



## Buyside Deep Dive for Suresh

Part 1: 19 March 2018 (Suresh in Kirkland)  
Part 2: 28 March 2018 (Suresh in New York)  
Part 3: 29 March 2018 (Suresh in New York)

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**PTX0993**

**1:23-cv-00108**

Part 1			
	Topic	Time	Presenters
19 March	<b>Introduction:</b> Product Portfolio, Team Structure	20 min	Payam, Max, Vlad
	<b>Business Overview:</b> Ecosystem, Revenue	60 min	Tobias, Roshan
	<b>Product Demo:</b> DBM	40 min	Roshan, Karin

Part 2			
	Topic	Time	Presenters
28 March	<b>Product Demo:</b> DCM	60 min	Luke, Karin, Deepthi
	<b>Product Strategy:</b> 2018 Strategy Overview, DV360		

Part 3			
	Topic	Time	Presenters
29 March	<b>Product Strategy:</b> Pivot to Video, Other Bets	120 min	Deepthi, Glenn, Luke

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# Product Portfolio and Overarching Strategy

Payam | 10 min

Google

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## Product Portfolio for Buyside Team

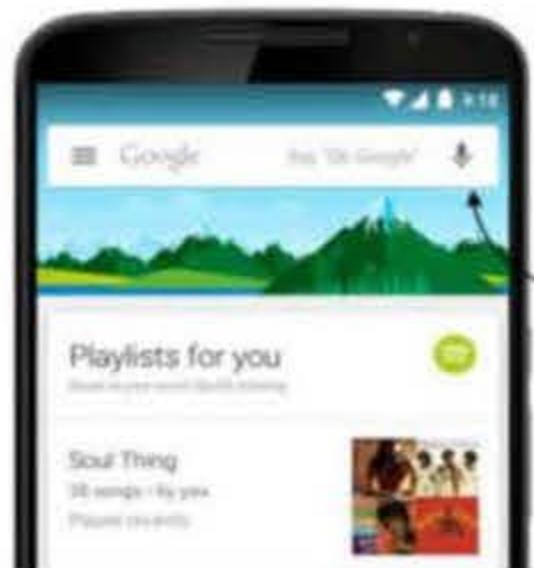


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## Overarching Buyside Strategy: Be the Decision Engine

### Android: Be the leading mobile OS



Drive  
O&O  
traffic

### DV3: Be the leading OS for large marketers



Drive  
O&O  
& network  
spend

### How?

Open source | Free | Broad  
ecosystem support

How?  
Choice | Channel consolidation |  
Source of truth | Superior ROI

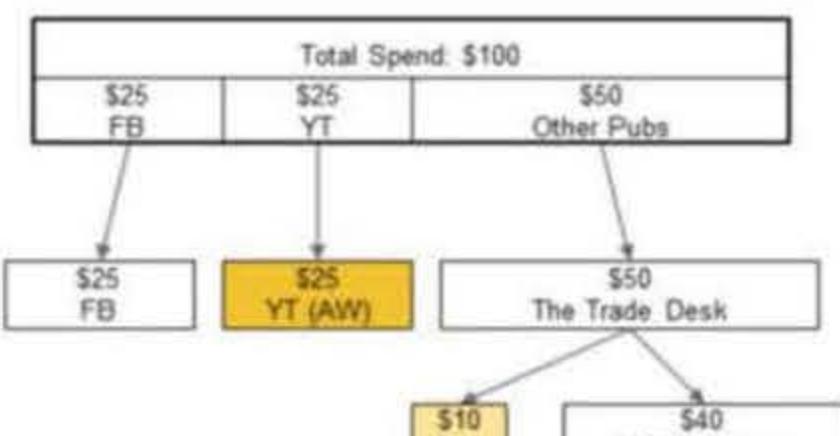
DV3  
becomes  
decision  
engine

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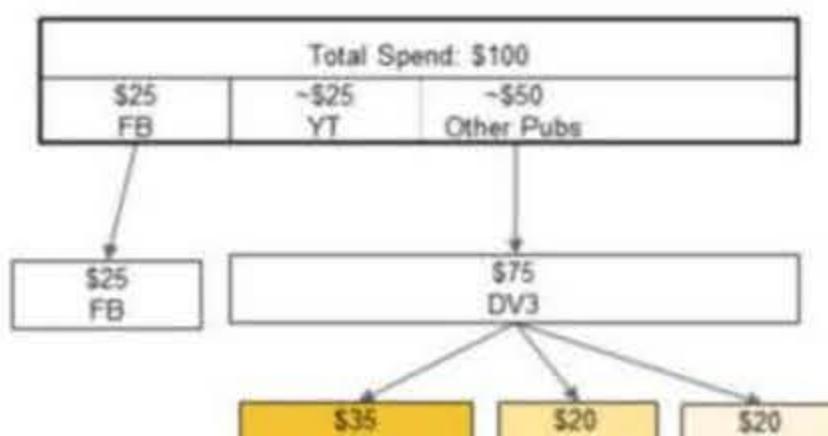
Let's take a look at how this strategy plays out in practice

**Advertiser does not use DV3**



Gross Revenue : \$35  
Net Revenue:~\$13

**Advertiser uses DV3**



Gross Revenue: \$75  
Net revenue:~\$25

- High margin revenue (O&O)
- Medium margin revenue (Network)
- Low margin revenue (3PE)

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# Team Structure

Payam, Max, Vlad | 10 min

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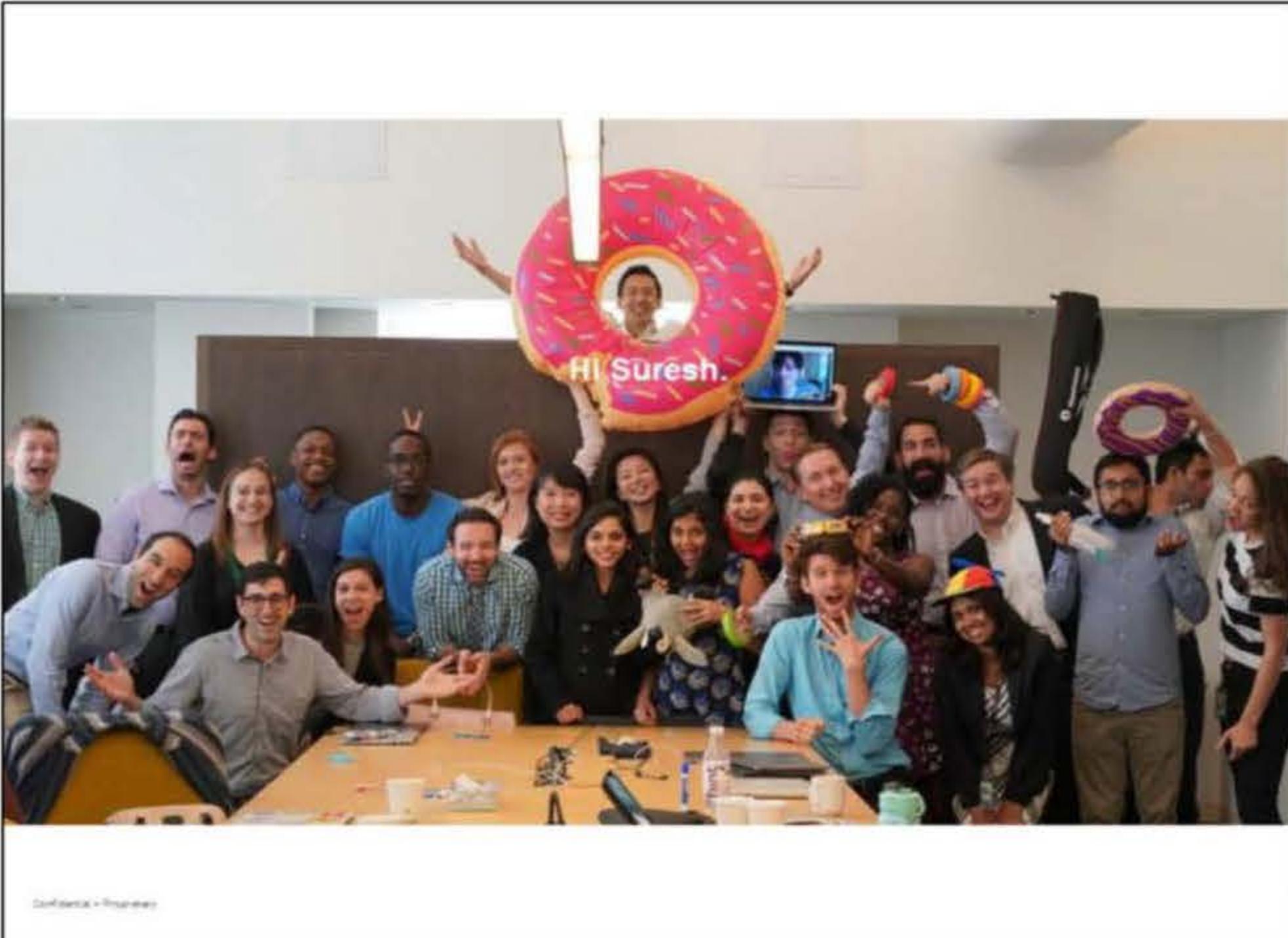
Undated archival photograph, restored.



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When we bought Invite Media in 2010, we had revenues of \$20M/year. Our revenue has since grown 300x to \$6B/year. While our PM team has only grown 6-fold.



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**Product Team:** 30 PMs, 6 pods across 3 sites (NYC, KIR, MTV)



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**Engineering Team:** ~280 engineers across KIR and NYC

KIR team: DBM, Audience Center. ~140 eng



Vivek

	Fang FE, 41 eng. FE infra, deals, API integrations		Ganesh Brand, 25 eng. Custom bidding, forecasting, experiments, lift.
	David BE, 24 eng. Serving support for features, inventory quality, programmatic TV		Alek TrueView and Planning, 22 eng. TrueView, Audio Ads, Planning
	Felix Reporting, 12 eng. Data processing business logic and billing. Infra is being consolidated on top of common infra.		Chris Audience Center, 13 eng. DAC, Audience Module in DV360

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## Engineering Team

NYC team: DCM, Studio, DBM creatives and reporting. ~140 eng



Vlad

	<b>Niranjan</b> DCM, 53 eng. DCM, Cronut, Creatives management for DCM/DBM		<b>Steve</b> Brand, 12 eng. Reporting infra (Warp)
	<b>Ranajeet</b> Studio, Formats, 34 eng.		<b>Franky</b> Verification, 15 eng.
	<b>Yuval</b> Reporting, 24 eng. Infra, DCM reporting, DBM reporting FE and DT		

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# Ecosystem

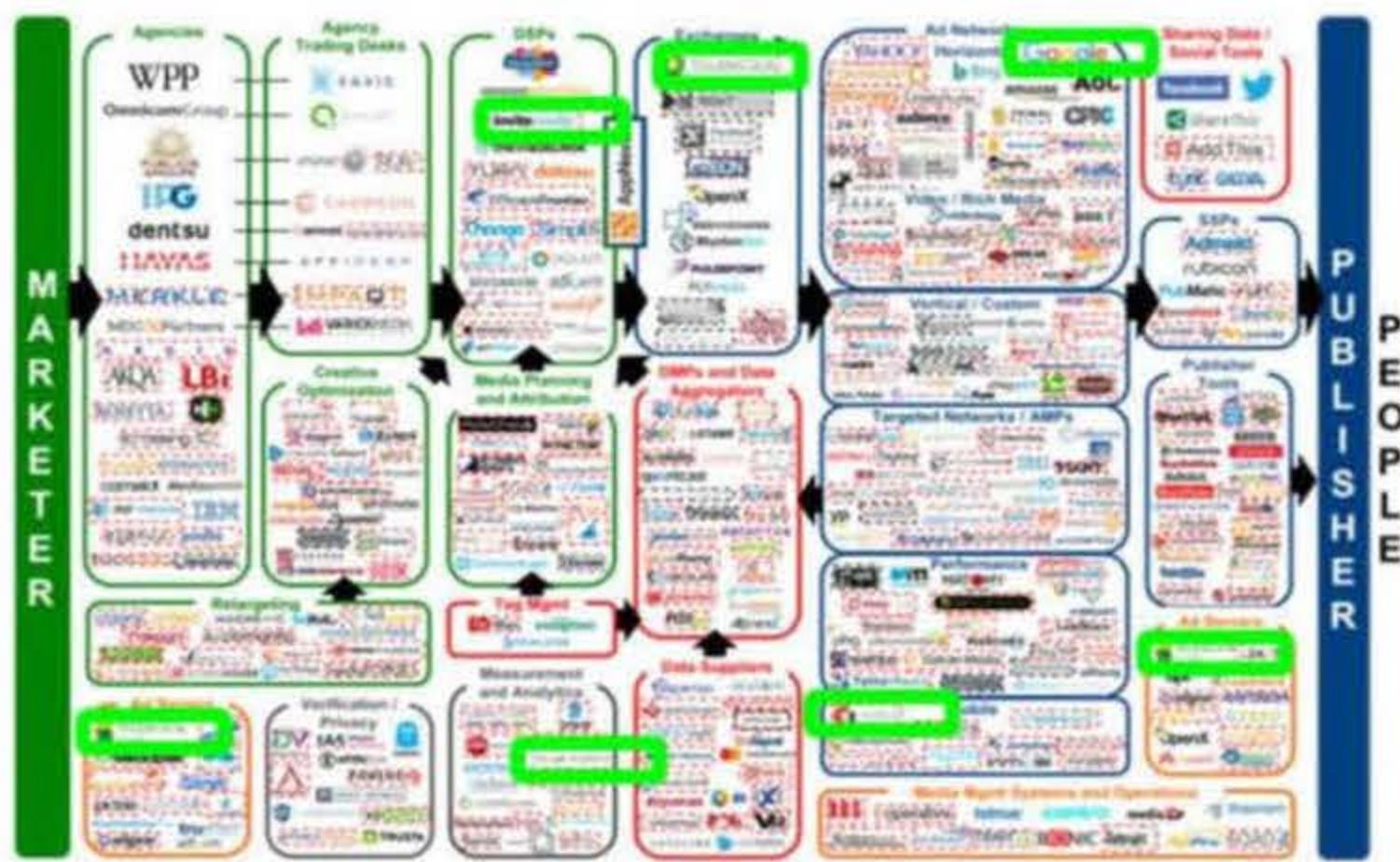
Tobias | 40 mins

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We are operating in a complex and highly inefficient ecosystem.

Google products in green.



Google

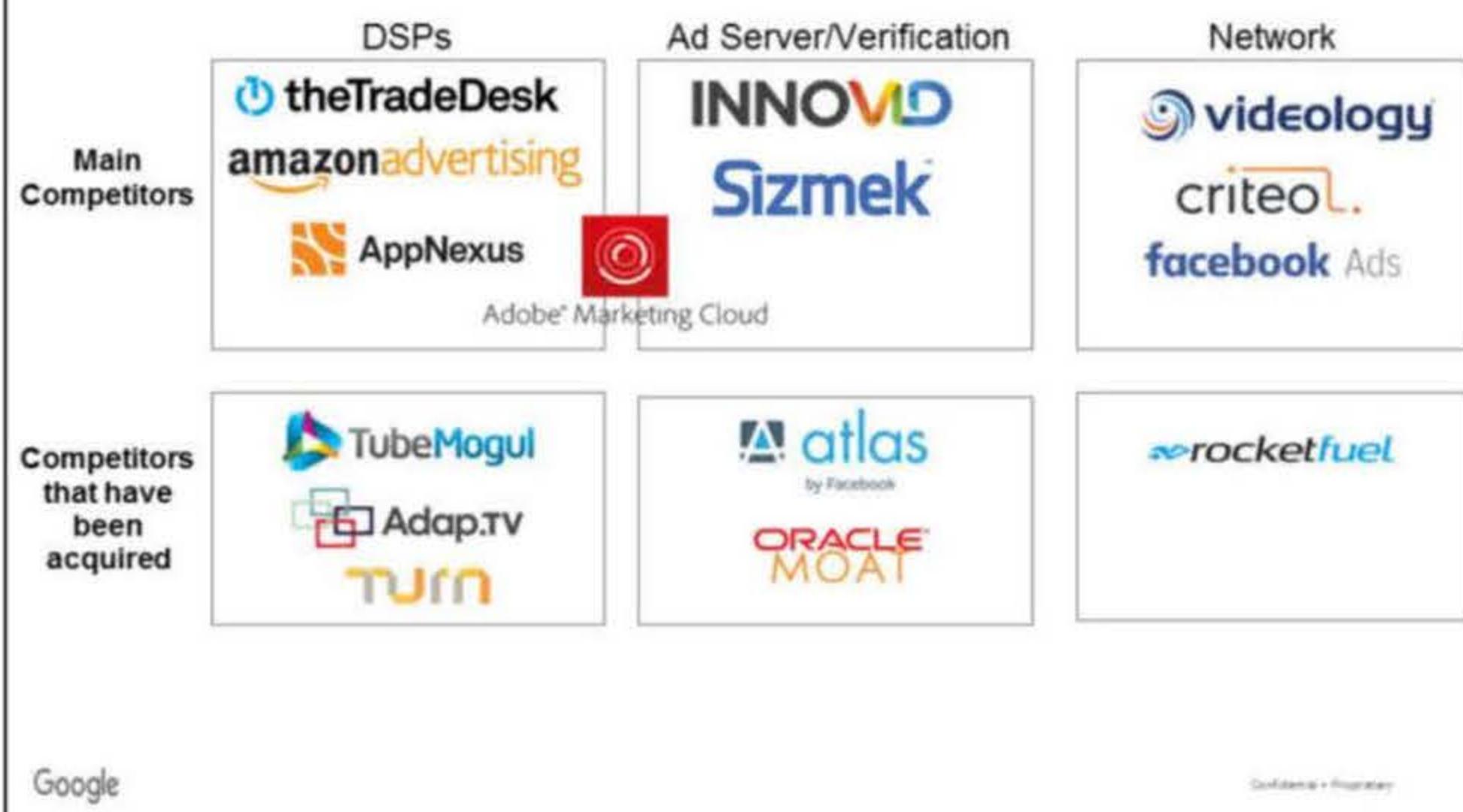
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## Market Dynamics on Demand Side

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Dynamic market with changing competitors every few years



1. Turn - acquired by Amobee, a singtel company. Not a strong competitor. Mostly display.
2. MediaMath - Still a commonly known DSP business, but not known to be strong. Independent.
3. Appnexus - Runs a sell side business and a large exchange. Rumored to be shutting down buyside platform
4. Adobe® Media Optimizer - Acquired tech, part of Adobe's marketing cloud.
5. DataXu - Small DSP, not known for strength. Mostly display.
6. Rocket Fuel - Had a very rocky public market run, recently was acquired by a large DCM competitor to pursue a 'cronut' strategy.
7. Triggit - Out of business.
8. Tubemogul (Adobe) - large and highly competitive video DSP. Acquired by Adobe recently. Strong video competitor.
9. Adap.tv (AOL Video) - Video DSP, acquired by AOL, now part of 'OATH' buyside stack.
10. Videology - Independent Video DSP
11. Criteo - Competitive performance ad network.

12. AdLearn Open Platform by AOL - Display focused DSP that is now part of the combined AOL/YAHOO business, OATH.
13. YAM+ (Yahoo) - see above.
14. The Trade Desk - Probably the most fast growing / aggressive competitor to DBM, focuses on all formats
15. Appendix competitive mega company bubbles Slide 107: Competitive Landscape



- \$308.2M revenue at 16.4% margin in 2017 (52% YoY), 403M 2018 goal
- Platform manages total of 1.55bn spend (51% YoY), 2.1bn 2018 goal
- 657 active customers

Focus on:

- Growing omni-channel (reporting >100% growth in audio, connected TV, mobile video, native)
- Global expansion, especially in China.
- Building an industry-wide identity footprint, amassing publishers, ad exchanges, and SSPs.
- Increase the company's data offering, which remains a large untapped opportunity.
- Building the tools to revolutionize media, planning and buying.

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<https://seekingalpha.com/article/4152132-trade-desk-moving-world>  
<http://investors.thetradedesk.com/phoenix.zhtml?c=254422&p=irol-newsArticle&ID=2334119>  
and 42% in Q4 (\$102.6M),



"Amazon's advertising business could reach \$5 billion in revenue in 2018"

BUSINESS INSIDER

- Second largest DSP, overall ads revenue expected to grow 4-5x to \$7bn in 2020 [BI]
- Quality intent data. "FB knows who you are, GOOG knows what you search, AMZN knows what you buy"
- Header bidding has made it easier for them to tap into large amounts of publisher inventory

Focus on:

Lifestyle segments

Reflects broad interest groups such as

- "Recent Movers"
- "Home Owners"
- Upper Funnel Awareness



In-market segments

Customers searching or browsing for certain kinds of products

- "Bedding"
- "Comforters"
- Mid-funnel Consideration



Retargeting segments

Amazon shoppers that have viewed but not purchased your products

- ASIN Retargeting
- Pixel Retargeting
- Bottom Funnel Conversion

(ASIN = Amazon Standard Identification Number); essentially product ID as defined by AMZN



The narrative that will resonate with marketers is that FB knows who you are, Google knows what you search for and Amazon knows what you buy. Amazon's pitch is focused on the quality of their rich shopping intent data which is reflected on their mid to lower funnel targeting products created using this data. Some examples are lifestyle segments like "recently moved", "bought a house" or in-market segments like "I want to buy a playmat for my 6 month old" or "car parts" (data collected from Amazon Garage) or retargeting which uniquely positions them to bring users back to purchase on their site allowing them to close the shopping loop.

## Market Dynamics on Supply Side

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50+ Exchanges with direct agreement

50+ Sub-exchanges via Bidswitch and other aggregators

Many of these are struggling, no real unique position in the market, actually buying/selling amongst each other - for example Rubicon.

\$155.5M revenue at 18.5% margin in 2017 (-44.1% YoY, margin dropped from 25%)

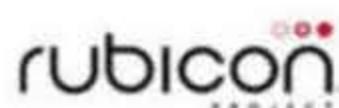
Focus on:

Eliminated 100 positions in 2017, \$20M reduction of capital expenditures, expects to EBITA positive in Q4, 2018

Eliminated buyer fees (DBM was impacted by this)

Revamped auction to be first price as default

Exchanges and SSPs: margin compression as header bidding makes yield management ineffective, buyers are smarter



slashed take rate in half over 2017



reduced their take rate even further (8.5%)



~50% of their inventory comes from exchange bidding

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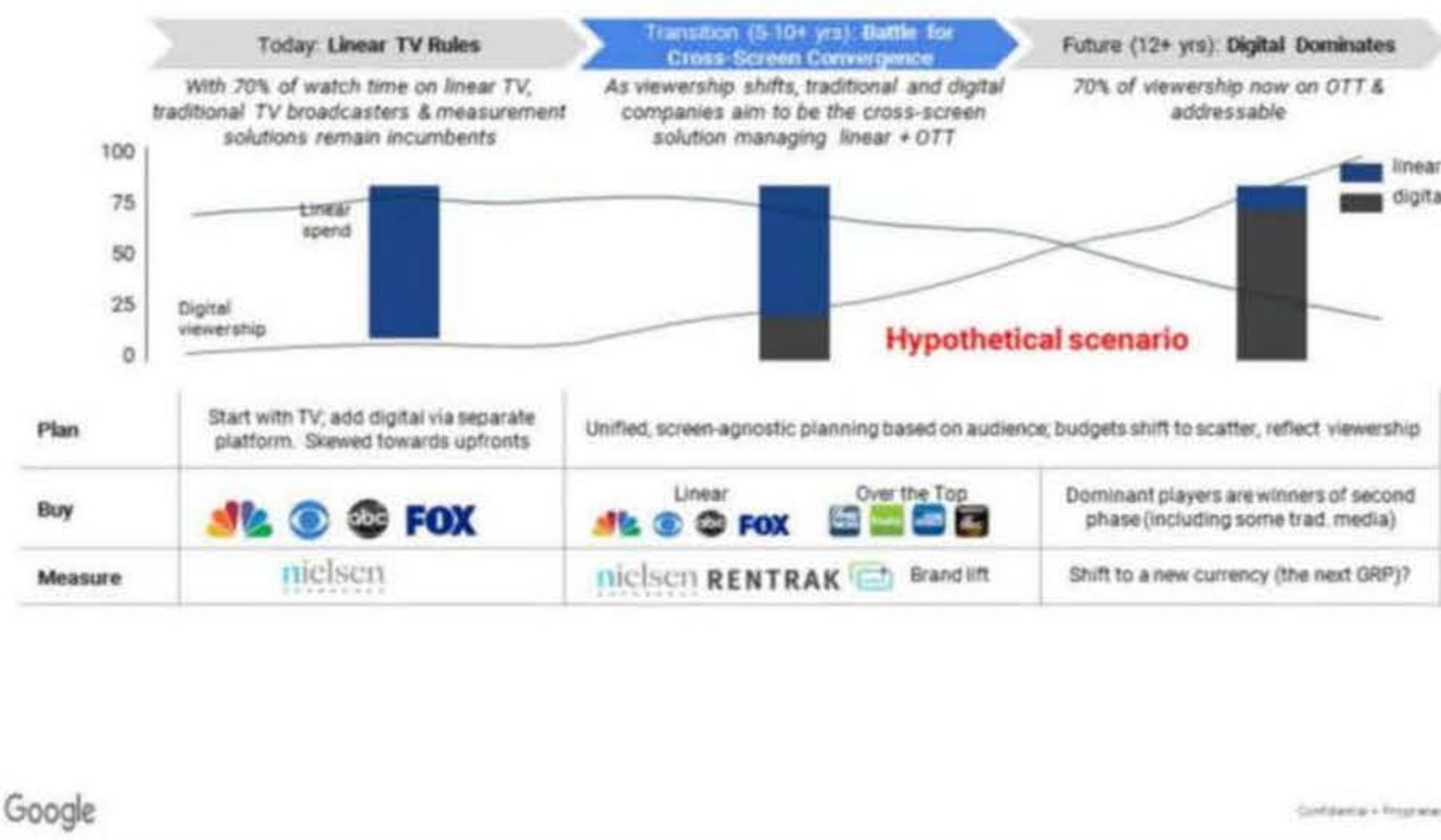


**Cookieless isn't only Mobile and logged in...**

"Platform to be developed in collaboration with NBCUniversal, Disney, Altice USA, Channel 4, Cox Communications, Mediaset Italia and TF1 Group. **The partnership is aimed at better ad planning, targeting, execution and measurement across screens.**"

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## Linear TV & Digital Video will coexist for next 5-10+ years

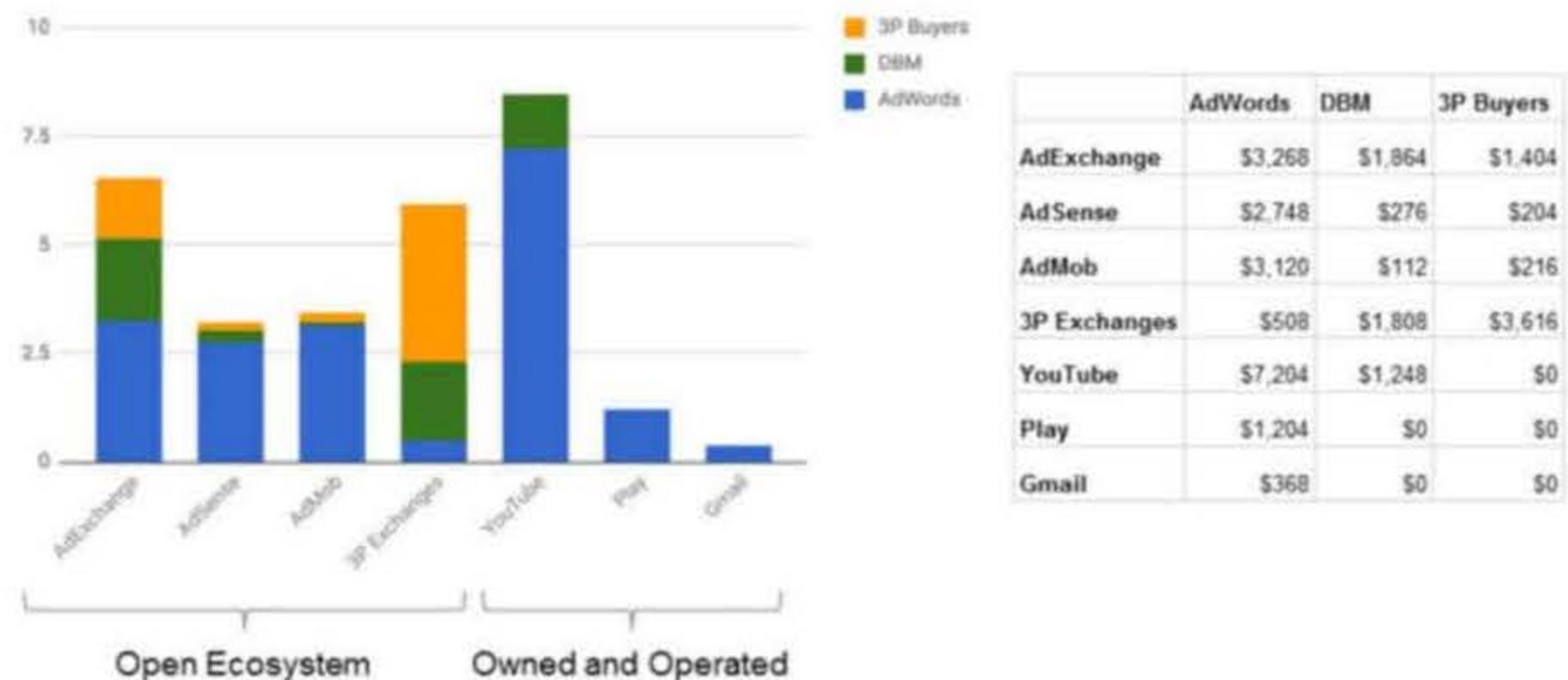


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- Slow transition -- linear will still be important for next 5-10 years (and longer in many markets) → importance of cross screen planning and buying
- To plan for the future, need to better support OTT -- and especially connected TV. When we talk about app strategy, we usually are just thinking of mobile app. But apps on cTV gaining traction, and even more complex than solving for mobile (more device types; HH level instead of individual)

DBM estimated to be largest DSP accounting for  $\frac{1}{3}$  of 3P Exchange spend



Estimates based on 4 x Q1 revenue, 3P buyers on 3P exchanges estimated as 2 x DBM revenue

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## Risks



### Inventory quality\*

invalid traffic attacks on the rise / no ground truth / don't have best defenses yet / confidence and trust eroding in ecosystem



### Inventory access\*

Exchanges becoming less relevant / Walled gardens growing / Increasing share of app attention controlled by FB / premium video inventory accessible through subscriptions only



### Erosion of identity on the open web\*

ITP / EU restrictions / long-term role of 3P exchanges / Goog vs FB identity / "open" identity platforms / partners moving to fingerprinting or going under / Impending de-cert / push for ADH on Google side / Failure of FB negotiations



### Sustainable profitability\*

Protecting rate card / shifting spend to more profitable media / shifting reservations to programmatic / strategic role of buyside



### Amazon threat (already covered)

Amazon putting pressure on Retail/CPG business / entering DSP space / getting first-look access to inventory through HB



### Brand safety spillover\*

Masa / FB brand safety issues / impact greatest on video

\* will be covered in more details

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## Inventory access

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Protecting rate card / shifting spend to more profitable media / shifting reservations to programmatic / strategic role of buyside

## Amazon threat

Amazon putting pressure on Retail/CPG business / entering DSP space

/ getting first-look access to inventory through HB

Brand safety spillover

Masa / FB brand safety issues / impact greatest on video

'Biggest Ad Fraud Ever': Hackers Make \$5M A Day By Faking 300M Video Views

Russian Hackers Stole Millions From Video Advertisers, Ad Fraud Company Says

White Ops says Russian hacking operation costed video ad networks more than \$3 million a day.

White Ops reports biggest ad fraud botnet found yet: 'Methbot' targeting high-CPM video inventory

The botnet has been siphoning an estimated \$3 to \$5 million in ad revenue per day, making it the largest ad fraud scam uncovered to date.

## UBER SUES DENTSU'S FETCH MEDIA FOR FRAUD

Adobe says it will help advertisers and publishers find out if they are getting ripped off by ad tech companies

Google Issuing Refunds to Advertisers Over Fake Traffic, Plans New Safeguard

Google's new system will identify fake traffic and issue refunds to advertisers.



Domain Spoofing Be Gone: Ads.Txt Will Filter Out Imposter Sites

Big brands fund terror through online adverts

Household names unwittingly pay extremists and pornographers.

04 '16

Methbot

Q1 '17

Brand Safety

Q2 '17

Chefbot

Q3 '17

Ads.txt

2018

Supply Path Optimization

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## Two major botnet attacks in 2017 led to major cleanup effort across Google and Industry



### Chefbot

- large, sophisticated botnet attack
- botnet was discovered by **White Ops** (third party)
- Nissan impacted w/ \$5.7M spend in Q2 alone.

### Blackout experiments

- Showed that large amount of inventory continues to transact even when publisher ad server is shut off



### What we did

- We proactively refunded ~\$32M net revenue impacted in 2017 (Q2 + Q3)
- Negotiated with all exchanges to have 30 day refund terms; limited default buying to exchanges w/ refund terms
- Initiated major internal effort to align spam crediting/debiting system (ongoing)
- [Externally communicated](#) what protections we offer
- Launched ads.txt and pushed as industry standard (>80% of DBM revenue covered)

### 2018

- Negotiating licensing deal w/ White Ops
- Investing in Supply chain optimization

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## Header Bidding democratizes access to inventory - while walled gardens are inaccessible to Google



*"Amazon pitches publishers a new header bidding wrapper."*

**DIGIDAY**

*"Facebook Is Finally Offering Header Bidding to Publishers on a Broader Scale"*

**ADWEEK**

*"AppNexus and Index Exchange Are The Header Bidding Leaders"*

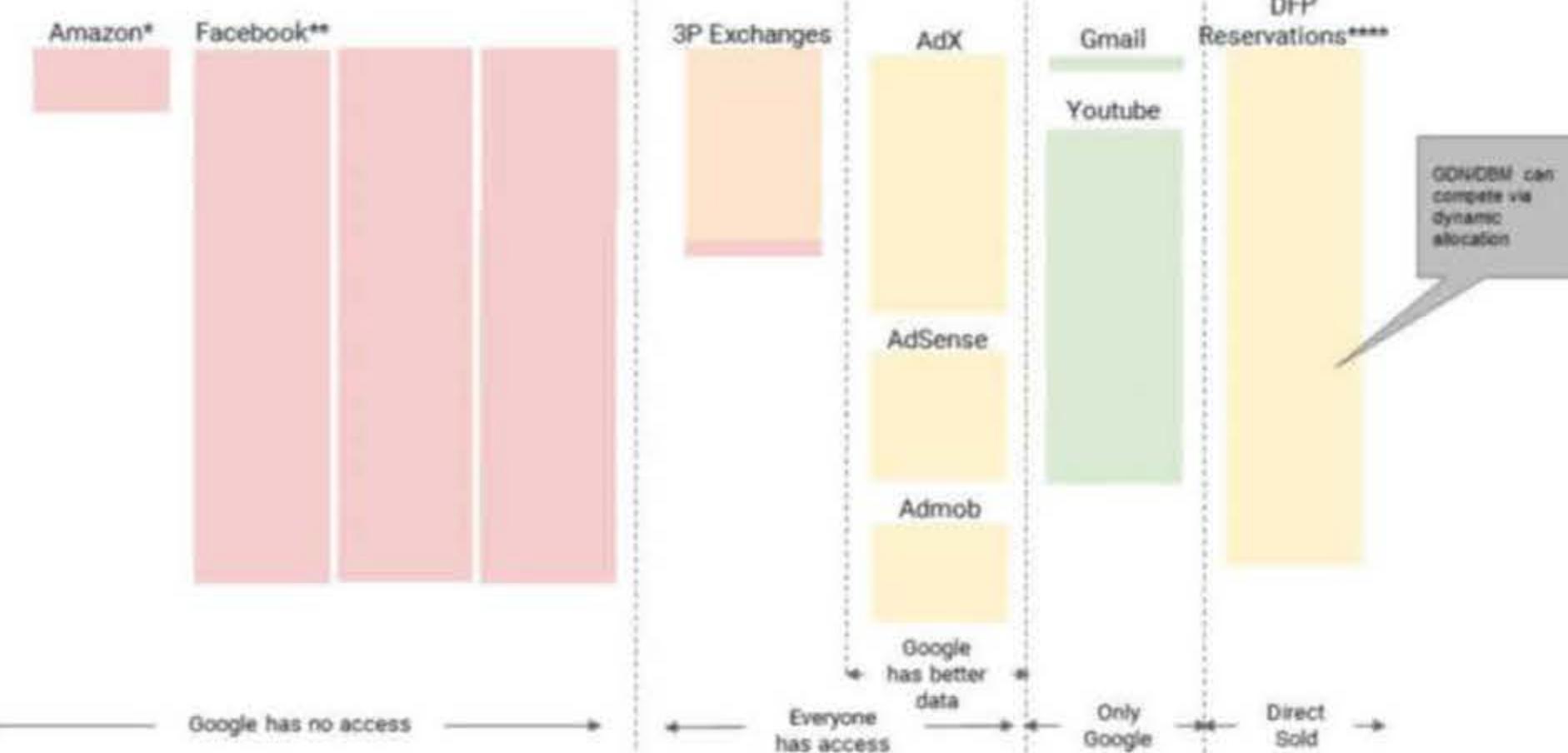


48% of US tracked GAIA do not open a browser on their mobile device in a given day. 20% don't open a browser over 3 weeks. Apps even more important to capture NBU opportunity.

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## Google Accessible Display Inventory in Context



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External factors, such as Safari ITP, EU restrictions contribute to erosion of identity on the open web w/ many players having to decide to comply, do full-on fingerprinting or go under



Safari Privacy Settings:

Website tracking:  Try to prevent cross-site tracking  
 Ask websites not to track me

- Apple announced and launched within 3 months
- 10% queries impacted
- [Gafeo stock fell](#) (27% 1-day loss)



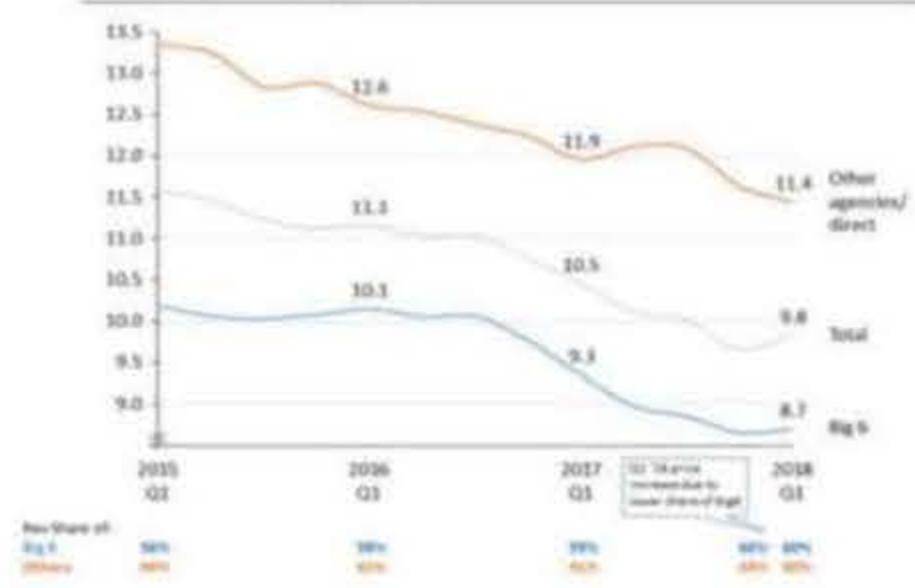
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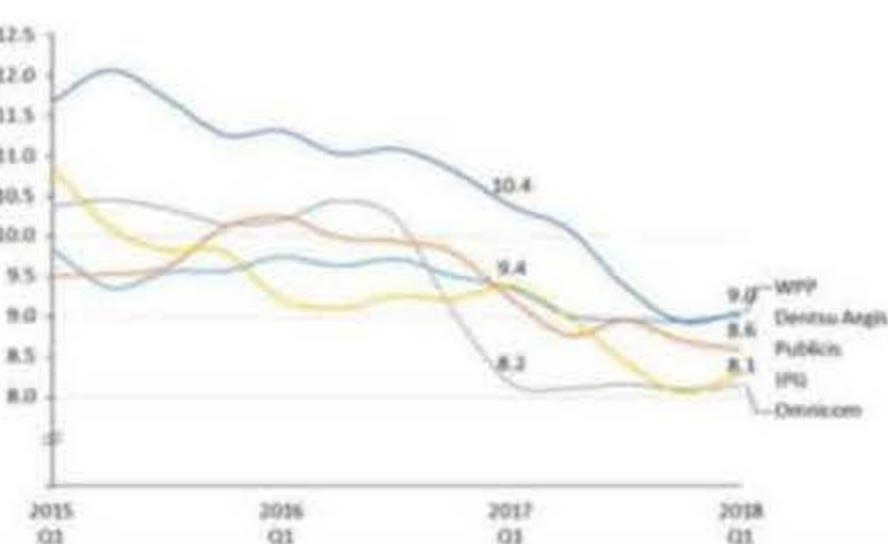
## DBM Auction: Declining prices across the portfolio, not driven by any particular buyer segment



Auction prices are declining both for Big 6 and other buyers



All Holding companies pay now between 8%-9%



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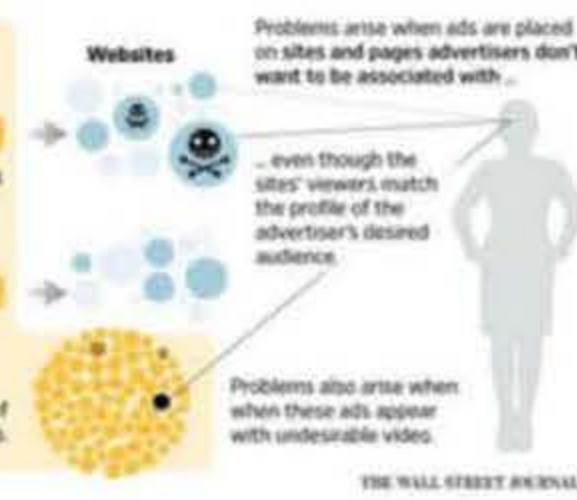
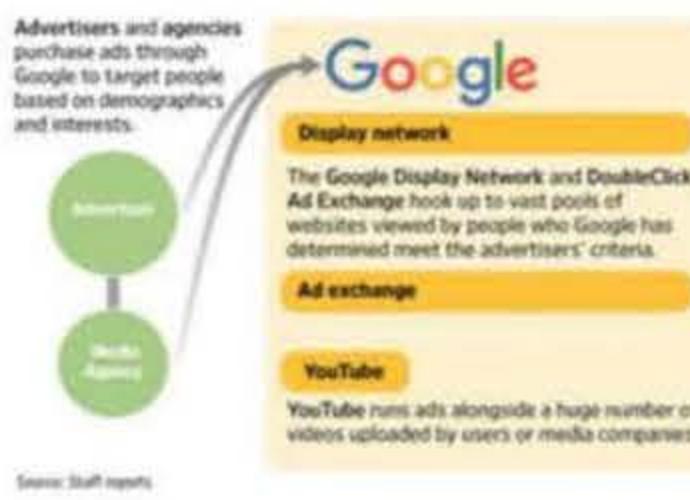
## Starting Q1 2017, Advertiser

18+

"Guardian pulls ads from Google after they were placed next to extremist material"  
March 16th, 2017  
**The Guardian**

"Taxpayers are funding extremism"  
March 17th, 2017  
**THE TIMES**

"Advertisers need to go back to basics to protect their brands from serious damage [...]"  
March 17th, 2017  
**Twitter Corp. Chief Executive Robert Thomson**



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# Revenue

Roshan | 20 mins

Google

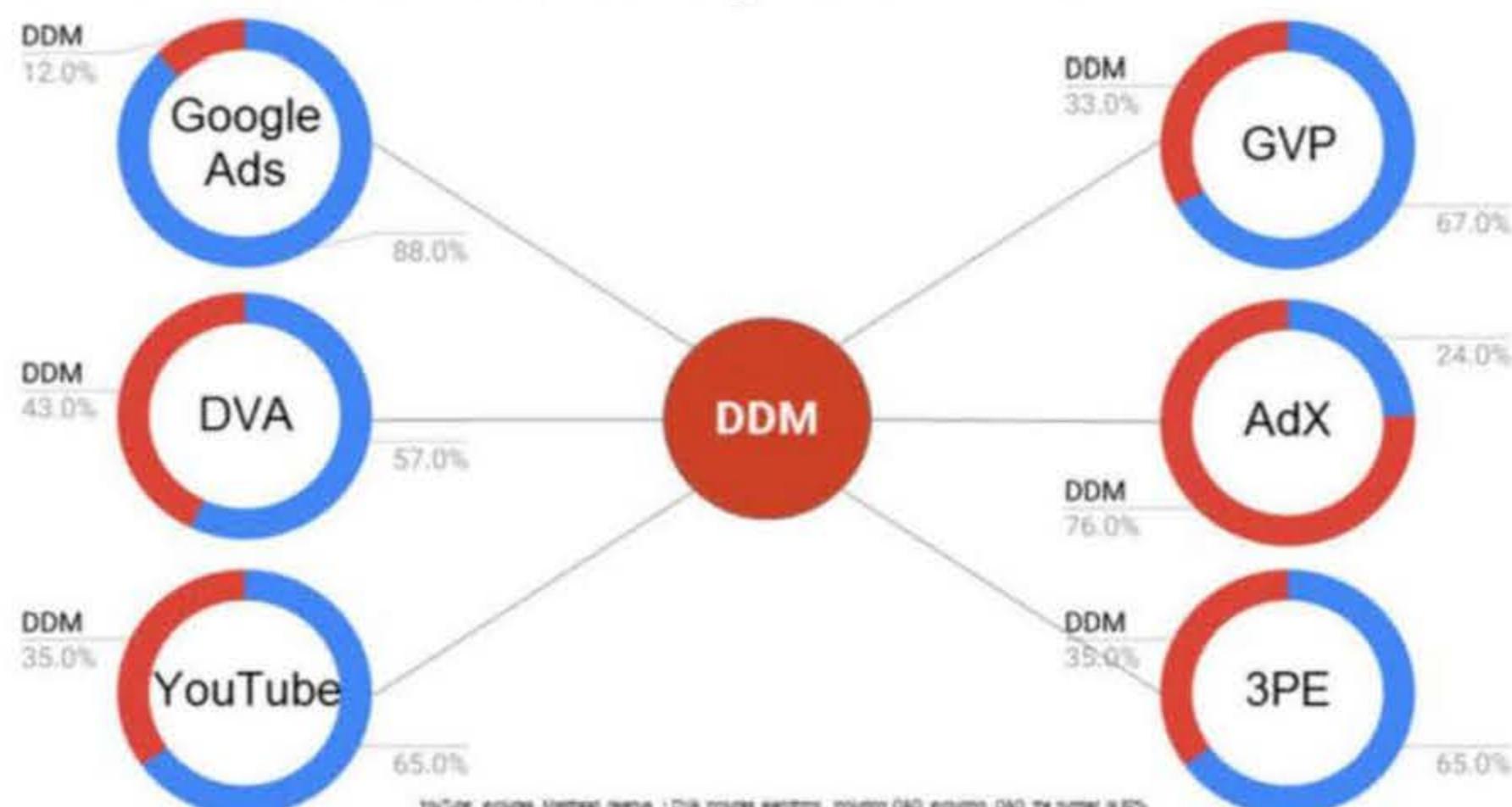
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### Share of 2017 Revenue Growth coming from DBM + DCM



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## DDM Revenue Overview

102% of Plan (\$5.4B, 52% YoY) in 2017

Product	2017 Plan	2017 EoY % Achievement	2017 Actual
<b>DBM Media</b>	\$4,765M (53%)	102%	\$4,835M (55%)
<b>DBM Fees</b>	\$563M (31%)	100%	\$563M (31%)
<b>DBM Total</b>	\$5,328M (50%)	101%	\$5,399M (52%)
<b>DCM Fees</b>	\$168M (-4%)	111%	\$187M (7%)
<b>DRM Fees</b>	\$70M (-10%)	121%	\$84M (9%)
<b>DDM Total</b>	\$5,565M (47%)	102%	\$5,670M (49%)

% mediacost fee model

CPM fee model

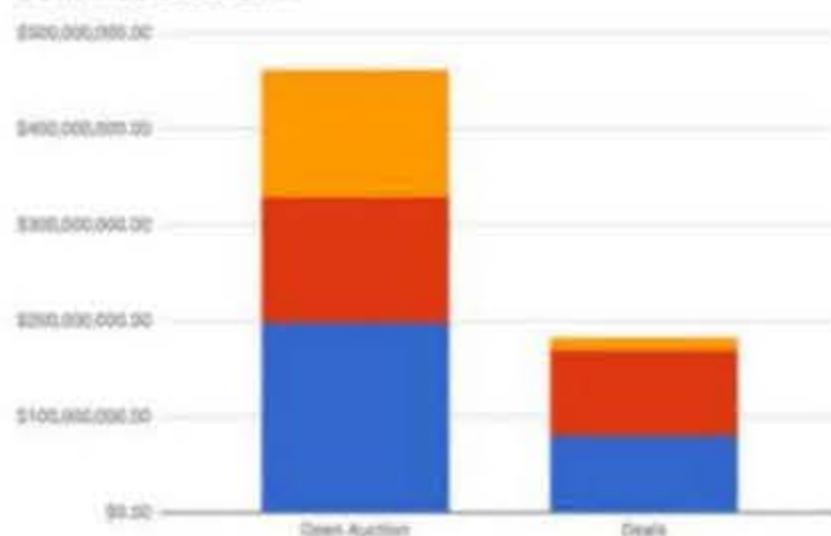
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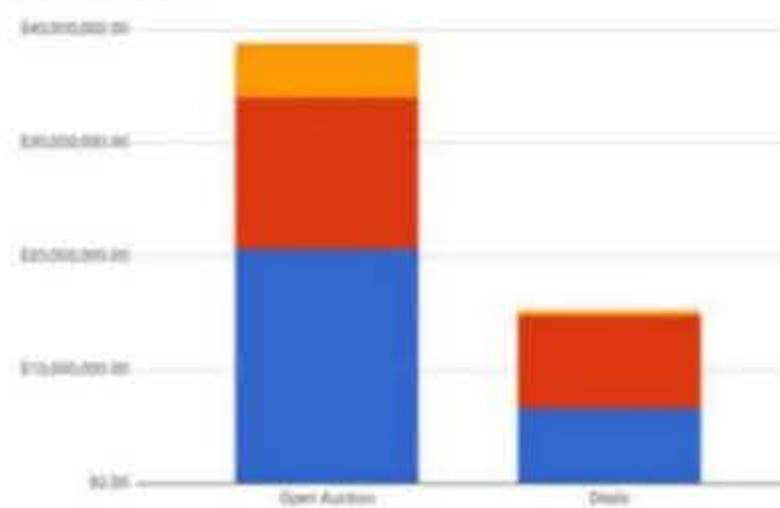
yes, strength was in video and tracking, even despite the served-to-downloaded launch, which was expected to have something like almost a -10% impact (growth more than made up for it)

## DBM 2017; Deals were 28% of media cost and fees

DBM Mediabuy 2017



DBM Fees 2017



Buyside Media Cost		Preferred Deals	Private Auction	Programmatic Reservation	DBM Tag Reservation
Buyside Rate	Open Auction	Always On			
AdX	10.42%	10.14%	9.59%	9.49%	3.65%
Third Party Exchange	10.10%	9.89%	9.56%	9.40%	4.00%
TrueView	3.64%	NA	NA	NA	3.50%

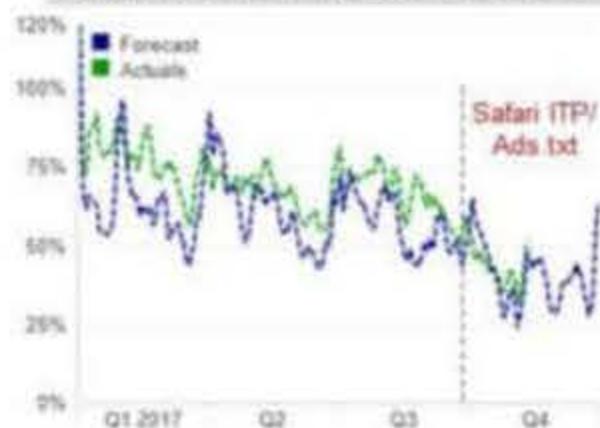
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## DBM 2017 Performance v. Annual Plan (media only)

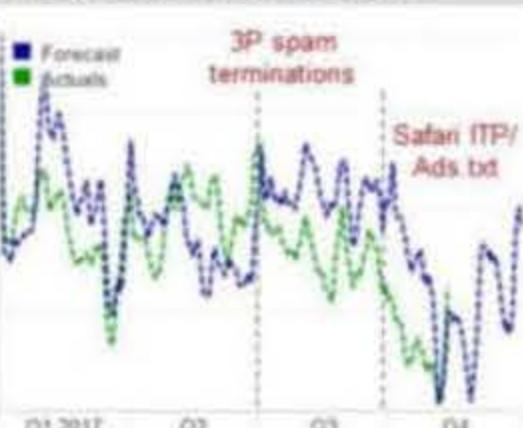
Overall 101.5% to plan, \$4.84B; specific drivers vary by inventory source

DBM on AdExchange YoY % Growth



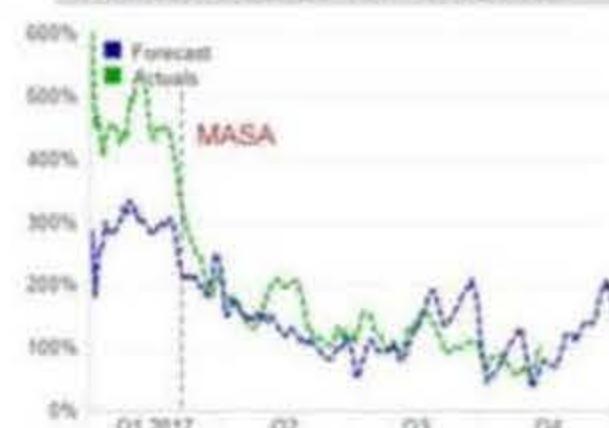
1 2017 Plan: \$1.85B  
2017 Actual: \$1.95B (105%)

DBM on 3PE YoY % Growth



2 2017 Plan: \$1.84B  
2017 Actual: \$1.73B (94%)

DBM on YouTube YoY % Growth



3 2017 Plan: \$1.08B  
2017 Actual: \$1.16B (108%)

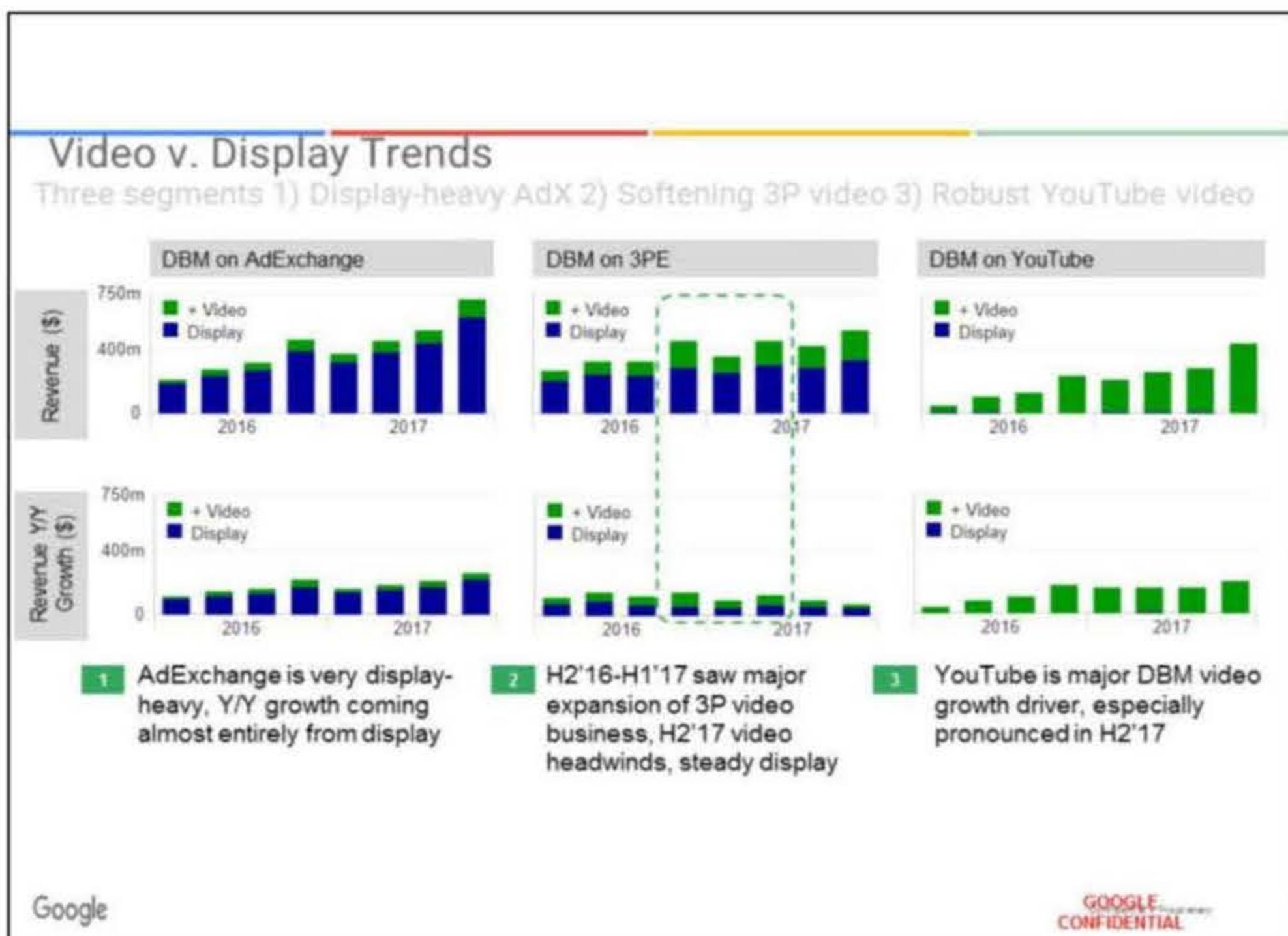
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DBM on AdX: Moderate overperformance on AdX through most of 2017; slight deterioration in Q4 due to negative impact from Safari ITP and Ads.txt, although still trending above annual plan

DBM on 3PE: Strong SoY performance trending well above plan, especially thanks to heavy spend from a few top advertisers, e.g. Renault. We've seen growth (and performance) slip from Q3 as a result of deprecating 3P relationships and additional downside/risk in Q4 thanks to Safari ITP and Ads.txt (more later)

DBM on YT: Forecasting was somewhat difficult w/ limited data; did see pullback from Ford and CPG clients.



AdExchange is very display-heavy and YoY growth is coming almost entirely from display; 3P saw video expand in 2016-2017, but inventory quality/fraud concerns (spam and Ads.txt), YouTube is video-only.

# 2018 Revenue

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## DDM Revenue Overview

\$7.9B DDM revenue in 2018, +40% YoY (v. 51% in 2017)

Product	2017 Plan	2017 EoY % Achievement	2017 Outlook	2018 Forecast
<b>DBM Media</b>	\$4,765M (53%)	102%	\$4,835M (55%)	\$6,940M (43%)
<b>DBM Fees</b>	\$563M (31%)	100%	\$563M (31%)	\$726M (30%)
<b>DBM Total</b>	\$5,303M (51%)	102%	\$5,395M (54%)	\$7,666M (42%)
<b>DCM Fees</b>	\$169M (-4%)	111%	\$187M (7%)	\$190M (2%)
<b>DRM Fees</b>	\$70M (-10%)	121%	\$84M (9%)	\$87M (3%)
<b>DDM Total</b>	\$5,565M (47%)	102%	\$5,670M (49%)	\$7,943M (40%)

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## DBM Revenue by Inventory

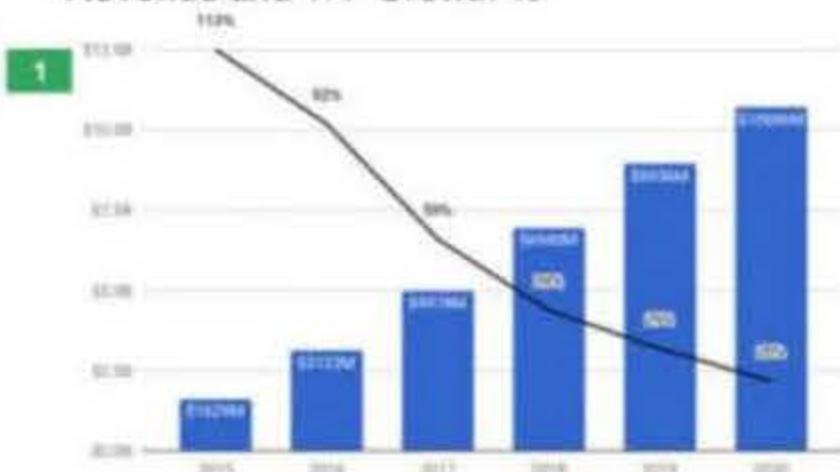
3/4<sup>th</sup> of the growth \$ for 2018 are dependent on  
[Youtube](#) and [Google Display](#)



## DBM media only, including YT

\$6.9B revenue in 2018, +39% Y/Y growth

Revenue and Y/Y Growth %

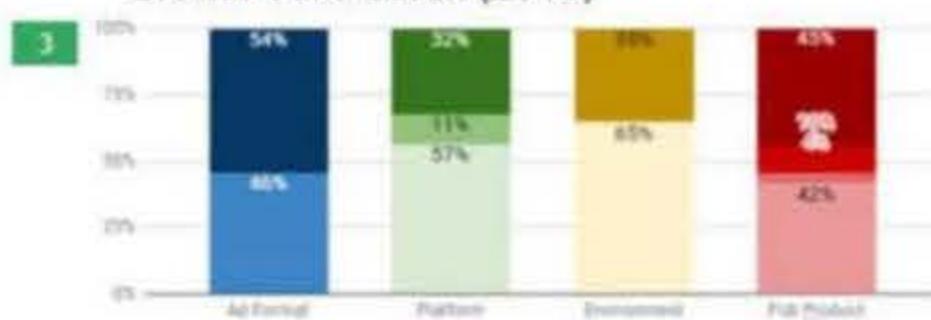


- 1 Relatively sharp growth decline 2016 to 2017 as product matures (especially DBM on YT); anticipate 20 ppt growth drop in 2018 to 39% Y/Y.
- 2 Despite majority of growth on mobile, DBM continues to be the most desktop-heavy front-end.
- 3 Although majority of growth on video overall, excluding YouTube, video growth contribution falls to 23% of total DBM growth.

Revenue Splits (2018)



Growth Contribution (2018)

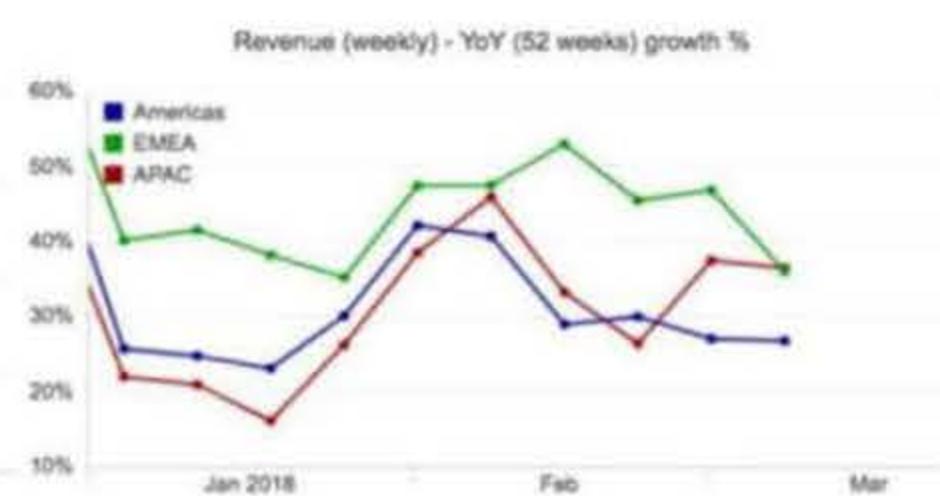
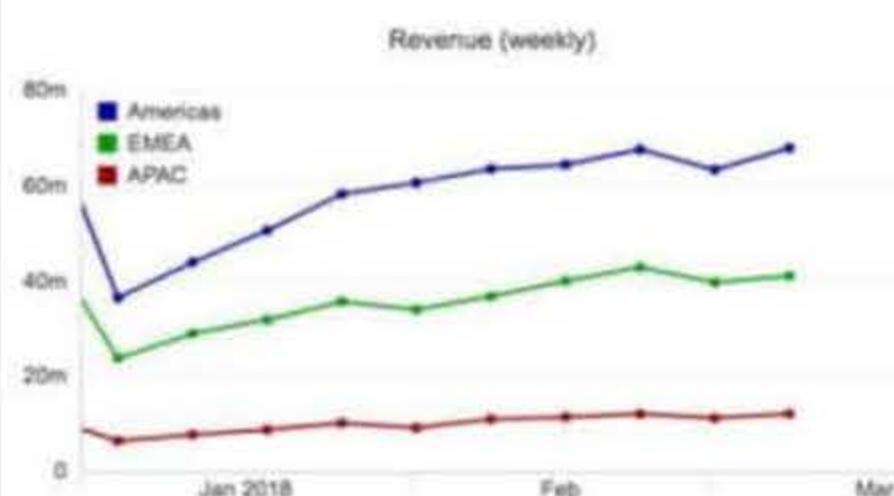


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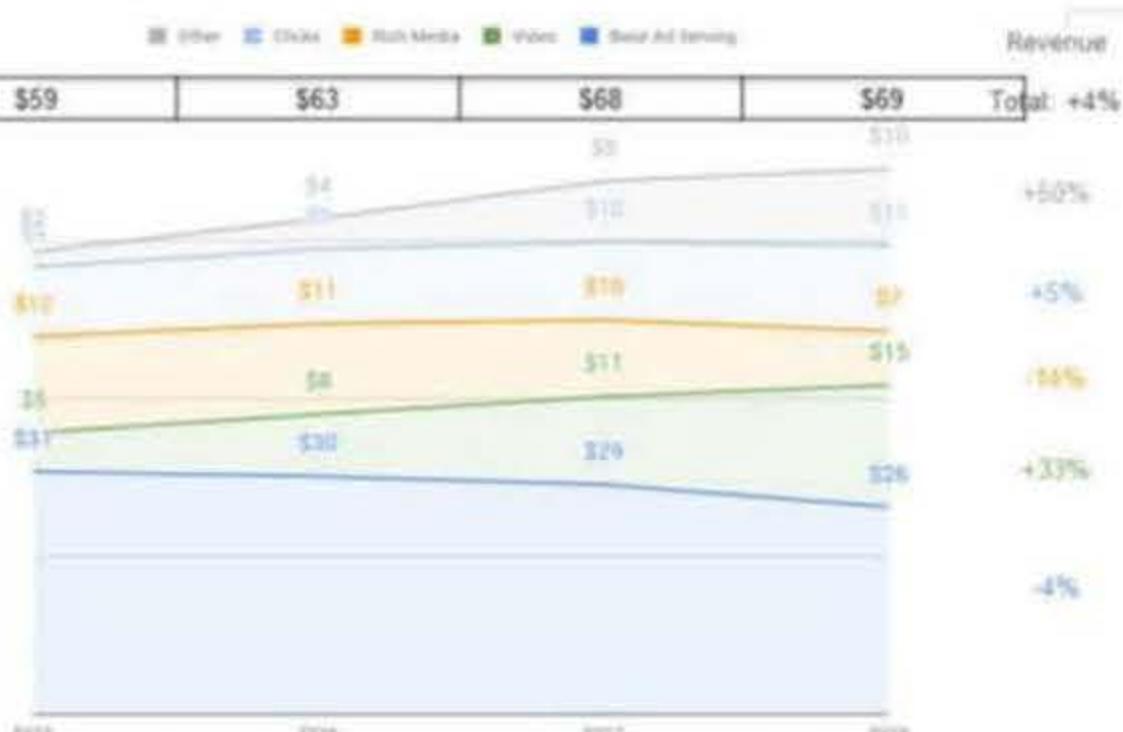
Americas still dominates, but faster growth in ROW



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## DCM: Video is growing by 39% y/y in 2018

Average Revenue \$m / quarter



4yr-CAGR



Source: [\[REDACTED\]](#)

Google

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# Demos

Roshan, Karin | 40 mins

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## DoubleClick Bid Manager by the numbers

**\$8B**

Media under management

**5K**

Active accounts

**60K**

Active advertisers

Google

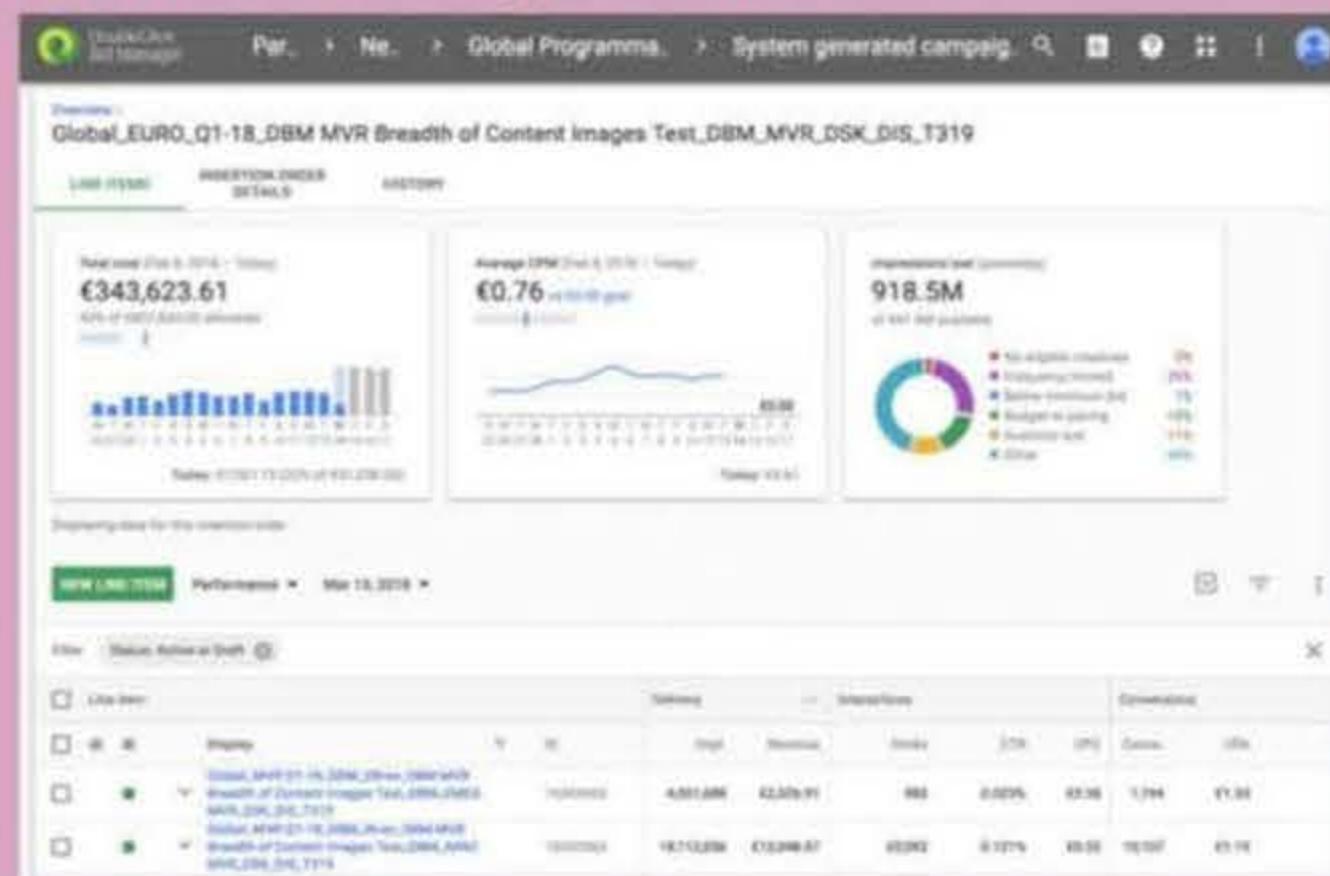
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- There are 12,000 active DCM networks/accounts, and 5,000 DBM accounts
- In DCM, there are 930K active advertisers across all accounts.
- There are 40K DCM advertisers linked to DBM (exclusive DBM autocreated, which means customer-initiated, real advertisers).
- Not to complicate things, but if asked, the reality is that every DBM link doubles the number of DCM advertisers b/c of DCM0 (so the real number of participating advertisers is more like 80K)
- In DBM, 65%ish of advertisers are linked to DCM.
- Of all linked DCM advertisers, 86% of them are only linked to a single advertiser in DBM (a direct, 1:1 link to connect programmatic and reservations attribution/creative).
- Of all linked DCM advertisers, 98% of them have fewer than 5 linked advertisers in DBM, which means it is relatively uncommon for a DCM advertiser to cross-link to many DBM

advertisers or DBM partners

- However, those who do cross-link tend to be our biggest customers like:
- Top linked advertisers: Best Buy (439), Zalando, Amex, Telstra, Google, KLM, Verizon, Diagio, HBO
- For linked advertisers, there are 9M active synched/shared creatives in DBM
- In DCM, there are 68M active placements/creative tags generally.
- Almost half of DCM MuM is programmatic,

## DoubleClick Bid Manager Demo



Google

DoubleClick Bid Manager

## DoubleClick Campaign Manager by the numbers

**\$21B**

Media under management

**12K**

Active accounts

**930K**

Active advertisers

Google

Confidential - Proprietary

- There are 12,000 active DCM networks/accounts, and 5,000 DBM accounts
- In DCM, there are 930K active advertisers across all accounts.
- There are 40K DCM advertisers linked to DBM (exclusive DBM autocreated, which means customer-initiated, real advertisers).
- Not to complicate things, but if asked, the reality is that every DBM link doubles the number of DCM advertisers b/c of DCM0 (so the real number of participating advertisers is more like 80K)
- In DBM, 65%ish of advertisers are linked to DCM.
- Of all linked DCM advertisers, 86% of them are only linked to a single advertiser in DBM (a direct, 1:1 link to connect programmatic and reservations attribution/creative).
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- Almost half of DCM MuM is programmatic,

## DoubleClick Campaign Manager Demo

The screenshot shows the DoubleClick Campaign Manager interface. At the top, there's a navigation bar with tabs like 'CAMPAIGNS', 'ADVERTISERS', 'ADS', and 'SUPERVISOR'. Below the navigation is a search bar and some user information. The main area is titled 'GooglePlay\_AIRWeek\_Variation-1\_EN\_300x250.HTML' and includes a preview of the ad on an iPhone 5 screen. The preview shows a 'Google Play' app icon and some text. On the left, there's a sidebar with a tree view of assets under 'GooglePlay\_AIRWeek\_Variation-1\_EN\_300x250.HTML'. The right side contains detailed settings for the creative asset, including fields for 'Name', 'Type', 'Compatibility', 'Version', and 'Size'. Buttons for 'SAVE', 'Discard changes', 'Copy', and 'Change' are at the top right of the settings panel.

Google

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Part 1			
	Topic	Time	Presenters
19 March	<b>Introduction:</b> Product Portfolio, Team Structure	20 min	Payam, Max, Vlad
	<b>Business Overview:</b> Ecosystem, Revenue	60 min	Tobias, Roshan
	<b>Product Demo:</b> DBM	40 min	Roshan, Karin

Part 2			
	Topic	Time	Presenters
Today	<b>Product Demo:</b> DCM	60 min	Luke, Karin, Deepthi
	<b>Product Strategy:</b> 2018 Strategy Overview, DV360		

Part 3			
	Topic	Time	Presenters
29 March	<b>Product Strategy:</b> Pivot to Video, Other Bets	120 min	Deepthi, Glenn, Luke

Google

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# Buyside Product Strategy 2018 Intro

Luke | 10 mins

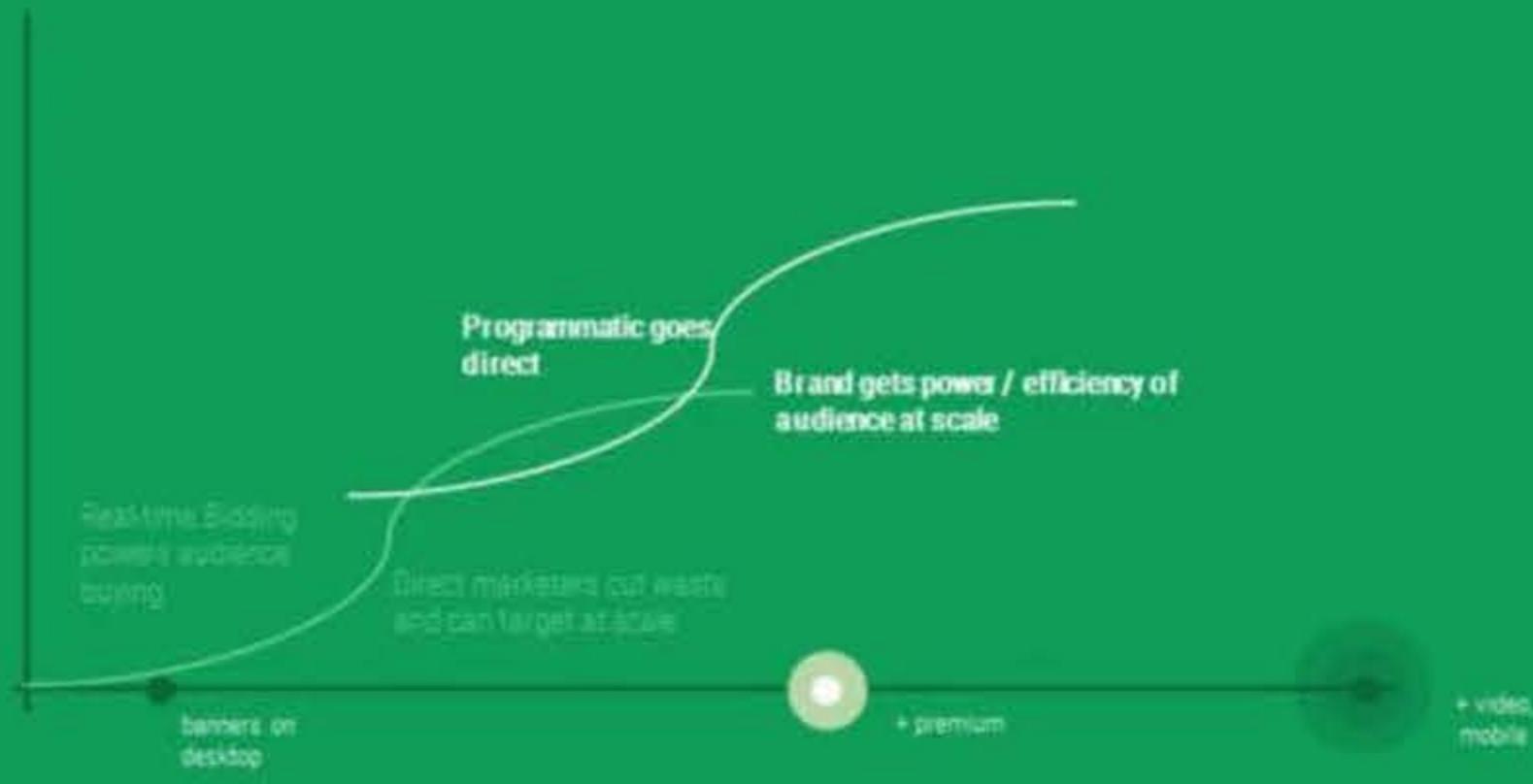
Google

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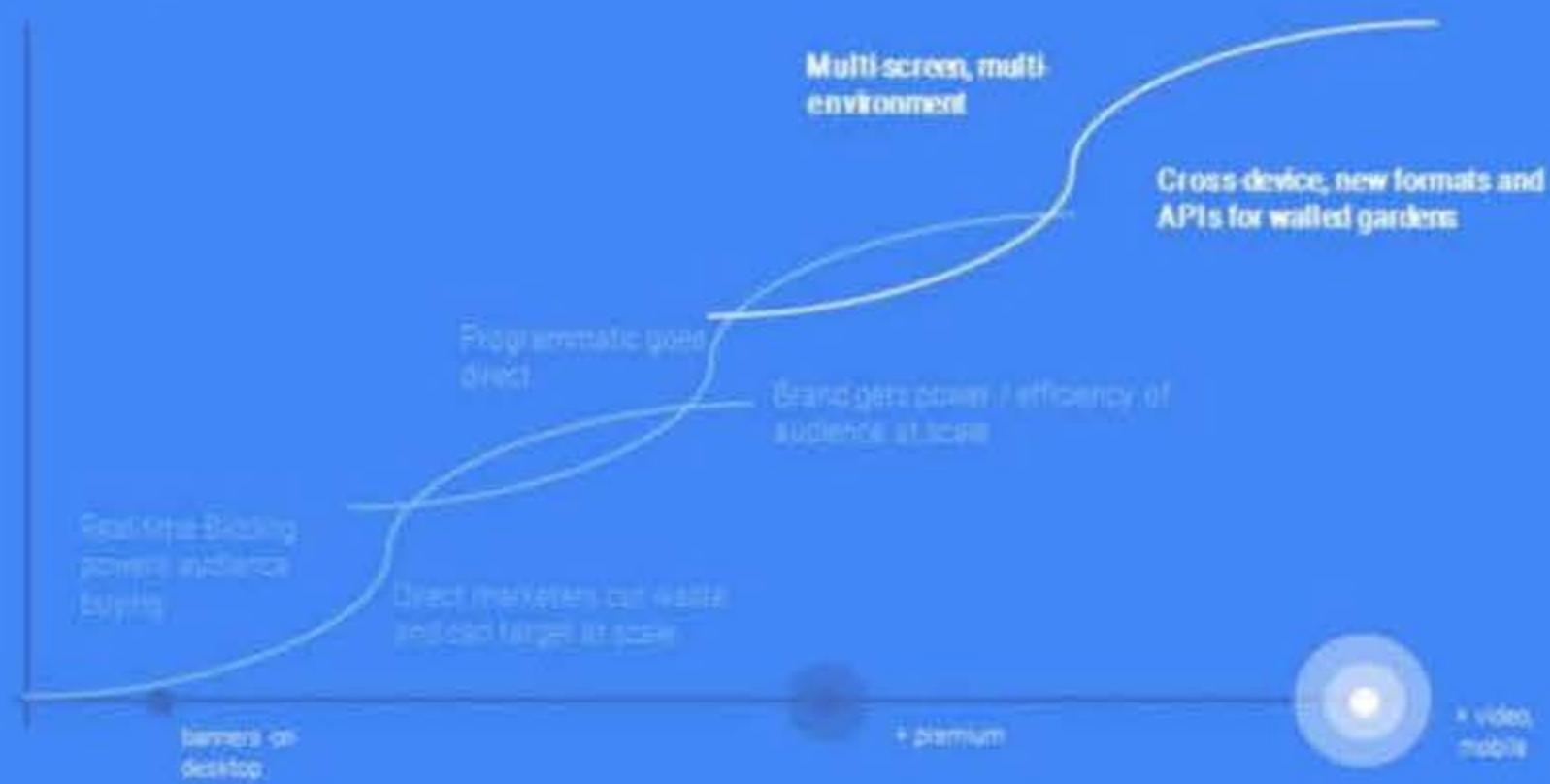
## 2009: Real-time bidding on remnant inventory



## 2013: Programmatic goes direct, on full-desktop inventory



## 2016: Programmatic extends everywhere, cross-screen/device



## 2018 Buyside Strategy: The Pyramid

**Code Yellow Projects**  
20% of eng resources

- Business Imperatives
  - Identity
  - Latency
  - Inventory quality/access
  - Serviceability
  - Brand Safety

**Big Bets**  
60% of eng resources

Display & Video 360

Pivot to Video

- DV3 launch
  - Prominent modules
  - Prepare for migrations

- YouTube
  - X-Channel
  - Living Room
  - Discovery, Packaging & Forecasting

**Other Bets**  
20% of eng resources



Google

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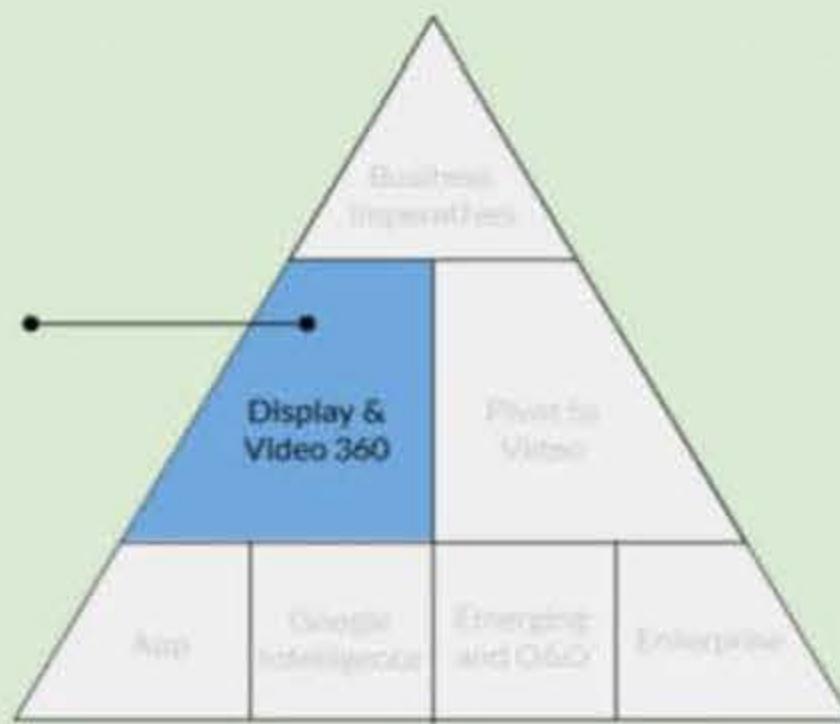


# Display & Video 360

Karin & Luke

35 min

Google



Conference + Programmatic

## Creative

[https://docs.google.com/presentation/d/1Y8pRpXe7iggl91tdZfizDkX8ovgKRQ5gNjtnr2C83o/edit#slide=id.g259e59bee2\\_0\\_349](https://docs.google.com/presentation/d/1Y8pRpXe7iggl91tdZfizDkX8ovgKRQ5gNjtnr2C83o/edit#slide=id.g259e59bee2_0_349)

## Inventory

[https://docs.google.com/presentation/d/1nkf9hGGsOdvzjFsJyiVmxEh8Jn2LYnU5NF0DeruWIE4/edit#slide=id.g29c52578b1\\_0\\_59](https://docs.google.com/presentation/d/1nkf9hGGsOdvzjFsJyiVmxEh8Jn2LYnU5NF0DeruWIE4/edit#slide=id.g29c52578b1_0_59)

## Audience

[https://docs.google.com/presentation/d/1yaxUNxb1fB8Y5ejKUciC7A\\_OWvEw3TJ\\_JgiAzm3C1Hs/edit#slide=id.p](https://docs.google.com/presentation/d/1yaxUNxb1fB8Y5ejKUciC7A_OWvEw3TJ_JgiAzm3C1Hs/edit#slide=id.p)

## Measurement

<https://docs.google.com/presentation/d/1bpW60UIEkwUMp-ZxthbxRIfYxNLLT11SE4iQ27ygTuc/edit#slide=id.p>

Show less

Id	Date	Text
2	03/27/2018 17:56:16	I guess we could make that point in voiceover on slide 60 but given the prior session I think Suresh will be interested in the reservations >> programmatic margin opportunity
1	03/28/2018 14:22:13	I can voice over this but the margin thing is actually tricky because he very keenly noticed the gross vs net thing, so it's not purely a margin story.
1	03/28/2018 14:26:08	+karinb@google.com Working through these slides today (sorry for the delay). I think we need to include a slide on the point of Cronut from our strategy perspective (i.e. long term goal of shifting reservation >> deals >> programmatic). I think that's an important point to make with Suresh upfront. _Reassigned to Karin Hennessy_
3	03/28/2018 14:26:08	Well, yes, not margin %age, but it definitely leads to more margin \$\$ for Google. But yeah, your call.

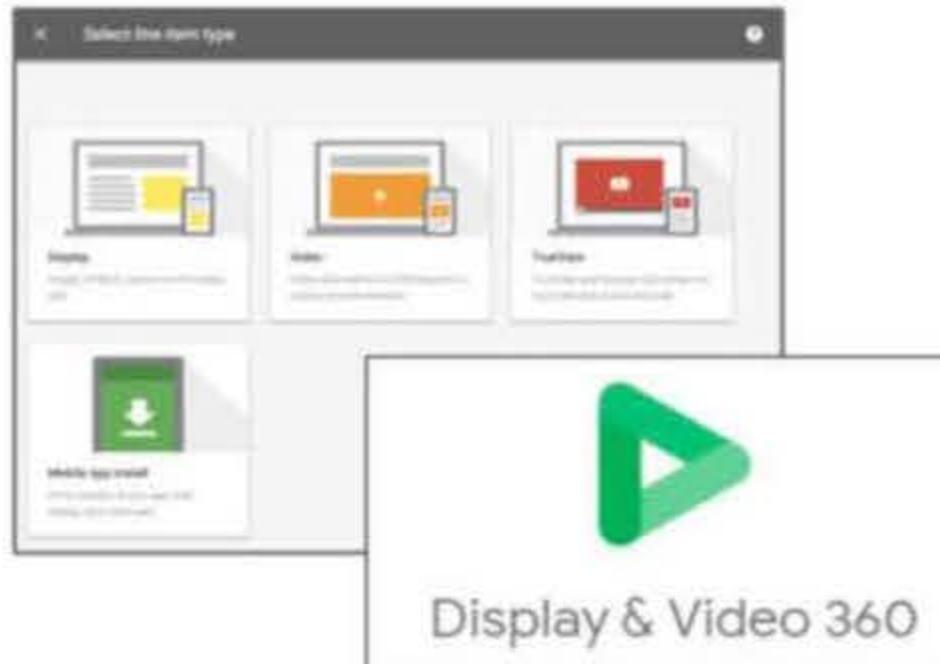
Google

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We are launching a unified enterprise display & video advertising platform

Our Product Portfolio  
Today

-  DoubleClick Campaign Manager
-  DoubleClick Bid Manager
-  DoubleClick Studio by Google
-  Audience Center

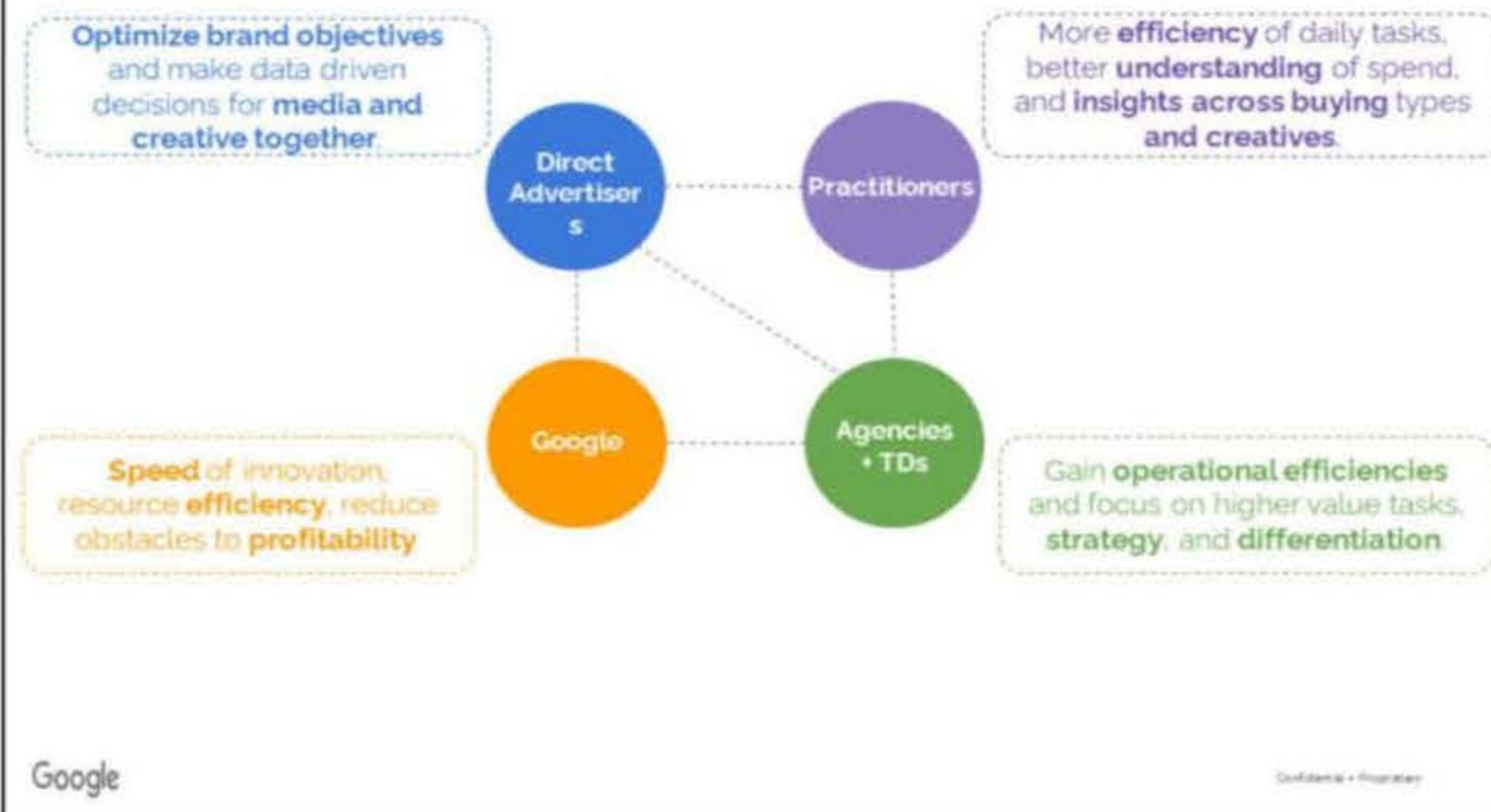


Aimed to be the leading OS for large advertisers

Google

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## Display & Video 360 benefits



# Launching Display & Video 360

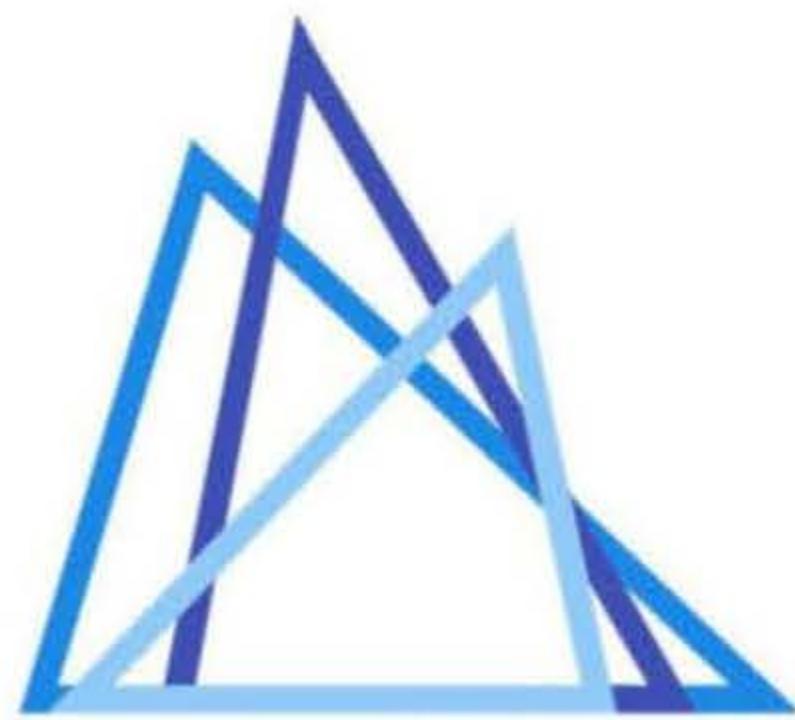
Five Awesome Modules. One Fully Integrated Experience.

Google

View slide

Google

# Marketing Live 2018



Google

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## Display & Video 360 @ Google Marketing Live 2018

July 2018

DCM, Studio & AC migration work

### Google Marketing Platform

#### Display & Video 360

- Campaign (DBM, DCM)
- Creative (DCM, Studio)
- Inventory (DBM, DCM)
- Audience (AC)
- Measurement & Attribution (DDM, GA)

#### Search Ads 360

#### Analytics 360

#### Optimize 360

#### Tag Manager 360

#### Surveys 360

Google

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## Measurement

DoubleClick Bid Manager

Partner name > Advertiser name > Campaign name

Accuen > Samsung

Campaigns

New Campaign

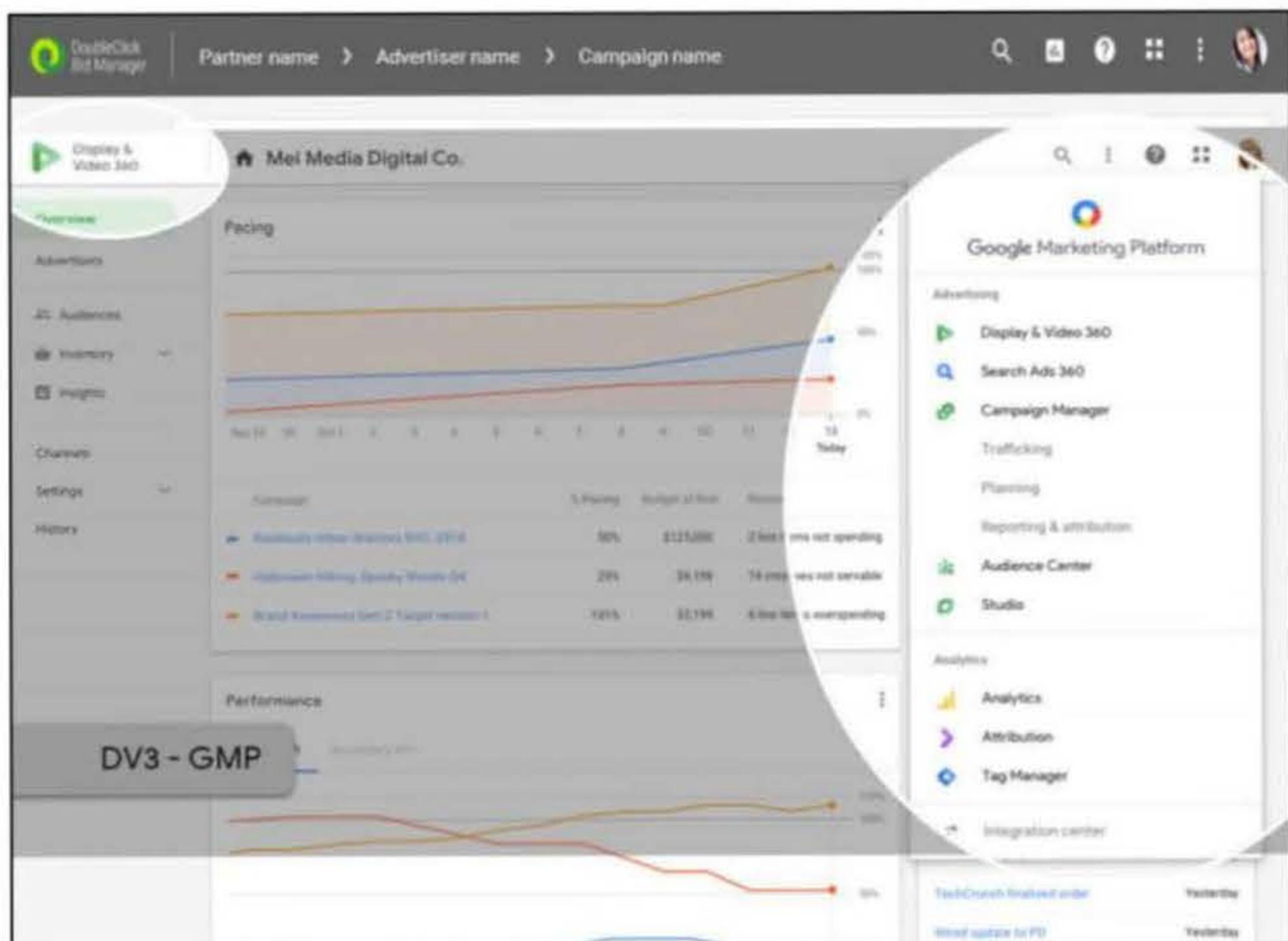
Filter Status: Active

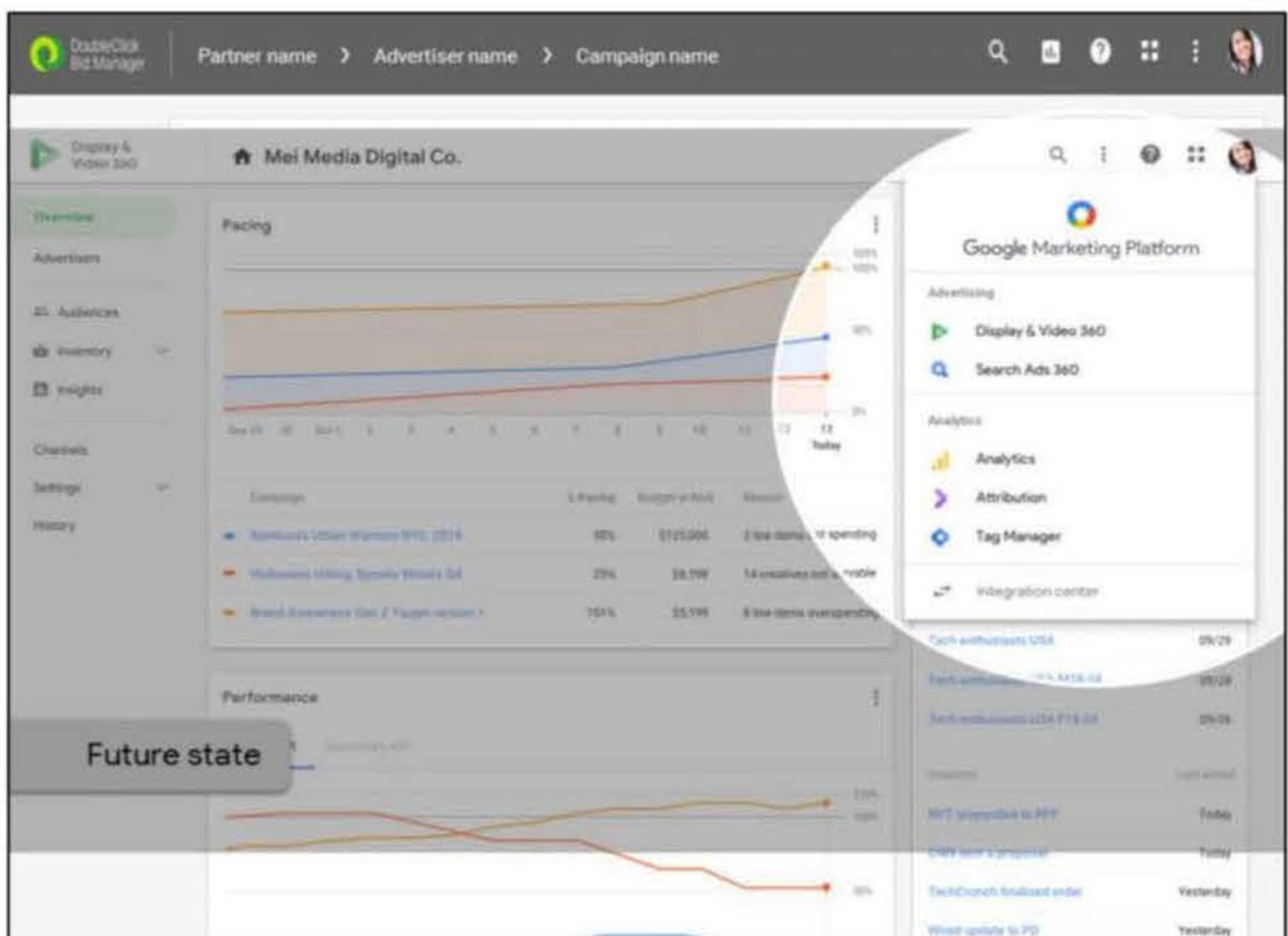
Campaign	Delivery	Budget	Spent	Avg Cost	Avg Actual
System Generated Campaign	137774	Unknown	\$7353.176.65	\$0.00 CPM	\$12.48 CPM

Show more: 20 | 1-1 of 1 | C | S | D | Y | X

Planning  
Traffic  
Bid Manager  
Reporting & Attribution  
Audience Center  
More...

DBM Today







Google Display & Video 360

Five modules, one unified experience



### Creativ e

Creation,  
management,  
development  
and  
collaboration on  
creative assets  
and designs.



### Inventory

Encapsulate new  
and existing  
relationships  
with publishers  
and inventory  
sources.



### Campaign

Enable all forms  
of media buying  
and optimization  
towards  
advertiser goals.



### Measurement

Source-of-truth  
for all digital  
media spend,  
regardless of  
buying platform.



### Audience

Holistic audience  
creation,  
management,  
insights, across  
identity spaces.

What is the module framework?

Key workflows

Point solutions in the market

Display & Video 360

Nei Media Digital Co. > Tredwell Shoes

Campaigns

Audiences

Creatives

Inventory

Insights

Resources

Settings

History

Top campaigns by reach

Consideration

US\_Nexus6Tablet\_Q4 2017 8.2M

EU\_SamsungTablet\_Q4 2017 7.5M

US\_Nexus5X\_Q4 2017 6.4M

LATAM\_Nexus9\_Q4 2017 6.1M

US\_Nexus8\_Q4 2017 4.8M

Top creatives by reach

Conversions

Top audiences by

Parents, 24-34

TV Drama Fans

Kevin Spacey Fans

Marvel & DC Fans

NEW CAMPAIGN

Filter Status Active

	Campaign	Name	Budget	Spent	KPIs
<input type="checkbox"/>	System generated campaign	322399	Unknown	\$6,569,520.98	\$0.00 CPM
<input type="checkbox"/>	Remarketing 1H2017	137301	\$582,000.00	\$1,251,159.67	\$7.00 CPM



# Create

Make making ads awesome



Google

Adwords Academy



## Creative Workspace

- Personalization – your most recent campaigns and creatives front and center.
- Campaign Home – Goals and objectives, creative brief, insights, and the launchpad for creative tasks.
- Collaboration – integrated activity feed keeps media and creative agencies looped in.
- Visual UI – lists are boring, seeing your creatives is delightful.

The screenshot shows the Creative Workspace interface. At the top, there's a navigation bar with a play button icon and the text "Travis & Penny 202". Below the header, a sidebar on the left contains a green "Home" tab and other options like "Campaigns", "Creative", "Audience", "Metrics", "Marketing", "Settings", and "Help". The main content area features a banner with the text "Hello Penny" and "Introducing the Creative Workspace!". It also displays three campaign thumbnails: "West Runner - Product Launch (Product)", "West Runner - Economic (Economics)", and "West Runner - Lifestyle (Lifestyle)". A "Recent activity" sidebar on the right lists items such as "Recent", "Recent", "Recent", "Recent", "Recent", "Recent", "Recent", and "Recent".

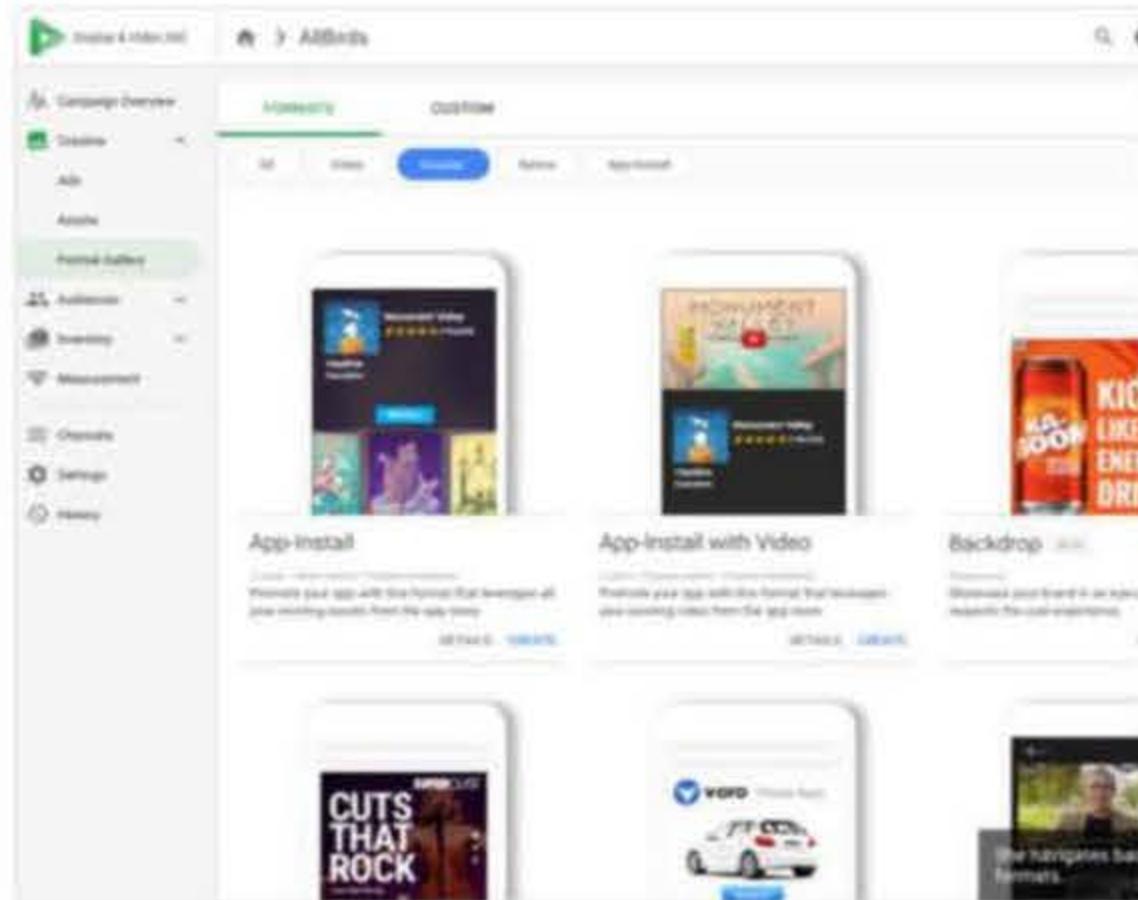
Google

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## Format Gallery

- High Impact Formats – Discover new innovative formats.
- Test Drive – See how your assets look in different formats.
- Integrated – Format recommendations based on your campaign goals and past performance.



Google

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## Asset Library

- Organized – smart asset tagging makes finding and reusing assets a cinch.
- Collections – build moodboards, collect inspirations, and collaborate on creative ideas.
- Powerful – image and video transcoding, live hot swapping, Machine Learning for creative insights.
- Concepting – (flesh out)

The screenshot shows the 'Assets' section of the Asset Library. On the left, a sidebar menu includes 'Designs', 'Creative', 'Art', 'Assets' (which is selected), 'Audience', 'Metrics', 'Collections', 'Channels', 'Settings', and 'Help'. The main area is titled 'ASSETS' and shows 'COLLECTIONS'. It displays three collections: 'Product Images' (with several shoe thumbnails), 'Brand color & logos' (with a color palette and logo thumbnails), and 'Lifestyle Images' (with various lifestyle photos). Below this, under 'Assets', there are more shoe thumbnails and a large 'allbirds' logo thumbnail.

Google

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# Measurement

Which ads worked?

Google

**DCM** has been the "Operating System" for large, traditional digital advertisers for 15 years

Including:

Advertisers use  
DCM to measure  
**\$21B+**  
of display & video ads  
(& \$16B+ of Search ads via DS)

\$2.3B on YouTube  
\$2.1B of ads bought by non-Google DSPs  
\$800M-1.3B on Facebook  
\$860M on AOL/Yahoo  
\$480M on Amazon  
\$400M on Hulu  
\$265M on NFL.com  
\$265M on Pandora  
\$80-300M on Snapchat  
\$210M on NBC sites & content  
\$180M on CBS sites & content  
\$100-200M on Twitter  
\$100M on Spotify

Source: March 2018 and March 2018 analyses of DCM Media Under Management. All figures ARR, DBM, figures as of Q42017 rates. N.B.: DS covers 30% of LCS Search. ~45% of Display #s are 1x1s only.

75

Google

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Pixel	Non-DBM	DBM	Total
non-1x1	198,553,196,653		117,789,673,496
	316,342,870,149		
1x1	231,136,718,192		35,120,207,230
	266,256,925,422		
Total	429,689,914,845		152,909,880,726
	582,599,795,571		
1x1/total	54%	23%	46%

<https://screenshot.googleplex.com/mD9wAte4hus>

## During the transition to DV3, we can't take DCM's successful position in measurement for granted

Increasing success  
from point players in  
brand, attribution, app



Facebook increasingly  
'closed' to measurement  
standards due to fears  
about viewability



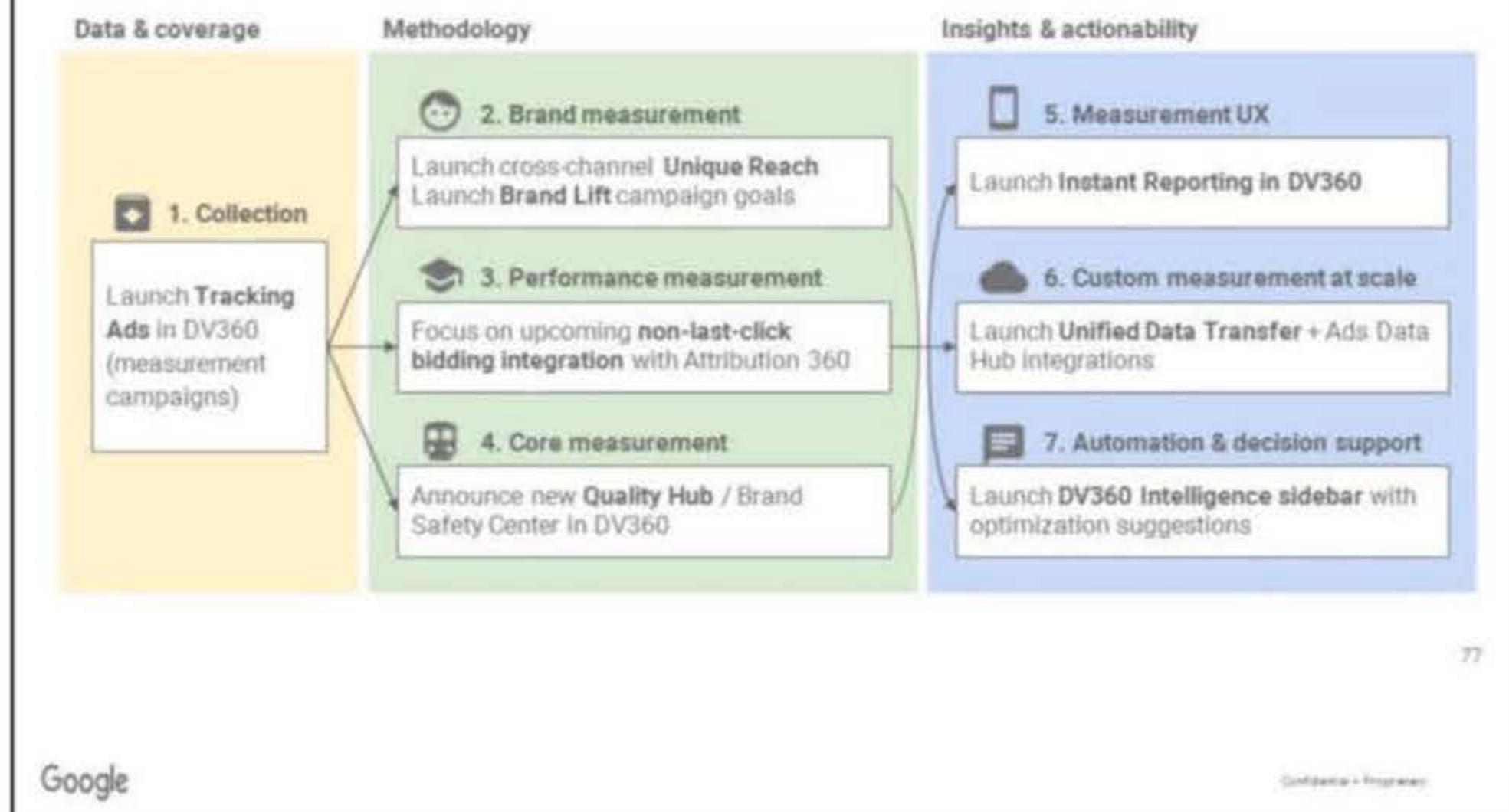
Agencies looking to  
differentiate with cross-  
platform approaches

Google

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76

## For GML, we're pushing DV3 measurement end-to-end



# Migrations

Move things, gracefully.

Google

View on GitHub



- There are 12,000 active DCM networks/accounts, and 5,000 DBM accounts
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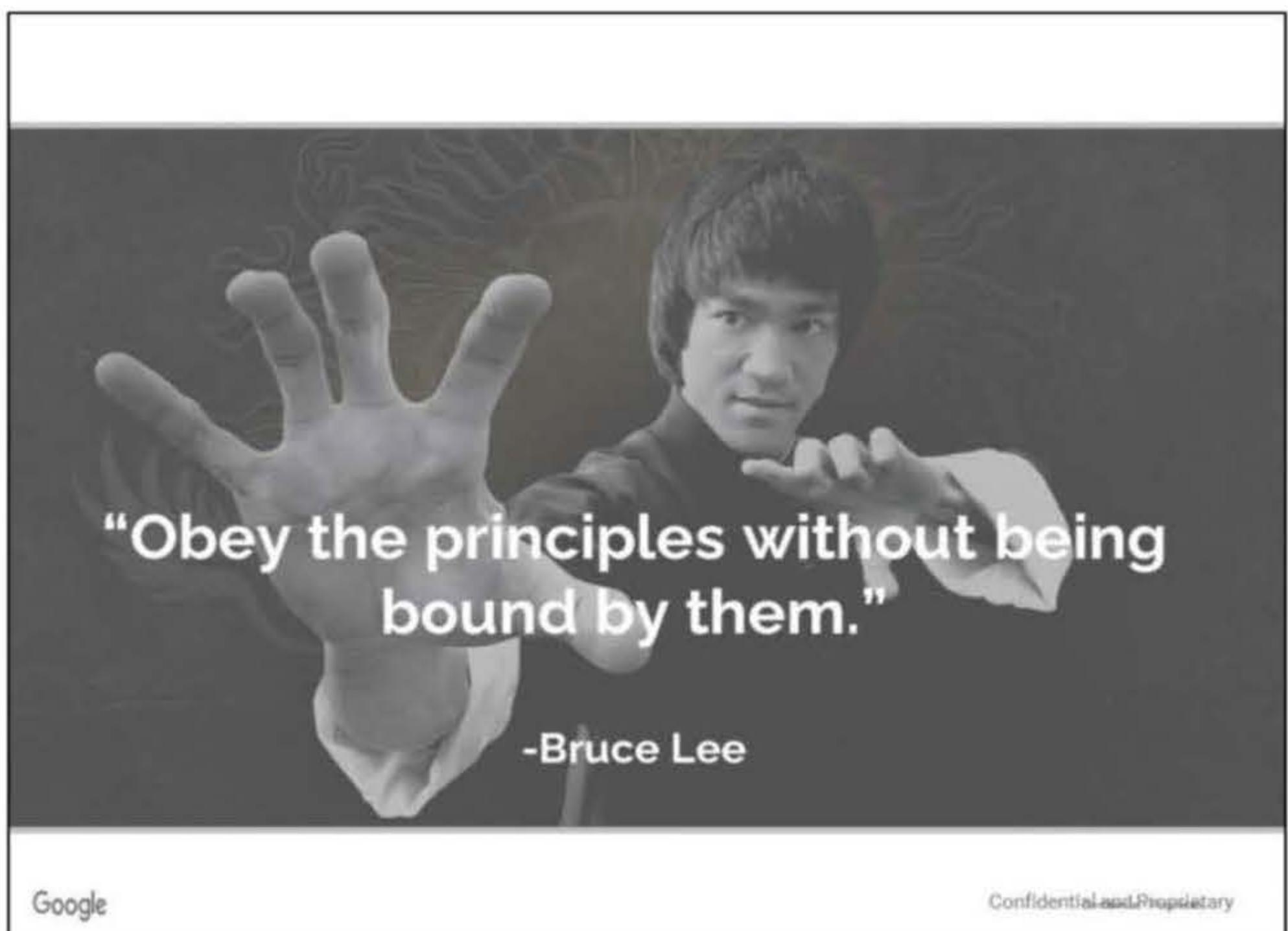
advertisers or DBM partners

- However, those who do cross-link tend to be our biggest customers like:
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- In DCM, there are 68M active placements/creative tags generally.

Id	Date	Text
4	03/27/2018 18:08:40	+karinb@google.com Suggest we cut for time

Google

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**“Obey the principles without being  
bound by them.”**

-Bruce Lee

Google

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## Display & Video 360 Unification Principles

Simplify account, product and commercial states while building for users of the future.

### Single Product Experience

Offer a single product to our customers.  
Customers may decide to use a subset of modules.

### Unified Contract

Offer a simpler, unified contract, but grandfather customer base to enable migration

### Single Account

Merge full stack customers where possible to help realize value of consolidation.

### Keep our customers

Making thoughtful cost/benefit trade offs and try to satisfy or improve customer use cases.

Google

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Slide 148

Id	Date	Text
5	03/28/2018 14:06:34	+karinb@google.com Suggest we keep this as the last slide, it's probably an important discussion to have with Suresh but we won't make it past this slide :)
2	03/28/2018 14:06:34	fine with me, moved it!

Google

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Part 1			
	Topic	Time	Presenters
19 March	<b>Introduction:</b> Product Portfolio, Team Structure	20 min	Payam, Max, Vlad
	<b>Business Overview:</b> Ecosystem, Revenue	60 min	Tobias, Roshan
	<b>Product Demo:</b> DBM	40 min	Roshan, Karin

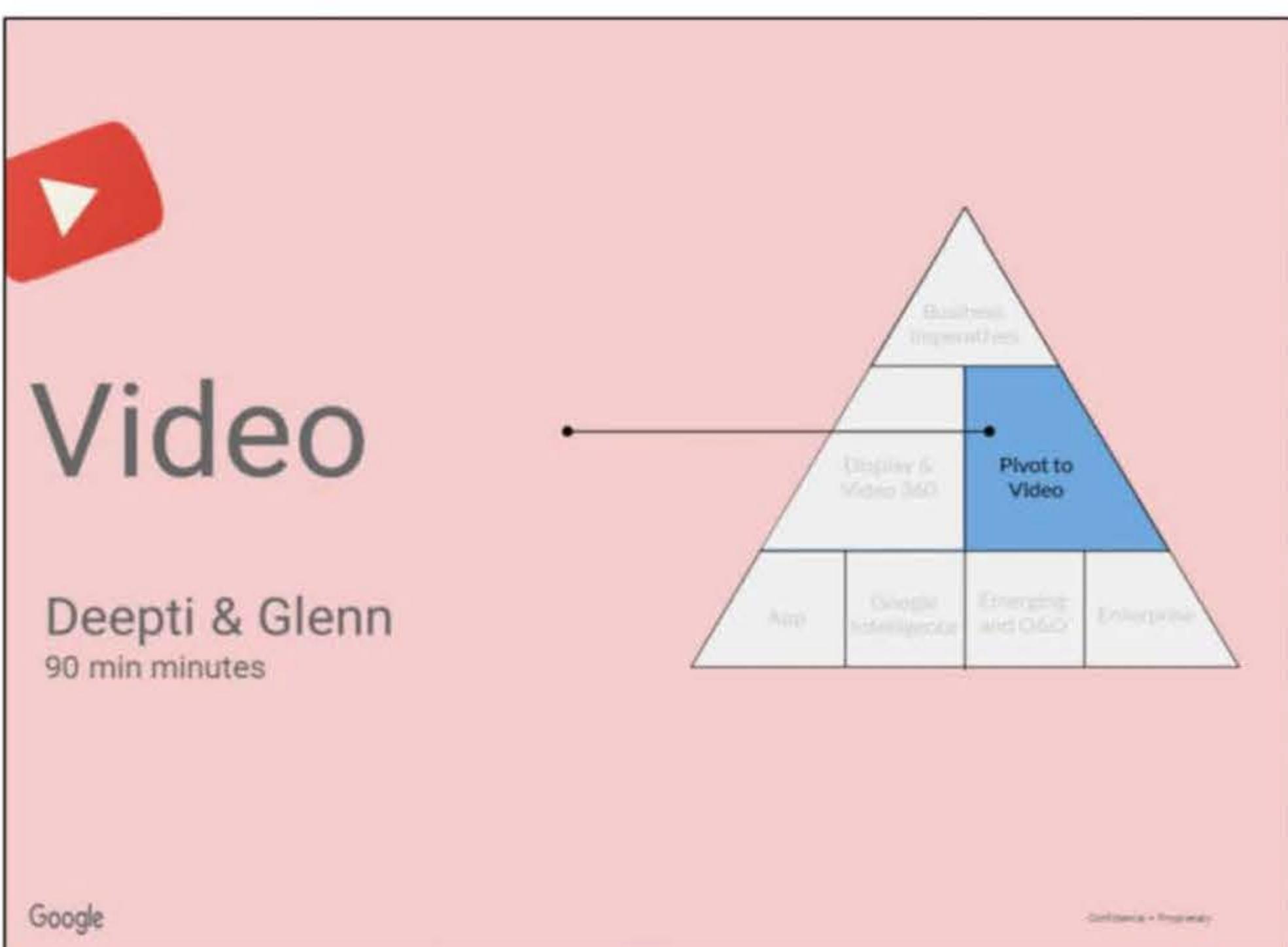
Part 2			
	Topic	Time	Presenters
28 March	<b>Product Demo:</b> DCM	60 min	Luke, Karin, Deepthi
	<b>Product Strategy:</b> 2018 Strategy Overview, DV360		

Part 3			
	Topic	Time	Presenters
Today	<b>Product Strategy:</b> Pivot to Video, Other Bets	120 min	Eve, Sara, Deepthi, Glenn

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# Market Overview

Google

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TV/Video is a \$200B+ global market; Video viewership and growth will be driven by OTT and Digital Video & Apps

#### Traditional TV

Linear TV, Addressable TV,  
IPTV, DVR, VOD



Ads  
Market: \$180B  
\$192B (2022)

#### Over-the-Top (OTT) Services

Subscription (VOD):



Virtual MVPDs (Live TV, DVR / VOD):



Direct to Consumer (Live TV, VOD):



\$6B  
\$20B (2022)

#### Digital Video & Apps

Watch, Scroll, Snap, Tweet, Play,  
Listen



\$20-24B  
\$60B (2022)

See Appendix A for more Comcast strategy and business details

Google

- Market = not just digital video, but also traditional TV and emerging growth areas like Over the Top services.
- Traditional TV still holds majority; OTT and digital growing fast → Overall pie is growing
- Creates a significant opportunity for our business

**Goal:** Provide smarter ways for marketers to reach their audiences while they are consuming content, no matter how, where or when they choose to watch

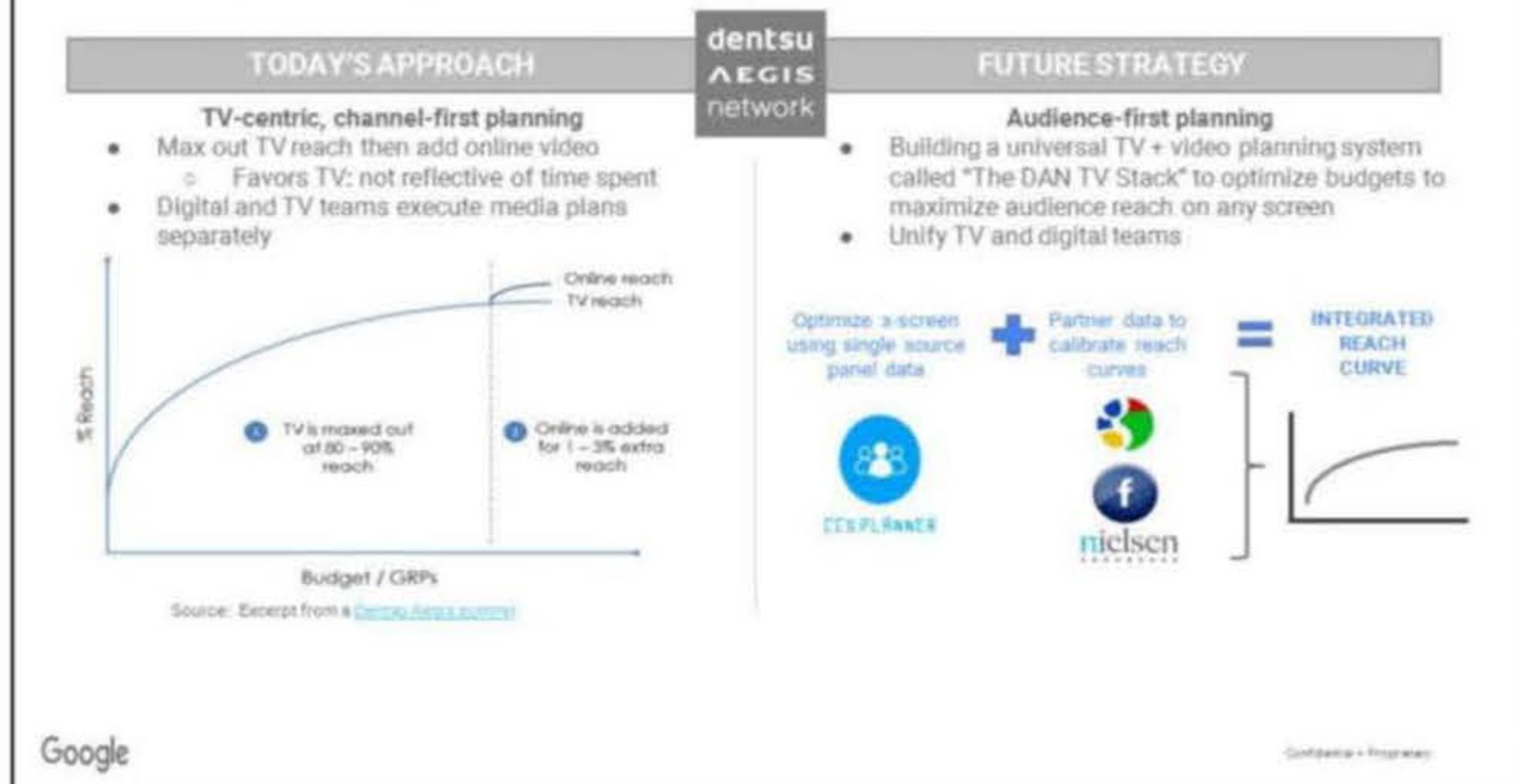


Google

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- As all of these options for consumers creates complexity for advertisers and agencies
  - Our goal is for DDM to be the platform where advertisers can plan, buy and measure across all video content
  - HOW/WHERE: devices and all channels
  - WHEN: live, on demand
- This vision / goal is well-aligned with what our customers are trying to do

Today, video buyers are still largely planning TV and digital video separately, but are looking to shift



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Summary: Clients want to plan across TV+digital video

- Historically, advertisers used to think about video and TV separately.
- They would plan TV first and then the digital video teams would get the leftover budgets
- But that's starting to change now
- Advertisers are starting to think about TV and video together
- They are looking to plan them together and build an integrated reach curve to help them understand where to spend their budget most effectively
- Dentsu Aegis or DAN is one of the big 5 holding companies
- As an example, they've built a universal planner that lets them pull data from many different systems and optimizes for reach across platforms
- These agencies are also starting to unify the TV and the digital teams in order to accelerate this trend

Both traditional TV buyers and sophisticated digital-first marketers are looking to find audiences x-screen with DBM



L'ORÉAL GEICO



**Traditional TV buyers** aim to maximize reach for their target demographic (e.g. Adults 18-54)

**COMMON TACTICS:**

- TV
- Non-skippable pre-roll
- Mastheads

**EXAMPLE KPIs:**

- Cost per Point (CPP)
- Total unique reach (TRP, GRP) and frequency

**Sophisticated digital-first buyers** use precise targeting to reach people most likely to convert

**COMMON TACTICS:**

- Pre-roll, digital-first formats (TrueView, Bumpers)
- 1st party targeting (incl. remarketing)

**EXAMPLE KPIs:**

- Completed views (viewable and audible)
- Conversions, CPA

Google

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- Summary: DBM's customers come from both traditional TV mindsets, and more digital mindsets - and therefore have different needs
- On the one hand we have traditional TV buyers like P&G and Chevrolet, that want to buy on reach for their target demographic
- And on the other hand side we have advertisers like Netflix and Booking that use very precise targeting and care about conversions
- TV buyers use formats that are very similar to TV like non-skip pre-rolls and mastheads, while the digital first buyers use digital strategies like 1p targeting
- They differ in their KPIs too. The TV buyers use metrics from the TV world like cost per point and frequency while the digital buyers use metrics like conversions and completed views

All advertisers care about both "brand" and "performance": this distinction is made at the campaign or creative level

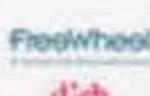
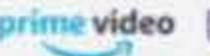


Google

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- Traditional tv buyer often equated to brand, where digital buyer is performance
  - For example, even a traditional TV buyer like P&G has campaigns and creatives that go after both of those things
  - At the end of the day they also have products they are trying to sell
  - For example at the top of the slide is their "Like a girl" ad that went viral which was obviously geared towards building brand affinity, no specific call to action
  - And on the bottom is an example of the tide ad with a clear call to action
- Most of them are leading users through a funnel  
Need to solve for both brand and perf use cases to enable this

Competitors are aggressively going after the video + TV opportunity with powerful ad tech + access to unique media

		Video-focused incumbents	Ones to watch
Unique Media	O&O	 <b>verizon</b>  	
	Partnerships	         	  
Platform strengths	Cross-screen reach planning (legacy Tubemogul product)  Potential to capitalize on cross-stack integrations across DSP and Marketing Cloud (DMP, Analytics, etc)	Targeting & measurement leveraging mobile & TV subscribers  Focus on attribution and proving ROI across channels	Full-funnel visibility into shopping across many verticals, yielding in-market / purchase data for targeting & measurement  Favorability with agencies due to service and incentives  Aggressive partnerships with 3rd parties for OTT targeting & measurement

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- competitors going after this opportunity with cross-screen video advertising for brand and performance use cases, each with different strengths
- Adobe is a full stack competitor and their main strength has been cross-screen planning
- Verizon's DSP is Oath which is basically a combination of AOL One and Adap.tv. They are interesting to look at given the strength of their data and O&O assets.

And then we have the emerging digital first competitors like Amazon and The Trade Desk

- Amazon is full-funnel, but important to note that they have strengths in certain verticals (like retail), and weaknesses in others (travel, telco, fin services, etc)
- Trade Desk has become quite popular with agencies due to their services and incentives. And they are going for aggressive partnerships with 3rd parties on the OTT front.

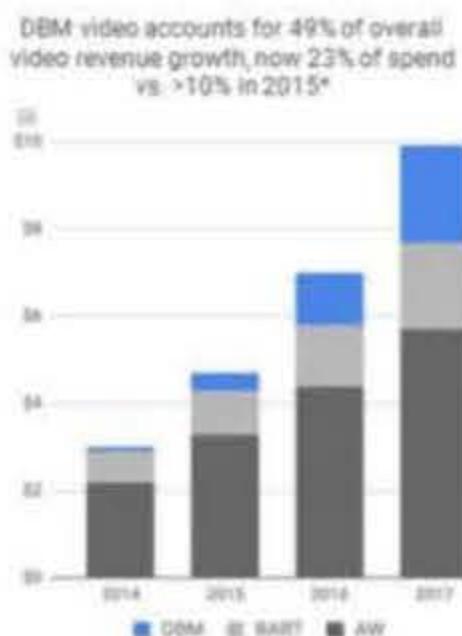
# Revenue Overview

Google

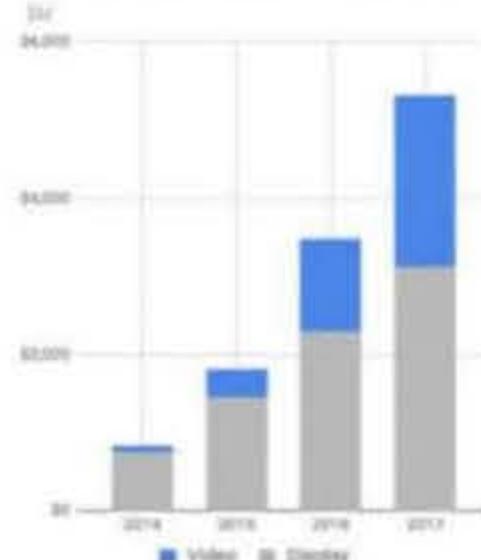
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## 2017 in Review: \$2.2B on DBM video, 86% YoY Growth

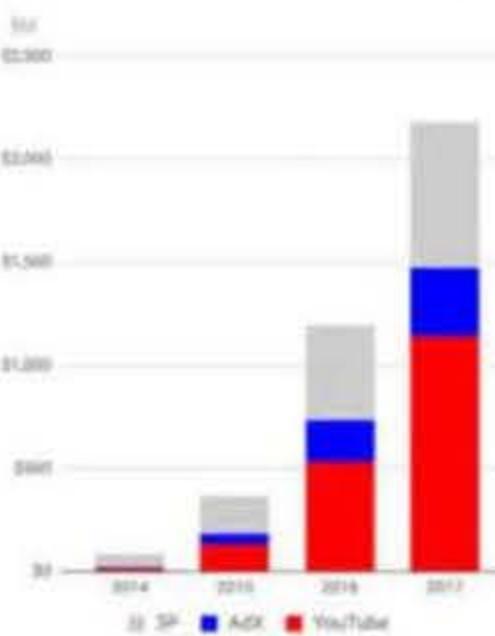
DBM accounts for 23% of total Google video revenue; video now accounts for 40% of total DBM revenue



Video is now 40% of total revenue in DBM, and the fastest growing segment of revenue



Within DBM Video, YouTube is driving the majority of growth and now accounts for over 50% of total DBM video spend



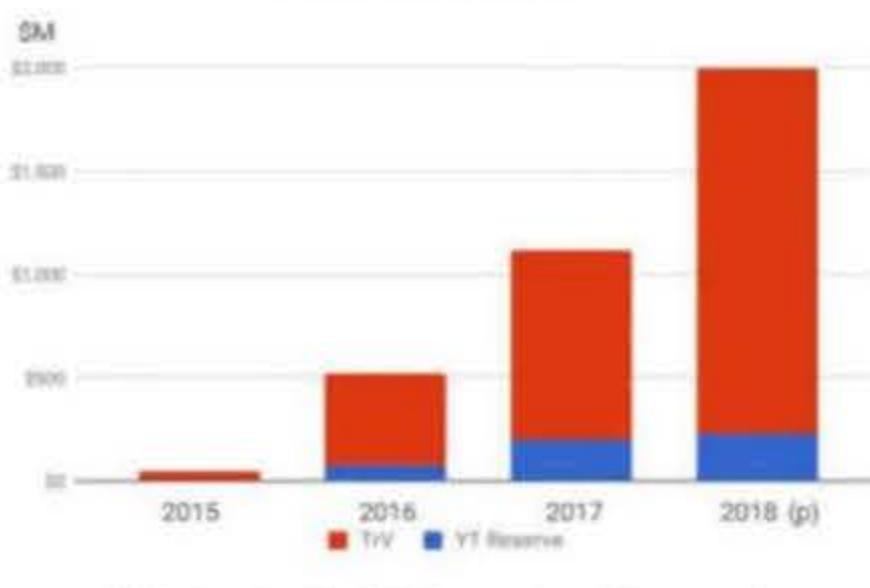
Google

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- Last year was a huge year for DBM video
- Now it is a massive part of not only DBM business, but also of the overall Google video business
- The chart on the left shows video as part of DBM. So Video is now 40% and still the fastest growing part of DBM.
- The second chart from the left is DBM as a percentage of overall video revenue. It is now roughly 23%.
- Within DBM video, YT is driving majority of the growth and is now more than 50% of the video revenue
- This also varies by the region
- There are some regions which are very heavy on YT like Australia

## 2017 in Review YouTube: \$1.2B driven by TrueView

2018 OKR to deliver \$1.8B of YT revenue via DBM - 50% YoY Growth, with ~90% from auction TrueView



- \$1.21B in FY 2017 (87% auction, 13% reserve)
- \$431M in Q4 '17, representing 75% YOY growth
- 22% of total DBM revenue in FY 2017

Multiple Studies Show 60-80c of every DBM TrV \$1 are incremental to Google

### Fargo Forecasting: 64-81c

Forecast AW TrV spend for DBM adopters to create counterfactual, compare with actuals

### Casual Impact: 61-75c

Forecast AW TrV spend using statistical relationship between adopters vs. non; compare with actuals

#### Key reasons driving incrementality:

- Media & workflow consolidation
- Accessing new dollars allocated to programmatic
- Unique feature sets (freq capping across media)

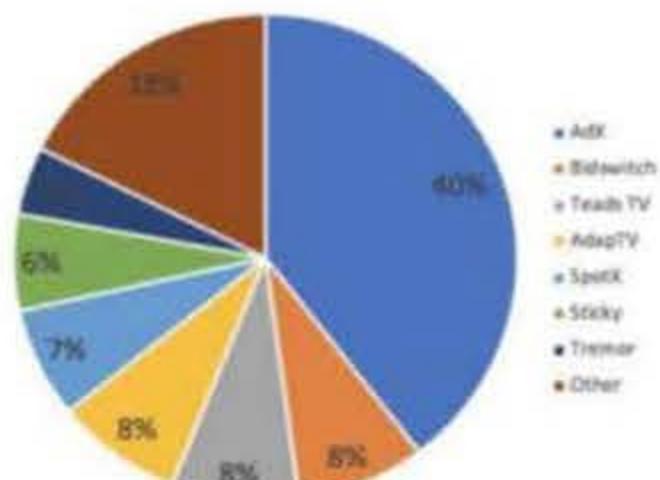


Google

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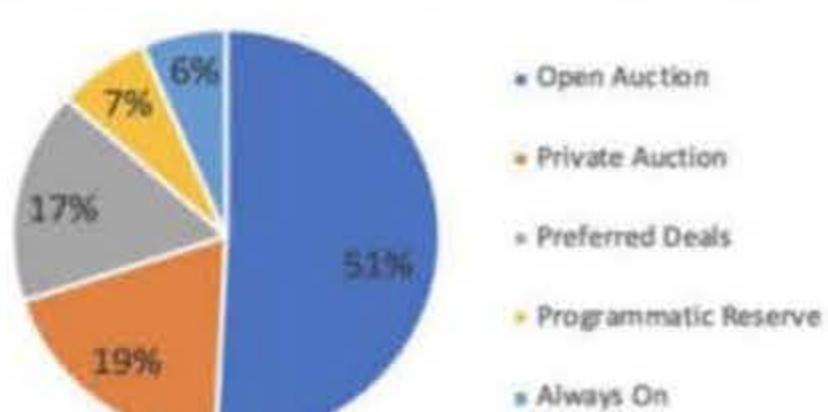
## 2017 in Review non YouTube: 40% of spend on Google Media, accelerated by ads.txt

AdX captured 40% of non YT video-spend in 2017



- AdX share of DBM non-YT grew 16% in 2017 to 40%
- Key drivers include "flight to quality": ads.txt, mApp growth (player size classification change) and adoption of PG

Open Auction makes up half of total spend, with preferred deals and private auction capturing 1/3



- Auction (open+private) still majority of video spend at 73%
- Deals growth outpacing that of open auction, especially PG (150% YoY) and Preferred Deals (79% YoY)

Google

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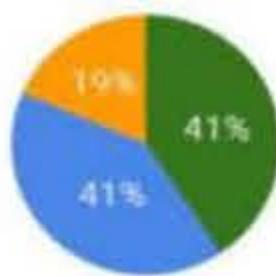
On the non-YT side, here's how the revenue splits by exchange and by deal type

- On the exchange side, AdX was almost 40% of the revenue in 2017 compared to maybe about 30% a year earlier.
- This was driven in part of the ads.txt launches where we stopped buying unauthorized inventory
- On the deals front, auction is still majority of spend at 73%
- But deals are growing much faster, with PG at 150% and PD ar 79% yoy

We want customers to use DBM for all video spend, to gain visibility into and capture share of wallet

 **All Media Buyers**

Buyers adopting DBM for YT and non-YT media



Active Buyers: 80  
L4Q Spend: \$351M

Most desirable segment: access to see (and win) broader media budgets

**YouTube Only Spenders**

DBM buyers spending on YT only via DBM (80%+)



Active Buyers: 45  
L4Q Spend: \$177M

High YT spenders, but lack visibility into all other video spend

**3P Media Centric**

Buyers adopting DBM video, but spending minimally on YT (<20%)



Active Buyers: 27  
L4Q Spend: \$93M

Current DBM clients with opportunity to capture spend on YT

■ YouTube ■ AdX ■ 3rd party exchanges

Google

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Summary: Just from a strategic perspective, we want everyone to buy all media with us- both YT as well as 3P

If advertisers only buy YT, then we don't get visibility into all of their video spend or get a share of their spend

Similarly, if they only buy 3P video from us, then we have limited ability to influence their how they spend their budgets

## SWOT for DBM Video

### Strengths

- Unique access to **YouTube** as anchor for digital video buying
- Leading buy-side **platform** (DDM) across search and display, with strong client adoption
- Partnership with **DRX** offers unique opportunity for unique inventory access and efficiency

### Weaknesses

- Lack of penetration in **traditional TV** solutions (inventory, planning, measurement)
- Limited x-media adoption for impact-based **measurement** solutions (brand / search lift)
- Video capabilities not yet fully front-and-center in platform

### Opportunities

- Unique Google cross-device **Identity & measurement**
- Leverage strong adoption with **consumer** products (chromecast, YouTube TV, android TV) to disrupt TV market, and accelerate digital / connected TV growth
- Expand our display **performance** business to video
- Move to **addressable** / data-driven TV buying creates opportunity to capture incremental TV budgets

### Threats

- Inability to access premium inventory due to walled gardens, **relationship** dynamics (e.g. FW, Amazon, FB)
- Strong competition from **walled** gardens, TV incumbents and agile video point-players
- Inability to prove **efficacy** over existing TV models and change the currency (or others do it first / better)
- "Light-touch" **investment** in linear TV may not be enough to win market long-term

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- We are only covering video specific ones

# Product Strategy

Google

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## 2018 Video Strategy: develop solutions to address the \$200B in video revenue converging across TV and Digital

### key goals



Google

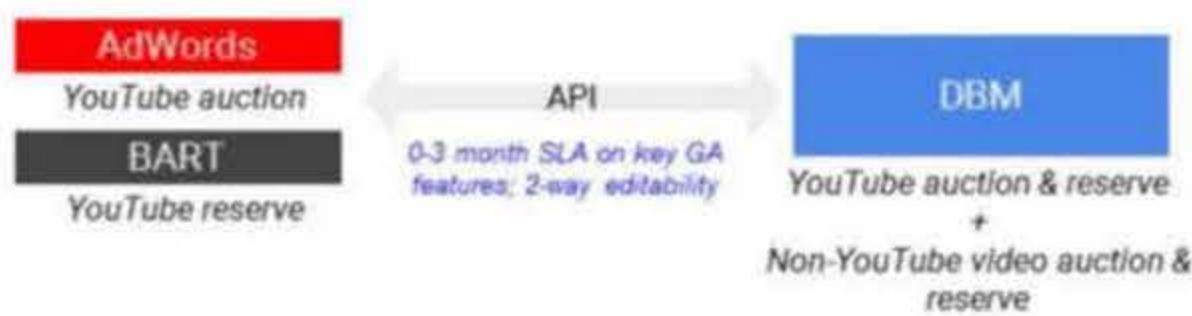
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- Our strategy is actually really simple: (1) we want to be the best platform for buying digital video and (2) we want to capture the TV opportunity (3) And we want to make all of our products discoverable by users.

- To be the best platform for digital video, we want to do 3 things
  - First, we want to invest in our crown jewel, YouTube, which is also our big differentiator compared to other platforms
  - Second, we want to give customers a reason to consolidate all their digital spend with us by offering cross-channel features.
  - Advertisers buy YT in DBM and pay a tech fee to consolidate their video spending in one platform
  - In return they expect to realize gains in efficiency and effectiveness
  - To realize these gains, our best features must work across YT and non-YT (cross-channel) seamlessly
  - If all channels are siloed, there is no advantage over buying via multiple platforms
  - Being strong in cross-channel allows sales to upsell DBM buyers who mostly buy YT, getting larger share of wallet
  - We'll get to what these features are in a few slides.
- Third we want to make app video a big part of our advertiser's portfolio since apps are where we're seeing the most growth in supply

- On the TV front, we want to set ourselves up for the future by being the platform of choice for buying connected TV in the long run
  - But because TV is going through this transition phase, we need to invest in both connected TV and programmatic linear TV and position this as a living room package for our customers
- 
- And of course, having access to all of this inventory is meaningless if advertisers can't find it
  - So we want to invest in discovery and packaging, so advertisers can easily find what they are looking for

We launched YouTube in DBM in 2015 to capture incremental budgets as the industry adopted programmatic platforms



**Benefits of YouTube via DBM today:**

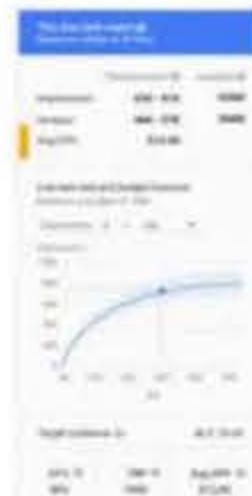
- Manage ALL YouTube + non-YouTube video media across auction and reserve in one place
- Compare performance of all media using key metrics like Brand Lift, Unique Reach and de-duped conversions
- Consolidated reporting and billing across all media in one system

► Done YouTube ► Digital Video & Apps ► TV ► Discovery & Packaging

Google

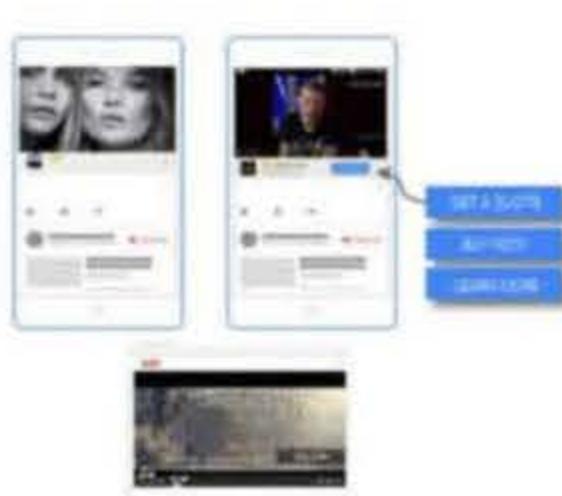
DBM offers the same key formats and targeting for YouTube as AdWords and BART

Forecasting



TrueView forecasting during campaign construction

Formats



TrueView (In-stream, Actions, Shopping, Discovery), Bumpers

Audiences



Google's search-informed intent signals and cross-device data

Done YouTube

Digital Video & App

TV

Discovery & Packaging

Google

Cross Channel Video leverages our tech and data to realize the benefits of consolidation across YT and non-YT

The screenshot shows a 'Update Forecasts' dashboard in Google Data Studio. It includes a line chart of 'Reach vs Time' and a table of 'Adwords products' with columns like 'Impressions', 'Clicks', 'CTR', 'Cost', etc. A red box highlights the 'Adwords products' section. To the right, there's a sidebar with 'Current settings' and a 'Reporting' section. Below the main area are navigation arrows for 'Done YouTube', 'Digital Video & Apps', 'TV', and 'Discovery & Packaging'. On the far right, it says 'Confidential + Proprietary'.

Plan

- Cross-channel forecasts

Buy

- Budget pacing
- Frequency management
- Auto budget allocation
- Real time targeting

Measure

- Unique reach reporting
- Comparable brand lift studies
- De-duped conversion tracking

- Cross channel is a very important pillar of our strategy
- Advertisers buy YT in DBM and pay a tech fee to consolidate their video spending in one platform
- In return they expect to realize gains in efficiency and effectiveness
- To realize these gains, our best features must work across YT and non-YT (cross-channel) seamlessly
- If all channels are siloed, there is no advantage over buying via multiple platforms
- Being strong in cross-channel allows sales to upsell DBM buyers who mostly buy YT, getting larger share of wallet

Examples include planning features that help advertisers understand their unified & de-duplicated reach across YT and RTB

Then there are the buying/execution features like helping you manage your budget effectively, both with unified pacing controls but also features like ABA

Similarly cross-channel frequency management which helps you save wasteful impressions and drives more efficiency

- Lastly on the measurement front, having unified reporting helps you understand your unified reach
- If the campaign goal is brand awareness, comparable brand lift studies help you understand the effectiveness of spend on driving awareness
- And if your goal is conversions, conversion tracking attributes conversions appropriately, de-duplicating across all your impressions

## YouTube in DBM: Areas of Opportunities

Get to Parity with AdWords for Betas

- Launch alphas, betas and labs simultaneously in AW and DBM for key features (new ad formats, targeting capabilities)

Manage Silo'd Buying

- Help buyers more easily manage across YouTube and non-YouTube video given unique YouTube formats, audiences and identity spaces

Create Clear Platform Differentiation

- Re-establish clear customer value proposition (4% fee) and support more programmatic capabilities on-and-off YouTube (frequency management, cross-channel buying)
- Commercialize clear customer segmentation between AdWords and DBM

Done YouTube

Digital Video & Apps

TV

Discovery & Packaging

Google

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Apps: 86%+ of daily user time is now spent in apps, creating a pool of quality video inventory for buyers



#### Formats

Enable targeting of rewarded, outstream and vertical video formats

#### Buying

Expose app inventory to eligible demand by fixing the blockers (e.g. viewability, brand safety)

#### Packaging

Win over opted-out advertisers with a video-focused, premium offering

Core YouTube → Digital Video & Apps → TV → Discovery & Packaging

Google

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We'll talk more about apps in the "Innovation" section but our overall strategy includes 3 pillars:

- Offer more targeting options that enable video buyers to find the inventory they are looking for
  - Minimize reasons to say "no", by fix the blockers including viewability and brand safety
  - Create reasons to say "yes" by creating packages of video-focused inventory that meet their key criteria
- p inventory to eligible demand by fixing the blockers (e.g. viewability, brand safety)

TV: Capitalize on the Connected TV opportunity

Make CTV a first-class citizen in DBM (device type, targeting, viewability, reporting, spam)

Enable CTV access, packaging and discovery

Develop identity, audience and household solutions for CTV

Roku

Core YouTube      Digital Video & Apps      **TV**      Discovery & Packaging

Google

- Roughly the same strategy for CTV as well
- Minimize reasons to say no by making CTV a first class citizen in DBM
- Believe it or not, right now advertisers can't explicitly target or report on CTV devices
- We want to fix that by making CTV a first class citizen
- Same as apps, we want to enable better discovery and packaging of CTV inventory
- The last thing here is somewhat unique to CTV though
- One of the challenges we face with CTV is that we don't have a very well developed notion of identity
- This also means that we can't do some of the things we do for digital, like demographic targeting
- We want to invest in that this year and

Peentoo

So far, no one is filling CTV inventory well, so we've taken a more thoughtful approach

The reality is w/ indirect monetization via server side DAI, buyers lose out on some key signals

generally this causes low fill for CTV inventory  
Working hand in hand w/ Roku and Apple TV to ensure proper signals are being passed to buyers  
You all have seen the fruits of these efforts - we launched HBO deal last month, \$31 CPMs, we sourced the demand from our DSP - DBM  
We have an entire programmatic deal team whose role is to connect buyers and sellers and source these deals and we look forward to continuing to add value to your current stack with this demand

## TV: Bring data-driven buying and faster, better metrics to Traditional TV (Linear and Addressable)

**Programmatic TV Buying**

Google fiber clypd  
WIDEORBIT

FOX NATIONAL GEOGRAPHIC TLC  
ESPN FX HGTV BBC

Enable data-driven execution and workflow efficiency for linear and addressable TV across national & local spots

**TV Attribution with Search Lift**

Measure impact of TV airings with Search Lift integration in DBM

**TV Ad Explorer**

Explore next day TV airing data and measure reach of TV ads by daypart, demographics, genres, networks & shows

Core YouTube Digital Video & Apps **TV** Discovery & Packaging

Google

- As we discussed earlier in the presentation, programmatic TV is becoming more important given the convergence of digital and linear TV and how they are increasingly planned together
  - We are somewhat behind Tube in this space, but we're making good progress
  - We have a few integrations under way with WideOrbit (local broadcast), Google fiber (which is our own MVPD) and Clypd (national cable)
  - The beta tests that we've done so far with WO have shown very promising results
  - We managed to get quite a bit of scale at very attractive CPMs and had no problems spending hundreds of thousands of dollars
  - The goal this year is to get enough scale with these integrations that we can go to market with a compelling offering
- 
- Our key product differentiator for programmatic TV is the search lift measurement we provide to customers
  - This will help them understand the effectiveness of their TV spend across multiple channels and day parts
  - So for example, for our programmatic TV beta that we recently ran with a customer we saw that while their ads in the primetime slots were more effective,
  - If you adjusted for cost, they were actually less efficient
  - They found that insight very helpful and wanted to use that for future planning purposes

The last product we're building for bridging the TV spend with digital spend is TV ad explorer

This feature gives customers access to linear TV campaign data directly in DBM through a new reporting dashboard where advertisers can analyze TV campaign performance.

## Discovery and Packaging: Help advertisers find scarce premium video inventory for their campaigns

The screenshot shows two main sections: 'Discovery' on the left and 'Packaging' on the right, both within a 'MarketPlace' interface. The 'Discovery' section displays a grid of publisher logos including YouTube, Univision, Hulu, Vevo, and others. Below the grid, three bullet points describe its features: 'MarketPlace for YouTube & Premium Video publishers', 'Planning workspace', and 'TV Content Cards'. The 'Packaging' section shows a curated list of video packages, including 'Top Video Picks' and 'Dynamic guaranteed packages with MarketMaker'. A navigation bar at the bottom includes 'Core YouTube', 'Digital Video & Apps', 'TV', and 'Discovery & Packaging'.

Discovery

- MarketPlace for YouTube & Premium Video publishers
- Planning workspace
- TV Content Cards

Packaging

- Curated video packages, including Top Video Picks
- Dynamic guaranteed packages with MarketMaker

Core YouTube   Digital Video & Apps   TV   Discovery & Packaging

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### Discovery

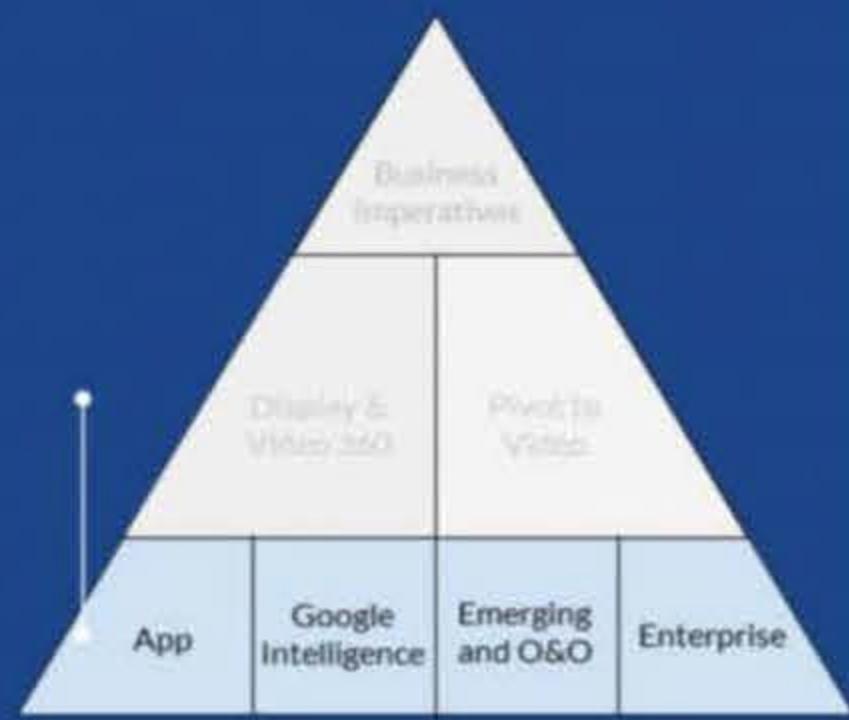
- Having access to all this inventory is meaningless unless advertisers can actually find it
- Therefore we are investing heavily in improving our discovery capabilities with marketplace
- Marketplace is a tool in DBM that lets you discover publishers you could strike a deal with
- You can input your key targeting criteria like demo & country and we'll tell you the top pubs
- We are also introducing this section in marketplace called spotlight which you can almost think of as featured publishers
- Initially it will be based on static input from sales/internal teams, but in the long run it'll be picked automatically by our algorithms

### Packaging

- On the packaging side, we're working to introduce curated sets of packages that span multiple publishers
- Google can play a role here by providing supply to advertisers through efforts like Top Video Picks or MarketMaker, and third parties can offer bundles of inventory as well.
- For example, the screenshot you see here is how we surface lineups in YT

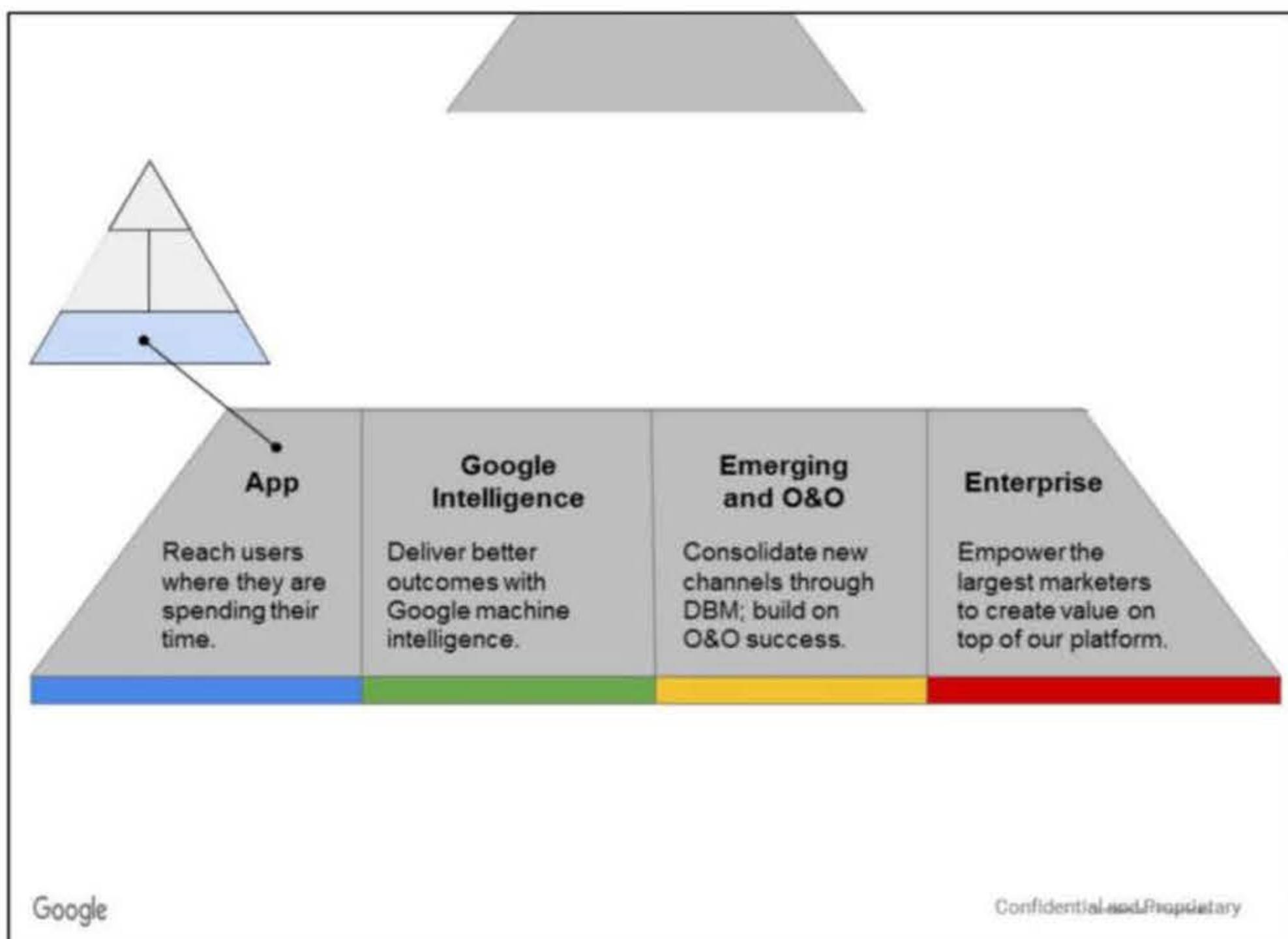
# Other Bets

Deepti | 30 minutes



Google

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As Luke talked about, these are our other bets

**App**  
critical innovation bucket  
user time dominated by apps

**Google Intelligence**  
leverage Google's core competency  
balance automatically vs. augmenting a user's decision

**Emerging and O&O**  
invest in nascent channels that will provide NBD  
build differentiated offerings (planning, targeting, measurem.)

**Enterprise**  
70% of DBM revenues, DBM has 35% share of wallet  
Expected to grow w/ TV spend moving to digital  
empower largest advertisers/agencies to operate at scale

Apps

Google

Confidential - Unpublished

Id	Date	Text
1	03/26/2018 18:21:06	+deeptib@google.com FYI, added the following 3 slides

Google

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There is an untapped growth opportunity in apps

**While DBM demand for app inventory steadily increases, there is a very large percentage of demand that is excluding app inventory altogether**



For comparison: GDN app spend is 27% of GDN total  
(excluding app promo, [source](#))

Revenue by environment targeting:

	App-only	Web-only	Both or no targeting
Display	6%	57%	37%
Video	9%	43%	48%

Google

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Summary: There's an untapped opportunity in apps

- As you can see, we've made a lot of progress in the last couple of years with apps, but there's still a long way to go
- Over the last year, app spend as % of overall DBM spend has gone from 6% to 13% which means that apps has been growing twice as fast as DBM
- And while that's great, 13% is still lower than where we'd like it to be and so we want to invest in increasing that further over the next year
- A big reason for this number being lower is opt outs
- As you can see on the right hand side table, a big fraction of our spend is opted out on apps

## How do we unlock more apps spend? Fix the plumbing and focus on brand.

Expose app inventory to eligible demand



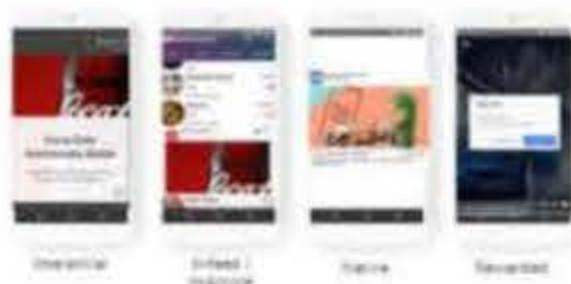
Viewability: an industry standard for viewability in apps that will expand coverage for app inventory

Same-device conversions: Changes to DCM execution reporting so that web-to-app conversions are displayed in line item reports and used for optimization

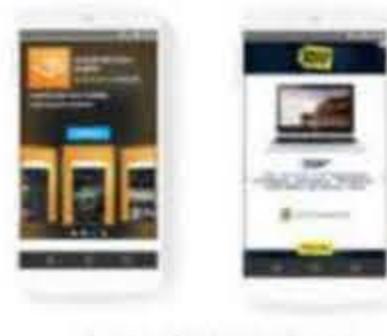
Reportable views: Ensures that top apps are included in a commonly used inventory targeting option

Brand safety: do the work so that common brand safety features don't implicitly exclude apps

Win over opted-out advertisers with a video-focused, premium offering



Grow demand by driving DBM adoption for programmatic performance



Google

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- In many cases, it's not because they don't want to advertise on apps
- Success of walled gardens like Instagram, fb and even yt on apps has shown that advertisers are actually okay with spending on apps
- The challenge on DBM has been fixing the basic plumbing and battling the perception that exchange bought app inventory is not premium

We have a 3 pronged strategy to fix that:

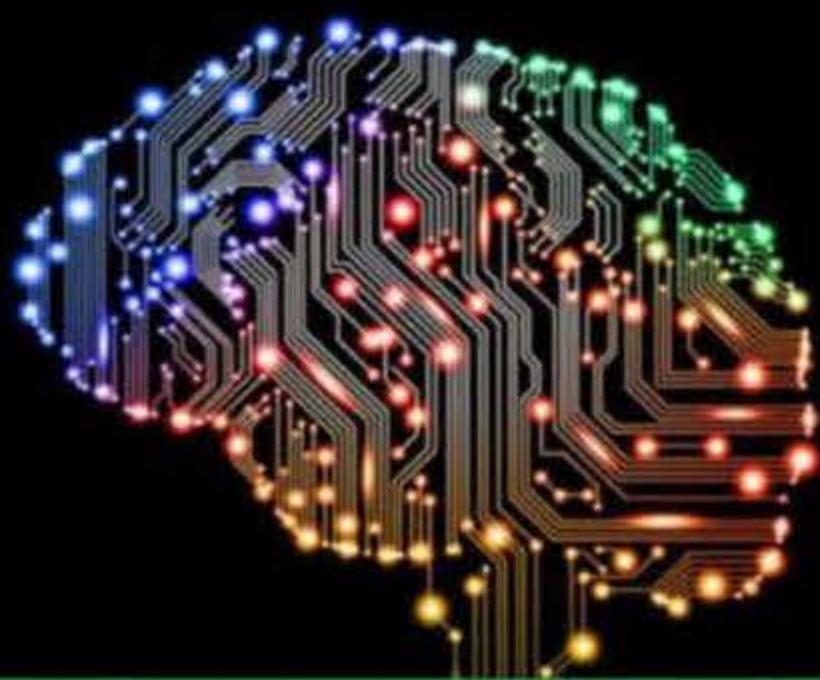
1. First is to match the existing demand to the existing supply by fixing basic plumbing. These are things like viewability which many of our customers consider as prerequisites for spending on apps.
2. Second is actually creating a package with apps that our advertisers would consider premium and would meet other key requirements like high viewability. Instead of going to customers and asking them "why aren't you opted in", we want to go to them with this package and see how they react
3. We want to grow demand from performance customers  
This includes all our initiative around app promo but also making traditional DBM performance spend flow with fixes like same device conversions

# Google Intelligence

Google

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Better outcomes with Google machine intelligence across all modules



The slide features a large, stylized brain composed of a circuit board with glowing nodes in various colors (blue, green, red, yellow) against a black background. Below the brain, there are three green rectangular boxes with white text, each representing a different module: "Automate", "Assist", and "Create".

Automate	Assist	Create
Grow auto bidding spend to 40%, pay-per-outcome, custom algo and reach opt for brands	Alert on campaign while running but also during creation; suggest ways to resolve issues that might lead to underperformance	Optimization, visual search for creatives, and creative recommendations
Confidential - Internal		

Summary: As Luke mentioned, this is our main strategy for being able to charge higher margins

#### Automate

- First thing here is automation. We want to increase the overall adoption of our automation features to 40% (it's around 26% today). And it was 15% a year ago.
- This includes pay per outcome which is where we charge customers for clicks but pay pubs for impressions so we can charge them a higher non-transparent margin
- We also want to invest in a reach and frequency optimization feature for brand customers, so we bring automation benefits not only for our perf customers but brand as well

#### Assist

- For customers who don't want full automation, we still want to provide them guidance on what to do next
- This includes alerting them when things are not going right, and also providing suggestions on how to improve their performance
- We recently launched budget reallocation suggestions in DBM and are continuing to add more (including raise bids, add additional targeting)

#### Create

- We're launching optimization for creative selection, which we know improves

performance for all customers who have more than one creative concept. This is the first step in helping advertisers measure the impact on performance good creative can have.

-For the first time, Google's expertise in visual search to the asset selection and creative development process - helping designers find and manage their artwork easier than ever

-We'll also introduce creative recommendations to help advertisers understand what messages and formats worked well for them, or might work well for their category or brand objectives.

We've been using machine learning in ads for years (adspam, bidding, classifiers, viewability).

Now expanding use cases to create additional value for customers:

Auto Bidding

Grow spend to 40%

Reach opt for brand

Incremental conversion opt for performance

Assist

Alert on campaign while running but also during creationS

Suggest ways to resolve issues that might lead to underperformance

Creative

Creative optimization

Visual search for creative content recommendations

## Emerging and O&O

Google

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Emerging Channels, Direct Integration and O&O increase reach

**New Channels**  
OOOH - Digital out-of-home, 40B+ monthly, Audio increased importance, Google Play Music potential, anchor property

**Expanding O&O**  
Building on success of YouTube and Gmail video, and expand into Waze, Maps, Photos, Now

**Direct Access**  
Direct integration with key publishers to ensure best access, signals

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- The third “other bet” that we have is emerging channels.
- These are new ways we are expanding the inventory that DBM can buy that we expect to bear fruit in the next few years
- We have brand new type of media like OOH and audio
- We have our own o&o that we want to expand into
- And we also want to provide direct access to publishers through project yavin aka demand platform

Picture shows actual ad from sales driven pilot in the UK via PG using DBM/DRX.

OOH is worth \$38B ARR. Exciting new market with new formats. We are uniquely positioned to measure.

Gmail/YT are a success story, we want to expand into other owned and operated properties across Google.

Direct Access, while still providing the broadest access to inventory, we want to be more explicit about the quality of our access and actively work on ensuring we have the best shot at winning each impression.

Id	Date	Text
6	03/19/2018 18:19:45	+tmaurer@google.com If we're not talking about Demand Product on Day 1, here's another place we could add any key points on Day 2 _Reassigned to Tobias Maurer_
7	03/19/2018 18:19:45	+deeptib@google.com FYI

Google

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**Audio Ads** in DBM allow buyers to seamlessly execute their audio campaign via programmatic pipes.

**Audio lets advertisers reach mobile users in new context**

**197    27%**

minutes per day  
spent on mobile

spent in audio  
only mode

**Audio Ads in DBM are a great opportunity for our buyers for a few key reasons**

**Digital Audio Drives Brand Results**

Audio drives +60% Brand Recall and +52% Brand Interest over benchmarks. Nielsen Catalina Solutions found that for top brands, each \$1 in spend drove \$6 in sales.

**Seamless**

Direct Integration with DBM allows buyers to use this new format with the same programmatic functionality they know and love.

We are fully launched with **Soundcloud**, **Spotify**, and **Google Play Music**



Id	Date	Text
1	03/27/2018 14:38:31	27% of mobile time spent is in audio-only mode

## OUT OF HOME is the fastest growing traditional media (\$42B market, +6% Y/Y)

### WHAT WE GET

Business expansion  
Incremental marketing dollars  
for Google

Business diversification  
Brand safe, not susceptible to  
ad blocking, zero fraud

Greenfield opportunity  
No other tech giants here yet

### WHAT WE PROVIDE

BMW: "OK Google... tell me about my ad performance."  
DBM: "Your ad was seen by [anonymous/aggregate], a millennial foodie who then visited the BMW X4 webpage"



- OOH is also a perfect example of the kind of disruptive thinking we can bring to a new industry and also generate incremental budgets for Google
- We can use the assets we have like the location history, GAIA identity and the audience data to change how advertisers buy this inventory
- Let's say a user was at time square at 2pm and saw a BMW ad and later visit the BMW website
- We can put all of that together for the customer and provide the level of insights that no one can

O&O properties collectively have monetization goals exceeding ~\$1B ARR for 2018 and ~\$3B+ by 2020. Each of these properties have the potential to be \$B+ properties as evidenced by similar-sized competitors.

	2017 DAU	2017 Revenue	Est 2018 ARR	Est 2020 ARR
Gmail	450M	\$400M	\$750M	\$1B
Image Search	340M	\$0 (display) \$130M (PLAs)	\$100M (display)	\$650M (display)
Feed	110M	\$0	\$50M	\$830M
Photos	120M	\$0	\$50M	\$350M
News 2.0		\$0	\$50M	\$220M*
Instagram	~500M	~\$4B	\$6.8B (2018E)	-
Pinterest	~50M	~\$490M	\$770M (2018E)	-
Snapchat	187M	\$825M	\$1.3B (2018E)	-

\* Excluding properties like Play that are 100% tied to Universal.

Google

Proprietary & Confidential

We are just scratching the surface of what we've done with O&O

<https://www.forbes.com/sites/greatspeculations/2017/11/13/how-much-revenue-can-instagram-drive-for-facebook-in-the-future/#591a33517b4f>

<https://www.fool.com/investing/2017/03/26/instagram-is-set-to-make-a-killing-in-advertising.aspx>

<https://docs.google.com/spreadsheets/d/1FxT-KnwBnTRQkyNouN16OFNPf01TjA8FUIQ024mTaiQ/edit#gid=1274630613>

[https://www.sec.gov/Archives/edgar/data/1564408/000156459018001409/snap-ex991\\_6.htm](https://www.sec.gov/Archives/edgar/data/1564408/000156459018001409/snap-ex991_6.htm)

<https://www.theinformation.com/pinterest-after-just-missing-2017-revenue-target-plans-sales-ramp-up>

<https://screenshot.googleplex.com/5Mpiy3HnakE.png>

Gmail 2020 ARR:

Momentum: \$900M

Assuming 20% YoY: \$1.08bn. So let's use a round \$1bn

IS - \$850M (based on book rev estimate for 2021, this includes also queryless

monetization)

Photos - assuming pursuit of both formats, 5X growth for assistant tab visits, and 3X growth of big-image views by 2020, we get around \$600M (lower scenario would be 3X growth for assistant visits, and 1.5X for big-image: \$350M)

Feed Ads estimates are \$1.8B ARR by EOY 2020, \$2.5B ARR by EOY 2021, \$3.0B ARR by EOY 2022.

Here is the modeling we did with the Finance team:

<https://docs.google.com/spreadsheets/d/1KSkwhMsdCmmv7920RFNDiqz61YpJ0jSD3xfuyZgq6mo>

SNAP: Brian Nowak, a Morgan Stanley who covers tech well (and usually asks Ruth a question on our earnings calls), has them at 1.3B for 2018E (59% YoY).

Insta: Nothing reliable because FB doesn't break out Insta, but seems like \$6.8B for 2018 is a standard estimate. That's massive YoY of 87% rev compared to estimated \$3.6B for 2017A, but I think it makes sense given their massive user growth (they more than doubled between Q2 and Q3 2017 to over 500M DAU).

Pinterest: Let's say they can grow at Snap's clip of 57%. Pinterest's rev grew 63% YoY from 2016 to 2017. That puts them at \$770M.

ARPU check for 2017 numbers:

Insta = \$7.28

Snap = \$4.41

FB overall = \$29.04

Pinterest = \$11.95

Seems reasonable, although Insta seems too low to me so the revenue estimates I found may be low. Added numbers to the slides. It wouldn't be objectionable to increase Insta to as much as \$7.5B (I currently have it at 6.8). Their ad load isn't so far off that of FB, and CPMs aren't encumbered by FAN there

Enterprise

Google

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## Big 5 Agencies continue to be an important revenue source for DBM...



- At the end of 2017, Big 5 Global agencies accounted for **60% of total DBM revenue**
- The share of revenue has **consistently grown** over the last 3 years

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Last but not the least we want to talk about enterprises

- Big 5 agencies continue to be a big part of our revenue
- At the end of 2017, big 5 agencies accounted for 60% of total spend
- And as you can see, the share of revenue has grown over the last 3 years

Video (45% 2017)

2017: \$390M

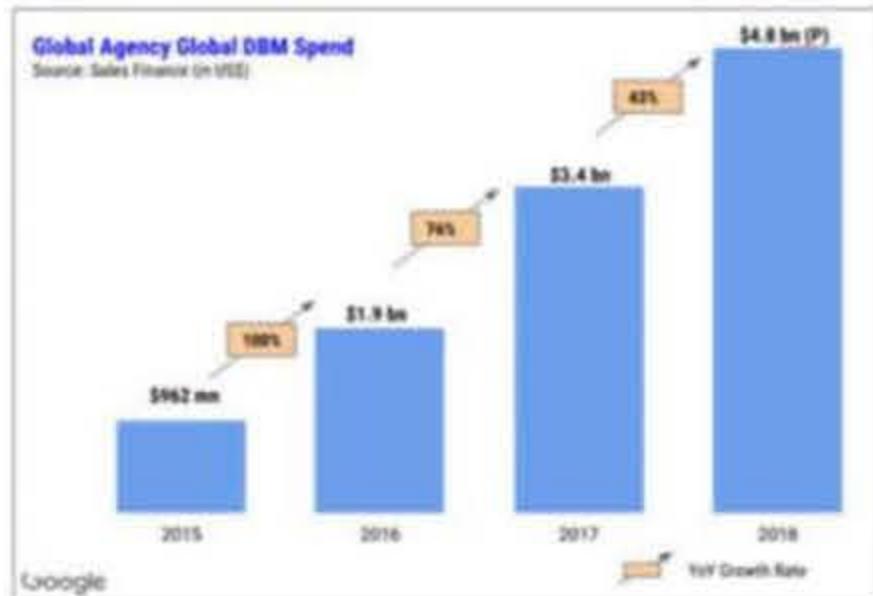
2018: \$550M

Non-Video

2017: \$494M

2018: \$893M

## But we need to strengthen our product p'ship to address declining growth...



- Recently, we have lost some share to competition as they've been more flexible to customization:
  - Trade Desk** is agency favorite for **quality of service** and **usability/ease of use** point of view. Though they don't have any proprietary data or full-stack offerings
  - Appnexus** allows really deep **customization** where agencies like WPP/Xaxis and DAN/Accordant have custom bidder build into Appnexus. But it's not a DSP for everyone, agencies with real assets make the most of their offering
  - Amazon AAP** offers their **shopping data** in a way that helps us predict future buys and targeting. They close the gap between ads & shopping for true ROI
  - Adobe** is emerging a strong **full stack** player, with a slew of recent acquisitions and is offering strong/closed-loop solutions to agencies

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- I know that we've mostly covered this content in the intro session, but just to reiterate
- We hear a lot about TTD and AppNexus from agencies in a different context

**Our strategy: Operate at scale, expand footprint with custom algorithms and ADH**

**Automate workflow for better efficiency**

- Write API (limited)
- Structured Data Files
- Scripts

**Add value through customization for a better ROI**

- Custom algorithms
- Ads Data Hub



Google

Customer's Proprietary

Agencies have two main goals- automate workflow for better efficiency and add value for their clients through customization

- For automating the workflow, we want to provide agencies a menu of options that they can pick from depending on their use case
- They can use the Write API for creating campaigns, but you can't use that for editing targeting or bids due to disintermediation concerns
- To help them edit targeting and bids, we offer structured data files where you can make changes in bulk in a CSV format and then upload back to us
- We are also exploring offering a scripts like functionality that agencies can use to automate their workflow but within our platform

Our second pillar is customization. And the main goal here is to enable the agencies to build on top of our platform, so they can add value and justify the margin they charge customers

- Custom algorithms is a really cool feature that helps customers use their 1P data or unique insights to optimize towards a business objective
- We've seen some really good success with our early customers and our goal is to scale that more broadly this year

And then we have ads data hub, that lets customers bring in their 1P data into

google cloud and join with Google data to derive unique insights

Video (45% 2017)

2017: \$390M

2018: \$550M

Non-Video

2017: \$494M

2018: \$893M

# APPENDIX

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## Three focus areas (further detail)

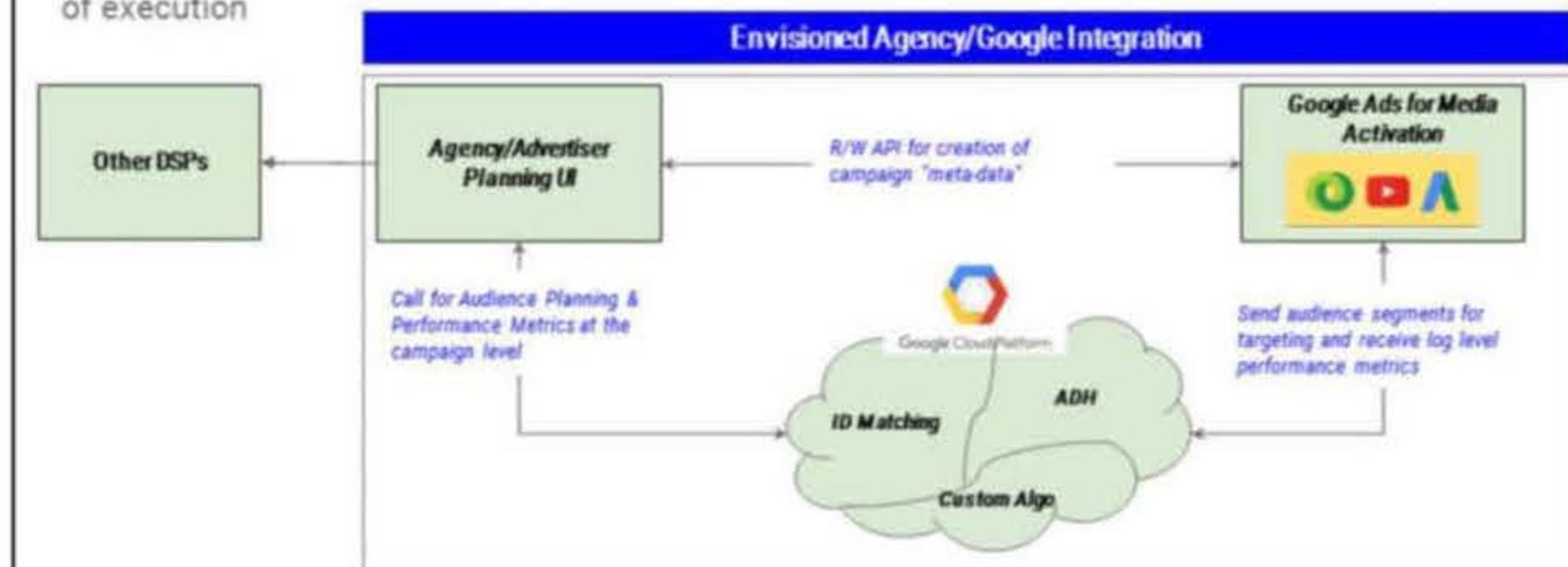
Focus area	Current challenges	What we're doing
1. Expose app inventory to eligible demand	Popular features have low coverage in app inventory (viewability measurement, 3rd party brand safety lists, verification, etc); reporting on same-device conversions is broken	Prioritizing and addressing each issue; some large efforts will have a big impact ("Fountain" for viewability). many small fixes will have a large impact in sum. Report on same-device, cross-ID space conversions in line-item reporting.
2. Build a great package of inventory, formats, and control to win over opted-out advertisers	Agencies, large buyers, and internal sales teams have a negative view of exchange-bought app inventory due to perception of low quality and low brand safety	Work across buy- and sell-side to create a package of high-quality inventory that is safe & measurable with great formats. Sell it proactively to well-suited advertisers. Get momentum and feedback.
3. Grow demand by driving DBM adoption for programmatic performance	Large performance advertisers use competing DSPs for in-app spend. App promo features still being built out for a full offering.	Deep-dive with advertisers to understand which features could bring their budget to DDM. App promo: Easy conversion tracking with AAP integration. Leverage Cray to serve GDN templates. Build out video formats.

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## What they're asking for...

Every agency is aiming to (a) Automate Workflow (b) Generate Advanced Insights and (c) Activate/Optimize Audience. Differentiation for an agency is derived via data, talent & flawless/speed of execution



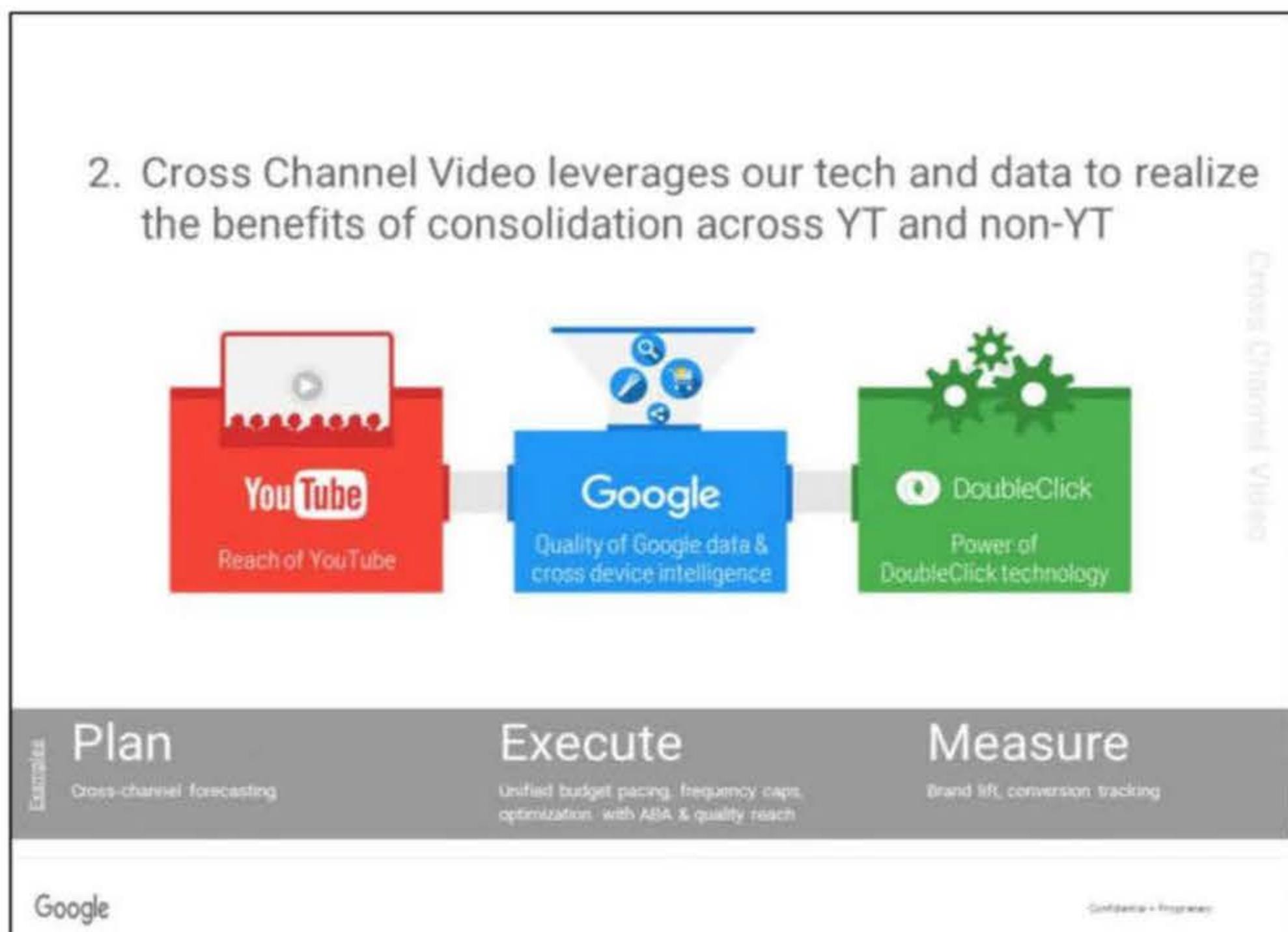
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Video (45% 2017)  
2017: \$390M  
2018: \$550M

Non-Video  
2017: \$494M  
2018: \$893M

2. Cross Channel Video leverages our tech and data to realize the benefits of consolidation across YT and non-YT



- To realize gains from consolidation, our best features must work across YT and non-YT (cross-channel) seamlessly

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## 3rd Party Tech: Where are we today?

### 7 Event Sync



### 1 Brand Format

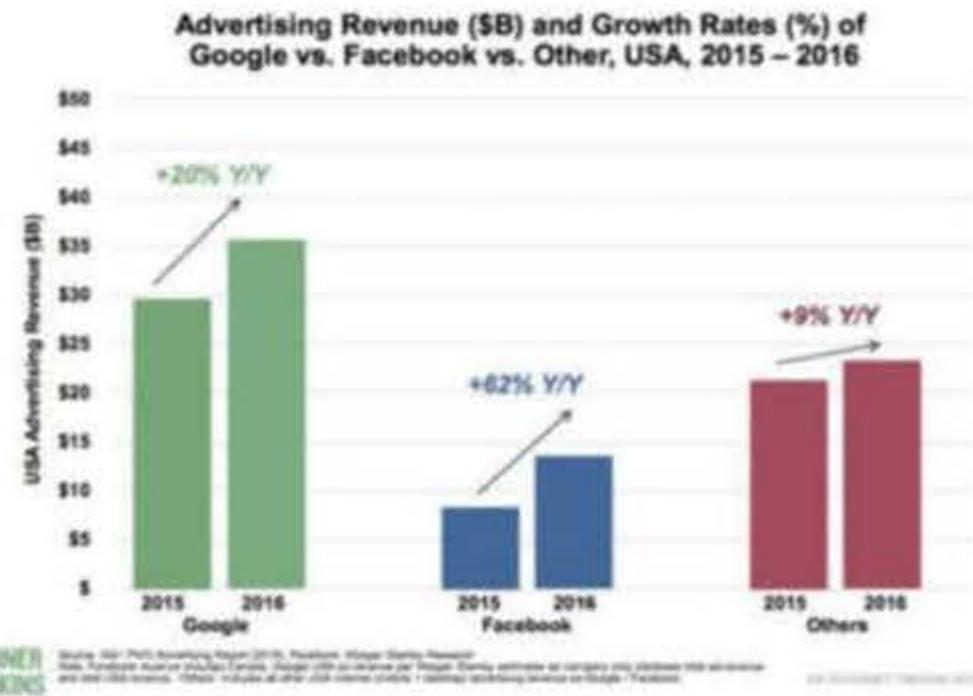


### 3 Ad verification



INTERNAL/Google Confidential/Not Proprietary

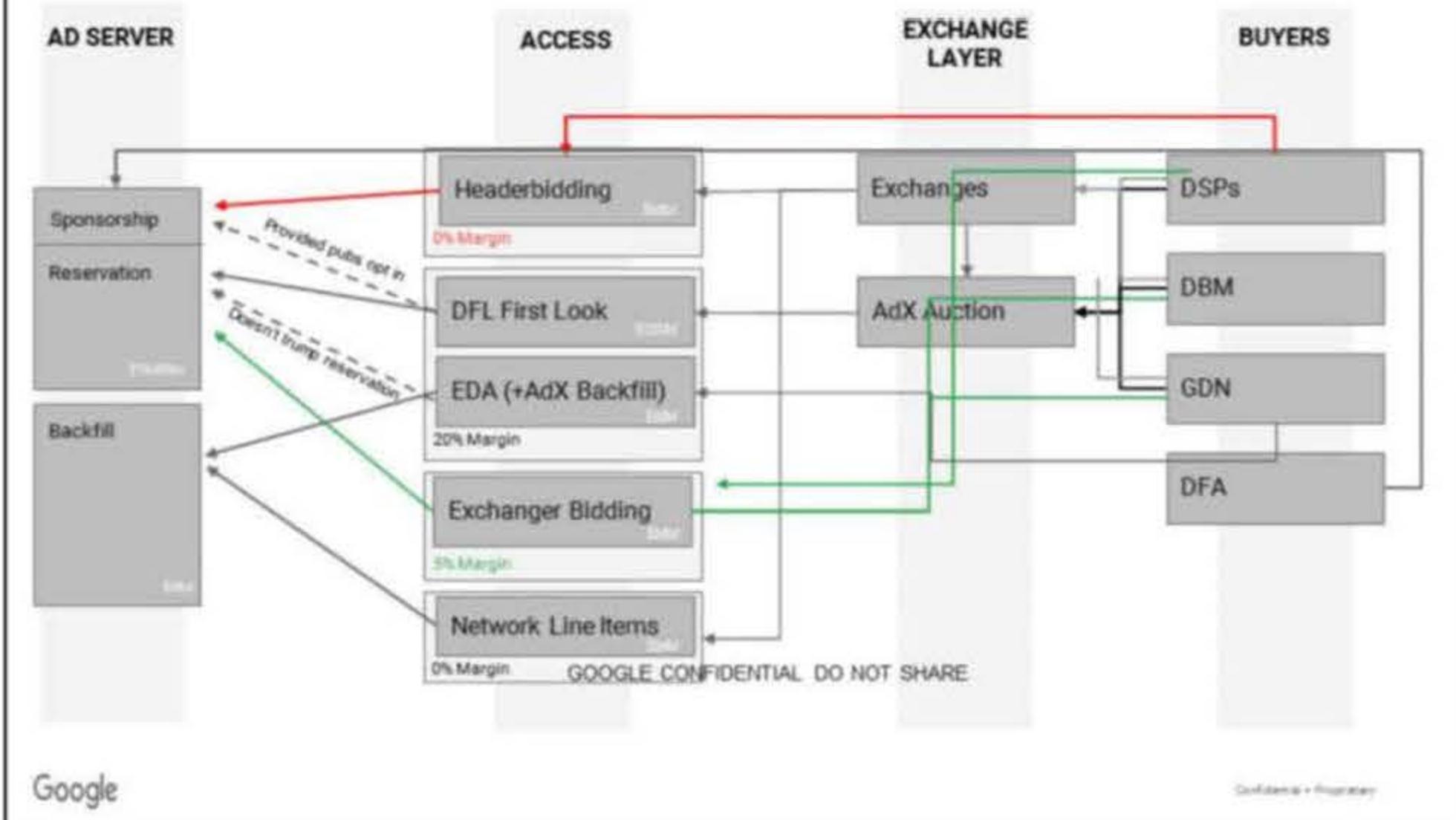
There are other tech partners which we are in contact with but not utilising and may make use of in future such as video contextual classification tech, native format tech providers.



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## Various layers of access define our ability to buy



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## Executive Summary

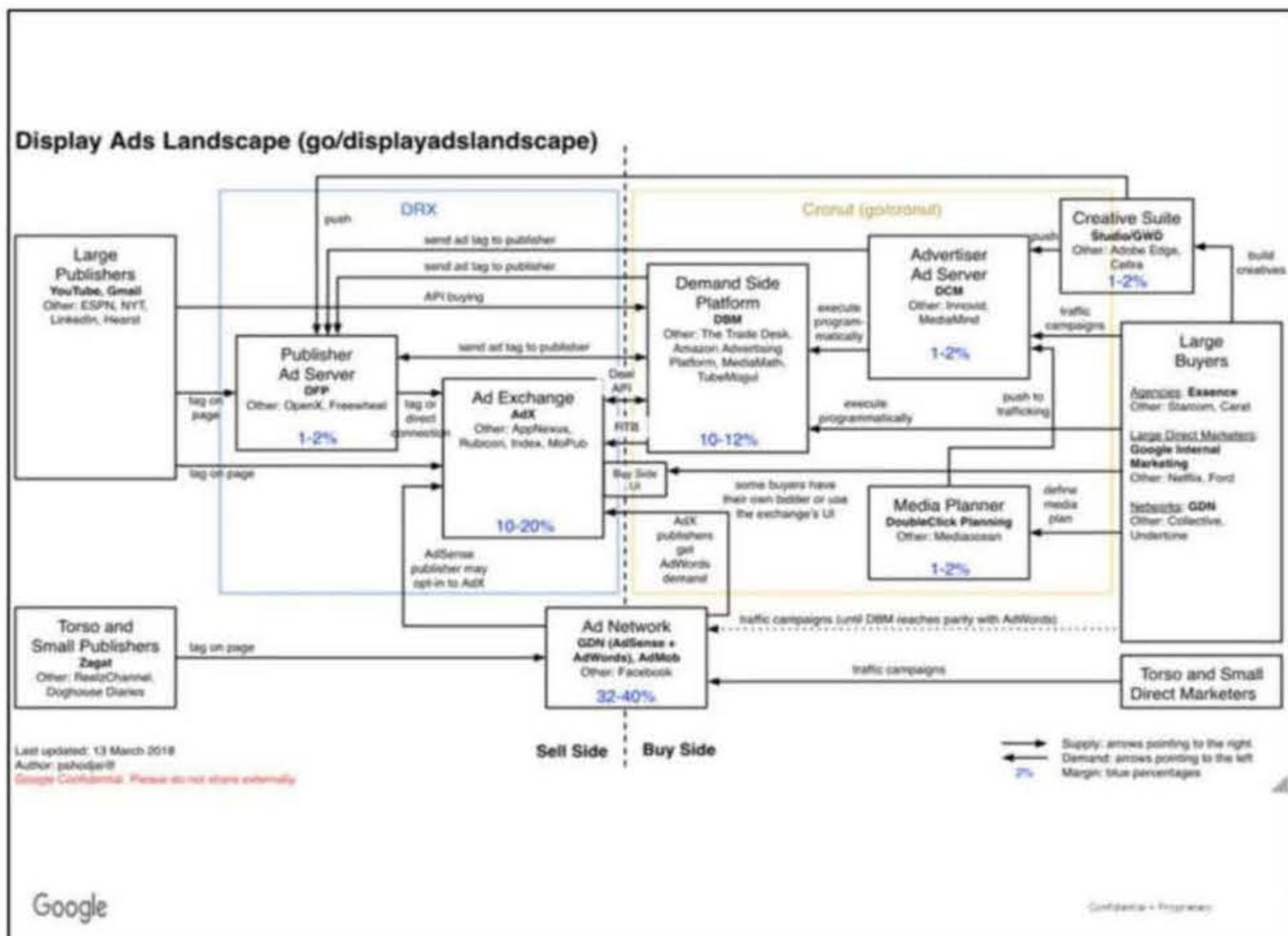
(scope is GDN + DBM unless stated otherwise)

1. Level-setting how we source inventory today
  - a. evolution of display ads ecosystem
  - b. inventory makeup (50 exchanges, adx, adsense, admob)
  - c. DSPs used to be all around enabling broad access as neutral buying tool, but 2, 3, 4 challenge this
2. inventory quality is a huge challenge
  - a. Spam
  - b. counting discrepancies
  - c. misrepresented inventory
  - d. brand safety concerns
  - e. Price gouging strategies
3. competition has changed significantly
  - a. used to be Turn/MediaMath and many others, now it's heavily consolidated (TTD, AAP, FB)
  - b. walled-gardens create all kinds of issues for us / what we have access to vs. not
  - c. unique value of DFP access is challenged by Header Bidding and ecosystem incentives
4. New types of inventory are emerging
  - a. challenging our policies/infrastructure
5. External factors
  - a. ITP
  - b. GDPR
  - c. Brand safety

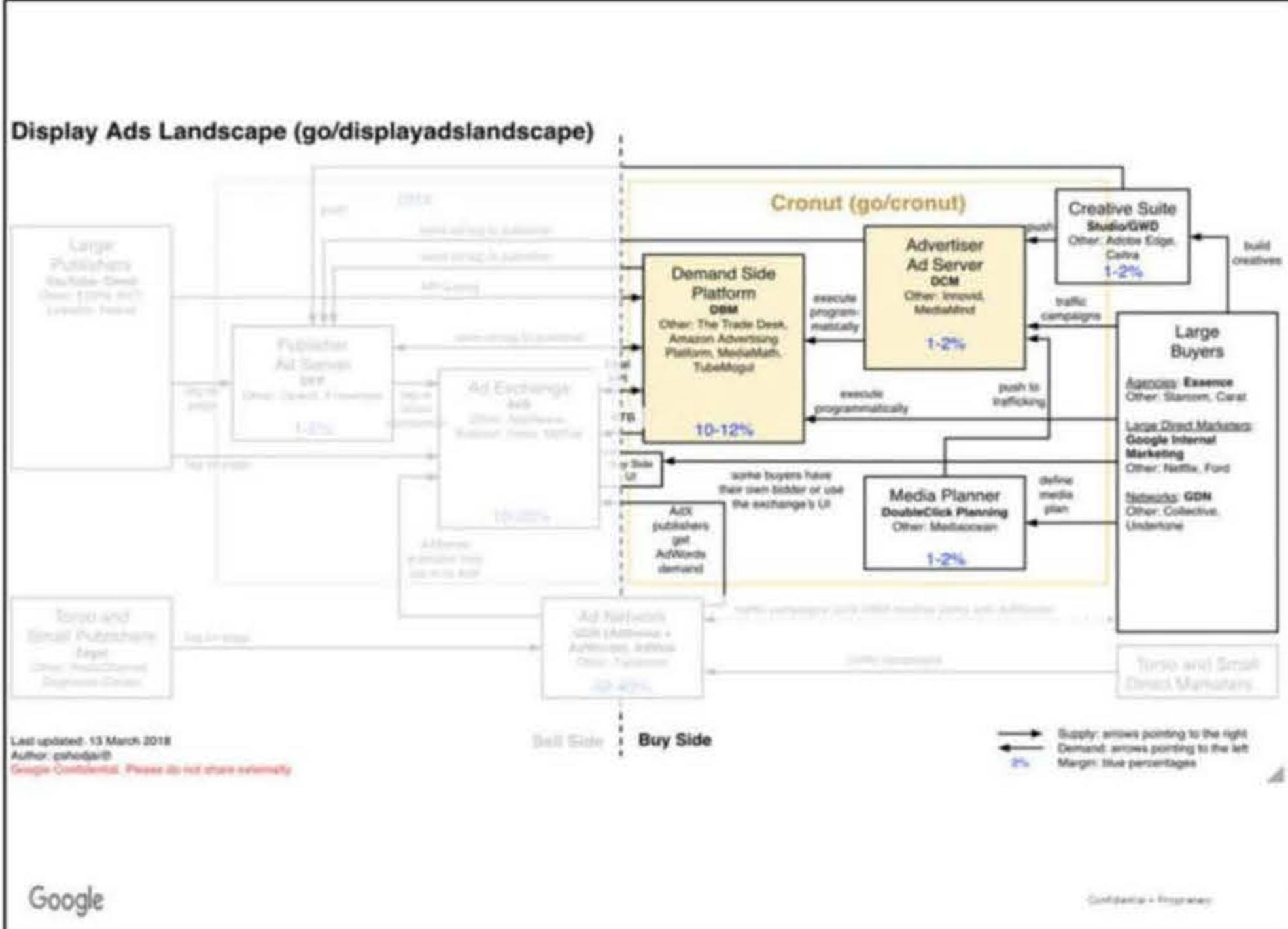
(for each of these problem statement, what we are doing on DBM and impact, how it compares to competitors)

erosion

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## Overarching Buyside Strategy

### Step 1: Be a media-agnostic platform for large marketers

Why? Large buyers control vast majority of spend and want media-agnostic tools to manage their business.



### Step 2: Consolidate all channels through programmatic technology

Why? So we can maximize share-of-wallet with large advertiser.

### Step 3: Deliver superior ROI across all channels

Why? So we can influence spend and grow Google O&O/network revenue.

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- \$155.5M revenue at 18.5% margin in 2017 (-44.1% YoY, margin dropped from 25%)

Focus on:

- Eliminated 100 positions in 2017, \$20M reduction of capital expenditures, expects to EBITA positive in Q4, 2018
- Eliminated buyer fees (DBM was impacted by this)
- Revamped auction to be first price as default

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<http://investor.rubiconproject.com/news-releases/news-release-details/rubicon-project-reports-fourth-quarter-and-full-year-2017>



## Inventory quality major concern starting early 2017

*"What gives advertisers pause on programmatic?*



### Media Buyers

- |                              |     |
|------------------------------|-----|
| 1. Bots/Fraud                | 27% |
| 2. Verification              | 22% |
| 3. Lack of human interaction | 22% |
| 4. Placement transparency    | 19% |
| 5. Poor inventory quality    | 19% |
| 6. Brand safety              | 17% |
| 7. Pricing transparency      | 17% |

Based on Q1 2017 Programmatic Intelligence Report collecting feedback from top 200 advertisers in US and >1000 key decision makers

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'Biggest Ad Fraud Ever': Hackers Make \$5M A Day By Faking 300M Video Views

Russian Hackers Stole Millions From Video Advertisers, Ad Fraud Company Says

White Ops says Russian hacking operation costed video advertisers out of more than \$3 million a day.

White Ops reports biggest ad fraud botnet found yet: 'Methbot' targeting high-CPM video inventory

The botnet has been siphoning an estimated \$3 to \$5 million in ad revenue per day, making it the largest ad fraud scam uncovered to date.

## UBER SUES DENTSU'S FETCH MEDIA FOR FRAUD

Adobe says it will help advertisers and publishers find out if they are getting ripped off by ad tech companies

Google Issuing Refunds to Advertisers Over Fake Traffic, Plans New Safeguard

Google's new system will identify fake traffic and issue refunds to advertisers.



Domain Spoofing Be Gone: Ads.Txt Will Filter Out Imposter Sites

Big brands fund terror through online adverts

Household names unwittingly pay extremists and pornographers.

04 '16

Methbot

Q1 '17

Brand Safety

Q2 '17

Ads.Txt

Q3 '17

Accountability

Q4 '17

Moving Forward

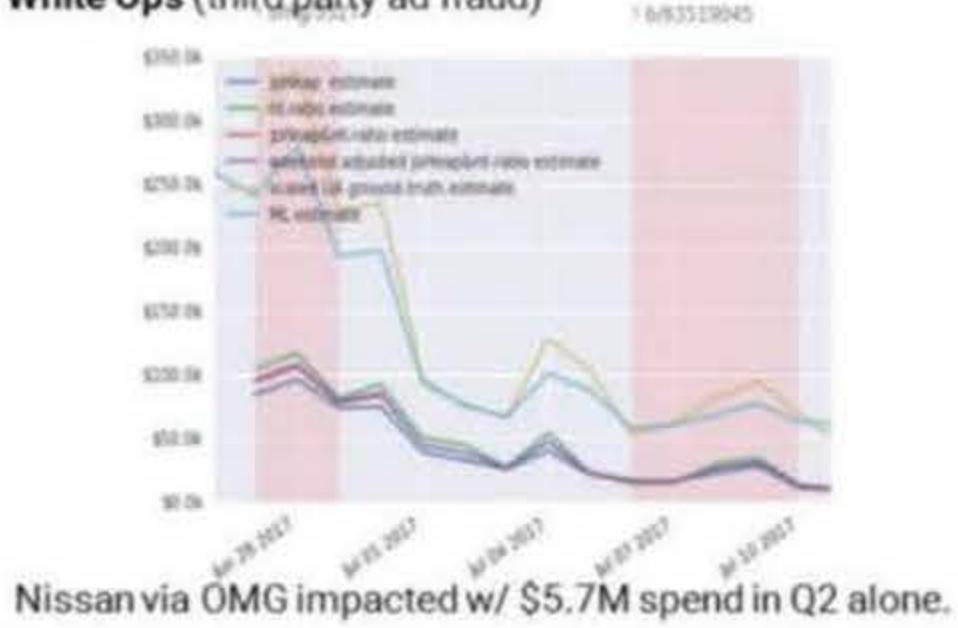
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## Two major attacks over 2017, impact in excess of \$32M



**Chefbot:** large, sophisticated botnet attack, likely via infected residential computers; ~\$32M net revenue impacted in 2017 (Q2 + Q3); botnet was discovered by White Ops (third party ad fraud)



Nissan via OMG impacted w/ \$5.7M spend in Q2 alone.

- We proactively refunded ~\$32M net revenue impacted in 2017 (Q2 + Q3)
- Negotiated with all exchanges to have 30 day refund terms; limited default buying to exchanges w/ refund terms
- Initiated major internal effort to align spam crediting/debiting system (ongoing)
- Externally communicated what protections we offer
- In active negotiations with White Ops to strengthen our ability to detect botnets pre-bid

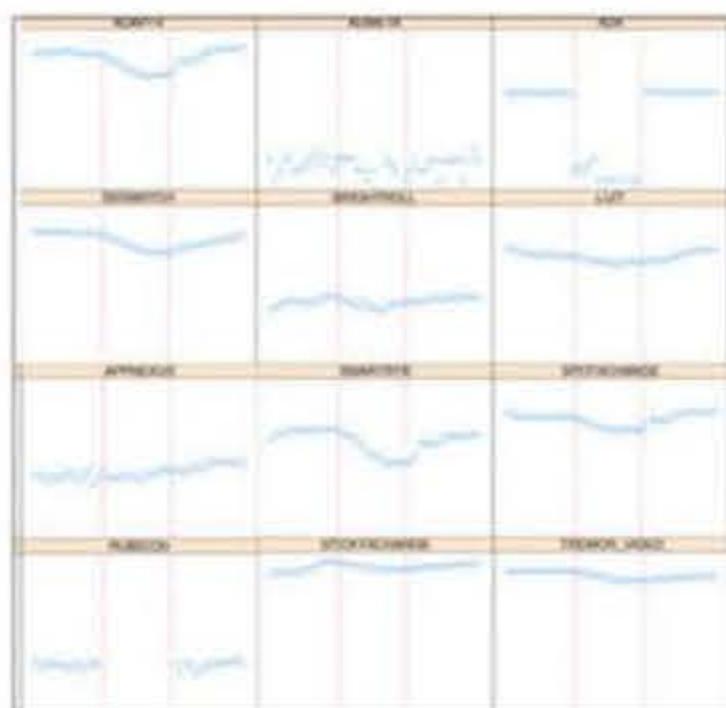
Google

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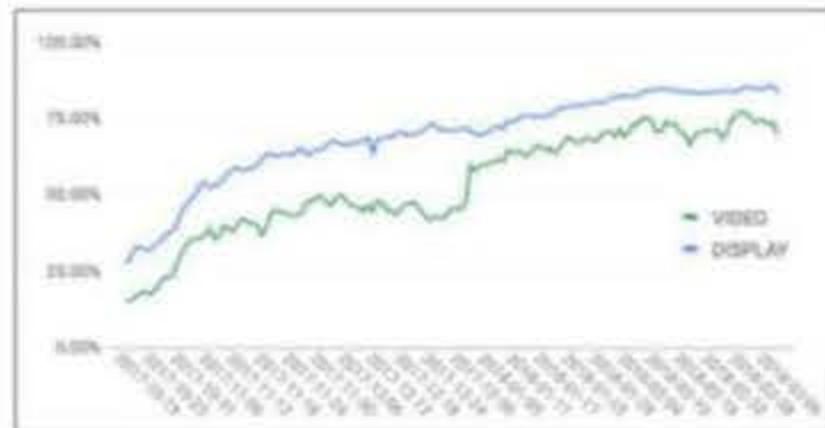
## Misrepresented/Counterfeit Inventory



**Blackout Experiments:** when turning off publisher ad serving for 5 minutes, impressions on many exchanges continued to serve.



**Established Adx.txt as industry standard,** launched support across Buy- and Sell-side.



- **80% of DBM** spent adopted.
- Unauthorized inventory overlapped w/ botnet traffic.

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Buy-side and specifically DSPs (DBM) used to be primarily focused on securing access. However this position is challenged:

Executive overview of following slides:

**1. inventory quality is a huge challenge**

Botnet attacks, spam, discrepancy deltas led to a loss of about 95M over 2017 - most of which has since been mitigated. In light of brand safety concerns in early 2017, advertisers demand better protections and guarantees on how their \$ is spent.

**2. competition has changed significantly**

# of programmatic buyers is declining as standalone companies in data management, ad buying, and measurement are struggling or being acquired. Survivors are those with scale TDD, AAS

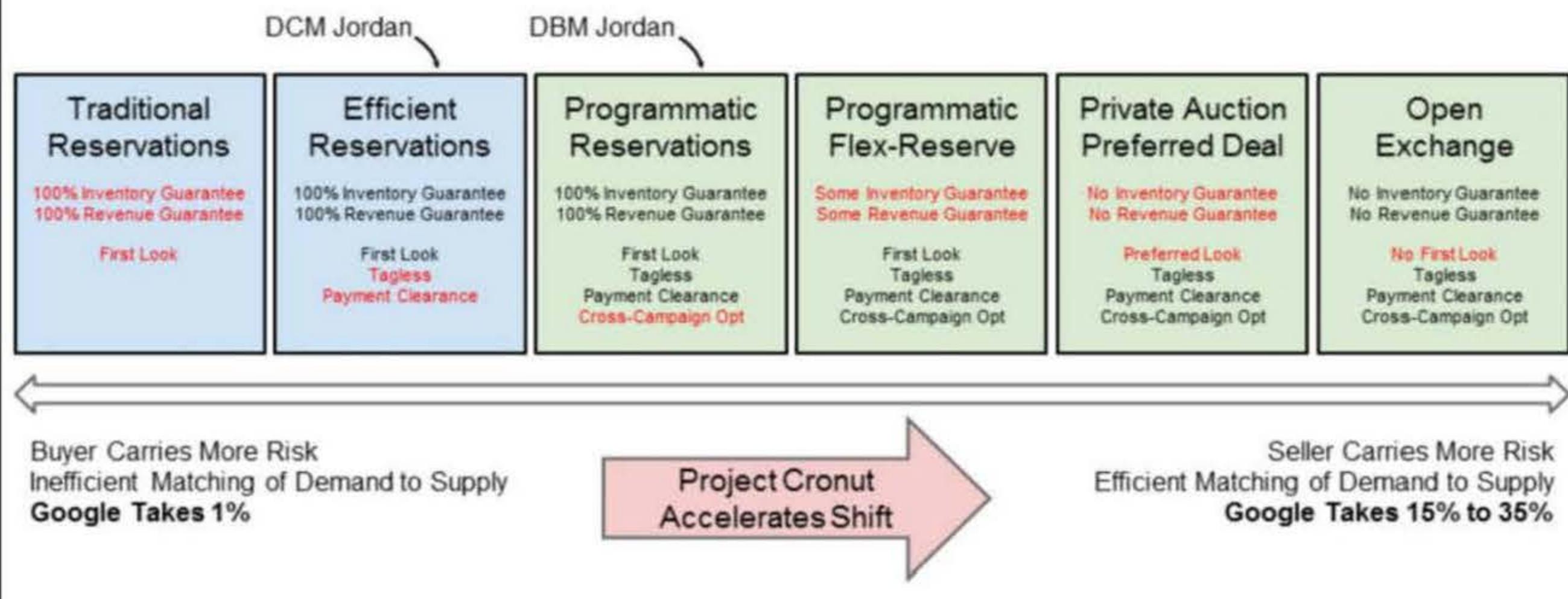
**3. external factors are consistently challenging our business**

New inventory doesn't always work well with existing policy/spam processes and often leads to revenue not flowing as a default. Ecosystem/Regulatory changes have huge impact (Brand Safety, ITP, GDPR)

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**By accelerating the move to programmatic deal types,  
Project Cronut creates a more efficient marketplace,  
defensible product offering and profitable business.**



Id	Date	Text
9	03/27/2018 18:29:28	Taken from: <a href="https://docs.google.com/presentation/d/1zIPjfx-m50YQYpaMrcFdoegZ57bPxdiG6NgGQbiWB8w/edit#slide=id.g2a507948c_0_0">https://docs.google.com/presentation/d/1zIPjfx-m50YQYpaMrcFdoegZ57bPxdiG6NgGQbiWB8w/edit#slide=id.g2a507948c_0_0</a>
8	03/28/2018 14:23:04	+karinb@google.com This slide is probably overkill but it's what I had in mind about the margin side of "Why Cronut" <u>Reassigned to Karin Hennessy</u>
3	03/28/2018 14:23:04	yeah i think this takes away a little bit from the product story, moving to appendix, we'll cover via discussion if needed

**Creative**

**NEARING COMPLETION**

- Ad canvas
- Rich media
- Custom dynamic
- Google Web Designer Integration
- Creative User Role

**IN PROGRESS**

- Format gallery
- Storytelling

A workspace for creative agencies to design, produce, and manage ads at scale

- The ad canvas is a visual-first UI for building custom rich media and dynamic creative
- Integration with GWD allows creative developers to seamlessly push ads directly to A3
- Format gallery highlights Google's newest high impact formats
- Storytelling allows cross format creative sequencing - allow brands to create personalized messaging as they move their consumers down the marketing funnel

Id	Date	Text
11	03/27/2018 18:01:21	Maybe we cut this section and just have 1-2 slides each on creative/measurement only?
12	03/27/2018 18:02:33	+karinb@google.com
10	03/28/2018 14:15:44	I think maybe we cut/rework these five slides? The launches aren't going to be meaningful in this form to Suresh without context & slide 67 already gives the concept
4	03/28/2018 14:15:44	I'll appendix the 1-slide versions



## Inventory

### NEARING COMPLETION

- Unified negotiations across deal types and publishers
- Deal type simplification
- Tracked inventory
- Spotlight in Discovery
- Inventory planning workspace
- Reach planning workspace

### STRETCH

- Packages in Discovery





## Campaign

### NEARING COMPLETION

- Campaign object

### IN PROGRESS

- CCO/CAO across RTB and reservations
- Campaign trafficking view (CE)
- Reservations in Campaign Context

### STRETCH

- Full Reservations buying workflow.

The screenshot displays the Mediavine Digital Creative Platform's interface. At the top, there's a navigation bar with icons for Home, Campaigns, Advertisers, Creative, Inventory, Reporting, and Help. Below the navigation is a search bar with the placeholder "Search Mediavine". The main content area is titled "Campaigns" and features three cards: "Top campaigns by revenue", "Top creatives by reach", and "Top publishers by reach". The "Top campaigns by revenue" card shows data for "Mediavine Prime (20-400)" with a value of \$1.00M. The "Top creatives by reach" card shows "Mediavine Prime (20-400)" with a value of 1.0M. The "Top publishers by reach" card shows "Mediavine Prime (20-400)" with a value of 1.0M. Below these cards is a section titled "New Campaigns" with a table listing five new campaigns:

Name	Status	Start Date	End Date	Advertiser	Advertiser ID
Mediavine Prime (20-400)	Pending	2023-01-01	2023-01-31	Mediavine Prime	1234567890
Mediavine Prime (20-400)	Pending	2023-01-01	2023-01-31	Mediavine Prime	1234567890
Mediavine Prime (20-400)	Pending	2023-01-01	2023-01-31	Mediavine Prime	1234567890
Mediavine Prime (20-400)	Pending	2023-01-01	2023-01-31	Mediavine Prime	1234567890



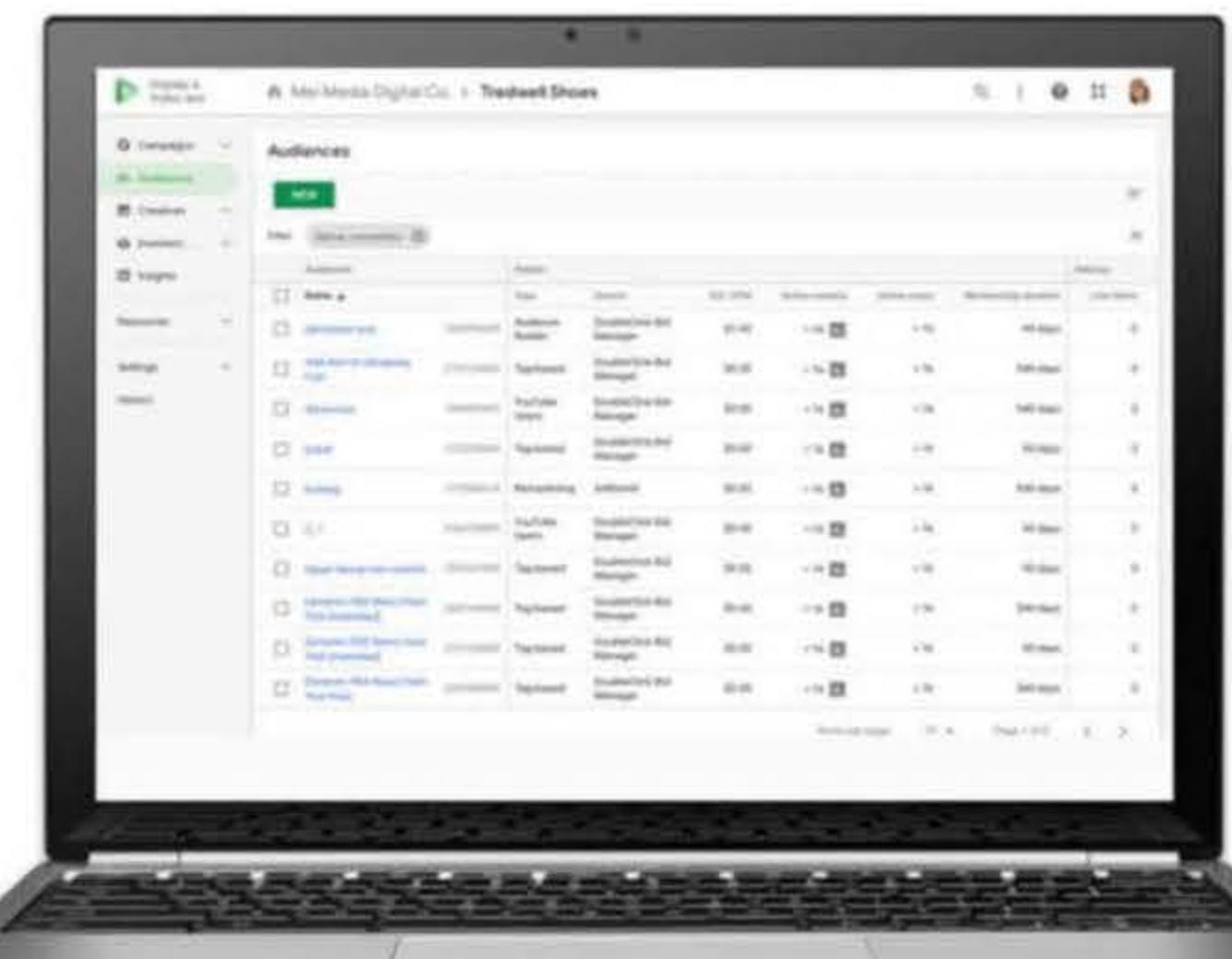
## Audience

**IN PROGRESS**

- Supporting Signed-in users
- New Building Experience
- Event-based audience building
- GAIA list management

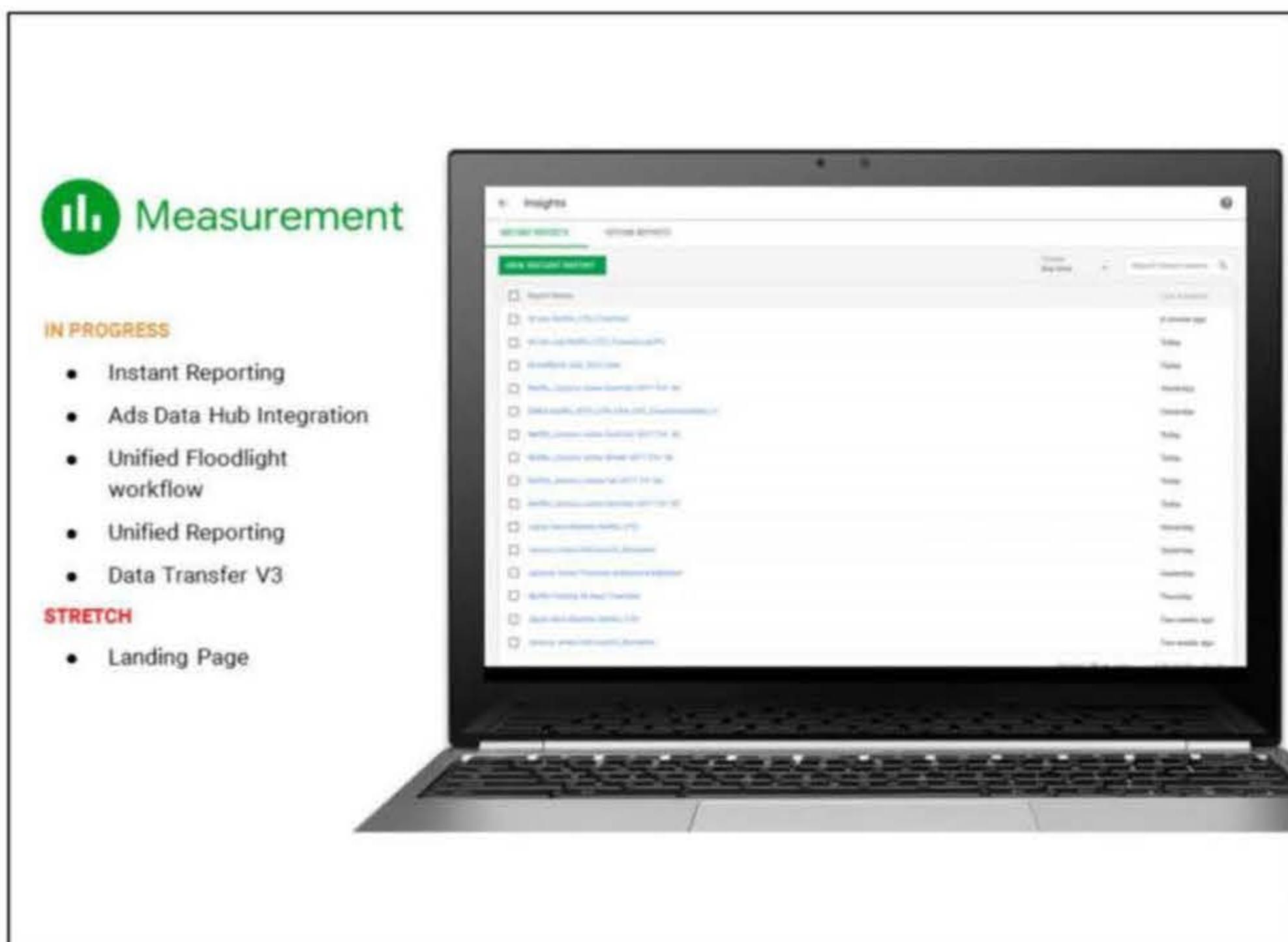
**PLANNED**

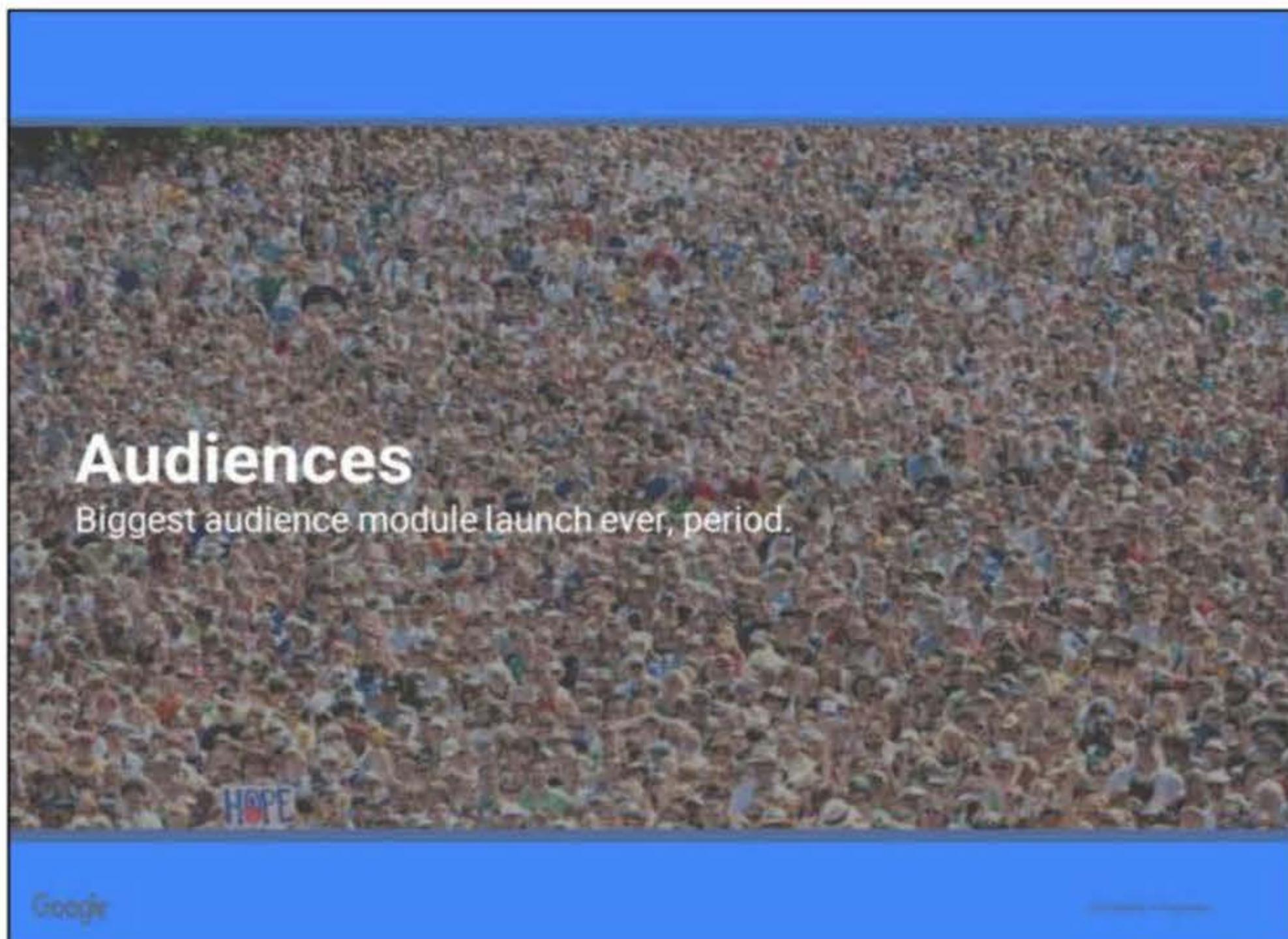
- Account Linking (Settings Tab)
- More Google Data
- Audience Composition



Name	Status	Description	Size (approx.)	Demographic	Interests	Membership Metrics	Last Update
Alpha	Published	Description for Alpha	50,000	1-18	1-18	10,000	2023-01-01
Beta	Published	Description for Beta	30,000	1-18	1-18	8,000	2023-01-01
Gamma	Published	Description for Gamma	20,000	1-18	1-18	7,000	2023-01-01
Delta	Published	Description for Delta	10,000	1-18	1-18	3,000	2023-01-01
Epsilon	Pending	Description for Epsilon	5,000	1-18	1-18	1,000	2023-01-01
Zeta	Pending	Description for Zeta	2,000	1-18	1-18	500	2023-01-01
Eta	Pending	Description for Eta	1,000	1-18	1-18	200	2023-01-01
Iota	Pending	Description for Iota	500	1-18	1-18	100	2023-01-01
Kappa	Pending	Description for Kappa	200	1-18	1-18	50	2023-01-01
Lambda	Pending	Description for Lambda	100	1-18	1-18	20	2023-01-01
Mu	Pending	Description for Mu	50	1-18	1-18	10	2023-01-01
Nu	Pending	Description for Nu	20	1-18	1-18	5	2023-01-01
Psi	Pending	Description for Psi	10	1-18	1-18	2	2023-01-01
Rho	Pending	Description for Rho	5	1-18	1-18	1	2023-01-01
Sigma	Pending	Description for Sigma	2	1-18	1-18	0	2023-01-01
Tau	Pending	Description for Tau	1	1-18	1-18	0	2023-01-01
Upsilon	Pending	Description for Upsilon	0	1-18	1-18	0	2023-01-01

Builder and Composition -- management  
Signed in users - YT audiences





## Audiences

Biggest audience module launch ever, period.

Google

View slide

Id	Date	Text
13	03/28/2018 16:17:40	+karinb@google.com Suggest we cut this section for time
5	03/28/2018 16:17:40	k

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## An Audience Builder to Rule Them All

The screenshot shows the Google Audience Builder interface. On the left, a sidebar lists existing audiences with names like "PLU11 Google Search User (Mobile)" and "PLU12 YouTube User (Mobile)". A blue box highlights the "NEW AUDIENCE" button at the top of the sidebar. An arrow points from this button to the main content area. The main area is divided into several sections:

- Mixed audience types:**
  - Combine Audiences: Create an audience by combining existing ones.
  - Tag-based audiences: Create an audience based on YouTube activity data.
  - YouTube User Builder: Create an audience based on your YouTube channel.
  - Custom Lists: Create an audience based on user behavior or interests.
- Uploaded data:**
  - Tag-based Audiences: Match and expand tag-based audiences.
  - Emails from YouTube Customers: Create an audience by uploading emails from YouTube customers.
  - Mobile Device IDs: Create an audience by uploading YouTube mobile device IDs.
  - CRM Data: Import a CRM advertising service and upload CRM data to create an audience.

156

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## A New Audience Building Experience

The screenshot displays the Audience Building Experience interface. It features three main panels:

- Create Audience**: A panel on the left where users can define audience segments based on various criteria like gender, age, interests, and location.
- Audience Overview**: A panel in the center showing a summary of the created audience, including its name, size, and key characteristics.
- Audience Metrics**: A panel on the right displaying dynamically updated metrics such as Demographics, Composition, and Eligibility.

Annotations on the left side of the interface include:

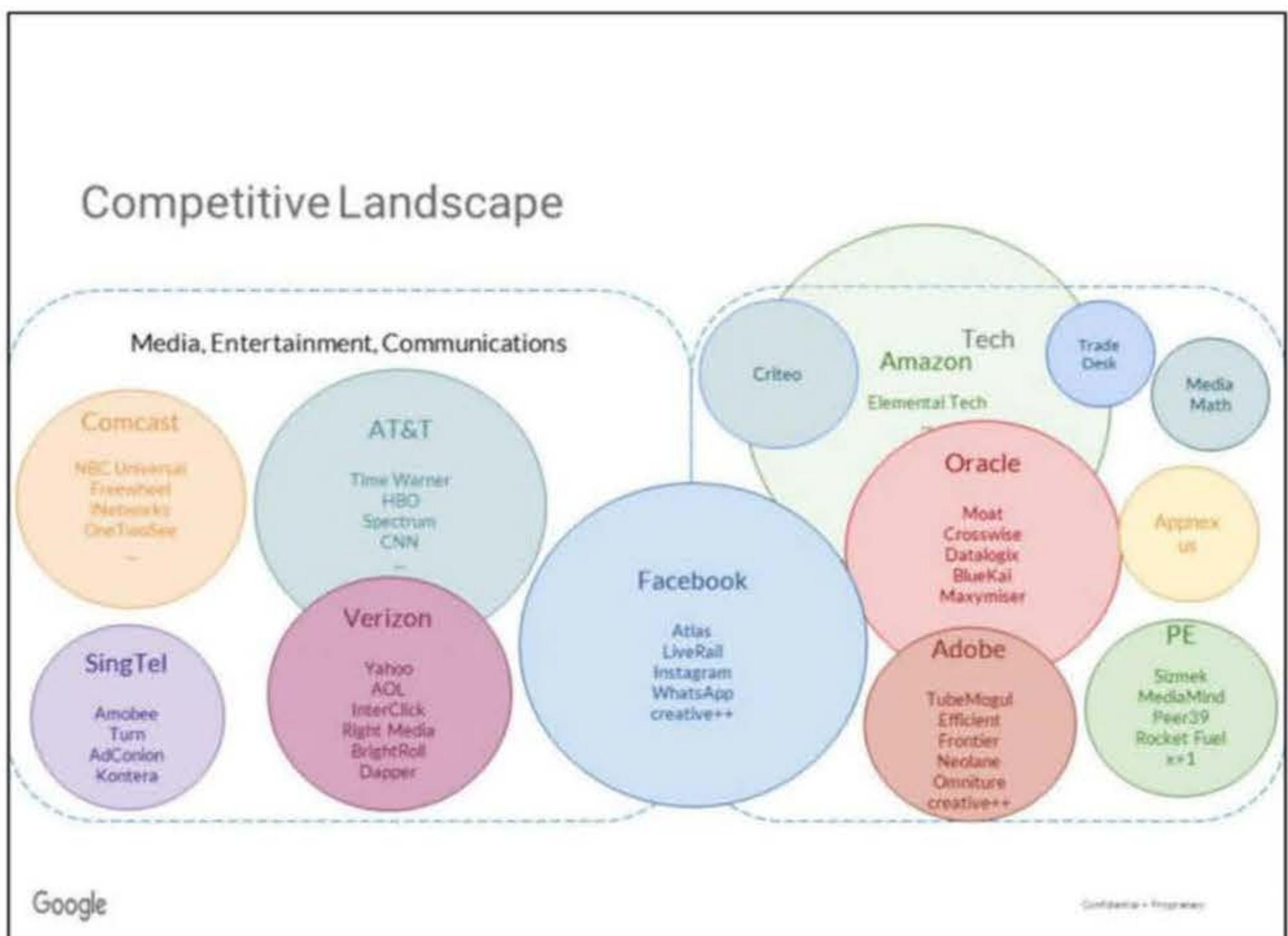
- Create audience once, use in many campaigns**
- Bring in DAC UX for combining audiences, with DBM audience creation in REAL TIME**

Annotations on the right side of the interface include:

- Dynamically updated metrics as Audience is defined:** Demographics, Composition, Eligibility

Other visible text and details in the interface include:

- Google logo at the bottom left
- Confidential + Proprietary at the bottom right
- 157 in the top right corner



More info: <https://docs.google.com/presentation/d/140k4P2CyaBPZMf5XHKPZ5aC5-bmgAWNRI3C6pBqY6UQ/edit#slide=id.p>

## CTV support across DBM Targeting, Reporting, and Creative Management

Advertiser enables Connected TV device type targeting and augments additional detailed targets at the Make & Model level (i.e. Roku, Apple TV, etc.)

The screenshot shows the 'Device' targeting section. Under 'Target the following device types', 'Connected TV (Device Type)' is selected. Below it, under 'AND the following makes and models', 'Roku (All Models) (Connected TV Make / Model)' is selected, highlighted with a red circle.

Advertiser configures additional targeting & notes that their viewability targeting will not prohibit CTV buying while still being respected across other device types.

The screenshot shows the 'Brand Safety' section with 'Excluded channels' set to 'Channel 8'. In the 'Viewability' section, 'Active view' is set to '50% or greater (most viewable)' and 'Exclude connected TV from viewability targeting for video ads' is checked. 'Ad position' is set to 'Above the fold'.

### Other cTV efforts across:

- Reporting
- Creative management
- AdSpam
- Sell side / audience data collaboration

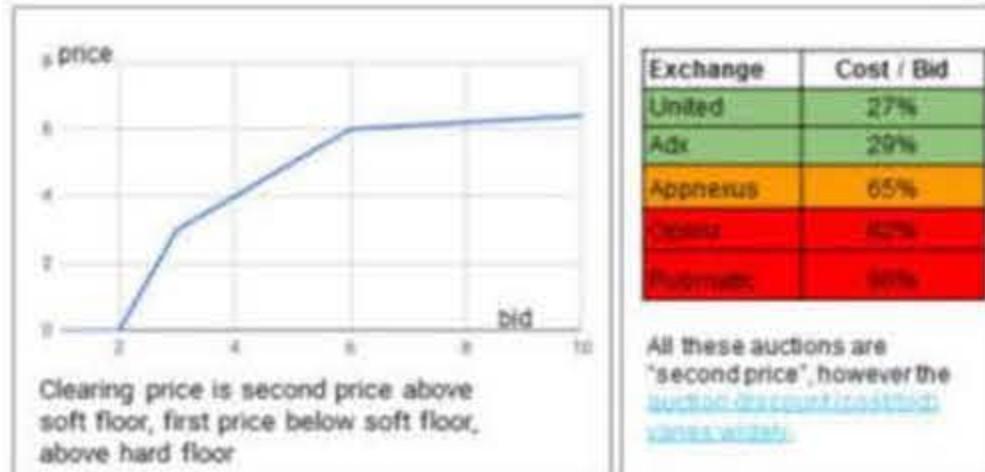
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## Price Gouging

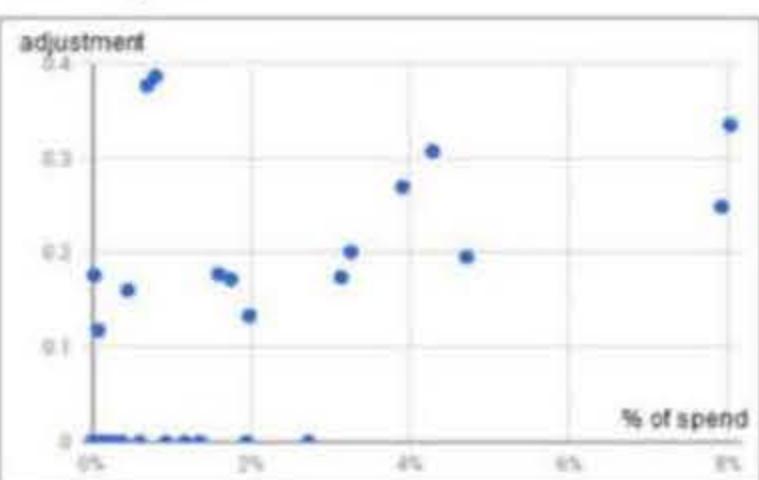
There are roughly three types of auctions

- Second price (buyer bids truthfully)
- First price (buyer has to shave bids)
- Dirty (called second price,  
but really more like first price)



### Project Poirot

uses machine learning to detect non-second price auctions and adjusts bids down to win the same impression at lowest price



**Impact:**  
+7% AdX (\$210M ARR)

RASTA

Google

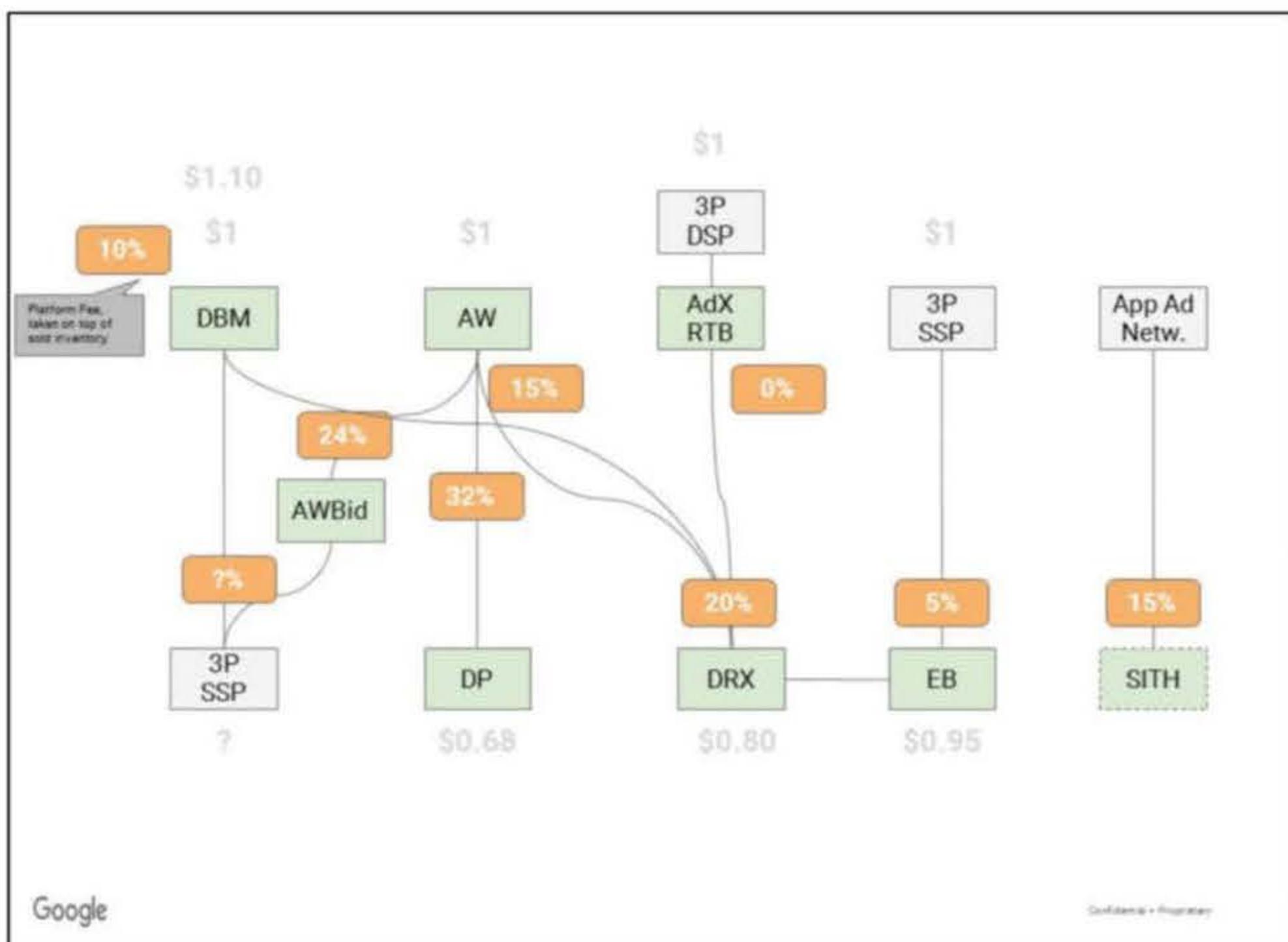
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## Dirty Auction

Reserve prices (RP) are common in second price auctions

Dirtiness is introduced using a new type of floor called a "Soft-floor". Unlike with hard-floor, advertiser wins even if bid < soft-floor, in this case price = bid (i.e. first price)!

Soft-floor is a knob that SSPs use to achieve a continuum of auctions from second price (soft-floor=0) to 1st price (soft-floor=infinity), opaque to the advertiser



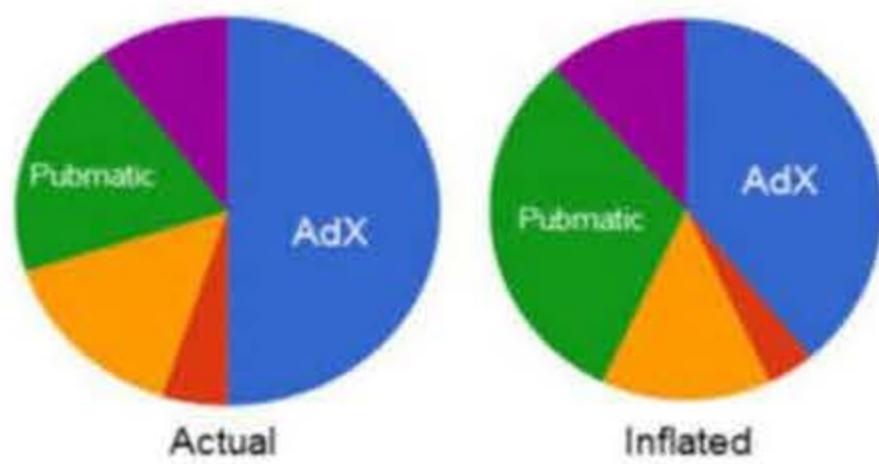
Google

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## Inflated Queries



Exchangers send multiple calls for single query to get multiple shots at budget throttling and then choose highest bid.



### Project Elmo

leverage cookie based budget throttling to ensure more consistent bids across calls

+7.8% (\$220M) increase on AdX

[RASTA](#)

Google

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elmo is another 7.8% increase on AdX. so another 220M shifting.

We expect more performance based buying modes in DBM to primarily use Outcome-based buying (PPO)



Today



**Head-of-head**

Custom bidding + Siloed models + CPM bidding

**Transparency / control sensitive use cases**

Siloed models + CPM bidding

**RMKT use cases**

Shared models + CPM bidding

Tomorrow (goal)

Tomorrow (goal)

Tomorrow (goal)



Shared models + PPO bidding

Google

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Outcome-based buying (PPO) delivers better performance  
to advertisers, brings margin flexibility



Intuitively, majority of performance difference  
GDN/DBM is due to arbitrage, mostly due to pricing  
and network optimization (Bernanke etc.)

How does this compare to other DSPs? Doesn't  
matter as much - the rest of DBM really competes  
w/ other DSPs, this is more about competing w/  
Criteo and others.

**Four options in GDN today**

- Pay per engagement
- Pay per click
- Per per conversion
- Pay per active view

Google

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## Publisher Ecosystem is Changing



### key points

Some strategic publishers moving off DFP to proprietary Ad Servers

Walled Gardens refuse to work with Google Platform technologies

Buyers are now able to bid on a per impression basis as a result of Header Bidding

Large buyers (Amazon, Facebook & Criteo) are establishing direct relationships with pubs

- ▶ There's a need for a new product maintaining Fair access, privileged **direct relationships** and **first party signals**

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## Demand Product as a direct way to access off-platform inventory



	Direct pub relationship	Per-query pricing	First party buying signals	Fair Access	Google Margin
<b>Platform products</b> <small>DRX, AdMob, AdSense</small>					High
<b>Off-Platform Products</b> <small>AdX, AdMob, or other AdServers</small>					High
<b>Cross-Exchange</b> <small>DBM or AdWords/AwBid on other SSPs</small>			X	X	Low
<b>Demand Product</b>					High

Google

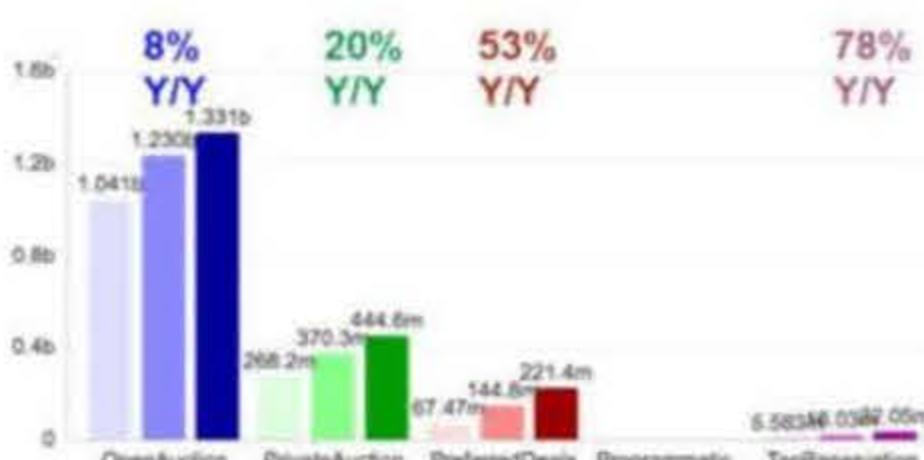
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DBM to remain a largely auction driven business with Preferred Deals, PG and TG contributing to less than <15% of revenue

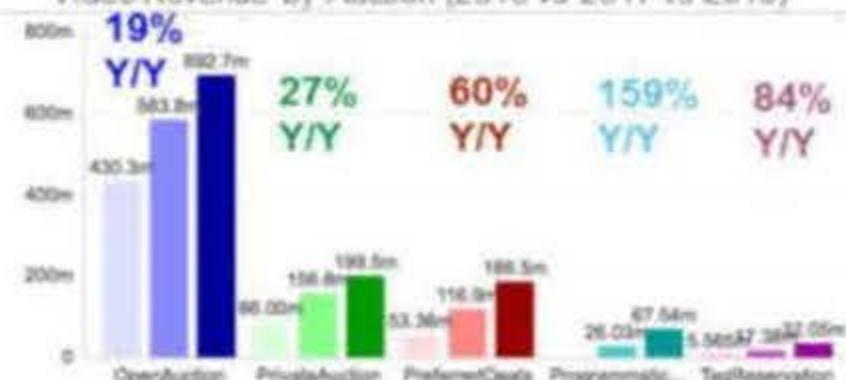
Deal Growth on AdExchange (2016 vs 2017 vs 2018)



Deal Growth on Non-Google (2016 vs 2017 vs 2018)



Video Revenue by Auction (2016 vs 2017 vs 2018)



#### Opportunities

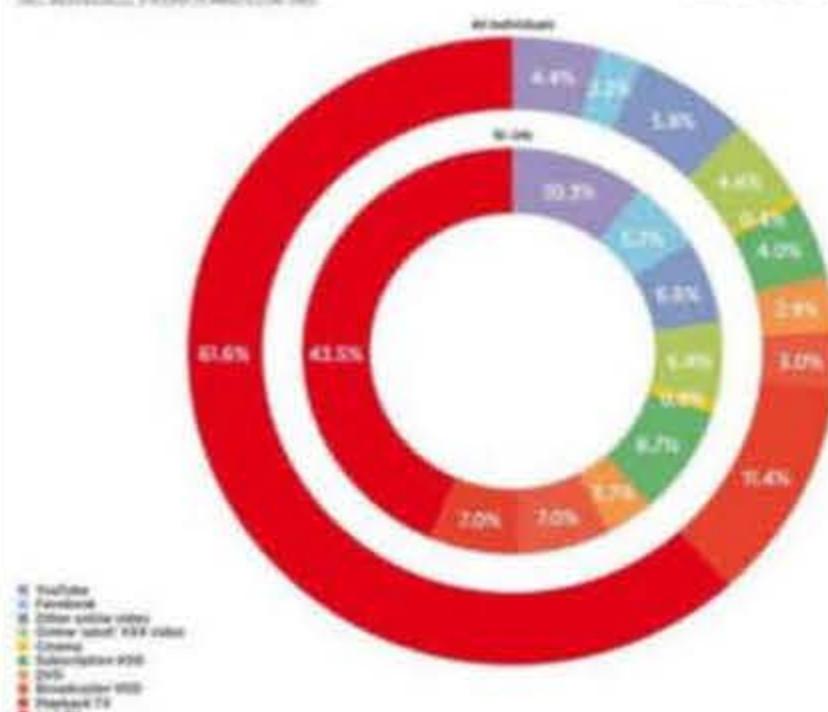
- PG/TG : Last year we did not see a lot of holiday spend come via deals. Possible these advertisers have direct relationships.
- Safari ITP will mitigate a lot of targeting efforts on iOS web. Deals can help bridge the gap. Browser based PD deals can help maintain reach for the advertiser and not sacrifice pricing for the publisher.

Google

**TREND #1: VIEWERSHIP**

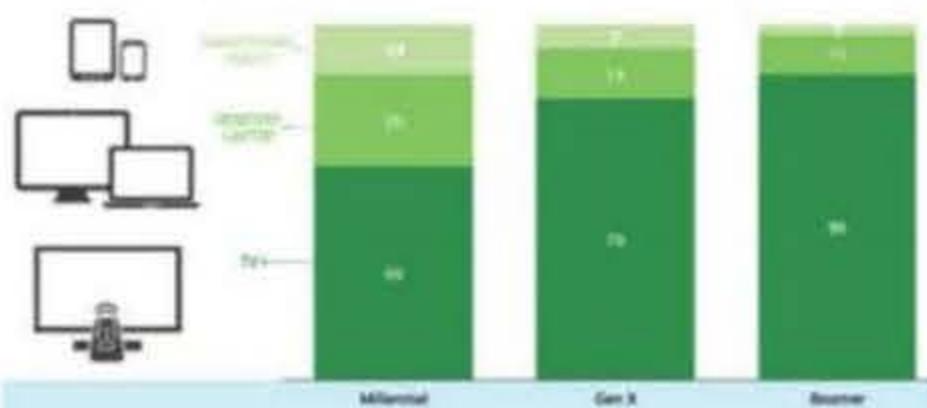
Linear TV still dominates watchtime, but will decline in favor of digital, especially with the younger demographic

Source: 2015 NIELSEN Connected Home/Viewership Report  
Digital video and mobile account for 44% of all screen time



Source: 2015 NIELSEN Connected Home/Viewership Report  
Digital video and mobile account for 44% of all screen time

Device Preferences for Watching TV Series  
U.S., 2015E, Percent



**IMPACT:** Agencies & brands will partner with companies that can provide **cross-screen planning, buying and measurement solutions**: including linear and cTV

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We are definitely seeing a shift in watchtime to digital and over-the-top especially with millennial audiences - , but linear TV continues to dominate the lion's share of watch time and budgets. This chart is UK, but most countries are still seeing 70%+ of total viewership happen on linear. Which means this shift over to digital is going to take time. But across buyers & publishers we are seeing the need for cross-screen solutions for planning, buying & measurement that look holistically at audiences. This concept of silo'd ad budgets will eventually dissolve.

[http://www.digitalstrategyconsulting.com/intelligence/2016/03/tv\\_trends\\_youtube\\_and\\_netflix\\_rise\\_but\\_tv\\_still\\_king.php](http://www.digitalstrategyconsulting.com/intelligence/2016/03/tv_trends_youtube_and_netflix_rise_but_tv_still_king.php)

Linear TV will decline, but slowly and in key demos

Linear TV is far from dead. In the US, linear TV accounts for 70% of total viewer watchtime and remains the single largest recipient of all ad budgets, capturing 37% of all spend as it continues to offer marketers mass audience reach against brand safe content. In countries like Italy and Germany, traditional TV viewership makes up over 80% of total of watch-time. We are seeing substantial changes in how TV is being watched, and by whom.

OTT will eventually lead, but this will take time

Silo'd TV and Digital ad budgets will dissolve, as buyers think cross-screen for audience reach.



## TREND #2: INVENTORY

Premium video is hard to find; plagued by brand safety and IVT concerns

### DIGIDAY

NEWS PODCASTS DIGIDAY+ EVENTS AWARDS CAREERS

The FT warns advertisers after discovering high levels of domain spoofing

OpenSlate

2017 News

September 7, 2017 Ad Firms Endorse Guidelines to Make Sure Ads Run with Safe YouTube Videos  
September 7, 2017 Ad-Agency Headline敦促广告公司审查YouTube上的品牌安全  
September 1, 2017 Two Social Video Analytics Companies Have Quibbled Over Auditing Business Since YouTube's Brand Safety Score

**IMPACT:** Brands are turning to TV, premium reservation deals, whitelists and 3rd party validation to ensure quality – not easy to scale

Google

After a year of trying to prove out PMPs, Netflix is **pulling away from direct deals** with publishers as the human effort and spend wasn't worth the ROI. They do like Top Video picks, and wish it was more scalable globally.

NETFLIX

### DIGIDAY

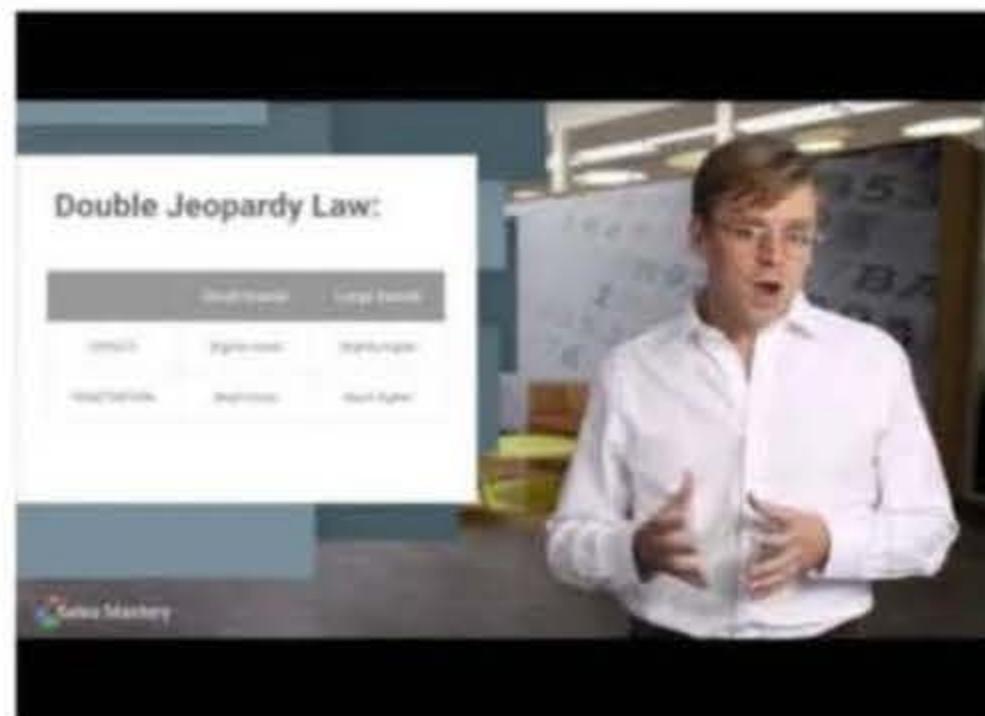
NEWS PODCASTS DIGIDAY+ EVENTS AWARDS CAREERS

Ads.txt, created to help publishers fight fraud, isn't being adopted by publishers

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### TREND #3: BUYING

Marketers are shifting from the "brand vs. performance" paradigm, in support of Byron Sharpe's philosophy on *How Brands Grow*



**IMPACT:** Clients increasingly care about maximizing reach (to build brand salience), but also about measuring "performance" in terms of attribution and sales lift

Google

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L'Oreal has underlying reach goal, but media planning occurs on a more niche audience (mascara lovers)

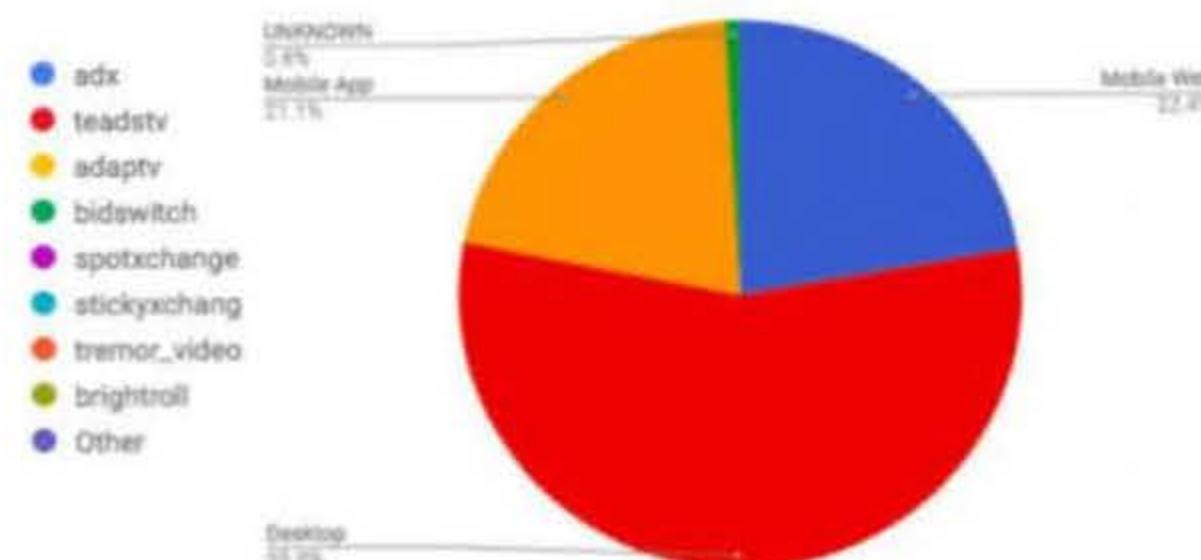
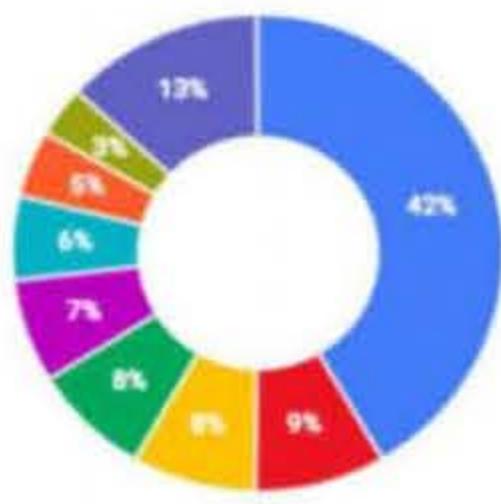
For CPG, sales lift; for M&E, tune in

## Competitive response

Google

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## DBM open auction video revenue by exchange and environment



Analysis over 2018-Q1

Google

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## Market context: 3 key trends

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# Client segmentation

Google

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To grow "All Media" segment, must differentiate with further investment in consolidation, and parity with AW/competitors

PLAN

BUY

MEASURE

- Reach planning and forecasting (incremental, quality reach)
- Discover inventory & deals
- Optimize to target reach & frequency
- Broad reach on premium inventory (FEP, TV, OOH, etc)
- Extensions to linear TV
- Bulk campaign and placement management

- Brand lift
- Attribution
- Sales lift

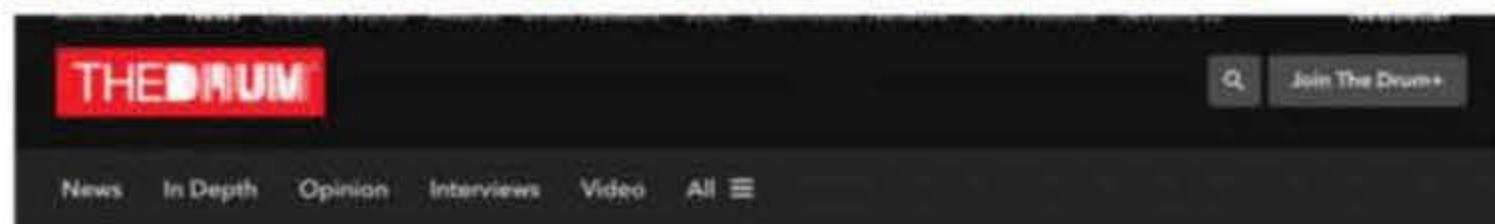
CROSS MEDIA & CROSS DEVICE



Google

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## Agency advanced TV teams are becoming formidable competitors (vs. target customers) to our pTV product



GroupM's addressable TV outfit, Finecast, to find a common currency in the 'walled gardens' of online TV

*It has inventory commitments from broadcasters Channel 4, Channel 5 and STV, set-top box partners Sky, Virgin Media and BT's YouView, and video-on-demand (VOD) access to Discovery, Disney, Fox and others. Its live partners are currently limited to free-to-air service TVPlayer and STV, but GroupM promises that more are coming soon.*

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## Make video front-and-center in DBM to deliver \$3.2B\* in 2018

Bring Programmatic Power of DBM to YouTube



\$1.8B on YouTube via DBM

Invest in our biggest area of growth

Play in Premium



\$560M video deals;  
Align & execute linear TV  
inventory acquisition strategy

Extend access to premium  
content beyond YouTube,  
including linear TV

Unify planning, buying and  
measurement of all media



\$3.2B on DBM Video

Cross Channel Video

Discovery & Packaging

Areas that enable advertisers to  
spend their budgets effectively on  
the inventory that already exists

YouTube is increasingly important, have to get that right  
But we can't succeed with YT alone -- hence focus on strengthening consolidation,  
and expanding on efforts in Premium video with deals, connected TV and linear TV  
Video is a critical focus for DBM  
Make it seamless to buy across YT and all video

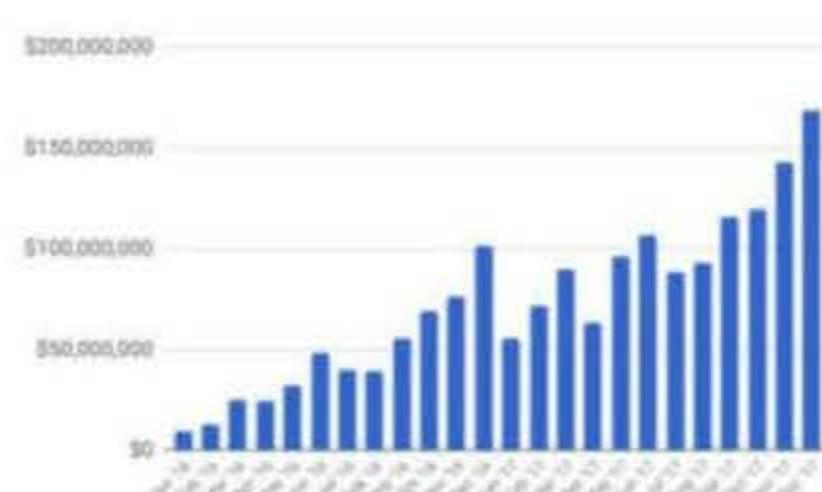
OLD

Google

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## YouTube performance review

**DBM-YouTube Monthly Revenue**



- \$1.21B in FY 2017 (87% auction, 13% reserve)
- \$431M in Q4 '17, representing 75% YOY growth
- 72% of revenue on mobile, representing 34% of all DBM mobile revenue (Q4 '17)

**DBM YouTube Monthly Business Contributions**



- DBM-YT was 16% of FY '17 total YT auction + reserve revenue (17% of auction, 11% of reserve)
- DBM-YT was 22% of FY '17 total DBM revenue, and 55% of total DBM video revenue

*2018 DBM YT revenue OKRs: \$1.79B total, \$1.59B auction, \$194M reserve*

Google

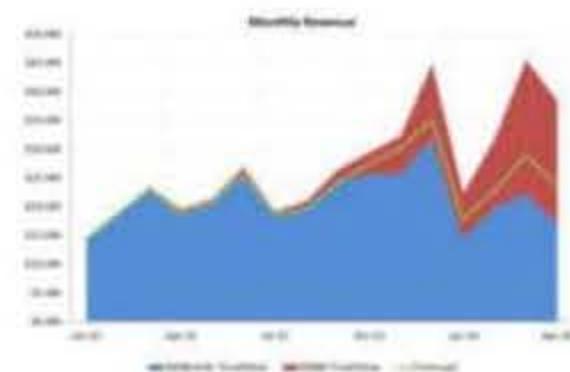
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\* TrueView + bumpers only. Non-skips, sparkles, etc not included.

## Incrementality Analysis - Counterfactual Methodologies

### 1 Fargo Forecasting

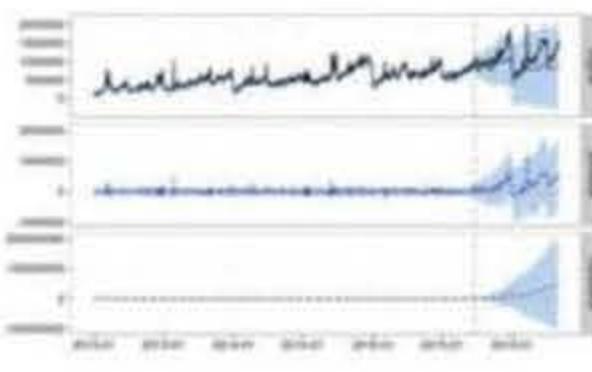
Use Fargo to forecast AdWords TrV spend for DBM TrV adopters to create counterfactual. Compare with actual DBM+AW TrV spend to measure incrementality.



64-81c of every DBM TrV \$1 are incremental

### 2 Causal Impact

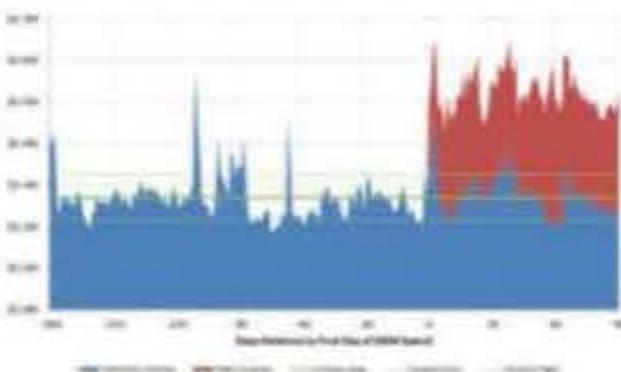
Forecast AdWords TrV spend using a statistical relationship between DBM adopters and non-adopters. Compare forecast with actuals to measure incrementality.



61-75c of every DBM TrV \$1 are incremental

### 3 Linear Regression

Set first date of DBM TrV spend as day 0 ( $t=0$ ). Train a linear regression model to forecast AdWords TrV revenue and measure incrementality.



Inconclusive due to Q4 seasonality impact

**Result: 60-80c of every DBM TrV \$1 are incremental. Our best estimate for future impact is ~60c.**

Google

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Incrementality details. Incrementality calcs over 9/24/15 (launch) - 04/30/16.

Id	Date	Text
1	03/26/2018 15:54:07	Move this stat to the previous slide and then delete this slide

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~~Advertisers are increasingly leveraging data to maximize audience reach across screens, while measuring performance~~

L'ORÉAL  
PARIS

"I want to reach beauty buyers"

We can help you find people who have...

**facebook.**

**amazon**

**Google**

**COMCAST**

**verizon**✓

*liked* beauty  
pages  
(people  
marketing)

*purchased*  
beauty products  
(purchase data)

*searched* for beauty  
products, beauty stores  
or watched beauty  
videos  
(search data)

*watched TV*  
shows related to  
beauty  
(STB data)

*interests* in  
beauty from  
(mobile & TV  
data)

Google

Comcast's Proprietary



## ~~Competitors are aggressively building solutions to capture the video + TV opportunity~~

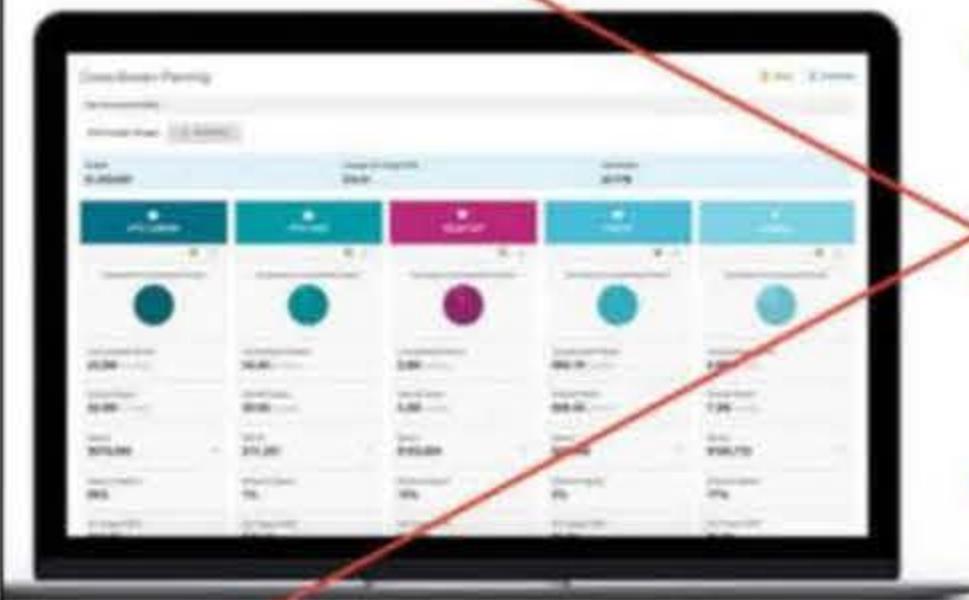
	Video-focused platforms	Others to watch
Inventory	<b>verizon</b> "Brand building & content experience on mobile"	<b>facebook.</b> "People marketing"
Planning & buying	- Linear TV SSPs - Facebook, Instagram, Freewheel  - Tubemogul cross-screen reach planning - Adobe Audience Mgr, Nielsen MRI	- Linear TV: MCN, Rogers, AOL, Adap.tv, Brightroll  - O&O: Facebook, IG, messenger - PG Audience Network  - Social graph - Nielsen partnership
Msmt	- brand surveys - Nielsen XCR - Sales lift (DLX)	- Convertro attribution - Site visitation lift  - Atlas pixel  - Sales lift

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The Trade Desk (maybe just for talking) --> doubling down in flexibility for PG/reservation and identity solutions (e.g. cTV announcement)

## ~~Adobe / Tubemogul is gaining traction with planning & measurement that spans TV and digital~~



### ~~Plan cross-screen campaign to optimize for incremental reach~~

- Upload your base TV plan, or choose from historical plans
- Planning tool models desktop, mobile, TV to the network level using Nielsen XCR panel data

### ~~Execute campaigns across TV and premium digital inventory:~~

- National and local linear TV; Full Episode content streamed OTT; Facebook, Instagram, etc.
- Target Nielsen demo and MRI (eg. "mascara lovers")

### ~~Measure results of your plan:~~

- Nielsen-verified demo
- Sales Lift

184

Google

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Next evolution of the PTV product is cross screen planner

Id	Date	Text
1	03/26/2018 22:49:27	<p>missing competitors: videology TTD (include content on cTV investments) <a href="#">+bitetti@google.com</a> are there existing slides we can use to bolster this section?</p>
1	03/26/2018 22:49:27	<p>we decided in the meeting to consolidate the competitive update into one simpler slide that just hits on the highlights for tech competitors, while also addressing the media angle. Check slide 109 (just added) and lmk what you think!</p>

Google

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## TV/Video is a \$200B+ global market; Video viewership and growth will be driven by OTT and Digital Video & Apps

### Traditional TV

Linear TV, Addressable TV,  
IPTV, DVR, VOD



Ads: \$180B  
Market: \$192B (2022)

### Over-the-Top (OTT) Services

Subscription (VOD):



Virtual MVPDs (Live TV, DVR / VOD):



Direct to Consumer (Live TV, VOD):



\$6B  
\$20B (2022)

### Digital Video & Apps

Watch, Scroll, Snap, Tweet, Play,  
Listen



\$20-24B  
\$60B (2022)

See Appendix A for more Comcast strategy and business details

Google

## Opportunity: Capture video spend across digital, OTT and traditional TV market as video market converges



Sources: Industry Metrics, eMarketer, IEG, FreeWheel, PwC, Enders, Mizuho securities, internal estimates - [slide inspiration and EMEA estimates by Robert Curwen](#) - Details in [this page](#)

### Current Google Digital Video Opportunity:

- YouTube
- OTT (Live Streaming, On-Demand)
- Other Digital Video
  - Short-form Clips
  - Out-stream Video (App Interstitials, Rewarded, In-feed/In-article)

### Potential Google TV Opportunity:

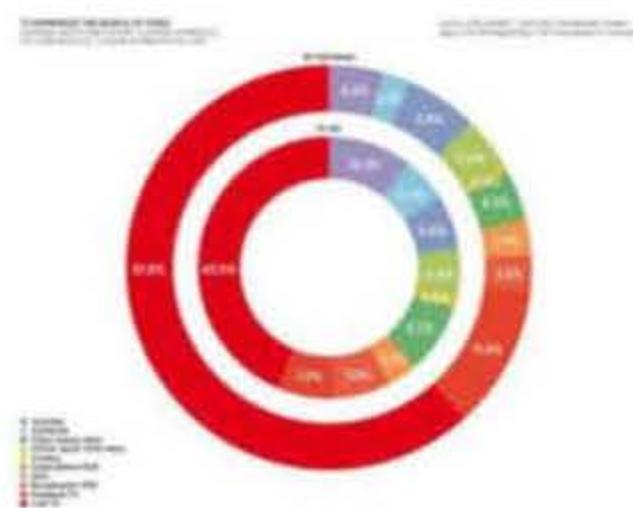
- Addressable TV
- Programmatic TV

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Expected to increase fast;  
As per my projection tv OTT est to grow to \$19B YT faster to \$25B

Traditional TV still dominates watchtime, but will decline in favor of OTT & Digital Video & Apps, especially with the younger demographic



Traditional TV viewership is still about 4.5 hours per day, but younger demographics are spending more time on digital video vs live TV



March Madness viewership grew +2% YoY overall driven by digital devices (roku, apple TV, desktop, tablet) but traditional Linear TV still dominated watchtime

- Digital Devices: +10% YoY, 420K viewers
- Linear TV: -3% YoY, 8.3M viewers

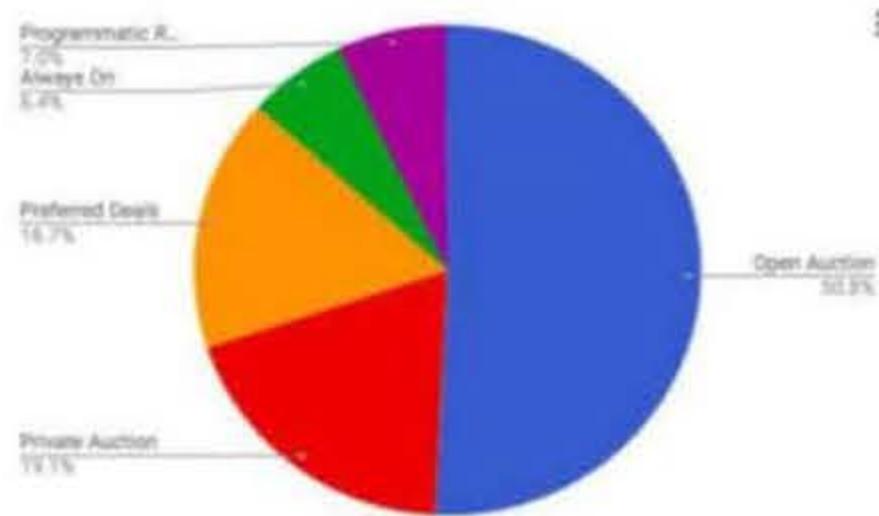
Source: SNL

Google

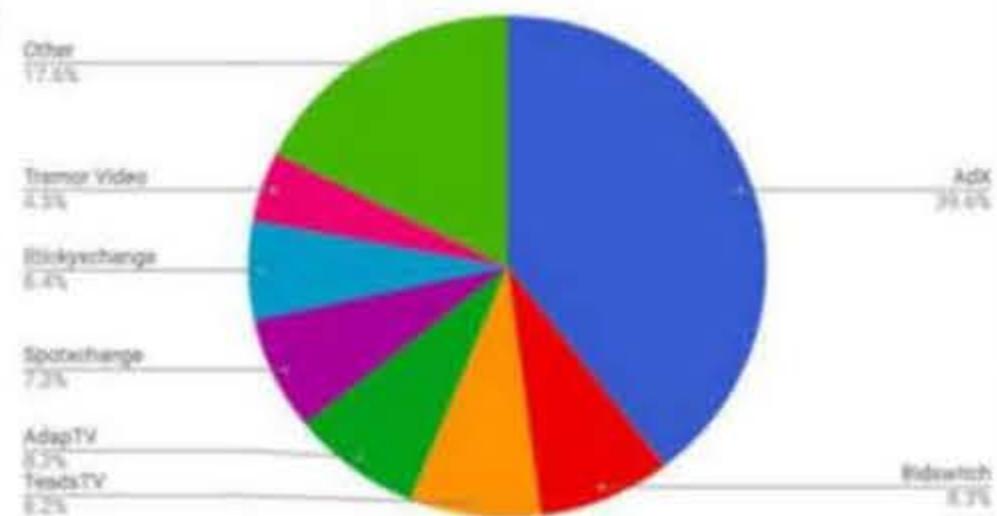
Id	Date	Text
1	03/26/2018 21:26:51	+bitetti@google.com The donut chart on the left always bothers me because its so difficult to read the legend or the percentages. Can we just make the point that TV still dominates on the previous slide as voice over? +deeptib@google.com
2	03/26/2018 21:26:51	<p>I agree with you!</p> <p>I thought we were deleting this slide (#101 and 102), and just keeping 103 ("The Global TV + Digital Video Ads Market in 2022")?</p>

## DBM non-TrV video revenue

2017 Revenue by deal type



2017 Revenue by Exchange



- \$1B in FY 2017
- 73% auction (open + private), 27% reserve

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2. Cross Channel Video leverages our tech and data to realize the benefits of consolidation across YT and non-YT



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- To realize gains from consolidation, our best features must work across YT and non-YT (cross-channel) seamlessly

Id	Date	Text
2	03/27/2018 02:55:47	<p>+deeptib@google.com add prospective features too?</p> <ul style="list-style-type: none"><li>- A/B testing</li><li>- R&amp;F opt</li><li>- unified brand lift studies</li></ul>

Google

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### 3. Discovery and Packaging help advertisers find scarce premium video inventory for their campaigns

The screenshot displays two main sections of the Google video advertising platform:

**Discovery:** A marketplace interface for YouTube and Premium Video Publishers. It shows a grid of video publishers like YouTube, Vevo, and Hulu, along with filters for ad length, targeting, and other parameters.

**Packaging:** A feature for creating dynamic video packages. It shows a preview of a package titled "YouTube" targeting "High-Value Audience - New Friends.com". The package includes various video thumbnails and logos for partners like "AOL", "A", "ECHO BOOM", "evo", and "GT".

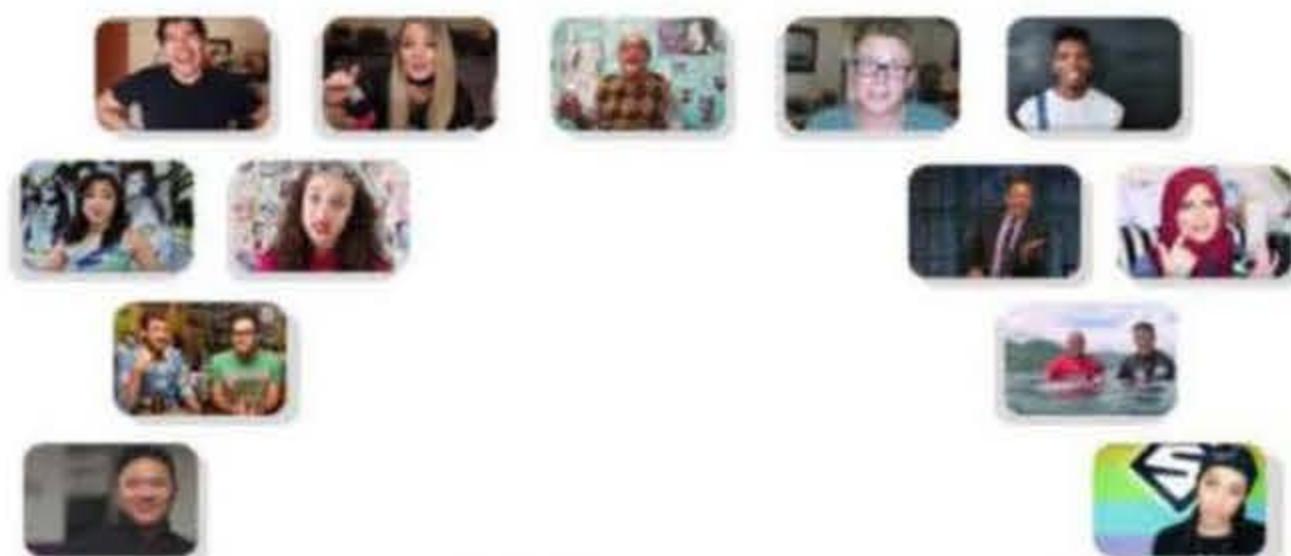
Below these sections, there is descriptive text and a Google logo.

**Discovery**  
MarketPlace for YT & Premium Video Pubs  
Planning workspace

**Packaging**  
Dynamic packages with MarketMaker,  
including Top Video Picks

Google

YouTube anchors our video offering with high-quality, attentive reach at **scale**



### Formats

Examples

Auction (TrueView, Bumpers) & Reserve  
TrueView for Shopping, Action, Crane

### Audience

CSAM Audiences  
Consumer Patterns, Life Events, YTAA

### Measurement

Automated DCM tracking  
Comparable brand lift with RTB

## Opportunity: capture video spend across digital, OTT and traditional TV market as video market converges



Expected to increase fast;  
As per my projection tv OTT est to grow to \$19B YT faster to \$25B

Long term opportunity

## 2018 Video Strategy

1

### Continue growth of digital video

Invest in YouTube, our biggest area of growth and differentiation  
+  
Offer holistic planning and buying across all digital video channels

Core YouTube

X-Channel

App Video

2

### Capture TV Opportunity

Enable seamless transition from linear TV to connected TV with a living room package

Connected TV

Programmatic TV

3

Help advertisers discover premium inventory across digital and TV.

Discovery & Packaging

Google

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- Our strategy is actually really simple: (1) we want to be the best platform for buying digital video and (2) we want to capture the TV opportunity.
- To be the best platform for digital video, we want to do 3 things
- First, we want to invest in our crown jewel, YouTube, which is also our big differentiator compared to other platforms
- Second, we want to give customers a reason to consolidate all their digital spend with us by offering cross-channel features. We'll get to what these features are in a few minutes.
- Third we want to make app video a big part of our advertiser's portfolio since apps are where we're seeing the most supply
- On the TV front, we want to set ourselves up for the future by being the platform of choice for buying addressable TV in the long run
- But because TV is going through this transition phase, we need to invest in both connected TV and programmatic linear TV and position this as a living room package for our customers
- And of course, having access to all of this inventory is meaningless if advertisers can't find it
- So we want to invest in discovery and packaging, so advertisers can easily find what they are looking for

Differentiating our Buying Front-Ends for YouTube / video  
to meet client needs

## AdWords

AdWords is a  
buyer's Assistant to  
Google Media

## DBM

DBM applies Google  
technology to empower  
buyers to holistically  
manage all of their media

In order to differentiate the experience of buying Google media,  
the **media offering must be identical: Formats, Inventory, Audience and Measurement**

► Core YouTube      Digital Cross-Channel      TV Extension      Discovery & Packaging

Google

Id	Date	Text
3	03/28/2018 14:33:16	+bitetti@google.com +eveg@google.com do you think we can work this into previous slide? would rather frame this as a challenge than a finalized segmentation; don't think all parties have agreed to this yet
1	03/28/2018 14:33:16	move this out

## December 2018 Headlines

**"The place to buy digital video. Period."**  
-AdExchanger

**"Everyone is talking about Display & Video 360...."**  
-Digiday

**"So fast, so beautiful."**  
- Anonymous Customer

**"How do we drive the best results for our advertisers? Easy. We extend the best technology Google has to offer with our proprietary insights."**  
- Agency Holding Company

**"The first time brands can truly turn insights into actions for their digital campaigns."**  
-Business Insider

**"You're really starting to see advertisers leverage the power of Google for the good of users."**  
-AdAge

Imagine this time next year. You've been getting nonstop emails from CMOs about their desire to get on the new platform DV3, ASAP. You're getting constant linked in requests from people working at Adobe and Amazon. Everyone you know from Facebook has stopped speaking to you. PMs that left for Neal's org are begging to come back to DVAA.

It's December 2018 and we've had a banner year, with a massive product launch, explosive growth in video, and major kudos for finally bringing some much needed innovation to ecosystem (formats! Audiences! New mediums!). Everyone wonders how we did it, it was such an ambitious effort. We mobilized 250+ engineers, 40+ PMs, and hundreds of sales, services and other support teams around this charter. Here is what we told them.