



Proprietary & Confidential

# Programmatic Overview

September 26, 2018

**PTX0792**

**1:23-cv-00108**

# Introductions



## Agenda

### Evolution of Digital Advertising

- The process of advertising
- The media landscape
- Evolution of digital

### Programmatic in Digital Advertising

- Real-Time Bidding
- Programmatic advertising defined
- The process of programmatic advertising
- Industry benefits, challenges and trends

### Google's role in the ecosystem

- How we fit into the ecosystem
- Industry challenges
- Our investments and commitments



Proprietary + Confidential

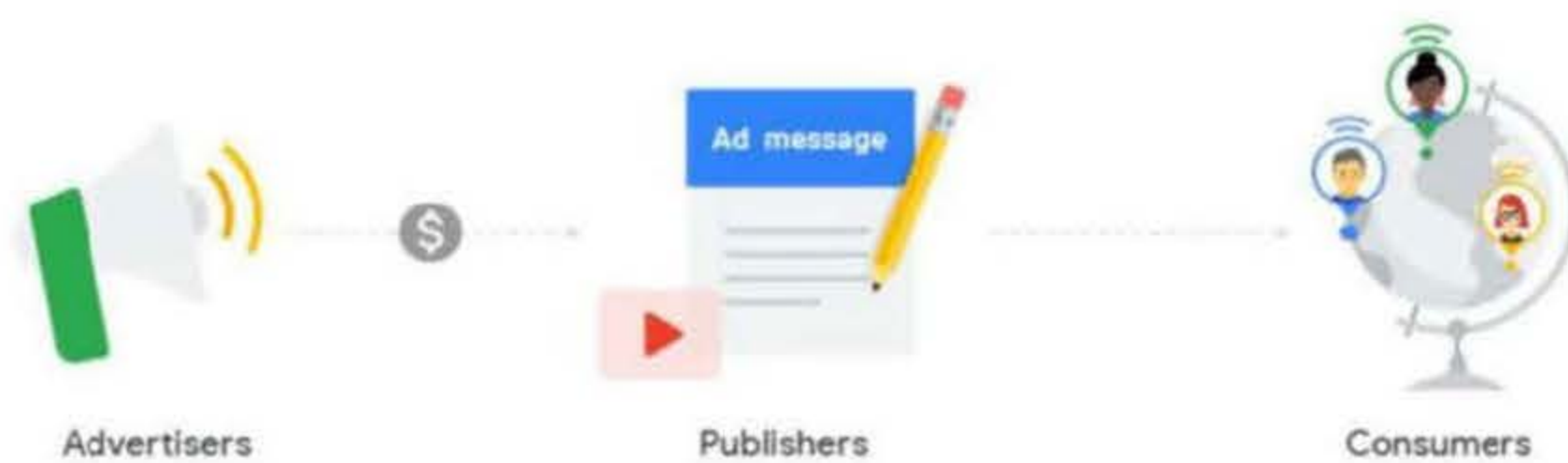
Proprietary + Confidential

# Overview of Digital Advertising

Google



## Advertising in its purest form



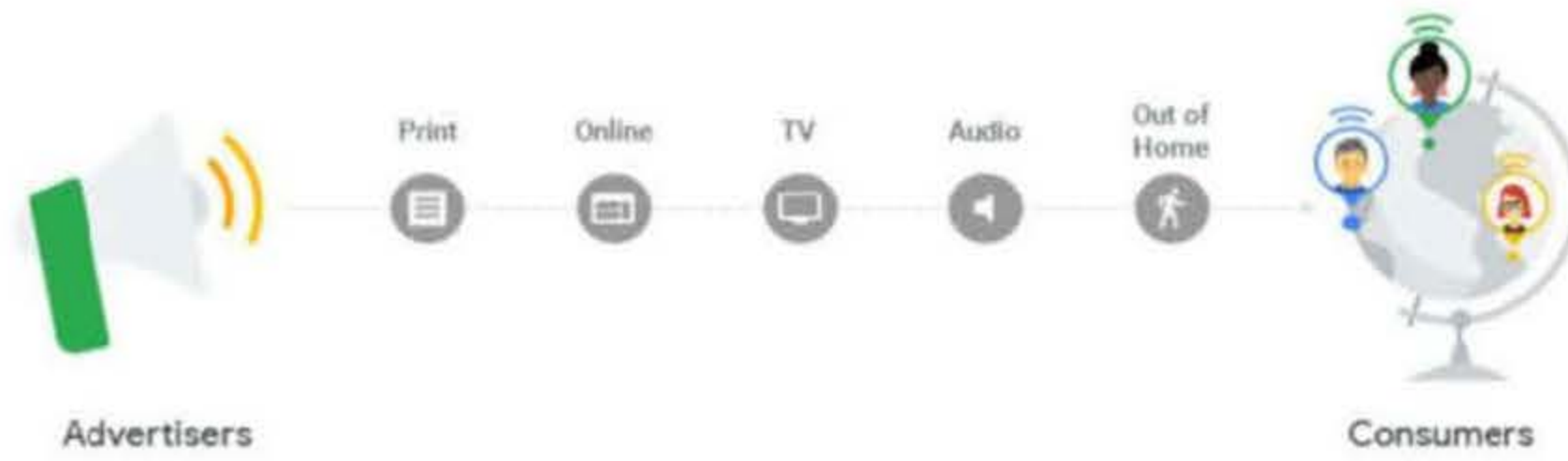
Google

## Advertising in its purest form



Google

Media is used as a communication medium for an advertisement



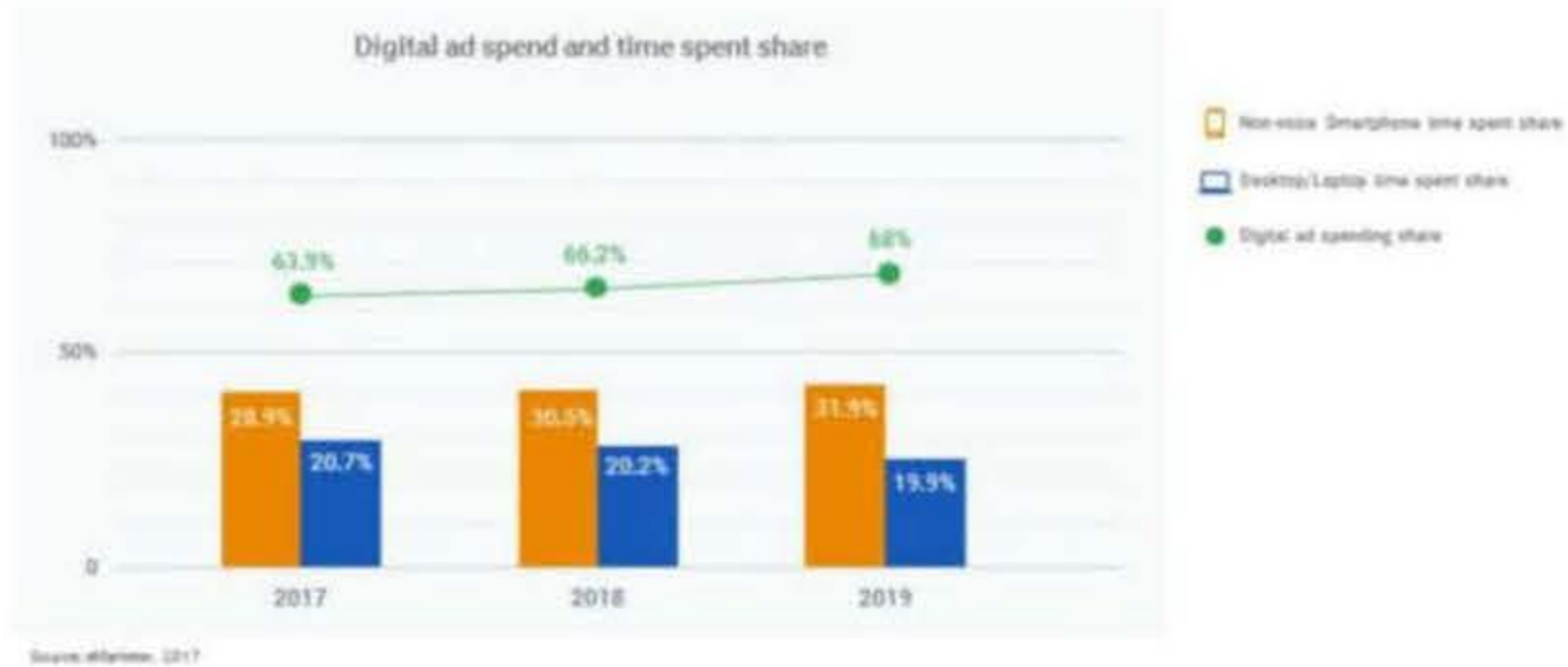


... and this can be done through various advertising channels





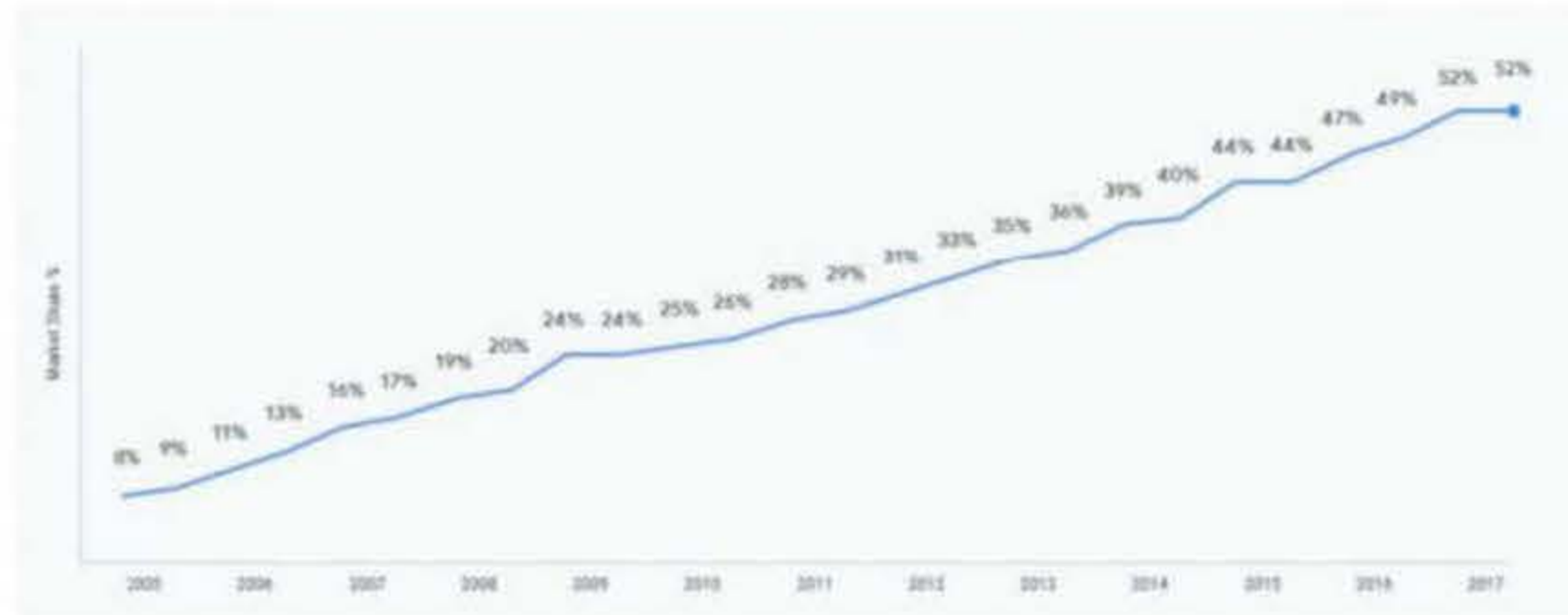
## A change in media consumption influenced how and where advertisers spend their advertising budgets overtime





Source: <https://www.slideshare.net/wearesocial/digital-in-2018-in-the-united-kingdom-86861467>

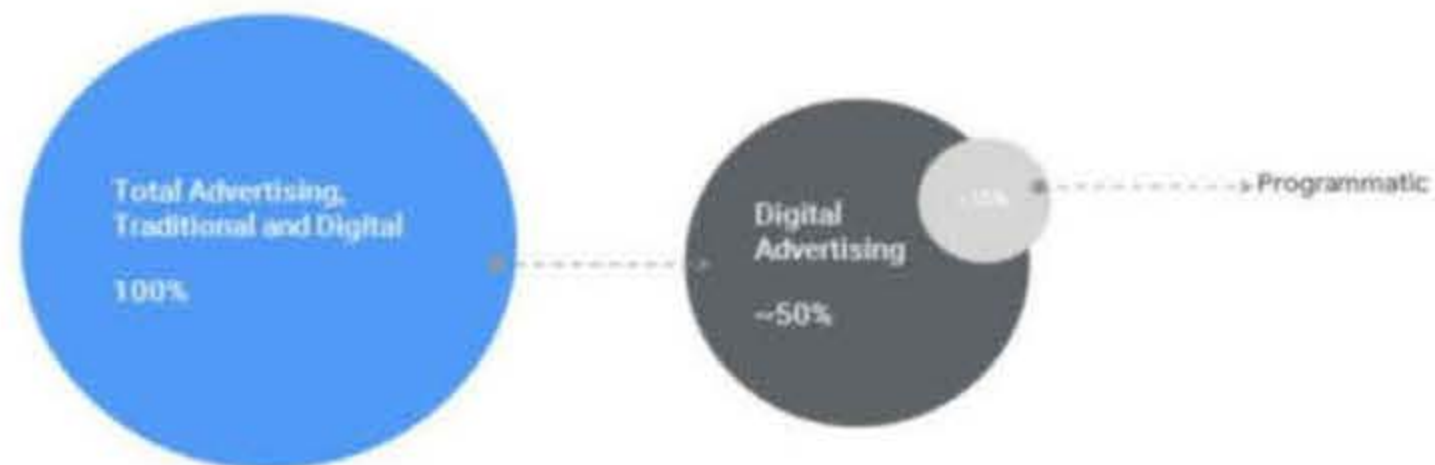
## Digital is now half of UK advertising spend



Digital includes broadcast TVC and digital video / magazine brands  
Source: IAB / PwC Digital Adspend 2017 & WARC



## Digital is a part of the advertising landscape



Total ad: 18.8b, 100%  
 Digital: 11m, 50%  
 Programmatic: 15-18% 3.3b

With digital, consumers see more ads in more media than ever before



## Bringing new challenge to advertising



Adopting new technologies and adapting business processes into dated platforms and organizations



Solving for complexity in managing performance across all digital



Growing competition with other advertising media and inefficiencies in reaching audiences online



Retaining and growing digital revenues and audiences on-site





Programmatic was the next step  
to help publishers earn more from  
their content.



# Overview of Programmatic



## To recap: Where advertising has evolved



## The buying and selling of advertising has changed



Analogue



Digital



## Real-Time Bidding introduced us to automation





Real-time bidding (RTB) refers to the buying and selling of online media through real-time auctions.



## Real-Time-Bidding technology delivers greater precision in media buying than traditional advertising

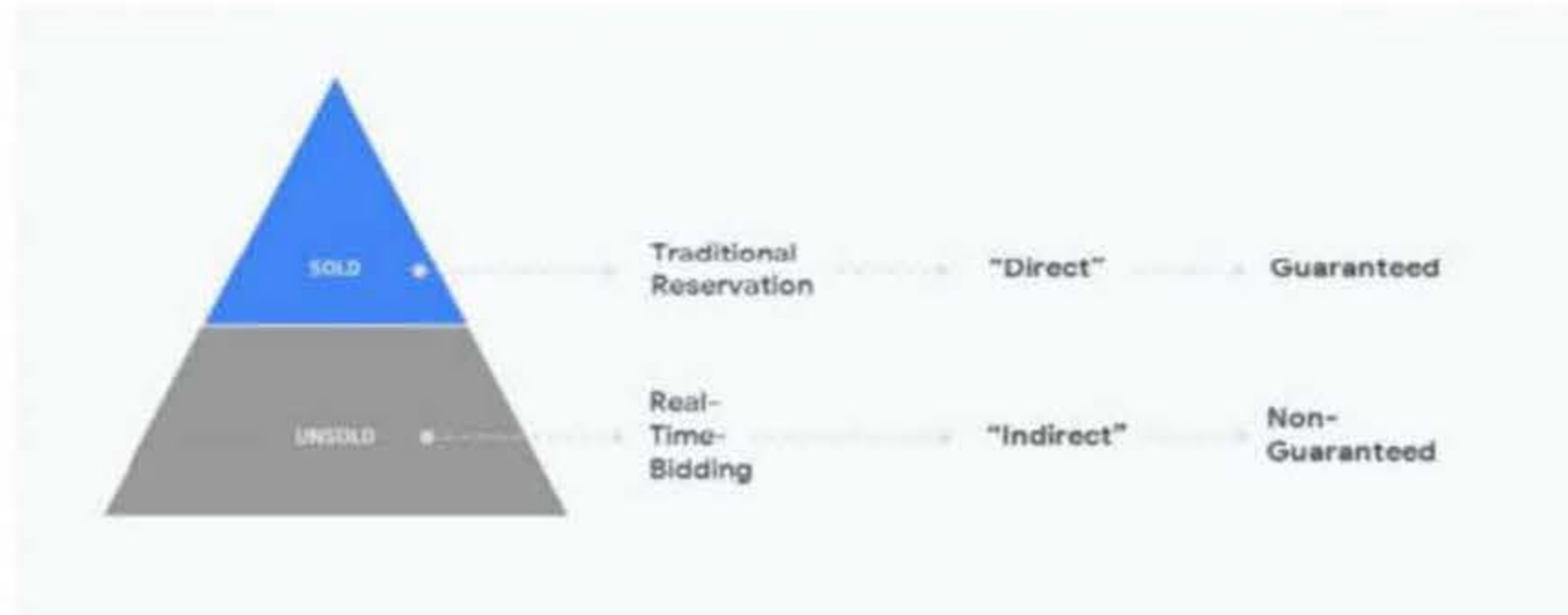


## Real-Time-Bidding tools offered more benefits to publishers and advertisers

	 Publishers	 Advertisers
Transparency	Real time reporting on programmatic activity	Real time reporting on programmatic activity
Control	Ability for pubs to command a minimum price for their advertising placements Automated controls to manage publisher business requirements (e.g. blocklist, restrictions, limitations on types of advertising)	Target and buy only the advertising they want, at an appropriate value, and in "real-time"
ROI	Higher eCPMs Improve publisher sell through rate More Revenue	Higher performance, More reach or exposure for campaigns with same spend
Flexibility	Single integration to access all Real-Time Buying advertisers	Single integration to access programmatic enabled publishers

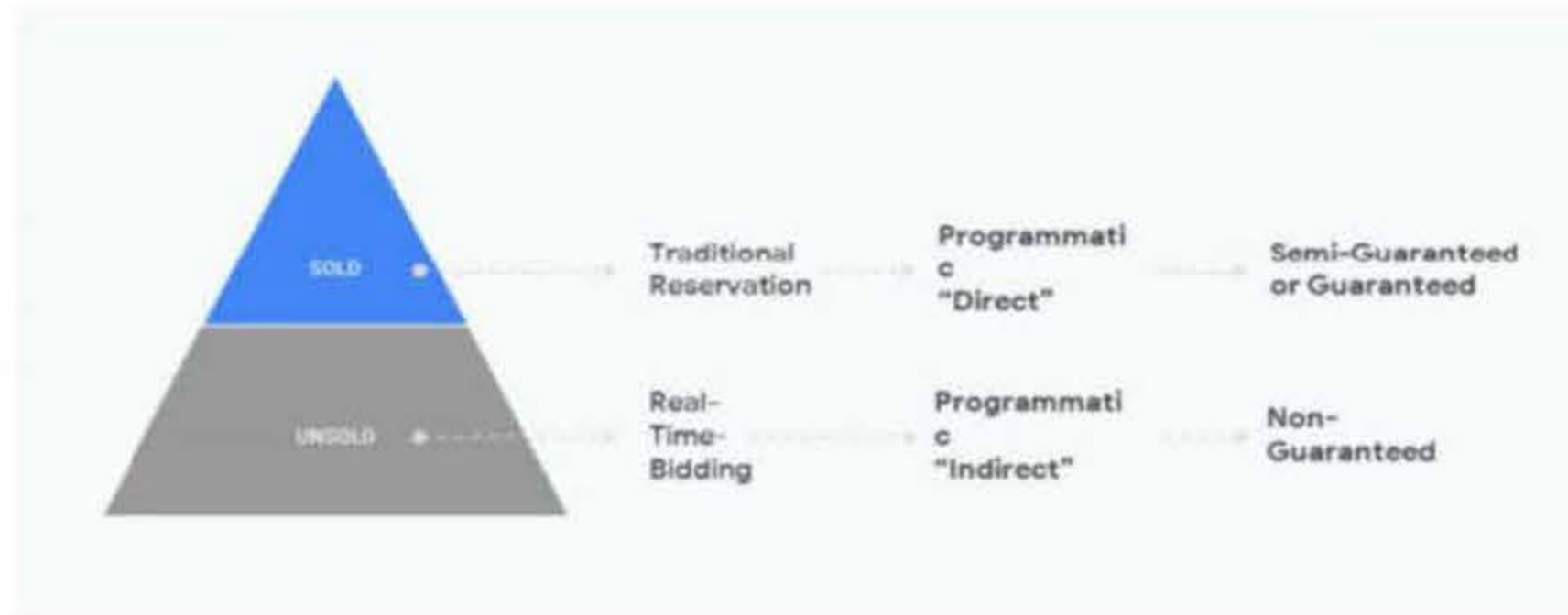


## Publishers focused on their unsold ad inventory with Real-Time-Bidding





## Programmatic was the next step



## What is programmatic advertising?



**Programmatic advertising is the automation of buying and selling of digital advertising**

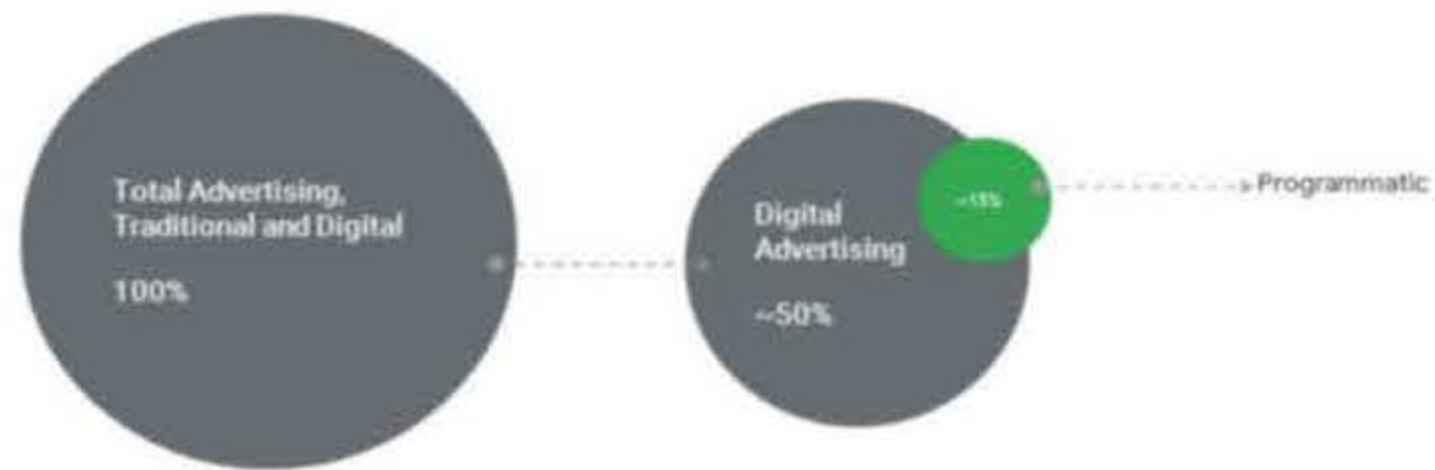
## Publishers have 4 main techniques to sell advertising placements



Source: IAB / PwC Digital Adpendix 2011



## Programmatic is a part of digital advertising



Total ad: 18.8b, 100%  
 Digital: 11m, 50%  
 Programmatic: 15-18% 3.3b

## How programmatic advertising works



## How programmatic advertising works



## Why Publishers have adopted Programmatic

- 1 **Changing user behaviours reflected in how advertisers spend:** Publishers have had to adapt their advertising business due to change in user behaviours and how advertisers have allocated ad spend. Programmatic is a growing share.
- 2 **Efficiency gains:** Programmatic streamlines the traditional process of selling advertising through automation. Gains include better integration of audience data.
- 3 **Revenue:** Publishers could build on existing partnerships with the benefits of programmatic, including more options to sell advertising placements. Some of these budgets were not always captured through traditional advertising.
- 4 **Control & Transparency:** Programmatic gives publishers control and choice over who, how and at what rate they allow buyers to transact across their advertising placements (e.g. controls and reporting)
- 5 **Globalisation:** With more audiences online and with more advertising pounds being spent through programmatic, UK publishers can are able to reach more buyers around the world







## Benefits to Advertisers and Agencies

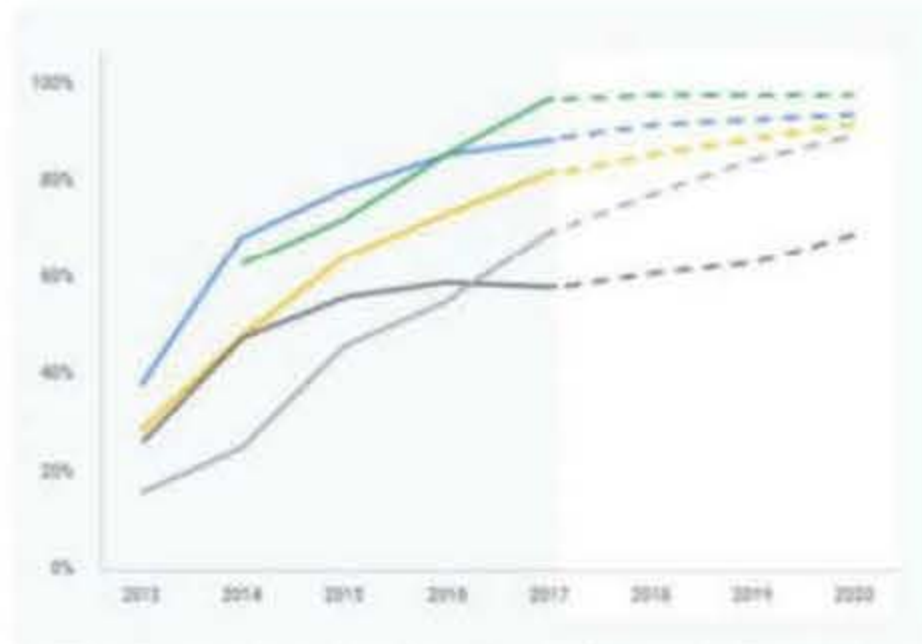
- 1 **Consumer Change:** Advertisers have had to adapt to where their consumers are today
- 2 **Efficiency gains:** Programmatic improves how advertisers reach their audiences online
- 3 **ROI:** Improved use of data to measure performance of ads, allowing advertisers to optimise or make changes to their campaigns in real time for better ROI
- 4 **Smarter transactions, reduced wastage:** Better use of data to improve their chances of reaching the right audiences online and reducing wastage
- 5 **Control & Transparency:** Transparency and control on what publisher sites their advertising served on to understand where ads are placed
- 6 **Globalisation:** With more audiences online and with publishers selling advertising space through programmatic has allowed advertisers to reach consumers across borders more easily while accessing more publishers



## How programmatic looks in practice



## Programmatic is expected to account for 80-95% of display ad spend in the UK by 2020



Note: Forecast represents the consensus view of industry participants attending sessions organised as part of the study.  
Source:

	2020
Smartphone video	90-100%
Smartphone display	85-95%
Desktop video	80-90%
Desktop display	65-75%
<b>TOTAL</b>	<b>85-95%</b>

"Programmatic media has reached a tipping point in a brand's overall spend. Advertisers have been forced to have an honest look at their buying practices and re-evaluate their KPIs and ROI goals. This has led to many setting much stricter governance around what, how and through who they buy to ensure quality is factored into the equation alongside reach and cost."

Mary Healy, Accenture,  
Chair of IAB UK's Display & Data Steering Group

Source: IAB/PwC Digital Adspend 2017



## Programmatic Direct is taking growing share of the spend



## Challenges with the growth of programmatic and Real-Time-Bidding



Challenges		Impact
1	Growing complexity with the number of companies	Publishers and Advertisers have had to work harder and double down on doing their due-diligence in selecting the right company
2	Distinguishing value & service between companies	Assessing service cost, including overhead, to relative impact on revenue and return
3	Ability for industry to respond to shift in brand spend, especially publishers	Forced innovation, reactive strategy deployment
4	Upskilling organisation and employees; Having the right skills in place	Increase in skills investment and future organisation considerations



New entrants = crowding

Organizational upskill of labor = sales vs tech

Pace of revenue shift = ability for pubs to respond

Value differentiation

## The ecosystem demands of programmatic advertising continue to evolve



### Publishers

- The demand for Programmatic Direct as a channel for advertising sales continues to grow
- Focus on the creation of value levers for longer term sustainability and growth (e.g. Ozone and data)
- Increased focus for the consumer on site



### Advertisers

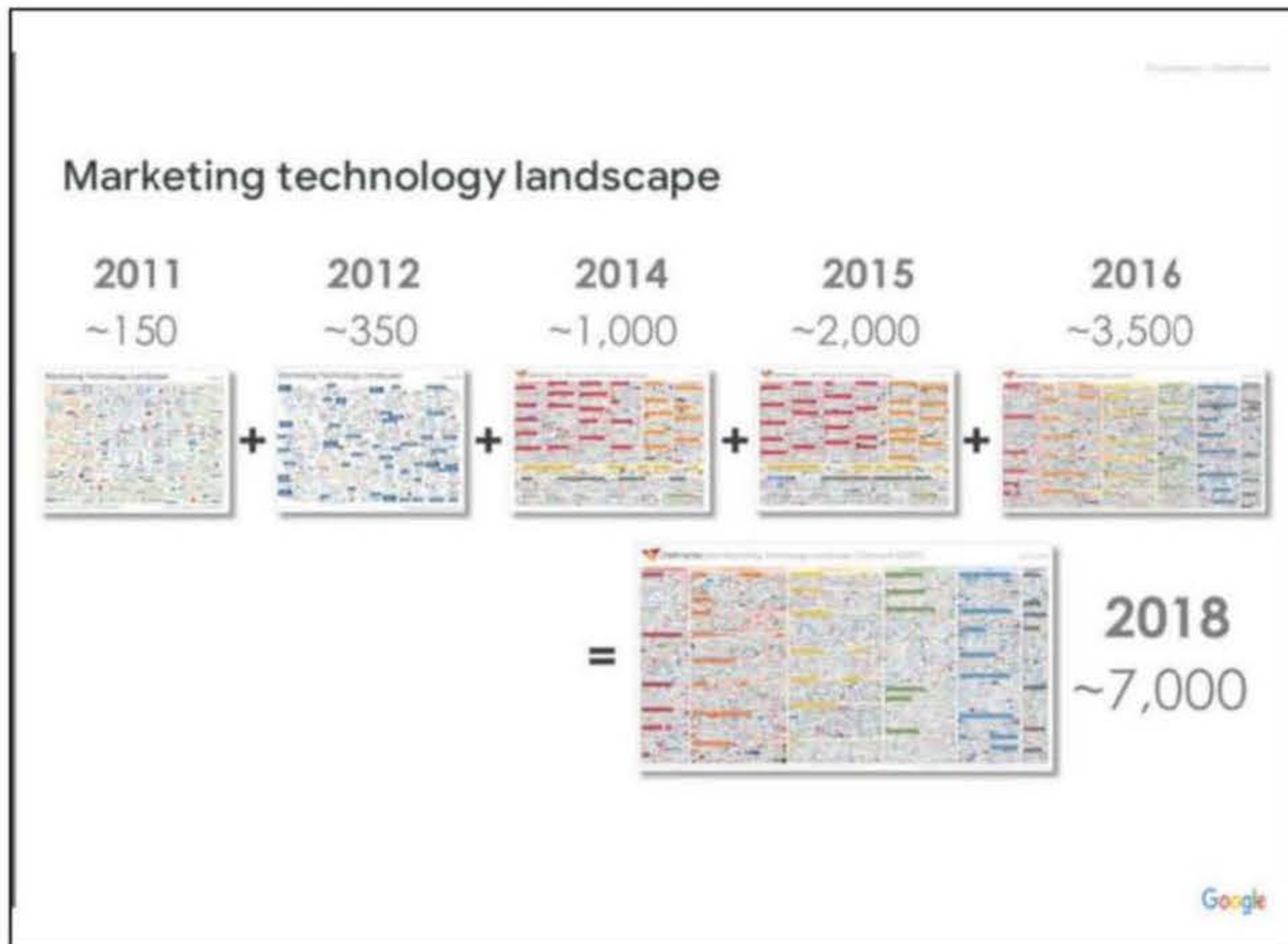
- Brand safety and quality of advertising space continues to be a priority. Context wins here
- Rethinking of the media management process with agencies, with advertisers starting to develop their own technology platforms to manage ad spend on their own
- Transparency and control into where their advertisements are placed and who is exposed







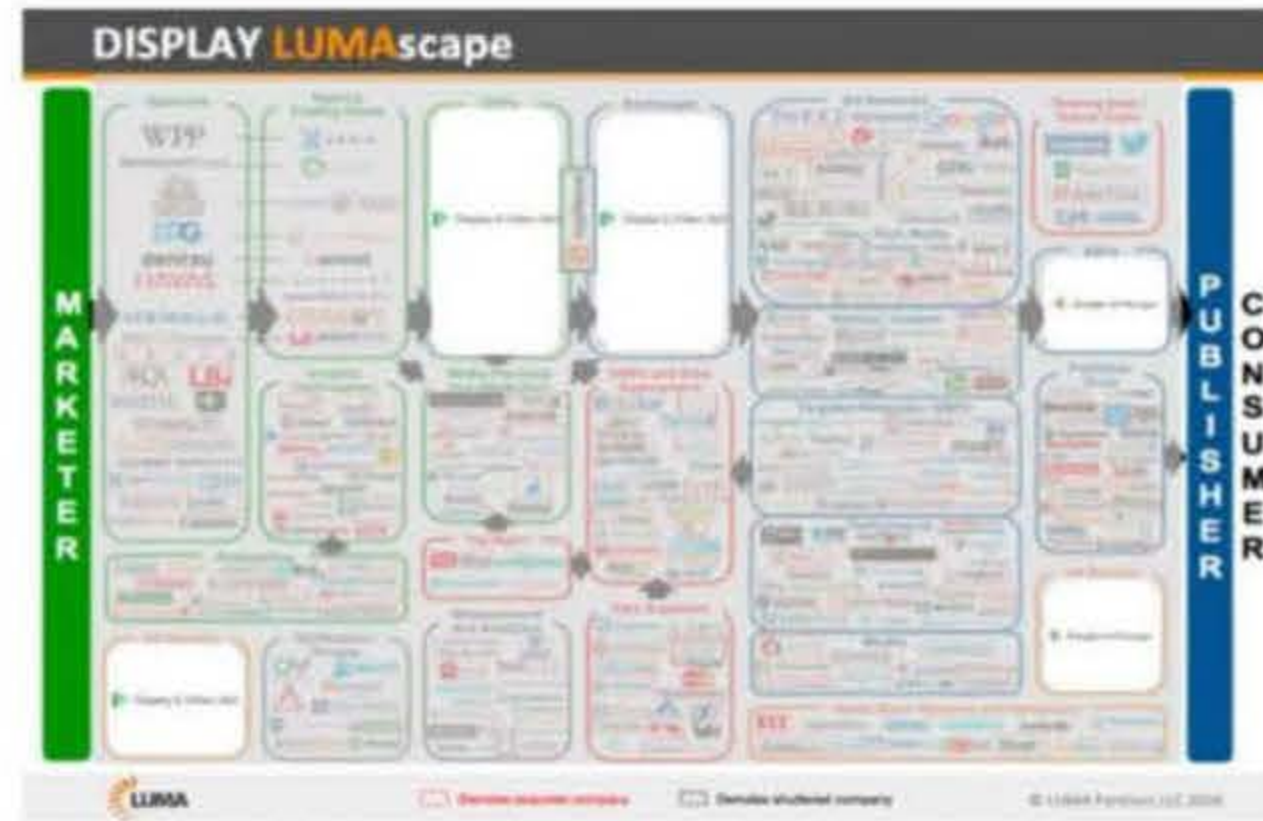




<https://chiefmartec.com/2011/08/marketing-technology-landscape-infographic/>

Clearly very competitive

## Where we fit in programmatic display



# Our role in the ecosystem



## Google's mission for Publisher partners

### **Sustain growth and create thriving businesses with advertising**

*Grow revenue and keep your brand safe wherever your audience  
is watching, playing or engaging with your brand.*



## Complete traditional and programmatic advertising chain for Publishers

*Publishers have 4 main techniques to sell advertising placements*

	Traditional		Programmatic	
	 <b>Direct Sales</b>	 <b>Networks / Resellers</b>	 <b>Programmatic Direct</b>	 <b>Programmatic Indirect</b>
Value Delivered	Guaranteed revenue in advance for premium ad placements	Additional revenue for unsold or "remnant" ad placements	Semi-guaranteed to guaranteed revenue on sold or unsold ad inventory	Additional revenue for unsold or "remnant" ad placements
Pub Pricing Strategy	Pre-defined rate, High	Pre-defined rate, Low	Pre-defined rate or minimum required, Medium to High	Auction, Medium to Low
Direct Advertiser - Publisher Relationship	Yes	No	Yes	No
Delivery	Email/phone, manual ad tags entered into a publishers ad server	Email/phone, manual ad tags entered into a publishers ad server	Automated with Demand Side Platform and publishers ad server	Automated with Demand Side Platform and publishers ad server

Source: IAB/PwC Digital Adspend 2017

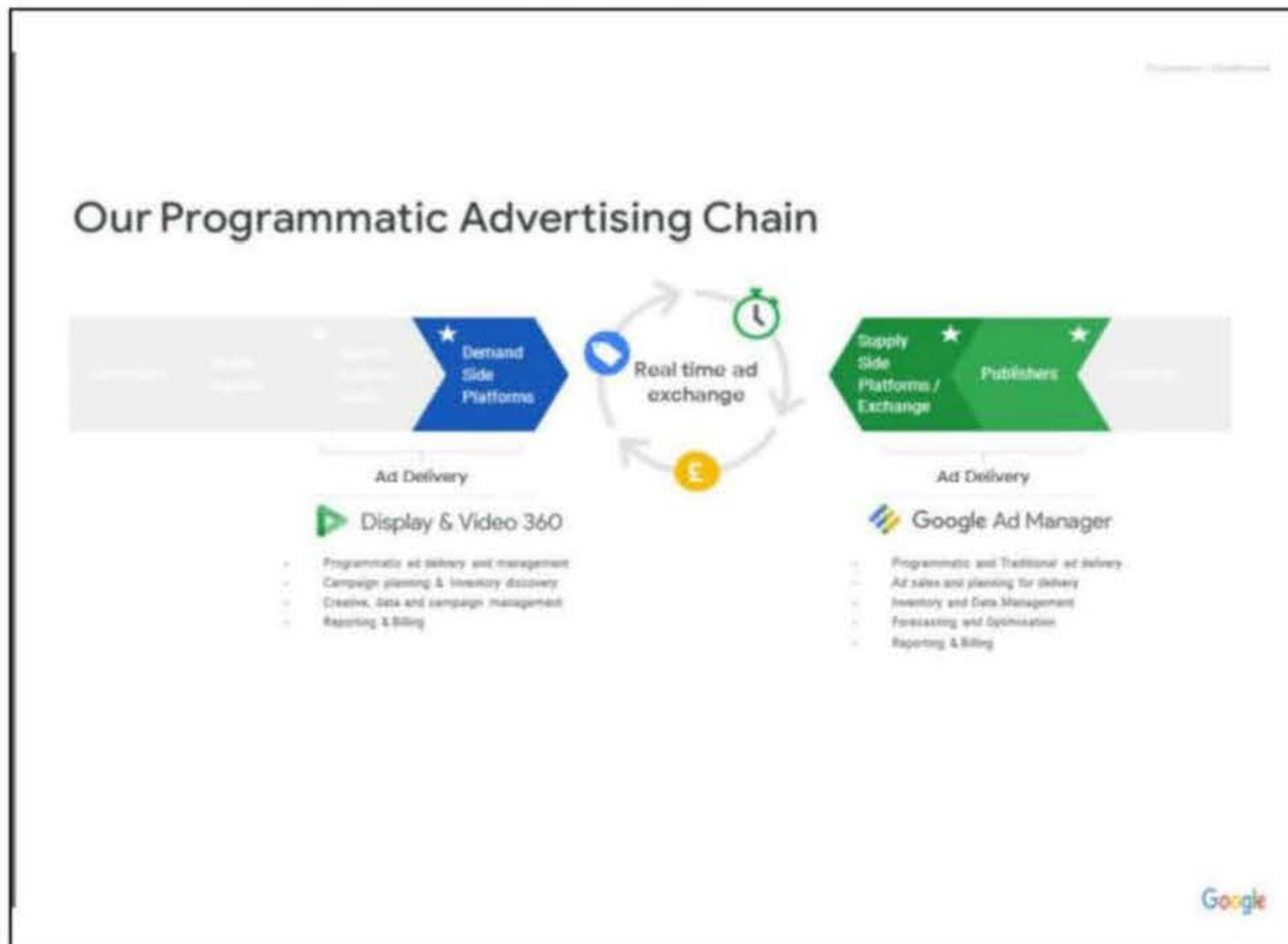


# Publishers have 4 main techniques to sell advertising placements



## The Programmatic Advertising Chain





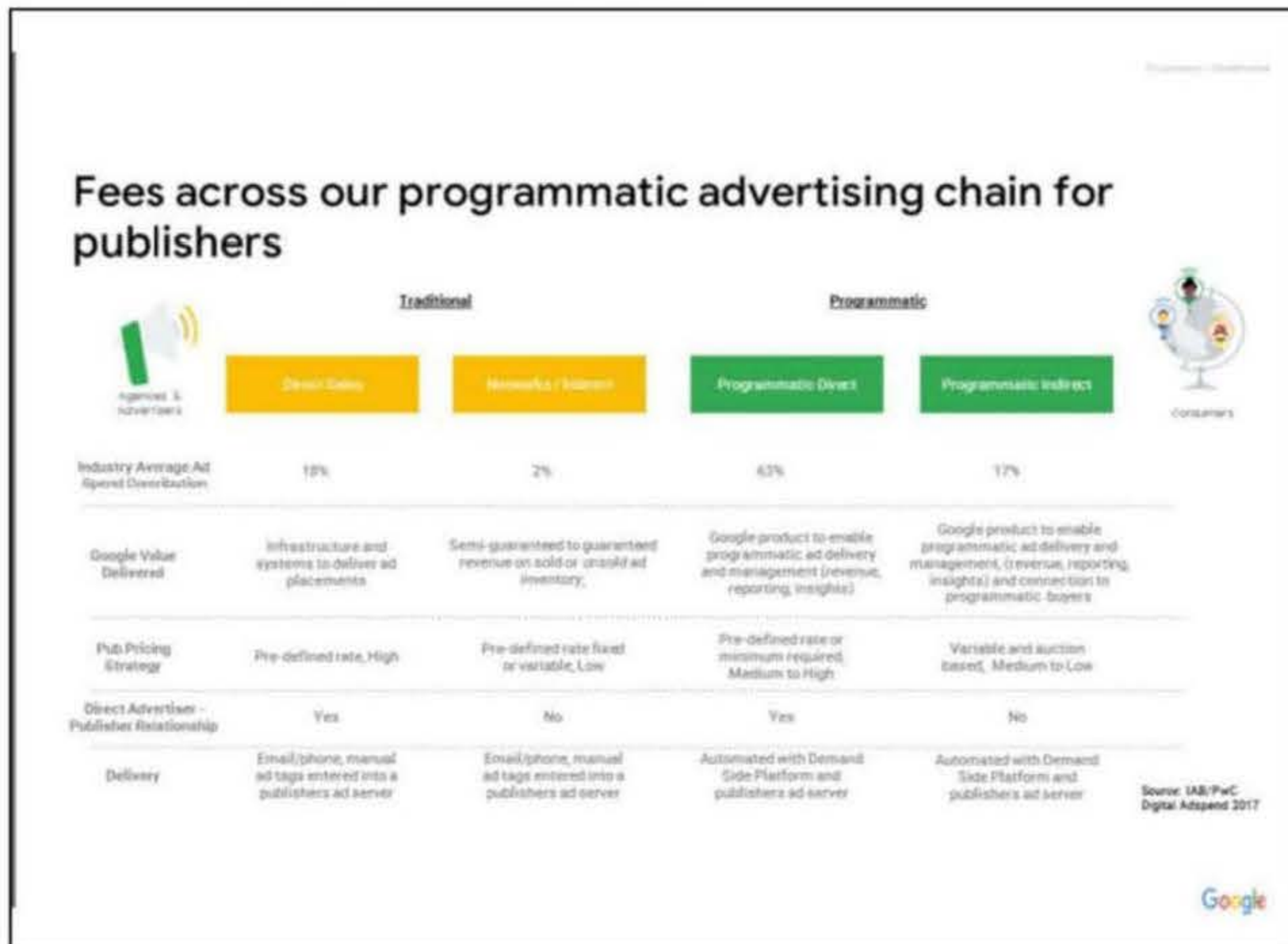
Within the programmatic advertising chain, we have 2 solutions: DV360 and Google Ad Manager

DV360 = DSP

Google Ad Manager = Ad server + SSP

In order for advertising transactions to actually take place, publishers have adopted ad servers to create advertising placements on their site and to “serve” advertisements from their agencies and advertisers. For that we offer an ad serving solution that functions as a system to enable these transaction across traditional and programmatic advertising.





Publishers have a options to sell their advertising placements through traditional reservation and programmatic.

Revisiting the 4 techniques pubs have to sell advertising, there are direct sales and indirect sales channels, which is traditionally how pubs worked with their agency and advertise clients. There would be a phone call, a paper IO, and manual exchange of "ad tags" that pubs would then traffic into their ad server. These campaigns would be semi guaranteed to guaranteed and negotiated on a pre-determined rate. Adsense is at 32% (blogpost link)

Under Programmatic, partners can leverage programmatic direct deals or programmatic indirect, or the open auction. These transactions are automated and in real-time, but pubs are still able to control and manage who buys their advertising placements, and at what price.

We offer products and solutions that enable pubs to deliver ads on their site, sell advertising to different types of buyers across direct sales and programmatic.

For just ad serving on Google Ad Manager, we charge a fee that equates to <1% of a pubs overall revenue. Ad serving is there to enable our publishers to advertise online. Typically this is a fixed rate, usually less than 2p. If we look at publisher revenue streams today, while programmatic is growing, we still see direct sales as being a critical and majority of a partners revenue. For this again, we take less than 1% for ad

serving and providing a product for pubs to create and deliver the ad.

For programmatic transactions, our rev shares can vary from 5 to 20%, dependent on the transaction type. For programmatic direct deals, which are 1:1, negotiated and managed by the publisher, our fees typically range from 5-10%. These are semi-guaranteed to guaranteed.

Moving into programmatic indirect, or what many refer to the open auction, our fees on this are 20%.

If we look at the value we, as Google deliver to our partners between these transaction types, it correlates to the revenue share applied. Most pubs see value in what we deliver them through the programmatic open auction / indirect. They have full control of how much they want to use the product.

As for the total revenue we as Google see across a single programmatic transaction in the open auction, when the publisher uses Google AdManager to monetize the inventory, and the advertiser/agency uses DV360 to buy the inventory, Google takes around ~30%. For programmatic direct, this goes down to ~10% (~10-20%). The publisher also has the option to sell the inventory to other buyers, in which case Google sees a much lower revenue share depending on the transaction type.



## Top Programmatic Advertising Challenges

- 1** **Transparency**  
The number of layers and companies in the ecosystem has convoluted the process of programmatic advertising. This includes the flow of information between advertisers and their agencies, and publishers with their SSP partnerships (Example: [Guardian](#))
- 2** **Fraud & Brand Safety**  
Advertisers are losing confidence in whether the ad placements they buy through programmatic are actually being seen, or purchased on the intended media site. Publishers in turn are losing revenue (Example: [The Financial Times](#))
- 3** **Education**  
As the industry and ecosystem rapidly evolve, with increasing demands on ROI, companies may not be doing their due diligence in investing in talent and resource. While programmatic may be a tool for advertising, the human application of best practices is just as critical in making the product work in the benefit for companies.



## Our investment areas

Product	Industry Collaboration	Education
<p>Google Ad Manager for Publishers</p> <p>Deployment of features and policies to protect publisher brands from fraudulent activity</p> <p>Tools to maximise ad revenue across traditional and programmatic</p>	<p>Support and participation in industry-wide initiatives to reduce fraud and improve transparency</p> <ul style="list-style-type: none"><li>- Ads.txt</li><li>- Coalition for Better Ads and Better Ads Standard</li></ul> <p>Google News Initiative and the Google News Innovation Fund</p>	<p>Product Working Groups with Publishers</p> <p>A/B/C level events for organisation decision makers and practitioners</p>



## Developing quality publisher solutions

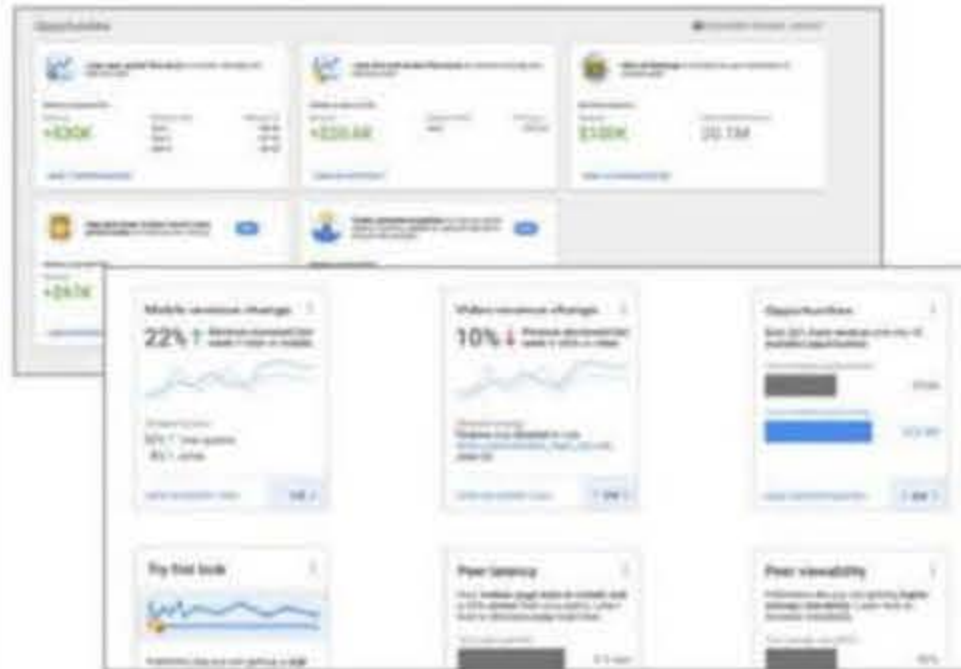


*Ad delivery and total revenue management across  
traditional advertising and programmatic advertising*

In 2017, we paid \$12.6 billion  
— an average of more than  
70% of our revenues across  
our third party display  
advertising services — to  
publishers, many of them  
news



## Providing publishers with tools to make even more revenue



Our Google Ad Manager product and yield management solution help publishers overcome key monetisation challenges by focusing on the following:

- Maximise overall yield
- Maximise overall auction pressure
- Aggregate demand

Underpinning some of this work is opportunities & experiments that applies machine learning to automatically surface key insights about revenue opportunities that publishers should test





Since we launched this feature in October 2016, publishers have implemented nearly 12,000 opportunities, generating additional revenue estimated in the hundreds of millions annually, according to Google internal data





Id	Date	Text
2	09/26/2018 03:15:37	+rahulsr@google.com +suzblackburn@google.com <span>Progress - Confidential</span>
1	09/26/2018 15:07:18	Not all of this work is included in opportunities and experiments, and the total benefit from all of our yield management is likely in excess of \$1B / year.
1	09/26/2018 15:07:18	+nyoo@google.com to make edits

## We've also invested in many approaches for fraud prevention and removal to protect publishers from objectionable ads

 <b>Policy</b>	 <b>Enforcement</b>	 <b>Controls</b>	 <b>Escalation</b>
<p>Develop policies for ads that can appear on sites</p> <ul style="list-style-type: none"> <li>• Misleading content</li> <li>• Non-family safe content</li> <li>• Circumventing systems</li> </ul>	<p>Take action to enforce on policy non-compliant ads</p> <ul style="list-style-type: none"> <li>• Automated reviews</li> <li>• Expert reviews</li> <li>• Other reports</li> </ul>	<p>Provide publishers additional control over the type of ads and advertisers that are served</p> <p>Sensitive category examples:</p> <ul style="list-style-type: none"> <li>• Politics</li> <li>• Religious</li> <li>• Reference to sex</li> <li>• Sensationalism</li> <li>• Significant skin exposure</li> </ul> <p>Advertiser blocks</p>	<p>Provide publishers with support so unsuitable ads can be removed quickly IF they do serve</p> <ul style="list-style-type: none"> <li>• Ads Review Center</li> </ul>



With positive result

**3.2 Billion**

Policy-violating ads Disabled  
in 2017\*

\* Ads disabled before they can be served to customers

**7,000**

Accounts suspended due to  
tabloid cloaking in 2017

**66 Million**

"Click-to-Trick" Ads disabled in  
2017



## Industry Collaboration



Improve user experience

Formed to improve consumers' experience with online advertising. Google is a board member, alongside advertisers, agencies, publishers and other tech companies

<https://www.betterads.org/>

ads.txt

ads.txt

We worked with industry partners to help combat advertising fraud through the ads.txt initiative.

[More info](#)



Digital Trading Standards Group (DTSG)

YouTube and AdX are DTSG-certified. DTSG is the cross-industry standard for brand safety in the UK

[More info](#)



IAB UK Gold Standard

YouTube and AdX are IAB UK Gold Standard certified. The Gold Standard brings together the

[More info](#)



TAG-certified

We partner with the Trustworthy Accountability Group (TAG) to help fight malware, ad fraud and internet piracy

[More info](#)



## Coalition for Better Ads and Better Ads Standard



- Coalition for Better Ads is a global industry group representing trade groups, publishers, marketers, agencies, and technology providers that are dedicated to improving online ads [Members](#)
- The Better Ads Standards (BAS) identifies the ad experiences users find the most annoying based on extensive data-driven research.
- Our commitment:
  - ⇒ Member of the Coalition for Better Ads and support of the Better Ads Standard
  - ⇒ Chrome Filtering: Chrome will filter ads on sites that we identify as repeatedly showing the annoying ads identified in the Better Ads Standard or that harm or take advantage of users
  - ⇒ Ad Experience Report: A new tool in Google Search Console that lists when we have identified experiences that violate the standard.
  - ⇒ Funding Choices & Contributor: Addressing existing ad blocker usage and giving users alternative choices to fund content



## Ads.txt = Authorised Digital Sellers



- Mission: Increase transparency in the programmatic advertising ecosystem
- Announced 27th June 2017
- Initiative by The IAB Tech Lab OpenRTB Working Group (of which Google is a part), which developed the ads.txt spec <https://iabtechlab.com/ads-txt/>
- Google fully supports this initiative and will implement ads.txt functionality into our systems.
- Our commitment:
  - Supporting partner to Ads.txt
  - Ads.txt enforcement across buy and sell-side sales operations
  - Automating buyer refunds for invalid traffic
  - Increasing transparency on invalid traffic we've filtered for buyers





## Google News Initiative and Innovation Fund



The GNI builds on a 15 year commitment to the news industry.

- GNI is our effort to build a strong future for journalism
  - Elevate and strengthen quality journalism
  - Evolve business models to drive sustainable growth
  - Empower news organisations through technological innovation
- The Digital News Innovation Fund (DNI Fund) is a European programme that's part of the Google News Initiative, an effort to help journalism thrive in the digital age
- We have received more than 4,800 applications, with 461 successful projects from 29 countries, for a total amount of €94m in funding (out of an initial commitment of €150m)
- UK publishers with funded projects include The Times, The Financial Times, Johnston Press, Dennis Publishing, Trinity Mirror, Guardian, Telegraph.



<https://newsinitiative.withgoogle.com/dnifund/dni-projects/?country=GBR>

## News matters to us as a company

Google cares deeply about journalism.

We believe deeply in spreading knowledge to make life better for everyone.

It's at the heart of Google's mission.  
It's the mission of publishers and journalists.

Put simply, our futures are tied.

SUNDAR PICHAI, GOOGLE CEO

