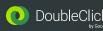


July 2016

Google



What we did

Prime Time is now all of the time, across screens, devices, apps and services. Viewers across the globe can now stream more content when and where they want than ever before. Ubiquitous high quality video is great for consumers, but makes it increasingly complex for broadcasters, distributors and publishers trying to monetize their content — or advertisers and agencies trying to reach the right audiences.

To capitalize on constantly connected, multi-screen audiences, brands and broadcasters have turned to programmatic buying and selling. Programmatic technology — both reservation and auction based — has made it easier than ever to buy and sell the most premium video and TV content, connecting brands to the right audiences, across devices.

With that in mind, we took a closer look at the state of programmatic video advertising around the world across our DoubleClick Bid Manager (DBM) and DoubleClick for Publishers (DFP) platforms from Q4 of 2014 through Q4 of 2015.



What we found

Advertisers, agencies, broadcasters and media companies are rapidly adopting programmatic video

85 of the Ad Age Top 100 advertisers have turned to programmatic video on DoubleClick Bid Manager (DBM).

Programmatic video revenue for TV and media companies increased over 550% in 2015 on DoubleClick for Publishers (DFP).

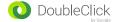
Changes in viewer behavior have accelerated programmatic video spend

With audiences viewing content across multiple screens, video impressions on mobile and tablet grew over 30X in 2015 on DoubleClick Bid Manager (DBM).

Buyers and Sellers are turning to Programmatic Direct to transact premium video content

Premium publishers are using reservation style deals over programmatic pipes as a way to maintain control over their most premium inventory, while delivering on advertiser and agency demand for programmatic buying.





What we found

Brand safety is critical for brands buying programmatically and exchanges perform differently when it comes to filtering bad ads

DoubleClick and Google disabled more than 780 million ads for policy violations in 2015.

Spam rates vary significantly across the top ad exchanges, requiring broadcasters and advertisers to evaluate the exchanges they use to sell and buy inventory.

Video viewability is improving but remains inconsistent across countries and exchanges

The average viewability of YouTube ads globally has increased to an industry leading 93%.







New TV

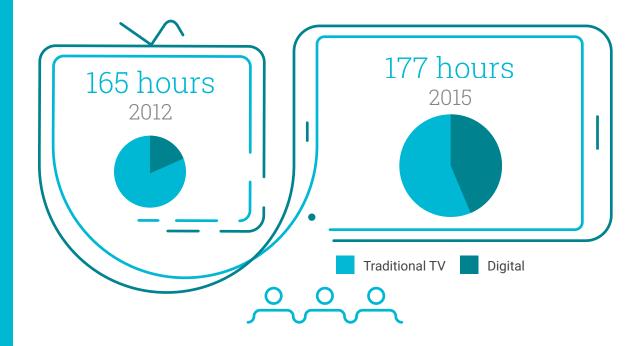




Brands and broadcasters are rethinking video advertising

Video consumption around the world is changing drastically. As online video viewing surges, the traditional definition of TV is evolving. While people now spend fewer hours watching traditional TV content, overall time spent watching video, including both online video and offline TV, is higher than ever and the video advertising ecosystem is poised to benefit.

Monthly Video Consumption in the US



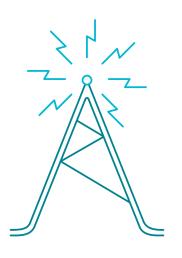




Buyers and sellers are adopting programmatic as a key strategy to find and reach fragmenting audiences

across screens and devices. Brands and broadcasters are rapidly adopting programmatic to address the complexity in both finding and reaching these increasingly

Broadcasters and media companies



Over 130% ()

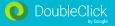


increase in programmatic video impressions on DoubleClick for Publishers

Over 550% (=)



increase in programmatic video revenue on DoubleClick for Publishers from TV and media companies



Buyers and sellers are adopting programmatic as a key strategy to find and reach fragmenting audiences

Consumers are watching TV and video today across screens and devices. Brands and broadcasters are rapidly adopting programmatic to address the complexity in both finding and reaching these increasingly fragmented audiences.

Advertisers

85 of the Ad Age Top 100

advertisers bought programmatic video on DoubleClick Bid Manager in 2015



23%

of them bought programmatic video on DBM for the first time in 2015

Over 590% growth

in programmatic video impressions bought from Ad Age Top 100 advertisers using DBM

Over 105% growth

in number of active video advertisers using DBM across all verticals



Screens and devices





Mobile and tablet are here

Mobile and tablet video ad inventory revealed major increases in 2015.

Broadcasters and media companies



Over 540%

growth in programmatic mobile video impressions on DFP

Advertisers

Growth in DBM-served video impressions on mobile and tablet devices



Smartphone

33x growth



Tablet

32x growth

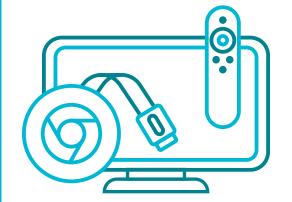




10

Connected TV ad inventory is growing

2015 was a breakout year for ad inventory on connected TVs — both TV screens equipped with internet access and internet-enabled devices that plug into TVs, like Chromecast and Roku. While connected TV advertising is still in the early days, with limited signals, inventory and measurement, the growth in advertiser spend and shifts in viewership are clear indicators of a growing market.



DBM-served video impressions on connected TVs grew

over 225%



Deal types





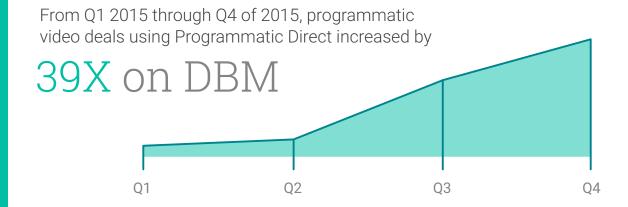
While still nascent,
Programmatic Direct and
private marketplaces are
driving growth on the
premium end of the
programmatic video market

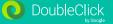
Programmatic Direct

Video spend by advertisers using Programmatic Direct on DBM grew

over 650%







While still nascent,
Programmatic Direct and
private marketplaces are
driving growth on the
premium end of the
programmatic video market

Private Auctions

More brands and broadcasters are using private marketplaces like Google Partner Select.

Google partner select

238% growth

in impressions bought via Google Partner Select

Case Study

Corriere de Sport

<u>Italy's Sport Network</u> grew revenue from private marketplaces by

355% with DoubleClick





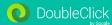
14

Programmatic spend on YouTube is growing across both auction and reservation

TrueView, an innovative user-choice format, and Google Preferred, the most-popular channels on YouTube, became available programmatically in 2015 through DBM.



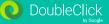




^{*}Programmatic buying on YouTube refers to the buying of TrueView and Google Preferred through DoubleClick Bid Manager.

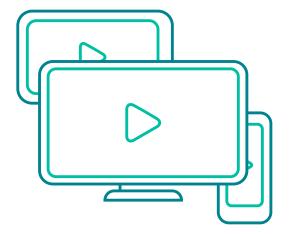
Video player sizes





Programmatic video advertisers are increasingly targeting large player sizes

Large player sizes have been shown to have a positive correlation with key metrics that advertisers care about — such as brand lift, video viewability and engagement — so advertisers are increasingly targeting them.



In the first quarter of 2016 on DBM, growth in spend targeting large players outpaced all other player sizes combined by

17%



But the amount of large player video inventory varies widely across the top exchanges

Advertisers

Programmatic video bid requests, by player size, across the top 5 exchanges by volume

	Unknown	In-Banner Video	Small Player 400x300 & smaller	Large Player 400x300 to 1280x720	HD Video 1280x720 & above
Exchange 1	1%	1%	13%	81%	4%
Exchange 2	46%	0%	29%	25%	0%
Exchange 3	42%	13%	13%	32%	0%
Exchange 4	8%	22%	17%	53%	0%
Exchange 5	0%	43%	20%	37%	0%





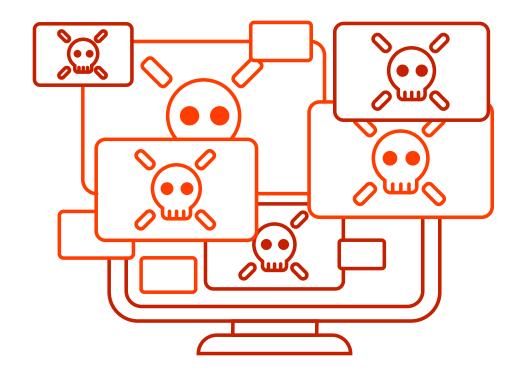
Brand safety & measurement





Brand safety & measurement

While the value of applying data-driven, programmatic methods to video advertising is more apparent than ever, brand safety remains a top concern for advertisers and agencies, specifically ad fraud and viewability.







Taking the lead to fight bad ads for buyers and sellers

Bad ads — carrying malware, covering up content or promoting fake goods — create a negative online experience for everyone. DoubleClick and Google combat bad ads with a robust set of ads policies and automated and manual content reviews. DBM automatically filters spam across all the video exchanges that it buys on. Our sophisticated technology and global team of experts disabled more than 780 million ads for violating DoubleClick and Google policies in 2015.

100+ people

work on DoubleClick's fraud prevention team

DBM's pre-bid video spam filtration across the top 12 video exchanges by volume



	Spam Rate
Exchange A	15%
Exchange B	11%
Exchange C	11%
Exchange D	23%
Exchange E	29%
Exchange F	13%
Exchange G	6%
Exchange H	14%
Exchange I	6%
Exchange J	6%
Exchange K	16%
Exchange L	1%



Viewability





The state of video viewability is improving across the industry

Viewability is crucial, but it's important to keep in mind that with video, viewability is an indicator of whether or not your ad had a chance to be seen – not the impact of your ad. In addition to viewability, there are several factors that drive results for brand campaigns, such as: Are your ads heard as well as seen? Is the viewer interested in seeing video and paying attention to your ad? And most importantly, for how long do they watch and listen?

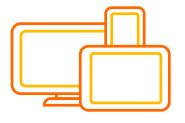






State of viewability for video ads in 2016

In 2015, we took a <u>detailed look at the state of</u> <u>video viewability</u> across the industry. In our 2016 analysis, we found that video viewability has improved across the industry but remains uneven across screens, countries and exchanges.



66% of video ads

are viewable on the **web and apps** (not including YouTube) across desktop, mobile, and tablet. in 2015, 54% were viewable



93% of video ads

are viewable on **YouTube** across desktop, mobile, and tablet — the global leader for video viewability. in 2015, 91% were viewable

Per the Media Ratings Council a video ad is viewable when a minimum of 50 percent of the ad is in view for a minimum of 2 continuous seconds.

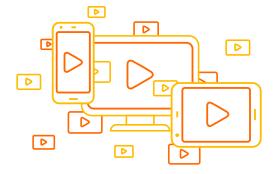
- 1. Video viewability across the web including both data from across the web (desktop, mobile, and tablet) and mobile in-app ads, not including YouTube.
- 2. Video viewability data for YouTube, including both data from across the web (desktop, mobile, and tablet) and mobile in-app ads.





Desktop video viewability continues to lag behind mobile and tablets in 2016

Viewability by Device



	Rest of Web & Apps	YouTube	
Mobile	73%	95%	
Desktop	64%	87%	
Tablet	81%	95%	



Video ad viewability varies significantly by country

with the exception of YouTube, which has consistently high levels of viewability globally

North America

	Rest of the web		YouTube	
	2015*	2016	2015	2016
United States	54%	62%	91%	93%
Canada	61%	72%	91%	93%



- 1. Video viewability across the web including both data from across the web (desktop, mobile, and tablet) and mobile in-app ads, not including YouTube.
- 2. Video viewability data for YouTube, including both data from across the web (desktop, mobile, and tablet) and mobile in-app ads.





^{*}Did not include mobile app viewability

Video ad viewability varies significantly by country

with the exception of YouTube, which has consistently high levels of viewability globally

Latin America

	Rest of the web		YouTube	
	2015*	2016	2015	2016
Mexico	80%	73%	89%	93%
Brazil	76%	70%	89%	92%
Argentina	84%	77%	87%	92%



- 1. Video viewability across the web including both data from across the web (desktop, mobile, and tablet) and mobile in app ads, not including YouTube.
- 2. Video viewability data for YouTube, including both data from across the web (desktop, mobile, and tablet) and mobile in-app ads.





^{*}Did not include mobile app viewability

Video ad viewability varies significantly by country

with the exception of YouTube, which has consistently high levels of viewability globally

Europe, Middle East & Africa

	Rest of the web		YouTube	
	2015*	2016	2015	2016
Great Britain	58%	69%	91%	94%
Germany	69%	67%	92%	92%
Russia	86%	79%	91%	94%
France	69%	65%	89%	92%
South Africa	77%	78%	93%	93%
Turkey	82%	81%	82%	91%
Spain	75%	74%	89%	93%
Italy	56%	58%	89%	91%
Netherlands	85%	81%	89%	93%



- 1. Video viewability across the web including both data from across the web (desktop, mobile, and tablet) and mobile in-app ads, not including YouTube.
- 2. Video viewability data for YouTube, including both data from across the web (desktop, mobile, and tablet) and mobile in-app ads.





^{*}Did not include mobile app viewability

Video ad viewability varies significantly by country

with the exception of YouTube, which has consistently high levels of viewability globally

Asia Pacific

Rest of the web		YouTube		
	2015*	2016	2015	2016
India	79%	67%	90%	91%
Korea	65%	81%	88%	93%
Japan	83%	75%	91%	94%
Thailand	79%	81%	86%	92%
Australia	64%	62%	91%	93%
Taiwan	67%	78%	84%	92%
Malaysia	75%	67%	90%	91%
,				



- 1. Video viewability across the web including both data from across the web (desktop, mobile, and tablet) and mobile in-app ads, not including YouTube.
- 2. Video viewability data for YouTube, including both data from across the web (desktop, mobile, and tablet) and mobile in-app ads.





^{*}Did not include mobile app viewability

Not all video exchanges are equal

Average domain viewability and median domain viewability rates vary dramatically across the top seven exchanges where DBM buys video ads. Only one exchange has a median rate over 70%, and four exchanges are under 40%.

Video viewability across the top 7 video exchanges by impression volume

	Avg Domain Viewable Rate	Median Domain Viewable Rate
Exchange A	62%	70%
Exchange B	22%	16%
Exchange C	47%	40%
Exchange D	52%	49%
Exchange E	31%	22%
Exchange F	39%	27%
Exchange G	42%	36%



Conclusions





Implications for advertisers and agencies

As viewership fragments across services and devices, advertisers will increasingly need to embrace cross-screen programmatic video strategies to reach their audiences.

Programmatic Direct allows advertisers to secure premium video inventory, including the most-watched content on YouTube, Google Preferred.

Advertisers should protect themselves from fraud by evaluating the spam rates on the ad exchanges they use.

Video ad viewability across the web and apps is on the rise; YouTube now has the highest video viewability of all major video platforms.

While video viewability is increasing, there are significant variations by platform, market, and player size. To drive impact, advertisers should choose exchanges with high viewability and access to large player sizes.





Implications for broadcasters and media companies

To most effectively monetize the video and TV audience that's becoming increasingly digital, broadcasters need to serve programmatic video ads in all of their digital content—including connected TV inventory.

Private marketplaces, such as Google Partner Select, offer a way for broadcasters and media companies to deliver the automation and data insights that advertisers and agencies want while maintaining careful control over their most premium inventory.

Media companies and broadcasters should carefully evaluate the anti-fraud capabilities of their partners.

While overall viewability has improved, its inconsistency across the industry remains a top concern for advertisers. Publishers should continue to prioritize page and player optimizations to deliver high viewability.





Conclusions

In this era of all-the-time video and TV viewership, programmatic allows broadcasters, media companies, advertisers and agencies to capitalize on fragmenting viewership patterns. With premium digital content now available programmatically, it's easier than ever to connect brands to the right audiences, across devices.

Bad ads and viewability are still of concern, but new fraud prevention techniques provide more peace of mind. Advertisers and agencies using programmatic can be confident in the quality of video inventory, and broadcasters and media companies can earn more revenue with smarter, better advertising.



