for **content quality** is getting higher and higher. Audiences are wielding control over the success and failure of any piece of content.







Creative quality and device/platform-specific experiences are critical to success in an increasingly cross-platform, programmatic marketplace.





Striking a balance between **user experience and value** to advertisers will be a continuous effort.





Industry-wide collaboration to tackle **currency**, **standardization**, **and user experience** challenges will continue.









Industry Actions For Consideration

The IAB Video Center of Excellence will continue to educate the marketplace on the changing video advertising landscape to help unlock video's full potential. We suggest the following industry-wide actions based on the opportunities and challenges highlighted in this report:

- Buyer & Seller Education: Provide training on cross-platform planning and buying, especially with regards to new ad formats and platforms.
- Measurement & Attribution: Develop digital and cross-platform audience measurement and attribution to support valuation of cross-platform inventory.
- Content and Creative Best Practices: Develop creative repository with various examples of cross media campaigns, brand objectives, and creative executions.
- Content Distribution and Discovery: Continue the research and development efforts to improve content discovery across various digital platforms and devices.



Closing Thoughts

The combination of sight, sound, and motion that underlies video storytelling has unique advantages in attracting and engaging consumers, and driving actions. Convergence of traditional TV and digital video consumption is growing rapidly, impacting advertising planning, selling, and buying. This confluence of consumer behavior and technology will continue to propel the industry to adopt a more holistic understanding of the consumer that recognizes the differences by consumption, platform, content type, and audience segment. The ability to create, plan, and execute video campaigns that reach consumers directly wherever they are with greater relevance is the promise of the converged future of traditional TV and digital video.



Additional Resources

In addition to this video landscape report, below are additional IAB Video Center resources to understand the video ecosystem:

- Is Virtual the New Reality
- Programmatic Video: A Spectrum Of Automation
- Digital Video Glossary
- Over The Top (OTT) Video: An Overview
- 2017 Video Content Discovery Study
- 2017 Video Ad Spend Study
- 2017 Changing TV Experience Study
- Tech Standards: <u>Digital Video Suite</u> <u>VAST 4.0</u> <u>VPAID 2.0</u> <u>VMAP</u>



Thank You

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