Programmatic Strategy Review

N-Staff - March 2014

Lexi Reese, Jim Lecinski, Bruce Falck, Sean Downey, Damian Lawlor, Guy Gibbs, Frank Einecke, Jason Bigler, Brad Bender, Payam Shodjai, Woojin Kim, Aidan Booth, Aaron McNally, David Bledin, Sam Temes, Ritu Kathpalia, Eve Goldman, Elaine Lee, Kelley Collacchi

Global
Publishers and Platforms Solutions & Innovations

PTX0794

1:23-cv-00108

Key Takeaways

- **Programmatic is more than just RTB** - "Programmatic" is the use of technology to automate media buying. It's simple, efficient, effective marketing... and that's why everyone is talking about it.

- **Our Display margins remain healthy in this end-state** - We are building out both a best-in-class buyside platform and a leading ad exchange to ensure we maintain the same margins as our traditional Display business.

- **We have a solid plan in place for 2014 and beyond, but we can go bigger** - We believe we can capture $6B of programmatic Display spend by 2017 if Product delivers on a truly integrated platform technology across buy and sell. There is +$4B incremental value if we deliver best-in-class mobile and video enablers seamlessly baked into our stack, and scalable Private RTB. And an additional +$5B if we leverage our O&O data to provide proprietary targeting on one-of-a-kind signals.

- **Sales needs to get smarter on Programmatic** - Programmatic is still a black box for many of our sellers, and we need to plan for this future by carefully considering our options across LCS and Doubleclick.

Quick Programmatic Primer

(Repetition doesn't spoil the prayer)

INTERNAL: Google Confidential and Proprietary

Defining "Programmatic" explicitly

High-level definition of programmatic:

Using technology to automatically buy and run an ad campaign, reaching the right user with the right message at the right time. Regardless of your goal, programmatic means simple, efficient, effective transactions. That's it!

Breaking this down into its subcomponents (*precision is important*):

Possible Media transactions

Type of Inventory

	RESERVED	UNRESERVED
FIXED PRICE	● Automated Guaranteed	● Unreserved Fixed Rate
RTB		● Invitation-Only ● Open Auction

Pricing Mechanism

Performance Oriented

Brand Oriented

1. PROGRAMMATIC OVER RTB PLATFORMS

Any trade of advertising inventory on an **ad exchange platform** on an impression by impression basis as each impression becomes available on a publisher's website (i.e., unreserved). Can be RTB or fixed price.
- *E.g., Turn buying on FBX*

1b. PRIVATE RTB

Programmatic over RTB platforms that involves a select number of buyers and sellers.
- *E.g., Tory Burch running a Custom Exchanges, Project Bolt (Video Alliance)*

2. PROGRAMMATIC OVER NON-RTB PLATFORMS

Any trade of advertising inventory that takes place on programmatic platforms where pricing is fixed and inventory is reserved. Programmatic element is the automation of the RFP, creative and campaign trafficking workflow.
- *E.g., P&G buying a WSJ home page.*

Programmatic Display RTB, Simplified
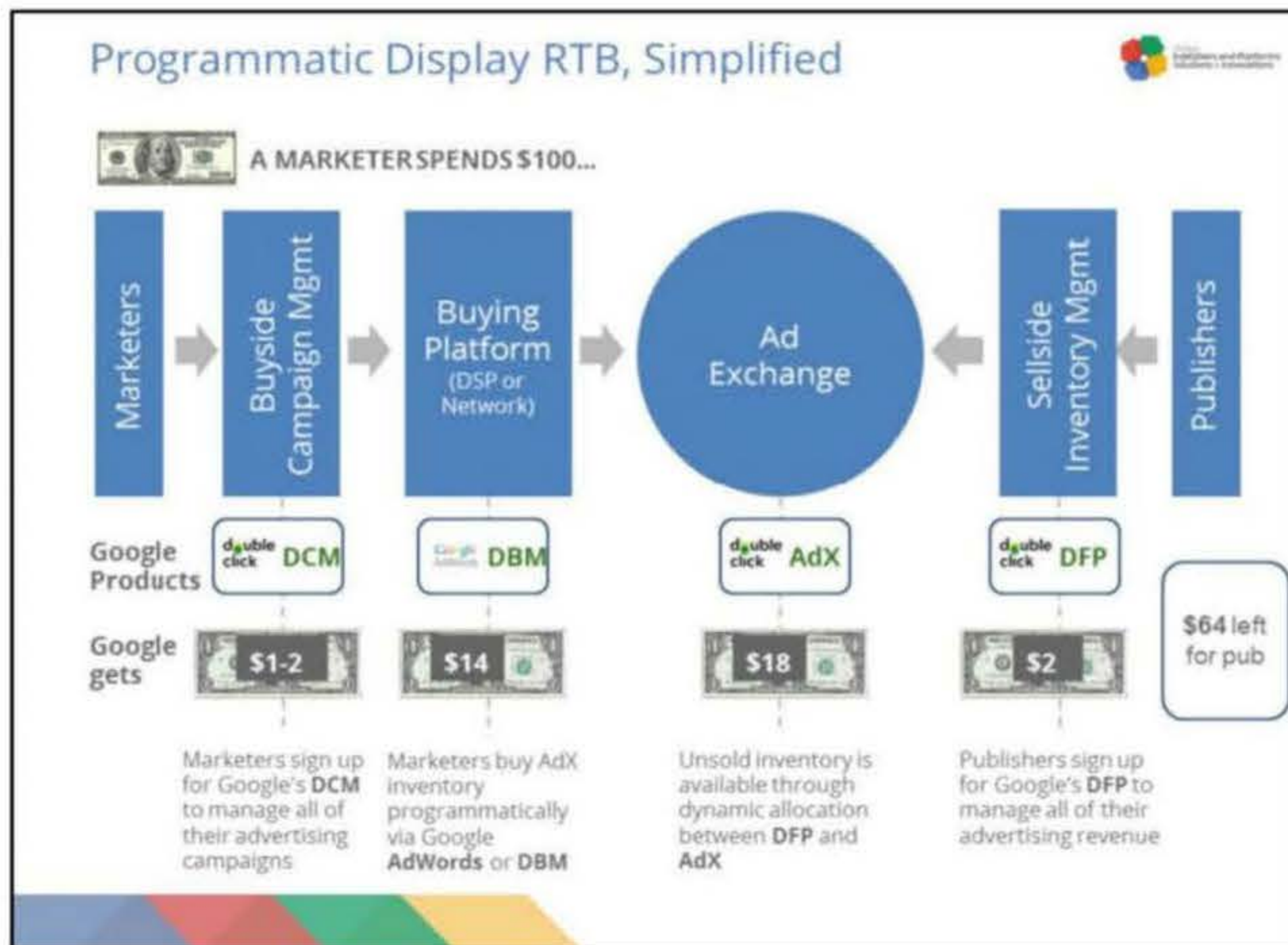
DS is programmatic, but we're focused on

Buyer using DCM, DBM, AdX -
* Pays $1-2 for ad serving, analytics
* Pays $14 for the buying platform capability: targeting, bidding algorithms
* Pays $18 for the exchange - a consolidated pool of great inventory with data signals that can be passed to the buying mechanism
Pub pays $2 for ad trafficking and inventory management

Id	Date	Text
1	03/14/2014 16:00:57	Does the AdX margin 'hit' the buyer or seller? i thought the buyer... i.e., if a marketer spends $100 on media, they are only effectively getting $66 of media (excluding DFP fee).
2	03/14/2014 16:35:52	its pub rev share so hits the seller. Buyer spends $100 on media, gets $84-85
1	03/14/2014 18:50:32	Do we need to clarify for this group which dollars marketers pay vs publishers? DCM/DBM are marketers, AdX/DFP are publishers.
2	03/14/2014 18:50:32	Are you sure? This doesn't make sense to me. In that case, our AdSense vs. AdX margins aren't equivalent, as in the AdSense case, the 32% comes from the buyer. These must be equal...
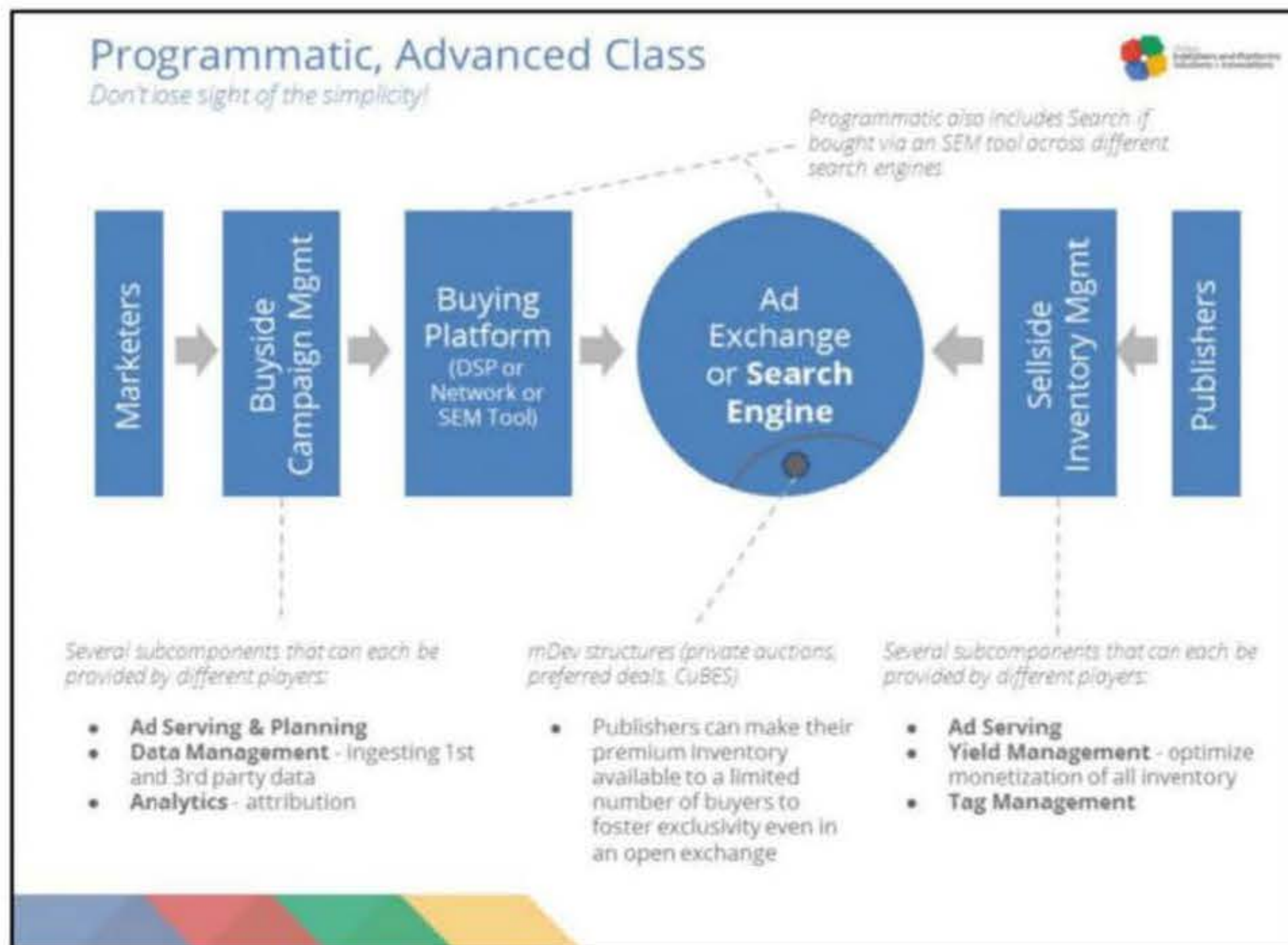
when we look at the more simplistic versions in slide 5 and 6, we are obscuring some of the complexity - but it's important to note that the key pieces of the stack have several sub-components that are important to our offering and we can be disintermediated at any point
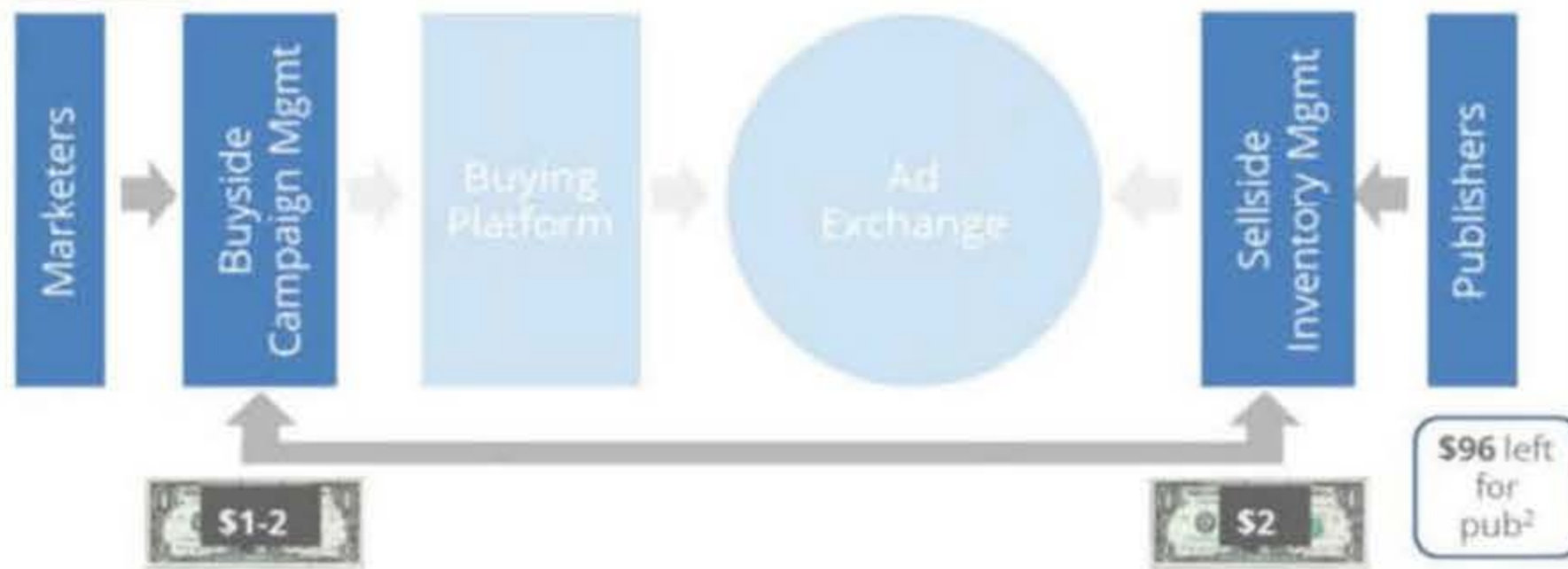
Programmatic will also power traditional (i.e. clunky, manual) direct buys

- Previous slides refer to media bought and sold over a **network or exchange** ("indirect"), which currently accounts for **35%[1]** of Global Display Spend
- Programmatic technology is also evolving to make **direct buys** - deals for **higher CPM inventory** (premium) between one buyer and one seller - more efficient

A MARKETER SPENDS $100 TODAY...

Marketers → Buyside Campaign Mgmt → Buying Platform → Ad Exchange ← Sellside Inventory Mgmt ← Publishers

$1-2 $2 $96 left for pub[2]

In the future, direct buys will be powered by programmatic technology - "Programmatic over non-RTB Platforms" - which we believe will justify higher margins than $2-4 across Buy and Sell

Notes and Sources:
[1] Direct vs. Indirect from GBS data hub.
[2] By comparison, TV margins equate to 10-15% though highly variable. Per Global Agency team, most agencies working off flat fees currently across media, so margins are historical.

Programmatic Market Sizes & Growth Rates

Google Product	double click DCM	double click DBM Google	double click DS	double click AdX	double click DFP
Key Competitors		TURN criteo Ad.com	Marin	OpenX rubicon	ADTECH
Gross Rev (2013)[1] $2.8B	$177M	$471M $805M (DBM ~20%)	$6.4B $226M		
Y/Y Growth[1] 49%	2%	50% 48%	21%	20%	
Google Share[2] 25%	50%	25% 25%	35%	50%	
Goog Margin[3]	1-2% 20%	11-15% (fee) 32%	1-2%	1-2%	
Competitor Margins[3]	0.5-1% 10-20%	8-15%	20-50%[4] 0.5-1%	2-6%	
Annual Plan (2014)	$202M	$697M	$7.1B		

Sources:
[1] Display P&L
[2] Approximation from Display BC Review
[3] DCLK Platforms Pricing Review
[4] Several anecdotal sources, including this one.

Tesla - 2B in annual revenue, 456M in annual gross profit, 22.6% margin
Chipotle - 3.2B in annual revenue, 899M in annual gross profit, 28% margin
Dominoes - 1.8B in annual revenue, 549M in annual gross profit, 30% margin
Wendy's - 2.5B in annual revenue, 648M in annual gross profit, 26% margin
AOL - revenue for 2013 - $2.3B, 22% margin on net revenue

Programmatic Display Margin Implications

It is important to understand the margin implications of a programmatic future on our Display business. Several media transaction scenarios emerge:

1a. *Status quo* - AdWords buying AdSense inventory

| AdWords Buyers | → | AdSense Inventory | **32% margin** |

1b. *Status quo* - AdWords buying AdX inventory

| AdWords Buyers | → | AdX Inventory | **32% margin**
(AW 14%, AdX remaining 20%) |

2. "All DCLK" Programmatic - DBM buying AdX inventory

| DBM | → | AdX Inventory | **32% margin**
(DBM fee 14%, AdX remaining 20%) |

3. *Disintermediation* - DBM buying non-AdX inventory, other non-Google DSPs buying AdX inventory

| DBM | → | Other Exchanges | **14% margin**
(DBM fee) |

| Other DSPs | → | AdX Inventory | **20% margin**
(AdX margin) |

KEY MARGIN TAKEAWAYS

- **AdWords neutrality**: Demand through AdWords has equivalent margins regardless of whether the inventory is sourced from AdSense or AdX publishers

- **AW/DBM neutrality (mostly)**: New DBM pricing structure is set up so that *average* DBM fee is 14%, neutralizing margin impact of whether Google-sourced inventory is bought via AdWords or DBM (note margin does fluctuate by DBM buyer based on contract fee)

- **Disintermediation hurts our margins**: DBM buying on non-AdX exchanges or Other DSPs buying on AdX yields us lower margins than Display status quo

- The world is becoming media agnostic - this is a sea change we can't ignore just because it threatens our margins (classic innovator's dilemma). **The challenge and opportunity**: margins are fully preserved if buyers use our DSP *and* buy media on our exchange.

Time Machine to the Programmatic Future (2017)

INTERNAL: Google Confidential and Proprietary
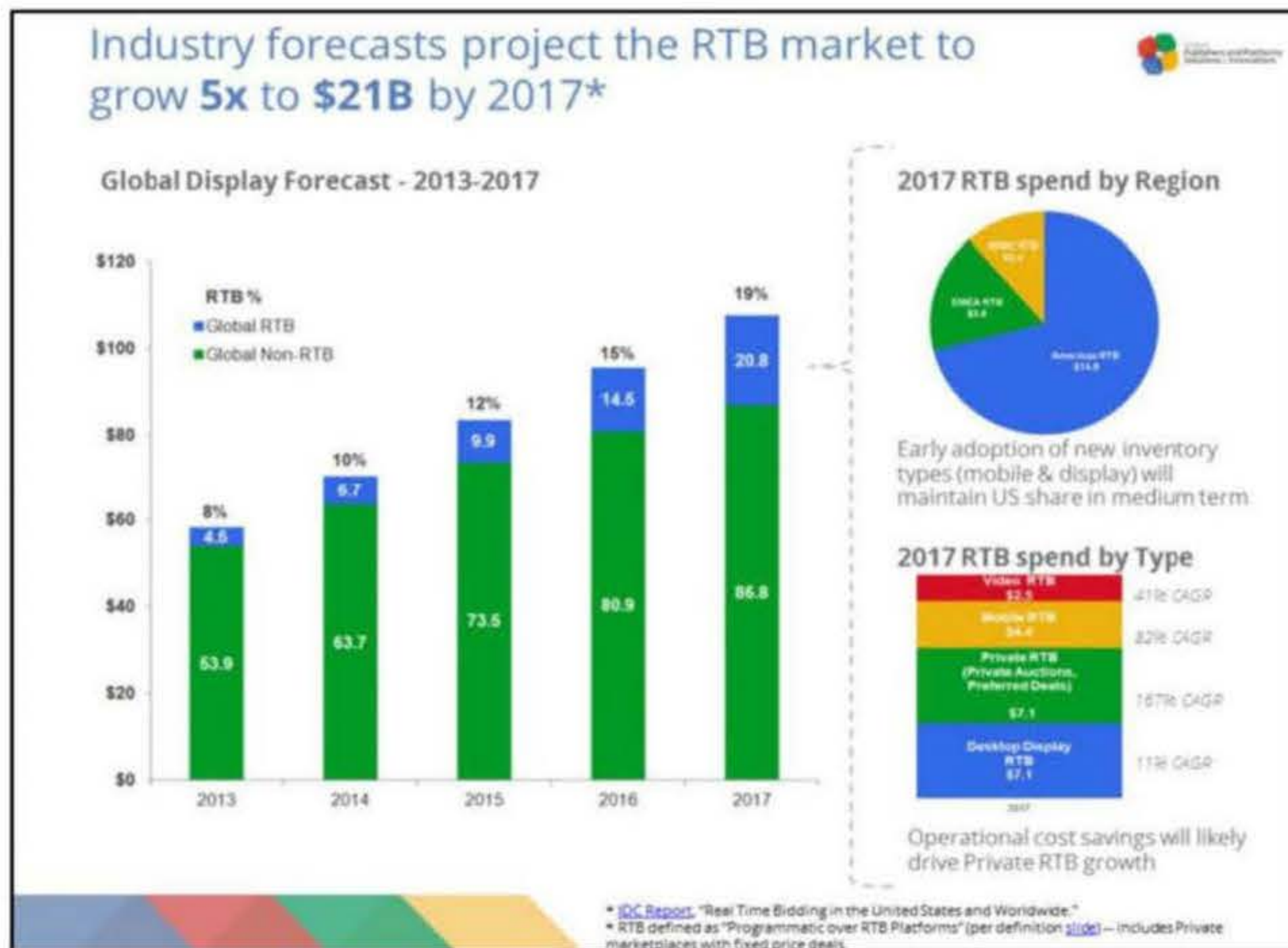
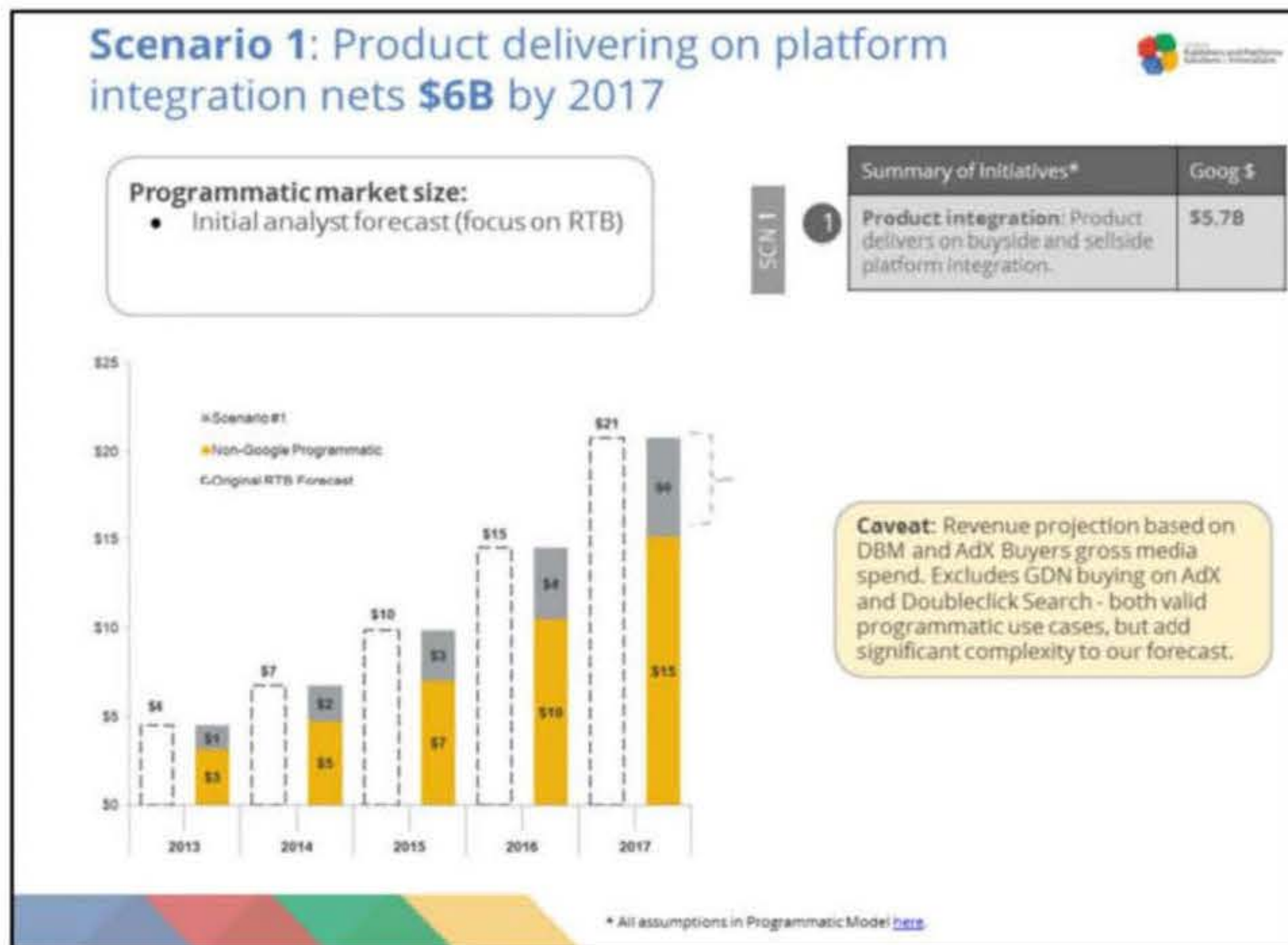* How do things grow? What has to happen / what do we believe?

- what's happening to the user? what do marketers care about?

Id	Date	Text
3	03/14/2014 16:35:53	+bfalck@google.com Feedback from Buyside Leads was to include a slide on what is changing with the user / CMOs to fuel this growth. We had a slide like this at one point but Philipp thought it was boring, so we moved to the appendix. Let me know if you want to reintegrate.

We believe customer behaviors will lead to greater programmatic spend than Analyst estimates
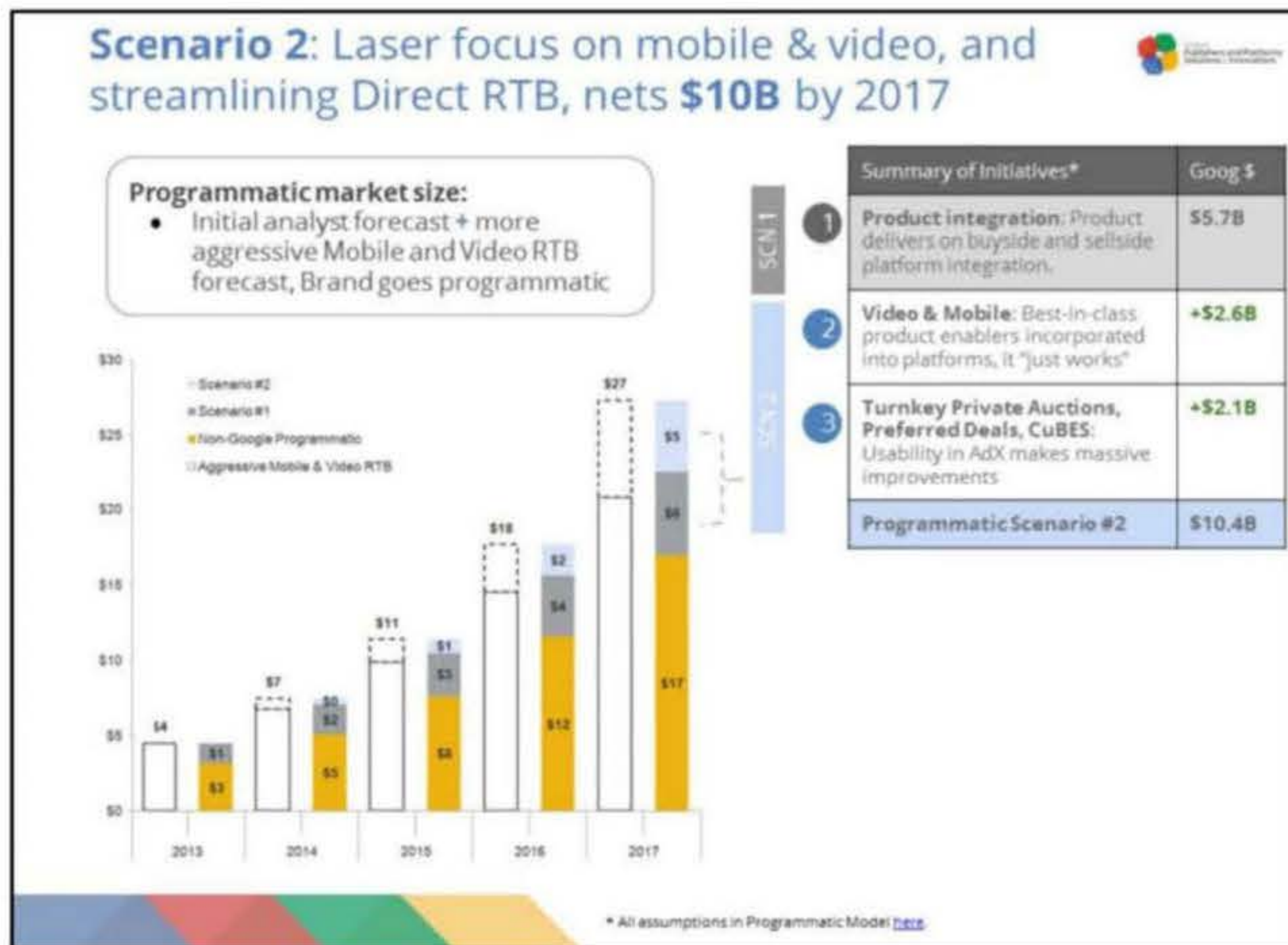
- mobile and video forecasts - double-check and add time period
- CMO - what is the value chain? CMO wants to own the data intelligence
- more intelligence equals better decisioning
- helps when they are planning, much smoother performance, optimizing on the go
- what are our beliefs?
- more consumer behavior will be on these devices
- CMOs want to get there
- CMOs want to be efficient with their buying
- Publishers want to maximize
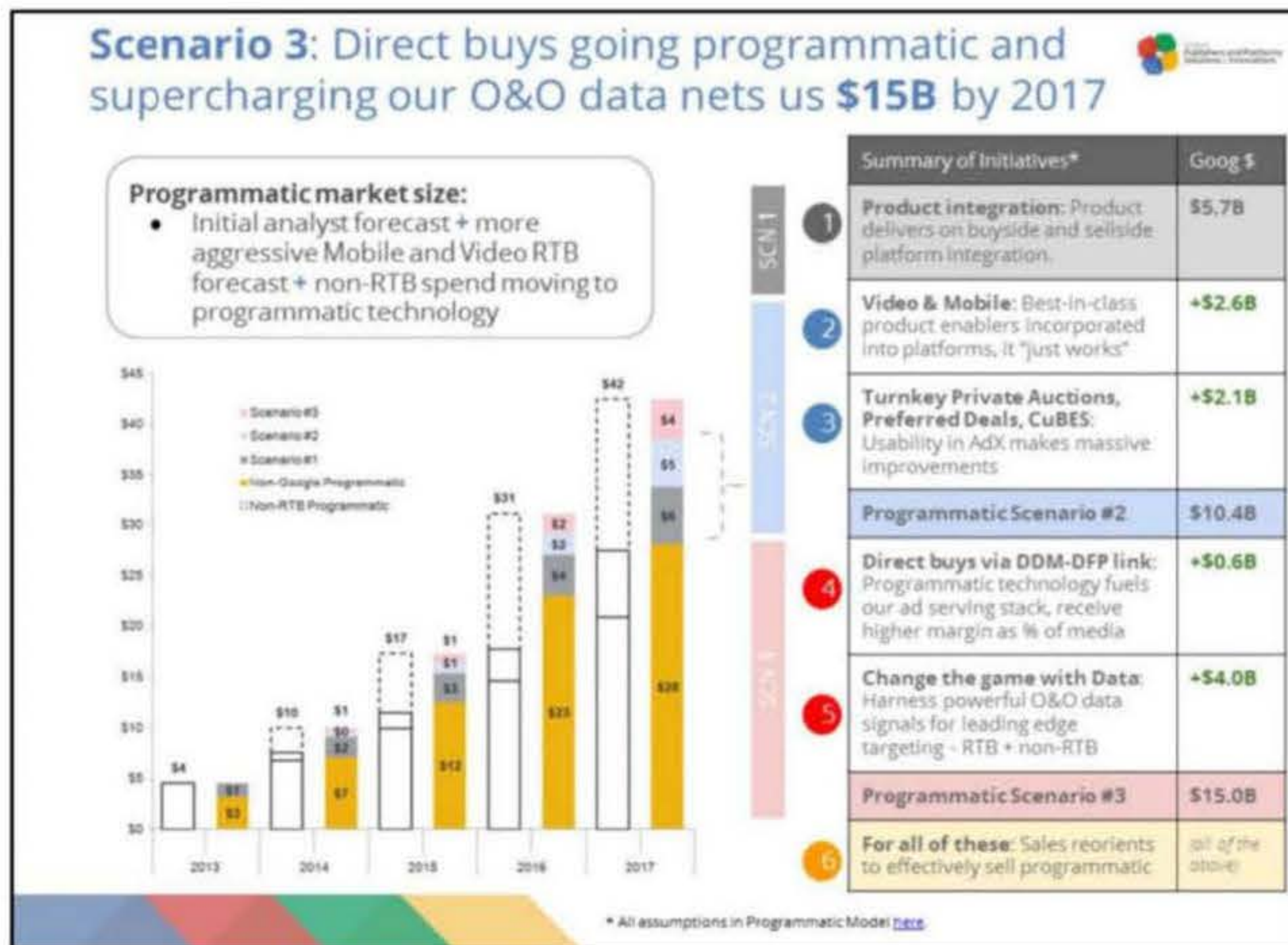
Scenario 1: Product delivering on platform integration nets $6B by 2017

- what % of the market will want to move direct to programmatic?
- Bruce build idea -
1. market / share
- reduce the 30%->20% for direct shifting
- blue 4 - red 5

Id	Date	Text
1	06/21/2019 20:56:55	+pshodjai@google.com see these scnearios from 2014. this was the last time with did the philipp exercise. in this case, these were about revenue goals. in this case, it is about product strategy. i think there is another example from 2016 which was more about product strategy / industry trends.
2	06/21/2019 20:56:55	put another way, we took the 4 trends in the previous slide as assumptions and played out revenue scenarios. In this exercise, I think we should outline the 4 trends, the probability of extreme in each and then the product implications on each end... I'll try to pen a structure for this before we meet with danielle.

Scenario 2: Laser focus on mobile & video, and streamlining Direct RTB, nets $10B by 2017

- what % of the market will want to move direct to programmatic?
- Bruce build idea -
1. market / share
- reduce the 30%->20% for direct shifting
- blue 4 - red 5

Scenario 3: Direct buys going programmatic and supercharging our O&O data nets us $15B by 2017

Programmatic market size:
- Initial analyst forecast + more aggressive Mobile and Video RTB forecast + non-RTB spend moving to programmatic technology

Summary of Initiatives*	Goog $
1 **Product integration:** Product delivers on buyside and sellside platform integration.	$5.7B
2 **Video & Mobile:** Best-in-class product enablers incorporated into platforms, it "just works"	+$2.6B
3 **Turnkey Private Auctions, Preferred Deals, CuBES:** Usability in AdX makes massive improvements	+$2.1B
Programmatic Scenario #2	$10.4B
4 **Direct buys via DDM-DFP link:** Programmatic technology fuels our ad serving stack, receive higher margin as % of media	+$0.6B
5 **Change the game with Data:** Harness powerful O&O data signals for leading edge targeting - RTB + non-RTB	+$4.0B
Programmatic Scenario #3	$15.0B
6 **For all of these:** Sales reorients to effectively sell programmatic	all of the above

* All assumptions in Programmatic Model here

Articulate base case, scenario 1, scenario 2 and be clear on what we need to do to bring those to pass and what externally needs to happen

And then talk about the implications of the different scenario

In scenario 2 (jordan) - i) WORKFLOW OPTIMIZATION (certain percentage) how much would advertisers pay for workflow integration ... PS velieves 5% is too few, ii) UNIQUE SECRET TARGETING SAUCE - what role does 1st and 3rd party play in this ... agencies are trying to proliferate themselves ... martin sorrell says "we are a data mining companies" ... they understand what they can bring is better data ... that is not necessarily our view ... if Google is the intelligence layer - either supplier or manager - how much would people pay ... and to what extent do we allow people to suck in data. ...

-- if we go down that path, agencies will not be happy

-- if you add value - not just in terms of efficiency, but in terms of data, you can (move from dumb ad serving to smart decisioning engine .. that's $0.02 to $0.05)

-- grab the dollar flow chart from the beginning and say how it changes in the new world

Id	Date	Text
2	03/13/2014 22:04:33	+bfalck@google.com +dbledin@google.com feedback from PS -- need to be more aggressive on data story -- should think through if we controled ad flow on android (i.e., we yield manage ALL ADS on android - we get first call on ad flow for every app) and we can place, literally based on our targeting and privacy principles, every ad on there -- in a way that is the old GDN business (we didn't pass signals to anyone else, what would happen if we shift radically back to that world) -- don't need to go crazy into the model, but need to be prepared to talk to how we'd use these data signals in programmatic and non programmatic environments
1	03/17/2014 23:24:04	PS -

What we believe needs to happen ...

- **Sales** - Support full service model for top 1000 [expand on this]
  - Build ecosystem - to implement and service our platforms
  - Articulate customer segmentation strategy for Programmatic era

- **Product** - Supercharge DDM, get behind as a company
  - Clean sheet design for a programmatic future - like DS
  - Truly integrate DS and GAP/DMP into DDM, currently half pregnant

- **Data** - Cohesive data plan for a data driven programmatic future
  - Develop a first party data strategy that's competitive with Tech Titans
  - Clear plan to consult with customers to help them leverage their data
  - Data management platforms to pull these and external data together for buying systems

- **Org** - Think through how we would org for a programmatic future - in particular need to resolve full serve platforms relative to core O&O business

- **Inventory** - acquire inventory as needed to drive this future [Mobile, Video, O&O strategy]

1. We secure RTB inventory (i.e. open to data usage.
2. We make great tools to access that inventory
3. The tools become sticky by combing premium with RTB for programmatic across ALL media (direct/indriect/bidable/negotiated)

Id	Date	Text
4	03/14/2014 16:33:39	From convo with Aaron McNally: DFP-AdX = make this a series of modules, but all part of the same product (same as DDM). brian adams pushing for this. DFP-DCM link (Jordan) is fully realized. (propose to add these under Product)

Back to the Present
(2014)

Level-setting in 2014: We are still at the beginning of our programmatic journey

- **DDM adoption** among LCS super-head is currently extremely low for >1 DCLK Buyside product:

Top LCS Clients DDM Penetration, as % of Parents   >50% adoption   25-50% adoption   <25% adoption

Country	LCS Super-Head	SINGLE-PRODUCT ADOPTION				TWO-PRODUCT ADOPTION			FULL STACK ADOPTION
		% DBM	% DFA	% DRM	% DS	% DFA + DBM	% DFA + DRM	% DBM + DS	% DBM + DS + DRM + DFA
AU	87								
CN	85								
DE	100								
ES	100								
FR	98								
GB	100								
IT	99								
JP	50								
US	175								

- **DFP and AdX sellside adoption** high in the US but highly variable in other regions, and very low for certain formats especially video:

Top Pub DFP/AdX Penetration, as % of Pubs   >50% adopt   25-50% adopt   <25% adopt

		AMERICAS			APAC			NACE			SEEMEA	
		Entertain & Online	Pubs, Networks, Apps	Commerce, ISPs	JP, Greater CN	AU/NZ	KR	UK	DACH	Benelux	FRITES	Emerging Markets
DFP	Desktop											
	Video											
	mWeb											
	mApps*											
AdX Sell	Desktop											
	Video											
	mWeb											
	mApps											

* Solution today is AdMob. We have some top-line access via AdMob Mediation or DFP, but often get disintermediated by other DSPs.

Solid x-functional plan to achieve **Scenario #1** in 2014, and OKRs to track progress

- **SALES** has completed rigorous Annual Planning for 2014:
  - Regional Buyside Leads developed a joint **business plan** for the first time at the end of 2013
  - PBS has a solid business plan with several OKRs around programmatic

- **PRODUCT** is moving ahead at full throttle on several key programmatic initiatives:
  - **PROJECT LINCOLN**: Unification of DBM and GDN backend engine so both products will have parity features & performance, unless intentionally suppressed in the respective UI (detail)
  - **PROJECT JORDAN**: Leverage programmatic technology to create the next generation of display reservations - eliminating manual workflows, providing full financial backoffice support, and paving the way for a true decision engine (detail)

- **gTECH** is evaluating Serviceability and setting targets to ensure the team is equipped to provide high-value, proactive service as programmatic products grow and evolve

- While winning in programmatic requires many components, we have set 3 **N-Staff OKRs** as our guideposts in 2014:

GROW DBM ADOPTION

GROW PRIVATE RTB

GROW ADX INVENTORY

OKRS STILL WIP

1. We secure RTB inventory (i.e. open to data usage.

2. We make great tools to access that inventory

3. The tools become sticky by combing premium with RTB for programmatic across ALL media (direct/indriect/bidable/negotiated)
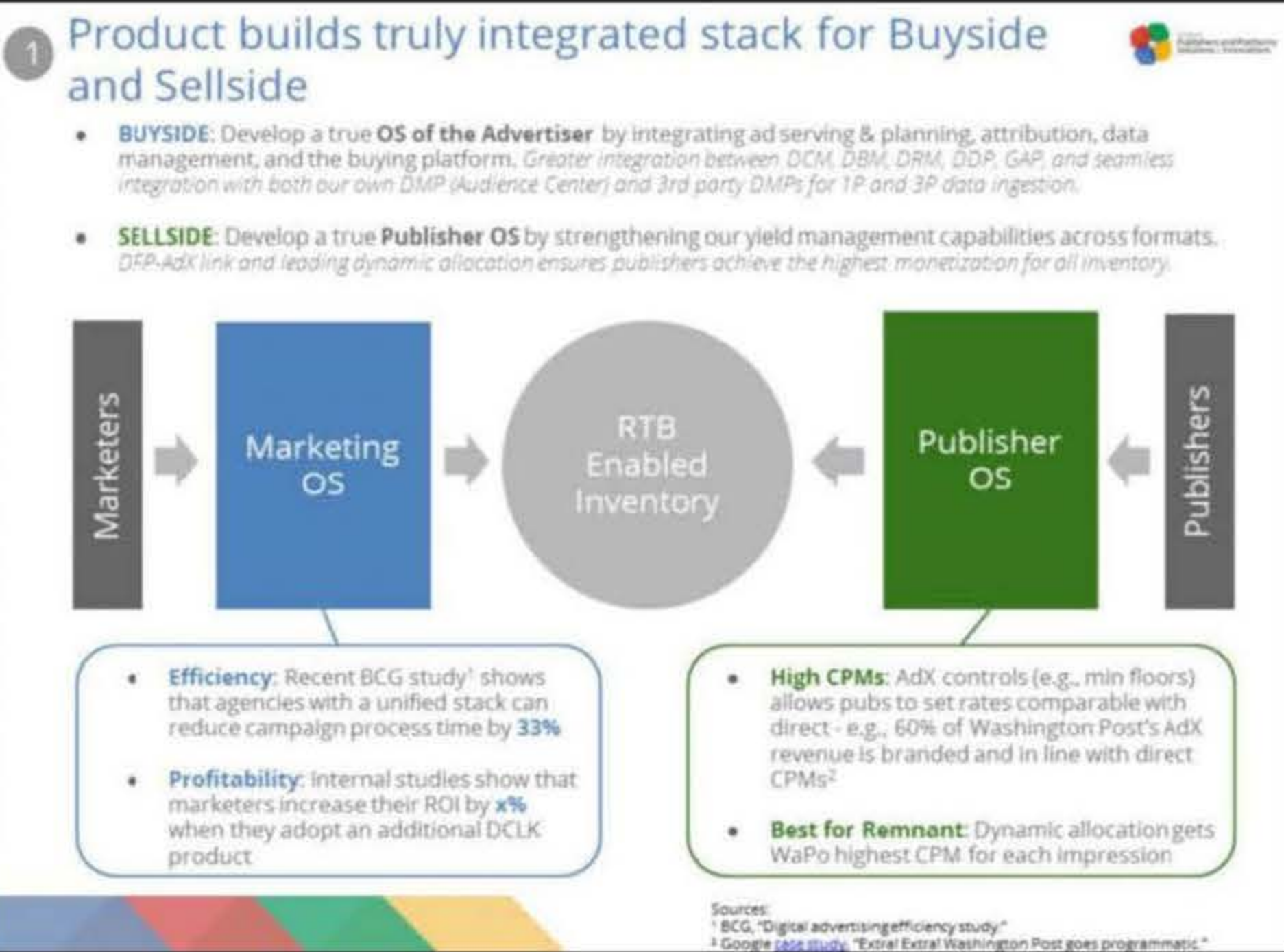
Id	Date	Text
3	03/10/2014 10:35:58	Wonder if the AdX marketplace deserves ink here. It will be the big connective tissue b/w buyers and sellers and help to power scaled PA/PDs

Supporting Detail
for Programmatic Scenarios

Product builds truly integrated stack for Buyside and Sellside

- **BUYSIDE**: Develop a true **OS of the Advertiser** by integrating ad serving & planning, attribution, data management, and the buying platform. *Greater integration between DCM, DBM, DRM, DDP, GAP, and seamless integration with both our own DMP (Audience Center) and 3rd party DMPs for 1P and 3P data ingestion.*

- **SELLSIDE**: Develop a true **Publisher OS** by strengthening our yield management capabilities across formats. *DFP-AdX link and leading dynamic allocation ensures publishers achieve the highest monetization for all inventory.*

Marketers → **Marketing OS** → **RTB Enabled Inventory** ← **Publisher OS** ← **Publishers**

- **Efficiency**: Recent BCG study[1] shows that agencies with a unified stack can reduce campaign process time by **33%**

- **Profitability**: Internal studies show that marketers increase their ROI by **x%** when they adopt an additional DCLK product

- **High CPMs**: AdX controls (e.g., min floors) allows pubs to set rates comparable with direct - e.g., 60% of Washington Post's AdX revenue is branded and in line with direct CPMs[2]

- **Best for Remnant**: Dynamic allocation gets WaPo highest CPM for each impression

Sources:
[1] BCG, "Digital advertising efficiency study."
[2] Google case study, "Extra! Extra! Washington Post goes programmatic."

② Product builds best-in-class platform for Mobile and Video within a unified stack

> **IPTV** could explode the market if TV ads are bought programmatically, but early days and we are working on sizing the impact - *unlikely to be material by 2017*

Programmatic Video in 2017

Unify linear and digital buying and selling and lead in the "video everywhere" environment - where video exists on every screen - with format innovation and interactivity

What needs to happen on the BUYSIDE:
- Power brand and TV spend by integrating planning, optimization, measurement (including sales lift) and verification capabilities in DCM/DBM for RTB direct, indirect Online Video buying across screens

What needs to happen on the SELLSIDE:
- Make it simple for publishers to monetize video content on any screen or device [DFP for Video]
- Ensure programmatic direct works for video so that pubs can make their exclusive inventory available to select buyers [Private RTB]

Programmatic Mobile in 2017

Find the right users at the right time regardless of screen using x-device and enhanced targeting signals (e.g., location), and build solutions for new revenue models for non-ads-supported inventory (e.g., IAP formats)

What needs to happen on the BUYSIDE:
- Single view of the consumer provided by x-device solutions [Jumble]
- Targeting and format innovation using unique mobile data signals like location awareness

What needs to happen on the SELLSIDE:
- Provide value to mobile pubs beyond ads - analytics, conversion tracking, and tools to drive in-app purchases

| Id	Date	Text
1	03/17/2014 15:07:39	+eveg@google.com agree with Ben's comment that would be good to mention Freewheel and the importance of pub side ad serving in terms of access to video supply [even though the deck tends to be buy side]
1	03/17/2014 17:56:31	The driving force behind the FW acquisition was TV everywhere (accelerating the ability to make cable content accessible across screens via IP). I think we can beef up the sellside video points and include something around enabling broadcasters to serve into all environments, especially VOD. Do you think we need to mention the specific acquisition? We don't mention any others... +weinberg@google.com for additional sell-side input
1	03/20/2014 02:30:17	mention comcast & freewheel here? somewhere?
1	03/20/2014 02:30:17	Also may be worth mentioning that it's important to enable dynamic ad insertion in live, linear environments as well. (e.g. serve into a cable network's IP delivered simulcast of a linear stream)

1. We secure RTB inventory (i.e. open to data usage.
2. We make great tools to access that inventory
3. The tools become sticky by combing premium with RTB for programmatic across ALL media (direct/indriect/bidable/negotiated)

Google makes traditional direct buys more efficient, then becomes a true decision engine

From greater efficiency...

- Mechanics of a direct buy are **clunky and time-consuming**: buyer and seller create actual plan in Excel, trade e-mails with vendors in RFP process, traffic ad tags, collect screenshots

- Google's vision is to create a direct bridge between buyside and sellside campaign management systems - using **programmatic technology** - to make direct buys as efficient as buying over an open exchange:

Buyside Campaign Mgmt → Premium Programmatic Transactions → **Sellside Inventory Mgmt**
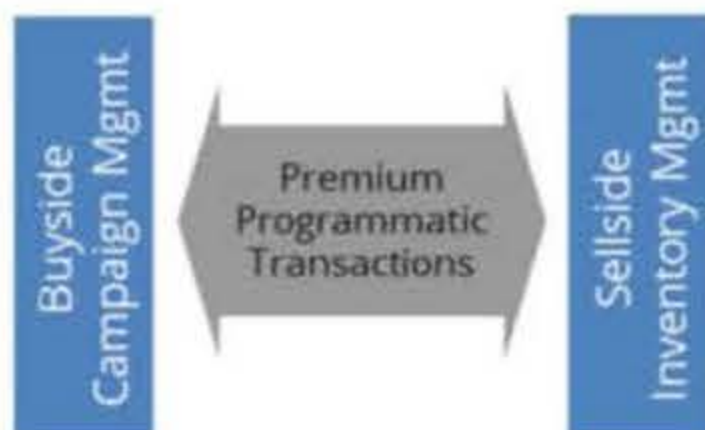
...to a true decision engine

- **It's not just about efficiency**... vision is to move from a 'dumb' campaign management platform to a true **decision engine** that will:

1. Inform what media to buy

Business intelligence layered into the platforms will inform optimal media mix across both reserve and exchange buys

2. Automate pricing

Current RFP process requires manually tracking costs for each publisher; pricing data for reserve buys will be directly transparent within the platform

3. Measure and optimize in real-time

Leading brand metrics baked into the platform, and campaigns are optimized in real-time

- By providing this value, we believe we can justify much higher margins on reserve buys: from approx $1 CPM (flat fee) to **5-10% cost of media**

- **Change in business model (and effective margins) will potentially let us report on gross revenue versus net**

Leverage powerful O&O data signals to supercharge targeting via programmatic tech

- Audience-based advertising is expected to be 50% of the global Display market by 2015[1]

- Data is the **fuel in the programmatic engine**: the technology without best-in-class targeting is a weak value proposition - an enabler of efficient workflows vs. a data layer for sophisticated marketing

- Our competition is not sitting still using their own data, and is poised to deploy this across their own integrated stacks:

Audience Data Strategy
- Leverages FB audience on FB site
- Leverages advertiser collected data on FB site (FBX)
- FB audience data on third parties (FB Audience Network)

Audience Data Strategy
- Leverages user search, browsing, purchase data
- Used on AMZN's own sites and other sites
- Used regardless of whether user is logged in or not

- PM has prioritized data requests and outlined use cases:

Google Data Required (prioritized)	Use Case Enabled
1. Raw Search queries	Interest Categories
2. Gmail receipts and e-mail text	Sales Lift Interest Categories
3. G+ identity across devices	X-Device linking
4. G+ work / family status	Psychographics
5. Android lockbox, voice and location data	Age/Gender/Interests

(all of the above in logged in or logged out state)

- Revenue potential if only using signals for logged-in users is dramatically less than for all users if sign-in rate doesn't increase:

2017 $ if leverage O&O signs for signed-in users	$1B
2017 $ if leverage O&O signs for all users	$4B

A1. We secure RTB inventory (i.e. open to data usage.
2. We make great tools to access that inventory
3. The tools become sticky by combing premium with RTB for programmatic across ALL media (direct/indriect/bidable/negotiated)

Sales org not yet oriented for programmatic future, though key learnings from Aristotle

- How many Googlers does it take to sell & service a programmatic solution to **Chase Bank** (a DBM direct marketer)?

  1 Aristotle AE
  1 DBM AM (DMM team)
  1 DCLK Agency AE (for DCM contract)
  2 DS AE & AM
  3 LCS HOI, AE & AM
  1 LCS Agency AE
  1 gTech Aristotle consultant
  1 gTech Agency TAM (for DCM)
  1 gTech for DS

  12 Googlers across LCS, Agency, DCLK

- Inefficiencies stem from DCLK and gTech fragmentation across products, and overlap between DCLK and LCS responsibilities

- More efficient cases do exist, like **GEICO** (another DBM direct marketer):

  1 Aristotle AE responsible for DBM, DCM, DS, DRM, and GAP
  1 DBM AM (DMM team)
  2 LCS HOI & AM
  0 LCS AE (taken off account)
  0 LCS Agency (no focus on agency)
 1 DS AM
  1 gTech Agency TAM (for DCM)

  6 Googlers across LCS, Agency, DCLK

KEY LEARNINGS FROM ARISTOTLE AS WE THINK TO THE FUTURE

- Best Aristotle AEs view themselves as "Ad Tech consultants" capable of selling unified DDM vision - DS, DCM, DBM, DRM, GAP

- Display buyers are fickle and ongoing head-to-head tests will determine whether we retain accounts - **manual servicing will be required** to provide best performance

- Out of ~80 tests in Q4/Q1:
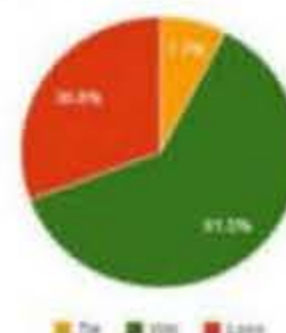
- Advanced Display servicing will be required for both GDN and DBM, and centralized team helps with best practice sharing and prevents skill erosion
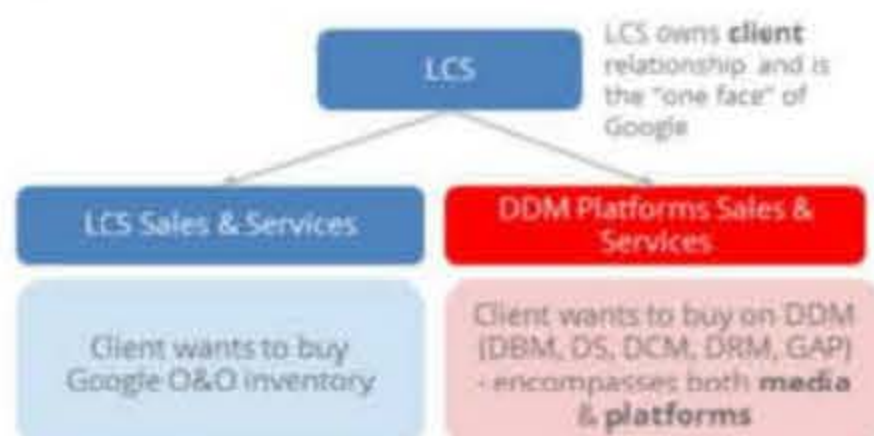
Two broad alternatives for Sales org alignment around programmatic

Org structures intentionally oversimplified and ignore exact reporting line nuances (e.g., gTech vs DCLK)

OPTION 1: *Programmatic media sales team is a separate entity from LCS*

LCS

LCS owns **client** relationship and is the "one face" of Google

LCS Sales & Services

DDM Platforms Sales & Services

Client wants to buy Google O&O inventory

Client wants to buy on DDM (DBM, DS, DCM, DRM, GAP) - encompasses both **media & platforms**

- DDM Media Sales to provide full servicing (campaign management & optimization, technical support)
- LCS would pitch media-centric, DDM teams would pitch media-agnostically

PROS:
- Central pool of knowledge on programmatic allows fewer touch points and faster implementation

CONS:
- Significant hand-offs required - likely to cause internal confusion, and for clients on the narrative
- LCS never gets schooled on programmatic

OPTION 2: *Programmatic media sales team is padded within LCS*

LCS Sales & Services

DDM Platforms Sales & Services

Programmatic AE role in pod will specialize in DDM **media** and will liaison with Platforms Sales

Non-programmatic AEs and AMs will primarily focus on O&O

Centralized Display Services

Enterprise sales team that will partner with Programmatic AEs to sell the full stack

- Centralized Display services team to join LCS but remain pooled in medium-term; concern over erosion of highly specialized skills, though team could be dispersed in pods in the long-term
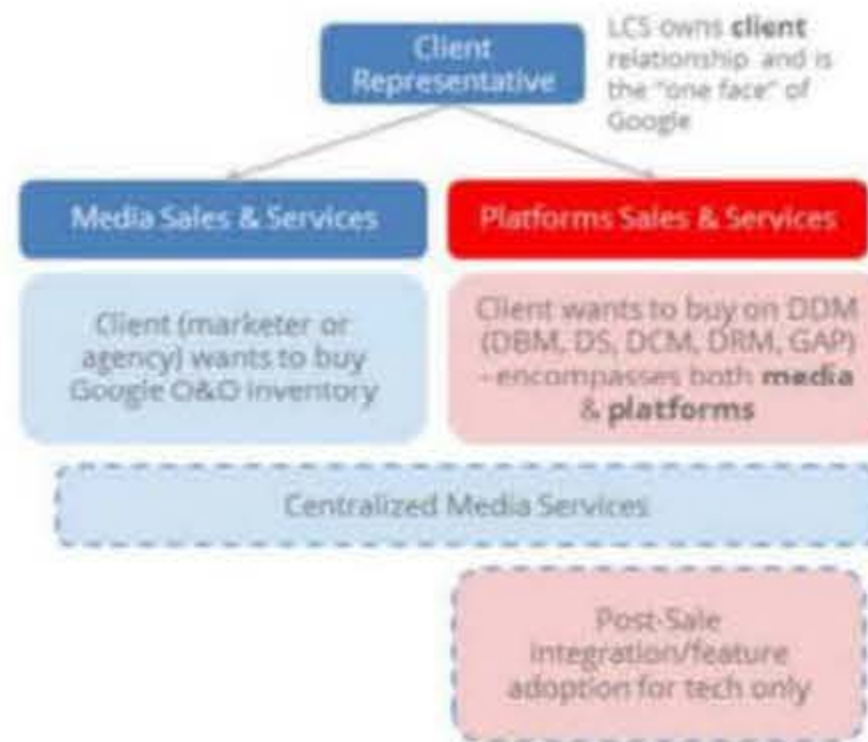
PROS:
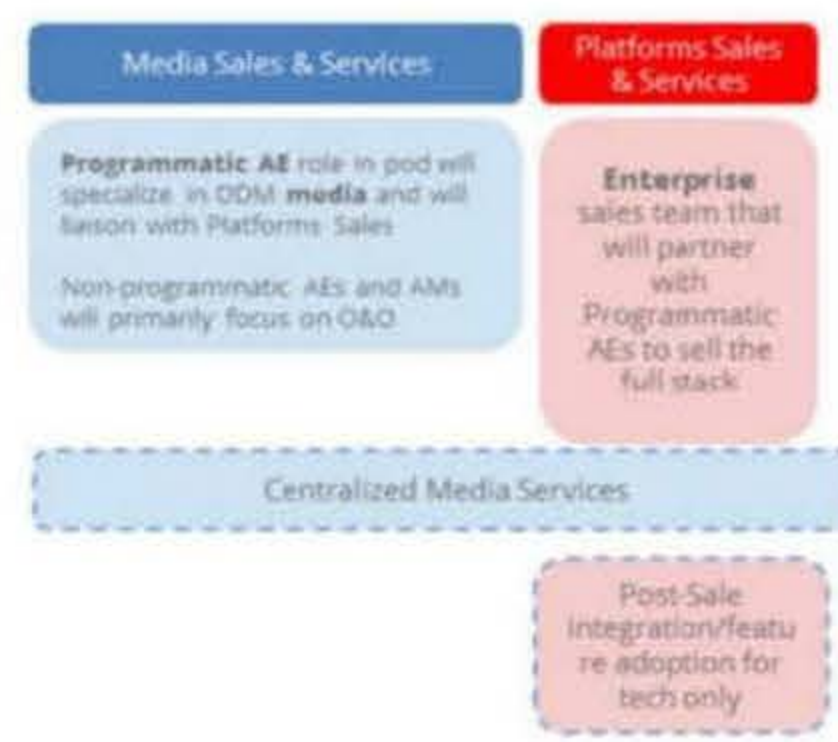- Team that ultimately owns client relationship (LCS) equipped to sell & service programmatic

CONS:
- Selling full DDM value prop spread across two sales teams
- Media-agnostic and media-centric narratives potentially muddled in the same team

OPTION 1: *Programmatic media sales team is a separate entity from xxx*

Client Representative

LCS owns **client** relationship and is the "one face" of Google

Media Sales & Services

Platforms Sales & Services

Client (marketer or agency) wants to buy Google O&O inventory

Client wants to buy on DDM (DBM, DS, DCM, DRM, GAP) – encompasses both **media** & **platforms**

Centralized Media Services

Post-Sale integration/feature adoption for tech only

OPTION 2: *Programmatic media sales team is padded within xxx*

Media Sales & Services

Platforms Sales & Services

Programmatic AE role in pod will specialize in ODM **media** and will liaison with Platforms Sales

Non-programmatic AEs and AMs will primarily focus on O&O

Enterprise sales team that will partner with Programmatic AEs to sell the full stack

Centralized Media Services

Post-Sale integration/featu re adoption for tech only

HIGHLY CONFIDENTIAL

Appendix

INTERNAL: Google Confidential and Proprietary
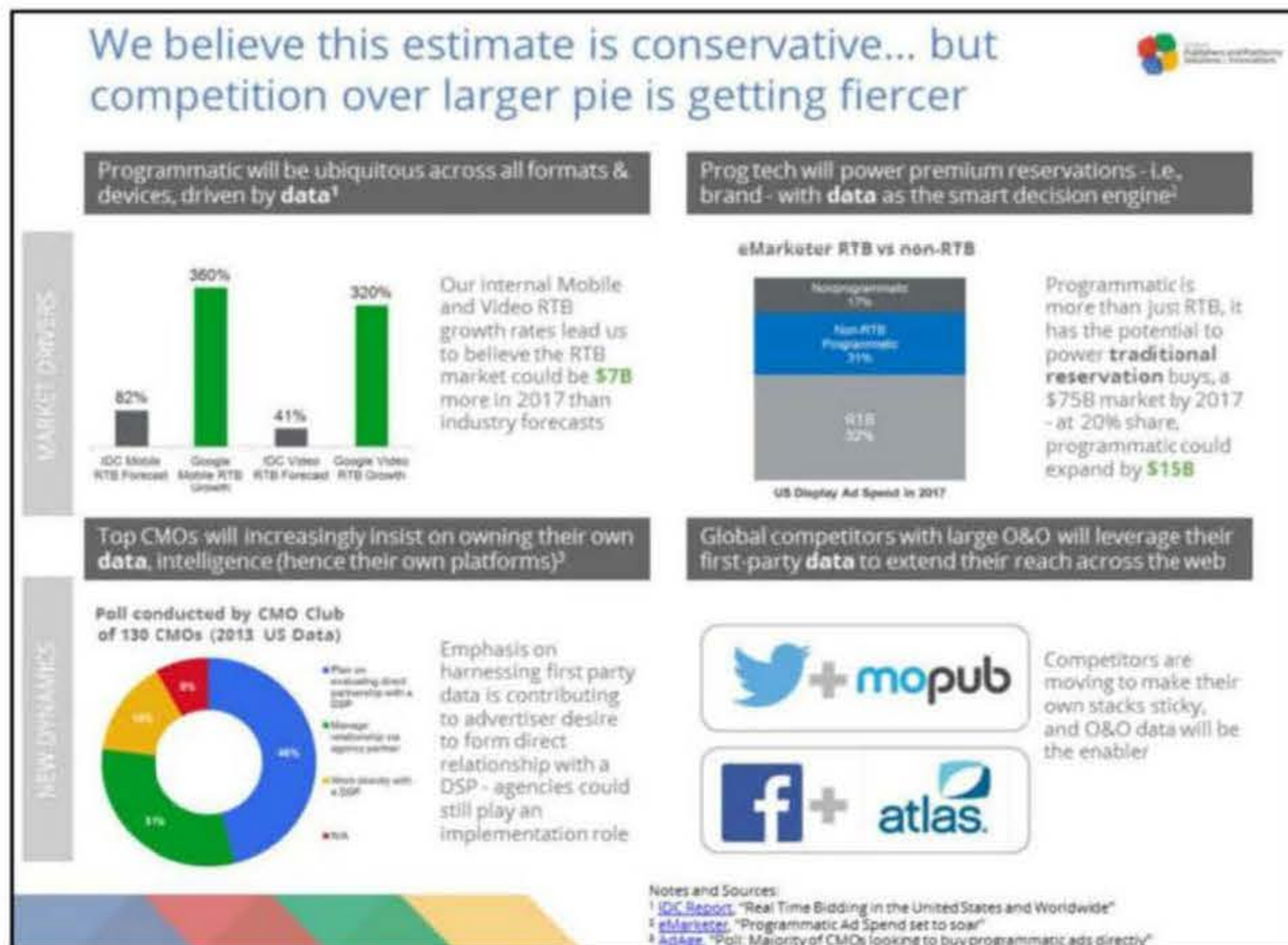
- mobile and video forecasts - double-check and add time period
- CMO - what is the value chain? CMO wants to own the data intelligence
- more intelligence equals better decisioning
- helps when they are planning, much smoother performance, optimizing on the go
- what are our beliefs?
- more consumer behavior will be on these devices
- CMOs want to get there
- CMOs want to be efficient with their buying
- Publishers want to maximize

Id	Date	Text
4	03/10/2014 10:21:32	We are playing catchup in mobile and video, driving some of the growth differential. it seems a relatively weak argument to pin $7bn on last year's Google RTB growth vs market. Do we have some other data points?
5	03/14/2014 16:37:07	- customer centric language - "customer behaviors will lead to greater programmatic spend than analyst estimate"
6	03/14/2014 17:57:34	+sdowney@google.com - any chance you can shoot me a scribble of the value chain graphic you had in mind? or i can swing by your office and pick it up?

Immediate next steps on **Double Down** and **Go Big** plans

DOUBLE DOWN SCENARIO

- **Accelerate Mobile and Video RTB**
  - Investigate integrating brand metrics into agency platforms (**P2 - MAD**)
  - Develop POV for linear TV and VOD programmatic buying (**Global Ops**)
  - Launch x-device linking and incorporate throughout our stack (**Product**)
  - Launch location targeting and incorporate via both DBM and AdX (**Product**)
  - Ensure new in-app purchasing models can be powered by programmatic technology (**Product**)

- **Scale Programmatic Direct RTB**
  - Prioritize PA/PD/CuBES serviceability roadmap and ensure launch dates don't slip (**Product**)
  - Launch inventory discoverability at parity with competitors (**Products**)
  - Scale Aristotle "Publisher Day" model to better connect buy and sell (**Sales**)

GO BIG SCENARIO

- **Fuel non-RTB Programmatic Direct**
  - Beta test Jordan on DBM in Q2, DCM by 2H-14 (**Product/P2**)
  - Begin margin analysis with Pricing team (**P2/Biz Ops**)

- **Leverage Powerful O&O Signals**
  - Crystallize our plan for signed-in users (**Product**)
  - Re-evaluate policy around leveraging O&O data signals (**Product**)

ASK TO N-STAFF

- We're still figuring a lot of this out! Be amenable to ongoing discussions throughout 2014, including a detailed proposal on future org alternatives with goal to align on structure before 2015 Annual Planning

1. We secure RTB inventory (i.e. open to data usage.
2. We make great tools to access that inventory
3. The tools become sticky by combing premium with RTB for programmatic across ALL media (direct/indriect/bidable/negotiated)

Id	Date	Text
5	03/10/2014 10:41:40	Location: we have this in AdX. There are multiple initiatives in train to improve both impression coverage and precision.
6	03/10/2014 10:41:40	Should we add ID and address all certification and policy friction points for mobile and video (MApp Deeplinking, Mobile Video Certifications)
7	03/12/2014 16:40:12	+bfalck@google.com - should we officially retire this slide to the appendix in favor of the following?

Our Most (adjective tbd) Prog

Direct Marketer	Seeking GEICO example via Damian McKenna
Agency	
Holding Co. Trading Desk	Trading Desk manages 50% of Publicis Media globally; plans for **100% of that spend to be programmatic by 2015** Leveraging DoubleClick's centralized stack and BigQuery tools to **centralize advertiser data into a single repository** to enable intelligent media buying.
AdX Buyer criteo	Sophisticated **buyer across >20 markets**, leveraging RTB signals and impression filters to **maximize performance against known user lists.** Early adopter of HTML5 **reaching >20% spend on mobile in Q1** (2x the AdX 2014 goal) and expected to show similar growth of InApp via **proprietary cross device linking.**
Publisher ESPN	Partner with Bryan / Pooja for example.

INTERNAL: Google Confidential and Proprietary

Id	Date	Text
3	03/12/2014 16:52:04	+dbledin@google.com are these the types of examples that are 'exciting' in your opinion? I think the data points are powerful
8	03/12/2014 16:52:04	Were you going to add pubs per the e-mail with Bonita? Given Lexi seems super-excited by this overview, should we bring back into the body of the deck?

What these truth's mean for our Sales Org

Google Today

Media-centric products
Google.com = Search Pub
YouTube.com = Video Pub
GDN = Google Network

Media-agnostic platforms
DS
DFA
DBM

Closing the gap

The Programmatic Future

Platform **AND** Media Centric offering that requires:

1. Tier 1 third-party inventory and O&O

1. PBS+CSI+LCS Deal Teams

1. Full Service Support

As our teams & technology evolve, we need to rethink...
1. How our people are organized
2. How we go to market
3. The skills our salespeople need to succeed

Truth #1: Programmatic will be ubiquitous across all formats, devices and will powered by data

LUMAScapes Keep on comin'
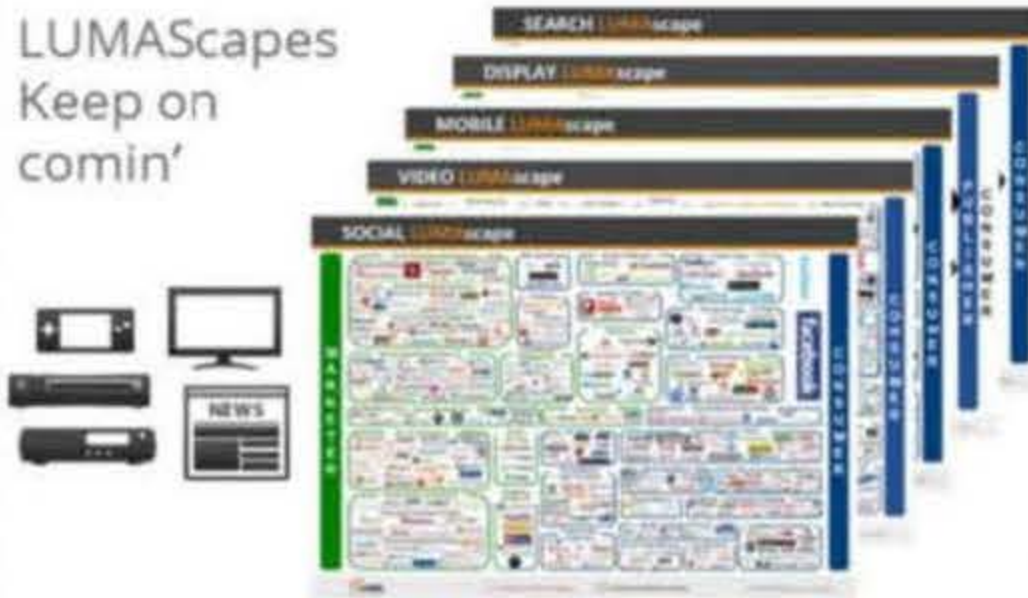
Magna Global: Programmatic Share
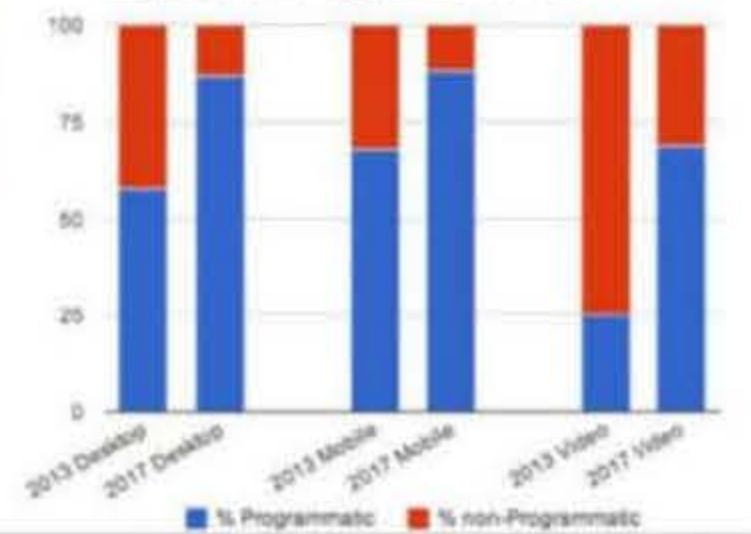
...Outside digital media, programmatic buying and automation are only starting to affect the advertising value chain. For example, agencies and television media owners are starting to revamp their planning/buying/booking workflows to better integrate data and realize efficiency gains. MAGNA GLOBAL believes most traditional media will be affected, to some extent, in the long term: television, radio, digital out-of-home being first in line.

Source Magna Global Ad Forecasts, October 2014

MAGNA GLOBAL also modeled the rise of programmatic across digital formats and environments in the US. Desktop display formats (banners and social) represent $5.3bn i.e. 72% of total US programmatic spend in 2013, down from 83% in 2012. Video and mobile (incl. social mobile) are quickly rising from a low base and now represent 9% ($685m) and 19% ($1.4bn), respectively, in 2013. In 2013, 58% of desktop display is traded programmatically, compared to 25% for video and 68% for mobile. By 2017, we expect those proportions to grow to 87%, 69% and 88% respectively...

...Outside digital media, programmatic buying and automation are only starting to affect the advertising value chain. For example, agencies and television media owners are starting to revamp their planning/buying/booking workflows to better integrate data and realize efficiency gains. MAGNA GLOBAL believes most traditional media will be affected, to some extent, in the long term: television, radio, digital out-of-home being first in line.

Source Magna Global Ad Forecasts, October 2014

"Facebook's launch of the Facebook Exchange (FBX), an RTB-based

advertising exchange making the company's inventory available to RTB-platforms (but notably, not to Google) was the most monumental change in the segment. The step validated RTB as the future default method of trading display advertising inventory....

....Other players entered the fray as well. In December 2012, Amazon launched an RTB ad exchange for selling inventory available on its sites. In May 2013 eBay launched a new RTB advertising platform. And in September, Twitter announced it would acquired mobile advertising exchange MoPub to RTB-enable its ad platform...citing overlap between the rise of RTB and mobile advertising as the reason.

Real-Time bidding in the United States and Worldwide 2010 - 2017
Karsten Weid, September 2013, IDC

Truth #2: Premium reservation programmatic will make brand budgets part of the programmatic future

IDC: Programmatic Direct Sales
■ Programmatic Direct Sales ■ Traditional Direct Sales
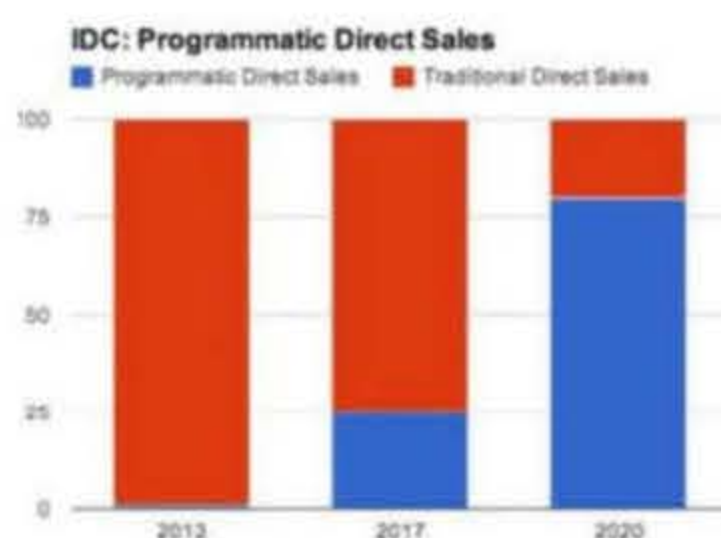
Programmatic Upfronts in Today's Video LUMAscape

"But even if private marketplaces have had a limited financial impact, what they did accomplish was to allow publishers to stick a toe into the water of RTB without having to fear drowning, preparing them for the next step in using RTB for direct sales: guaranteed upfront sales

Eventually, because with RTB comes automation, publishers will be able to reduce sales headcount, save money, and improve profitability."

Real-Time bidding in the United States and Worldwide 2010 - 2017
Karsten Weid, September 2013, IDC

Id	Date	Text
9	02/23/2014 19:59:12	How much of AdX revenue is mDev vs. open auction?
1	02/23/2014 19:59:12	10% in the Americas, up from ~2% a year ago

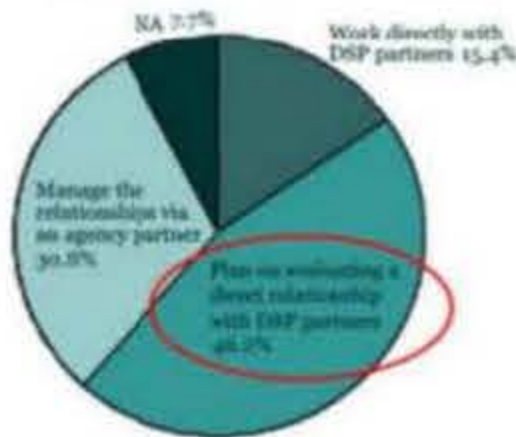**Truth #3**: CMOs will insist they own the platforms to drive this world

Package-Goods Marketers Build Private Trading Desks to Hoard Data

Kellogg, Unilever and Kimberly-Clark Wary of Handing Valuable Data Over to Agencies

By: *Jack Neff* Published: *March 18, 2013*

Brands now have the ability to work directly with Demand Side Platforms.

So You Want To Build An In-House Trading Desk?

Why StubHub Took Programmatic In-House

A year ago, StubHub wondered if it really needed agencies to handle programmatic ad buying on its behalf. One year later, it has decided the answer to that question is a simple "no."

Now, the brand has its own demand-side platform powered by Turn and a data-management platform provided by BlueKai. StubHub also partners with a range of rich-media and brand-safety companies. A core team of just three people manages the stack. Other than some help here and there from technology vendors, it's completely self-sufficient.

"When it comes to buying ads programmatically, agencies don't have a role in our case," said Leo Engel, StubHub's head of programmatic advertising. "As a business owner, we want to be in direct control of the marketing levers, to adapt as quickly as possible to changing business requirements. We can be really nimble because we're not working through an intermediary, and that's important for programmatic."

How we're preparing...

	Business as usual	**Achieve glory - BIG Asks?**
Ubiquitous RTB	- PBS Sales: Drive DFP + AdX Adoption - Video Alliance: Secure video inventory - AwBid scaled: Access RTB from DBM & GDN	- YouTube fully programmatic - Strategic inventory partnerships: NBC, Verizon, ClearChannel, etc.?
Premium Reservation Programmatic	- CSI sells buy<>sell connected ad tech - CSI sells CuBES, Private Exchange	- LCS / CSI / PBS become media brokers - O&O _and_ Third-Party - Sales shift to planning and dealmaking - Get 100% penetration of ad serving
Advertiser Direct Ownership	- Aristotle: full service display expertise - Lincoln: Solution sell to Tier 1 advertisers - CSI drives advertiser adoption of DBM	- LCS becomes Aristotle and full service - LCS sells platform adoption - DSP, ad serving, analytics & DMP
Competitors Driving Stickiness	- Continue to promote openness - FBX, TWTR, AppNexus partnerships	- Open more O&O Data / Inventory - Ad Serving FREE?!

Display P&L

2013 ($M) Pinned	DISPLAY CONSOLIDATED P&Ls					DISPLAY PRODUCT P&Ls								
	Display w/YT	Display w/o YT	Platforms (DFA,DFP,DW)	Programmatic (DBM,ADX,AWB)	GDN	DFA	DBM	GDN	AdX buyers	AdX buyers ex DBM	AdMeld	DFP	DRM	YT
Served Revenue	$10,575	$8,115	$458	$1,232	$6,425	$177	$471	$6,425	$805	$680	$81	$226	$55	$2,480
Net Revenue	$4,142	$2,887	$458	$289	$2,149	$177	$80	$2,149	$200	$191	$9	$226	$55	$1,255
Net Revenue Margin	39%	36%	100%	23%	33%	100%	17%	33%	25%	28%	11%	100%	100%	31%
Data Center/Network Costs	$632	$158	$12	$12	$131	$3	$4	$131	$5	$5	$4	$7	$3	$476
OpEx	$1,801	$1,073	$242	$128	$702	$86	$60	$702	$61	$59	$10	$97	$59	$728
-Sales	$693	$500	$41	$58	$403	$29	$31	$403	$19	$19	$6	$13	$0	$193
-Services	$123	$123	$76	$19	$29	$19	$0	$29	$10	$9	$1	$28	$26	$0
--Vendor	$13	$13	$9	$1	$2	$3	$0	$2	$0	$0	$0	$1	$6	$0
-PM/Eng/UX/Other [1]	$810	$426	$113	$52	$261	$35	$19	$261	$31	$30	$3	$53	$25	$384
Marketing Costs [2]	$162	$11	$2	$2	$7	$1	$1	$7	$1	$1	$0	$1	$0	$151
Operating Profit	$1,709	$1,658	$203	$138	$1,316	$88	$16	$1,316	$133	$120	-$4	$122	-$7	$51
Operating Margin	16%	20%	44%	11%	20%	50%	3%	20%	17%	19%	-5%	54%	-13%	2%
Licensed Tech/Other Costs/Legal	$174	$118	$89	$30	$20	$88	$1	$20	$30	$30	$0	$1	$0	$56
Total HC [3]	7,386	4,442	985	534	2,923	354	256	2,923	247	237	41	395	238	2,924
-Sales	3,568	2,305	191	257	1,857	133	144	1,857	89	86	27	58	0	1,262
-Services	778	648	400	95	151	98	44	151	50	47	4	154	148	132
-Product	158	92	13	12	67	5	8	67	4	3	1	8	2	66
-Eng	2,191	1,316	369	157	790	111	54	790	99	96	7	174	64	862
-Marketing	138	40	4	6	30	2	3	30	2	2	1	1	1	38
-Other	543	43	8	7	28	3	3	28	3	3	1	2	1	500
FTE Sales Cost	$0.22	$0.22	$0.22	$0.22	$0.22	$0.22	$0.22	$0.22	$0.22	$0.22	$0.22	$0.22	$0.22	$0.22
FTE Services Cost	$0.19	$0.19	$0.19	$0.19	$0.19	$0.19	$0.19	$0.19	$0.19	$0.19	$0.19	$0.19	$0.19	$0.19
FTE PM/Eng Cost	$0.29	$0.29	$0.24	$0.24	$0.24	$0.29	$0.29	$0.29	$0.29	$0.29	$0.29	$0.29	$0.29	$0.29
Gross Rev YoY 2012-2013	25%	20%	6%	18%	21%	2%	50%	21%	48%	41%	-67%	20%	-23%	47%
Gross Rev YoY 2011-2012	22%	16%	11%	62%	11%	14%	50%	11%	110%	115%	19%	10%	8%	55%

Place source info here

Our own data proves its not just hype

- **DBM client type** analysis in Q4-13 shows higher reliance on trading desks in less mature markets and direct marketers bringing technology in-house in more mature markets
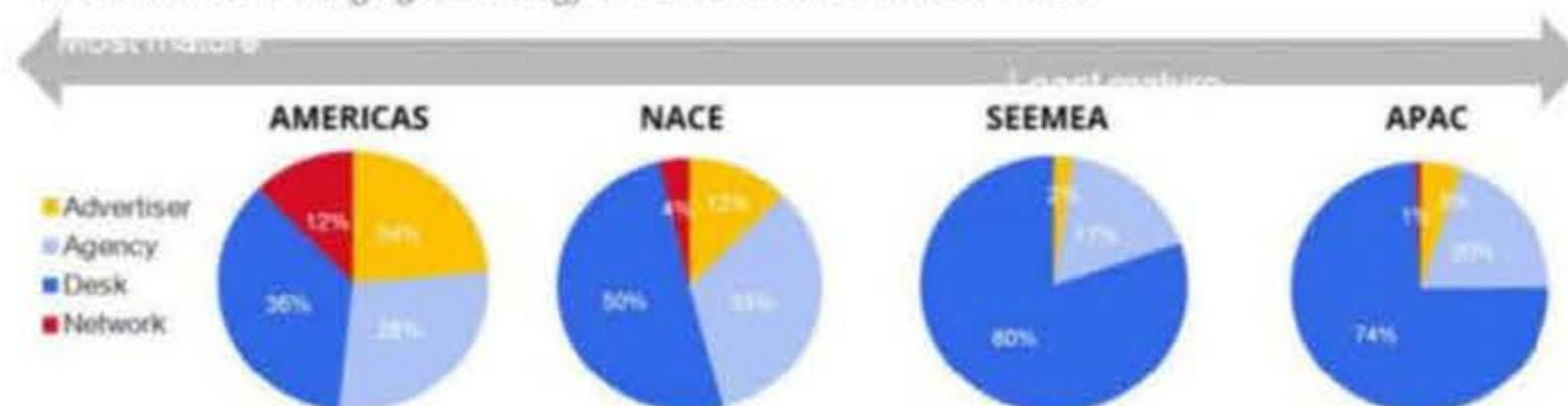
- We believe other regions will trend similarly to the Americas, with **Directs** and **Networks** taking share away from **Agencies** and **Desks**
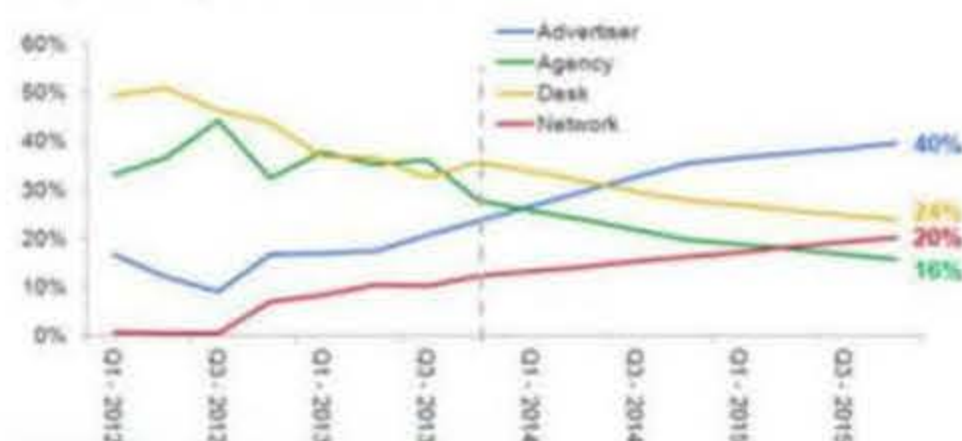
- Networks gain traction via adoption of RTB buying into full service arbitrage business

- Advertiser directs gain share as advertisers invest in data ownership and expertise

Id	Date	Text
2	02/23/2014 21:19:43	This is an important strategic insight, in my view. These trends are what have driven mDev's LCS and curated network strategies in the Americas. I'd move this into the main deck...large implications for product, sales and organizational strategy.

Lumascape matters: Programmatic success not guaranteed, we compete on every dimension
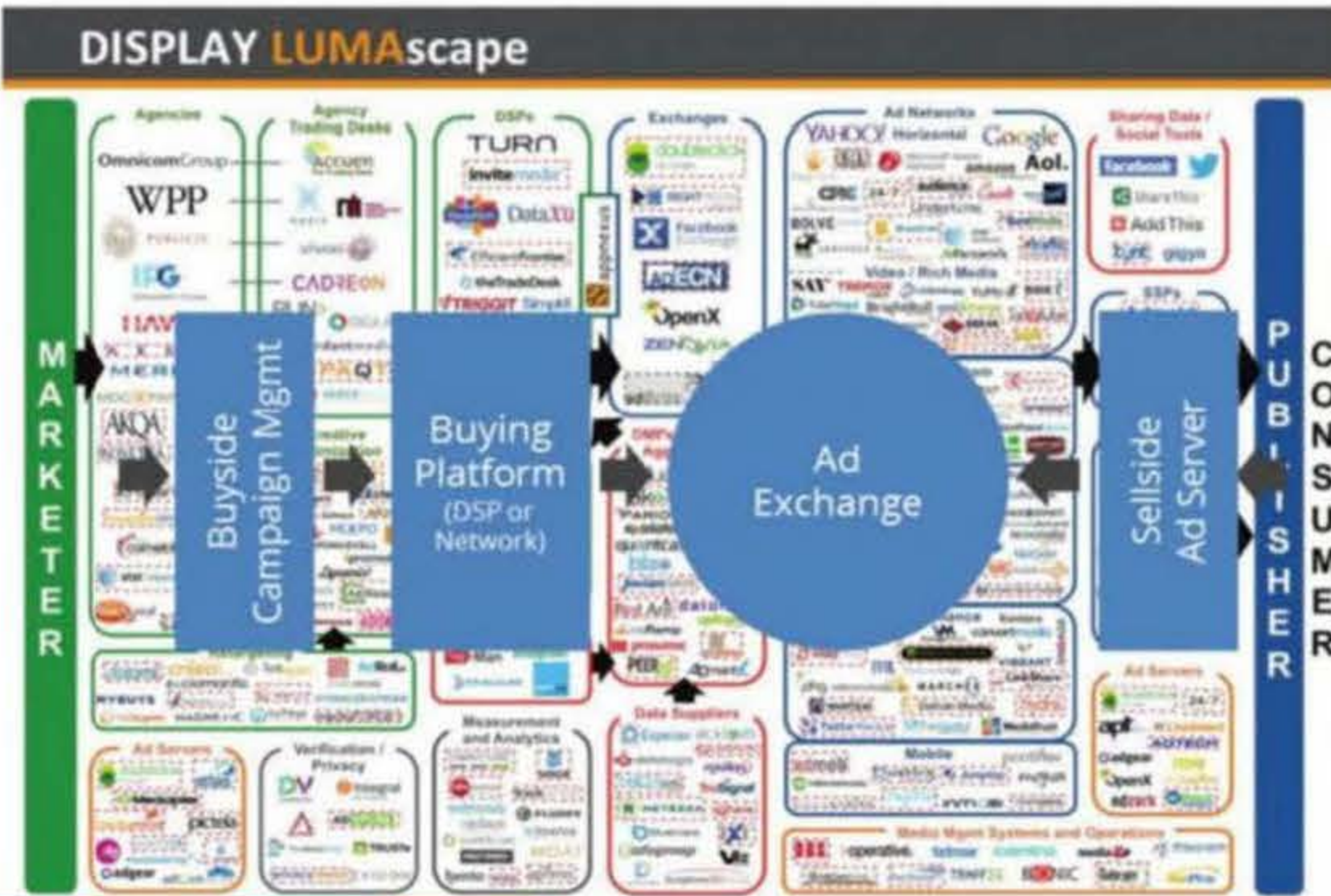
Graveyard Slides

INTERNAL: Google Confidential and Proprietary

Defining "Programmatic" is fuzzy

EXTERNAL DEFINITIONS

The use of technology to automate processes and the use of math to improve results.

Joe Zawadzki
CEO, Mediamath

The application of artificial intelligence and big data to bid on advertising inventory sources through an ad exchange, in real-time, for the opportunity to show one specific ad to one anonymous consumer in one context on one device.

George John
CEO, Rocket Fuel

INTERNAL PRODUCT DEFINITION

Product definition of programmatic:

Using technology to automatically buy and run an ad campaign in real time, reaching the right user with the right message. Regardless of your goal, programmatic means simple, efficient, effective transactions. That's it!

Real-time bidding ("RTB") is a subset of programmatic:

Any real-time bidding on ad exchange platform on an impression-by-impression basis as each impression becomes available on a publisher's website.

As we'll come to see, the above distinction is essential - programmatic encompasses much more than just media bought and sold over an exchange, and our strategy must be broad enough to encompass this larger definition

- programmatic - be very clear what they are
1. RTB
1a. Private RTB
2. Non-RTB Programmatic

-growth driver assumptions of each of these things
-no external vs internal

Id	Date	Text
10	03/11/2014 18:39:46	this slide being revised for our more explicit definition: - RTB -- Direct RTB - non-RTB programmatic

We have a journey ahead of us to become a truly integrated stack (*Buyside perspective*)

- Buyside product adoption among LCS super-head is currently extremely low for >1 DCLK product:

		Single Product Adoption				Two-Product Adoption		Full Stack Adoption	No Adoption
Country	LCS Super-Head	% DBM	% DFA	% DRM	% DS	% DFA+DBM	% DFA+DRM	% DBM+DS	% DBM+DS+DRM+DFA	% No Products
AU	87	64%	79%	52%	17%	52%	51%	11%	7%	8%
CN	85	0%	53%	6%	0%	0%	6%	0%	0%	47%
DE	100	51%	17%	7%	3%	11%	6%	2%	2%	43%
ES	100	18%	16%	12%	6%	5%	10%	2%	0%	66%
FR	98	48%	38%	27%	15%	20%	27%	4%	1%	35%
GB	100	36%	41%	33%	24%	16%	32%	9%	4%	33%
IT	99	16%	26%	23%	9%	11%	22%	2%	2%	66%
JP	50	18%	50%	16%	24%	16%	12%	6%	0%	40%
US	175	60%	67%	47%	28%	49%	46%	21%	18%	22%

- The path to becoming a true "OS of the internet" is a multi-stage journey (with caveat that this journey may sequence differently for certain buyers):

2014 → Media Buying Platform (DBM + DS) → **2015** → Decision-making Brain (...+ DCM + GAP) → **2016-2017** → **OS of the Internet**: Full stack unification, Buy/Sell integration
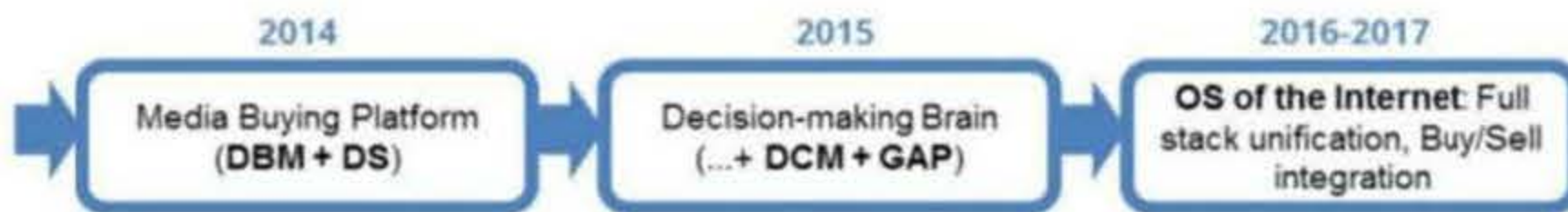
- **Given immediate focus on being the Media Buying Platform, Regional Buyside leads have defined 2014 N-Staff Platform OKR around DBM adoption -**

"Sesame Street Simple" - WIP

- FUTURE - Real-time bidded media buying will grow globally from $3B and 11% of the display market in 2012 to $16B and 38% of the digital market in 2017 (emarketer). That is big, but we think this is conservative and forecast as much as 80% of digital media buying will be processed in real-time-bidded exchanges in the next 10 years. Why?
    - Content is moving - Publishers business model is under siege and they want their sales force focused on native, bespoke, unique experiences and move greater amounts of inventory to liquid inventory pools where the highest bidder wins (prediction - high-end pubs will move 50% of sales to programmatic and 50% to custom, bespoke 1-1 experiences)
    - Money is moving - Buyers want to find audiences at a scale and customize messages to them based on deep knowledge on who that customer is, what she's doing, and where she is.
    - Devices are connecting - And as TV and Internet screens converge the buyers that win will be the ones that can leverage technology to find audiences across all screens and engage them.
- GOOGLE's ROLE - Google is at once a catalyst, an enabler, and an objective referee in this shift. We need to:
    - Execute on our business plans - 2.5B (58% YoY growth for buy-side), XXX for sell-side
    - Accelerate product execution - DDM from vision to reality - that means 1) video, 2) mobile-first, 3) integrated attribution
    - Prepare for organizational flexibility - we need a sales force that understands both media buying and technology. Many potential paths to get there and want this team's early thoughts on how this looks
- RISKS - We have made a ton of progress, but risks are
    - Socialist democracy on the buy-side - We may need more command/control to ensure regions coordinate approach and services win
    - Services are a core component of this offering - we need to rethink our approach here (not as cost, but as asset)

- In this world - where
- great ad inventory is being made available for purchase in open exchanges rather than through 1-1 relationships with direct sales forces,
- where the need to reach consumers across devices is so palpable,
- the dream of data driving digital marketing becomes a reality

- This dream allows i) publishers to focus on valuable partnerships with their direct clients and experiences with their users and ii) allows marketers to
- "program" our ads to do what we want, when we want depending on the audience on the page
- by leveraging sophisticated, real-time, machine-based targeting to ensure precision and

Id	Date	Text
3	01/24/2014 19:44:17	PS advised to just summarize - 5 bullets or less - the point. let me take a crack based on all our convos on this topic and you guys chime in.

Programmatic is embraced because it solves long-standing problems

MARKETER

Media consumption has become extremely fragmented and that trend accelerates as devices proliferate

"I need to reach the right user, at the right time, with the right message, regardless of which timezone she's in, what she's reading or watching, and what device she's on"

"I want to have an informed, multi-channel, two-way conversation with her - I don't just want to bombard her with a static ad"

PUBLISHER

Cost of content production has gone through the floor resulting in an explosion of publishers - massive inventory growth and much of it unsold or undervalued

"I need to expose my inventory to as large a pool of smart buyers as I can"

"Data will help me articulate the value of my audience to the buyers who are most interested in those segments"

Programmatic creates market liquidity by connecting buyers and sellers in real time

Id	Date	Text
3	01/24/2014 18:49:07	+emel@google.com Should include the concept of real-time optimization.
2	01/24/2014 18:52:31	+ashellhammer@google.com
1	01/24/2014 19:23:41	+1 this statement is from the buyers perspective. For individual publishers, programmatic solves the problem of scaling their ad sales business. There are only a fixed number of sponsorship deals a sales team can sell. Inventory volume fluctuates over time and programmatic allows publishers to sell more of their inventory at the highest price possible. Publishers can maximize their revenue and minimize their operating costs with programmatic technology.
1	02/01/2014 22:23:04	For premium publishers this isn't really the case - they still have premium brands and it's not about discovery.
4	02/01/2014 22:23:04	alex - i'm working through this concept on another slide. any good data you have around this?

Google **Sell-Side Platforms:** Overview

Vision Principles Initiatives

Vision: To **maximize the long-term value** of a user for our publishers. We do this by **commercializing products and features** that allow us to bring best-in-class solutions to market.

Revenue / KPIs / Business Summary

Global Publisher Display Revenue $BN [DRAFT - not yet submitted]

Legend:
- Platforms
- AdMob
- AdX
- AFC

Chart (stacked bars):
- 2012: 6.0 (20%) — AFC 1.1, AdX 0.4
- 2013F: 7.2 (12%) — AFC 1.7, AdX 0.6
- 2014B: 8.2 — AFC 2.6, AdX 0.8
- 2014S: 9.3 (29%) — AFC 3.3, AdX 1.1

- Display-focused headcount in PBS increased 12% in 2013 (vs rev 20%)
- Including Search, PBS 2014 base forecast is +4% y/y (zero HC ask)
- 2014 stretch plan focuses heavily on Brand (incl Video), Programmatic and Mobile web/apps
- Display Sales resource asks to deliver stretch plan: ~64* (of total PBS ask ~170), resulting in 16% hdct growth to deliver 29% revenue growth
- gTech ask not yet clear (as of 10/10)

Status

Priorities / Principles
1. Programmatic Everywhere
2. Multi-screen First
3. Audience is the Currency
4. Brand is the Opportunity
5. Content (Management) is King

Plan / Initiatives

1. Programmatic Everywhere
- [Jordan] 100% DFP-DFA imps programmatic, 75% Google-cleared
- [SuperFriends] 70% DFP imps eligible for AdX
- [Auction Dynamics] $XB revenue at $3+ CPMs

2. Multi-screen First
- [DCLK for Apps] $100m from First Look at App Imps
- [Formats everywhere] $XB Engagement ad inventory (incl Tablet)
- [Single View of User] X% G+/PPID adoption

3. Audience is the Currency
- [DMP] Build plan for s/s DMP consistent with long-term b/s vision
- [Audience Extension] $70M AdX incremental spend in first year

4. Brand is the Opportunity
- [Supply] $80M revenue from new guarantee video inventory deals
- [Brand Formats] 70% of inventory Active View enabled
- [Serve on all Video inventory] $XM of Video inventory in Games

5. Content (Management) is King

89 are Commerce and Bus Dev developments
6 are AFS transformation

Access to inventory starts with DFP and our penetration is highly variable and generally lower outside of the US

Estimated Top Pub DFP Penetration, as % of pubs (NOT impression share)

% of Pubs on DFP (estimates): >75% | 50-75% | 25-50% | <25%

	Americas				APAC			NACE				SEEMEA	
	Entertainment & Online	Pubs, Network, Apps	Commerce, ISPS	LatAm	Japan, Greater China	AU, NZ	Korea, India, SEA	UK	DACH	Benelux	Nordics	FR, IT, ES, IL	Emerging Markets
Desktop													
mWeb													
Video													
Apps (MoPub)	Solution today is AdMob. We have some top line access via AdMob Mediation or DFP, but often get intermediated by other SSPs												
Example Pubs not on DFP	Yahoo!, Netflix, Hulu, Pinterest, Costco, Reddit, Globo				Alibaba (and most major China pubs), Benese, ACP, Dwango			Axel Springer, SKY (both in deal negotiations), Guardian, Schibsted, Sanoma, Telegraaf				Unidad Editorial, RCS, Gruppo L'Espresso, LeMonde, Le Figaro, Schibsted, Onet	
Market position, challenges	• Overall strong in NA (esp. in Canada) • Weaker market perception in Video • Room to grow in LATAM: resistance from newspapers, strong competition in video, pricing challenge (now resolved)				• AU/NZ DFP penetration among highest levels globally • JP adserving dominated by agency groups • China challenged on price & insularity			• DFP strongest in UK, Flips in last 12 months, incl. IPC, NewsQuest, ... • Nordics dominated by local player Adform, no local MBS team in Nordics • Video sales needs activation				- Position improving in FRITES thanks to new pricing - Publishing vertical reluctant to work with Google - Close to 0% market share in Eastern Europe and Russia with entrenched / low cost local competitors - Video mostly owned by VideoPlaza	
Key competitors	AppNexus, AdTech, OpenX, FreeWheel, Adobe, SambaTech (LATAM) 1				AI Match, App Nexus, DAC, 24/7, Open X, Zedo			Adtech, 24/7,Emediate, Smart+, Adform, Addition, Adese, Freewheel				OAS, Smart+, AdRiver, AdTech, AdFox, AdOcean, BB Elements, VideoPlaza	

This is DFP penetration …. bright spots in Americas … especially the

AdMob … has been our strategy to date … is that our strategy {work on slide that talk about apps}

** mWeb - confident our desktop etc..

** apps - top of market … brands big enough for advertisers to care about … come concerns that what's going to happen in next 18 months (a lot of driver for this is FB has a lot of inroads … FB and Twitter could go that route in the apps world) … exchange balkanization (saw that early on in ad network … pandora saw ad tech took a new CEO … pandora/facebook/etc..)

Those are both representative of AdMob ….

****

info we have in pubpangea - looks at penetration across the pubs we have today (so sampled publisher)
inventory planner - we looked at best estimates and nielsen and there were red flags (e.g., FB was 99 of 100)

going through the top pubs by region/by market, by desktop/mobile/video - no
tool to do that - we talked to regions

Similarly, AdX penetration is also lower outside of the US, and we are just starting to actively move into Video

% of Pubs on AdX (estimates): >75% | 50-75% | 25-50% | <25%

Estimated Top Pub AdX Penetration, as % of pubs (NOT impression share)

	Americas				APAC			NACE				SEEMEA	
	Entertainment & Online	Pubs, Network, Apps	Commerce, ISPS	LatAm	Japan, Greater China	AU, NZ	Korea, India, SEA	UK	DACH	Benelux	Nordics	FR, IT, ES	Emerging Markets
Desktop													
mWeb													
Video													
Apps*													

*Admob penetration, Top 300K apps

	Americas	APAC	NACE	SEEMEA
Example Pubs not on AdX	Yahoo!, Netflix, Hulu, Pinterest, Costco, Reddit, Globo TV	Seek, Asahi, Dwango, GMO Group, Impress	Axel Springer, Sky (both under negotiation), Guardian, Schibsted, Sanoma, Telegraaf	RCS, Gruppo L'Espresso, LeMonde, Le Figaro, Tf1, Allegro, Orange France
Market position, challenges	• Overall strong in NA (esp. in CA), but facing constant competitive & pricing pressure • Top premium video currently locked up via guarantee deals, not currently playing in space • LATAM growing on open auction, blocked on Premium, Video by Globo	• Very high AdX adoption in AU but inventory constrained by key pubs • JP & CN enjoying great RTB growth but RPM constrained • Video locked up by key pubs across region	• Strong AdX position in UK, DACH, but often only small share of inventory with top pubs • Rubicon esp. strong for premium publishers • Video penetration low as many do not serve video (and market pre-bought by Videology)	- Strong position in Italy and Spain, but large traditional premium pub not yet using RTB (or only for Int'l) - Challenged in France as 2 private marketplaces trusting most of the traditional premium pubs - Good initial position in Emerging Markets but still nascent
Key competitors	AppNexus, Rubicon, Pubmatic, Adap.tv, LiveRail, AdTech, OpenX, Facebook, SambaTech (LATAM)	Rubicon, Pubmatic, AppNexus, Youku, AdpatTV, Brightroll	Rubicon, Videology, Adap.tv, Adform (Nordics)	Rubicon, Appnexus, Videology

Among top pubs,

From Robin:
Important to note that fundamental difference between DFP and AdX relationship maps shown here and on previous page:
For DFP, owning the relationship is "everything"
For AdX, relationship is just the first step, need also to get access to and win impressions (i.e., funnel pages in rest of this section)

Also, picture changes for Mobile whether we are talking about mobile Web vs. apps (this is more a web-based view with traditional pubs, not top apps).

From Scott: Given this is very high level / directional I'm not going to worry about this too much but the table structure is tricky for APAC. Lumping Japan and China together makes the shading somewhat meaningless, ditto Korea/India/SEA being grouped. Also, AdX is not the only display inventory access point. If we include AFC, AdMob etc then the mobile picture in Japan/China would look much better. I've just limited to AdX though.

From Aleks: Adx should be green on SEEMEA markets with the definition of what percentage of Pubs are using AdX in LPS. That is almost 70% at the

moment.

3-point plan to drive up access to publisher inventory

Placeholder slide:
Intent to focus on the key areas we want to accelerate on from publisher perspective

...tives required

			PL	PBS
Drive DFP/AdX penetration *Lower desktop penetration outside of the Americas; lower penetration on Mobile & Video*		video/mobile point solutions (e.g., Videology, Drawbridge) - Socialize mApps inventory strategy (AdMob is current answer: will DFP/AdX take on mApps)	...te highest ...ts for ...ased on evaluation of inventory supply/demand mismatch	- Continue extending penetration from desktop to mobile and video - Launch focused action plan/investment in under-penetrated markets (e.g., Russia, Eastern Europe)
Improve format compatibility *Many potential ad sizes are not AdX compatible*	1.3x	- Prioritize product investments to open up AdX access to new formats	- GPL/NPS/LCS: Drive awareness among SMB and LCS sales teams and include in solution packages	- Communicate new format opportunities to publishers and drive adoption
Maximize premium inventory availability on platform *Multiple gating factors to inventory accessibility on AdX: Fettered access; Low win rates; Poor placements; Low visibility/branding*	>4x	- Rollout **Cross Priority Ranking (CPR)** / dynamic allocation on the campaign schedule versus priority level - Rollout **network backfill** to ensure all DFP inventory is auto-opted into AdX	- GPL: Drive supply/demand insights to identify highest priority investment areas for PBS and stimulate premium-price demand among LCS teams - NPS/LCS: Drive premium brand packaging and sales initiatives to stimulate premium-price demand	- Implement sales action plan/investment to drive adoption of **CPR** and drive account optimizations as monetization levels improve - Continue investing in **MDev** to drive premium/secondary premium marketplaces (4 people hired in Americas, reached $1 million weekly ...

Global
Publishers and Platforms
Solutions & Innovations

INTERNAL: Google

However, where we have DFP penetration outside of the US, our ability to access inventory is comparable, with a higher match rate

DFP-AdX Inventory Flow by Publisher Location: Aug 2013, Top 1500 Networks*

Bucket	North America	LATAM	EMEA	JAPAC	Total
DFP **Total Impressions**	257,388,811,899	60,151,704,862	134,856,983,409	68,572,020,582	520,969,520,752
DFP Impressions **Not Sold/ Guaranteed** by Direct Sales Teams	68%	56%	76%	72%	69%
DFP Impressions **Sold Indirectly with AdX Compatible Sizes**					58%
DFP Impressions sold indirectly with AdX Compatible Sizes made **Available to AdX**					37%
DFP Impressions that **AdX Wins**					18%
AdX **Match Rate** (won/eligible)					50%

Placeholder slide:
Intent to describe how much access to inventory we currently have, vs how much we monetize (programmatically or otherwise)

We want everyone using DFP to use AdX as ... ...ening today for a variety of reasons:

- Fettered Access:
  - Publishers can lock up their unsold with other SSPs or networks mainly for some type of guarantee (e.g. Tribune and Rubicon))
  - Some publishers refuse to put any unsold on exchanges sales channel conflict concern (e.g. KBB)
- Compatibility:
  - Sizes and formats are tricky with directly sold concepts not always translating to indirect, standard exchange sizes (e.g. 88x31)
  - PM is looking closely to address this as we launch new sizes, while ensuring there is ample demand
- Low Monetization:
  - Price Floors in DFP and/or reserve prices in AdX
  - Blocks on Buyers and/or advertisers, especially on endemic

The paradoxical challenge: we allow more controls to gain more access, yet such controls can hamper monetization

* DFP Premium only

Direct sold - in DFP, the publisher has specific flags that allows us to know if it's direct .... it's standard and sponsorshop ad types
Indirect, but not backfill eligible

DFP matters because it allows Google to seamlessly compete for directly sold inventory. We have a ways to go, but are seeing successes

AdX competes for nearly one-fifth (21 billion impressions out of 118 billion "premium", brand impressions) inventory at Directly sold priority levels

| All DFP* Impressions top 1500 pubs = 521 billion | → | "Direct" priorities only (1 through 7) = 153 billion | → | Brand safe only and excl. YT and eBay = 118 billion | → | From pubs. who allow AdX to compete at direct priorities = 21 billion | → | Won by AdX = 7.6 billion (6% of total, 37% of eligible) |

Publishers and Platforms
Solutions & Innovations
DFP-AdX Inventory Flow, Select Publishers by Direct Sold Priority: Aug 2013, Brand Safe AdX-Enabled*

Publisher	Total Impressions Priorities 1-7	AdX Enabled Impressions Priorities 1-7	AdX Won Impressions Priorities 1-7	% Enabled	% Won	Match Rate
Associated Northcliffe Digital - (Mailonline)	3,412,249,879	2,168,537,541	377,766,856	64%	11%	17%
Libero ItaliaOnLine - DFP EMEA	2,578,722,434	1,507,436,127	821,375,487	58%	32%	54%
FOX News - DFP	2,490,926,338	1,691,365,507	885,508,499	68%	36%	52%
Synacor - DFP	2,104,894,139	811,027,066	169,517,563	39%	8%	21%
Weather DFP Premium	1,770,039,260	670,384,731	189,674,864	38%	22%	58%
Gannett	1,252,666,533	763,260,231	418,071,425	61%	33%	55%
Sträer Interactive - DFP EMEA	1,176,211,662	635,731,544	43,293,448	54%	4%	7%
About.com	1,067,601,238	824,303,314	504,776,760	77%	47%	61%
Move.com - DFP Premium	976,295,465	694,581,552	296,081,115	71%	30%	43%
IDG - Global	813,735,767	748,976,046	480,535,995	92%	59%	64%
Hearst Communications, Inc. - DFP	785,884,677	571,220,803	149,869,461	73%	19%	26%
ONE ITALIA - DFP EMEA	635,721,505	582,188,223	23,554,121	92%	4%	4%

INTERNAL: Google Confidential and Proprietary

* XFP Premium only

The prior pages show that there are a lot of hurdles, but there are a set of pubs that allow us to compete at direct sold priority levels and adx is winning quite a bit of that inventory.. Here are some examples.

-- Of top 1500 pubs, 521 billion real impressions/month globally (XFP premium, not including small business)

-- 153 billion (or roughly 1/5th of the 521 billion impressions) are at priorities 1 - 7 = proxy for directly sold

-- 118 are brand safe, excluding YouTube and ebay = brand safe ... PREMIUM

-- 21 billion, or 18% of the brand safe total, AdX is competing for

-- 7.6 billion, or 36% we win

The idea adx is a junk yard ...

This is the subset of global publishers that allow us to compete for direct sold, premium publishers (versus more)

530b total global impressions and X# of pubs
LESS Priorities below 7, ebay, non brand safe, YT = 118
Out of 166, you split into 2 groups - 13% allow AdX to compete and *87%* that do not allow AdX to compete
Of the 13%, AdX buyers win about 5% of the time ...

The 'Best' of Google Programmatic Partners

PUBLISHER (ESPN)
- [SEEKING ADDITIONAL INPUT FROM POOJA/BRYAN]
- x
- x

DIRECT MARKETER (at&t)
- Buying audiences across formats and platforms via DSPs and Networks through agency
- Agency planners leverage full service offerings on GDN, DSPs *and* RTB Ad Networks
- Google's Largest DSP advertiser ($40M/year) is now considering our ad server over Atlas
    - BidManager opened door to DoubleClick stickiness

TRADING DESK
- Centralized audience and RTB buying for agencies to accelerate adoption
- Utilize disparate platforms to access access all inventory and data (i.e. Format Specific DSPs)
- Sell 'services' of guaranteeing access and managing data from disparate platf[...]
    - Creates new profit center for agency holding company

Add biggest bu[...]

AdX Buyer (Criteo, TubeMogul, Turn)
- Bring custom data and optimization to RTB exchanges in arbitrage model
- Sell against Trading Desks & DSPs via performance optimization & proprietary data
- Capitalize heavily on lack of buyer knowledge and sales and service expertise in display

INTERNAL: Google Confidential and Proprietary