PRIVILEGED AND CONFIDENTIAL

1/9/2018

Aparna, Vivek, Jim, Chris, Payam, Liz, Tobias, Max, Sam, Ali, JB

- Discussion re. Pricing DRX with competition counsel
 - Some options available...
- Recap of Eisar meeting late Dec. 2017 <<Vivek's doc>>
 - Should AdX buyers be in DP/Yavin?
 - It's a GDN decision, could be useful to know what RTBs are bidding
 - Would likely require contract change, so can't happen right away
 - Margin changes will require buy and sell side contract changes for existing products (not DP/Yavin)
 - We should work on another opaque margin product on buyside
 - Existing "full stack" DRX inventory will stay on transparent rev share contract for forseeable future
 - The method for doing this is outcome based buying on DBM, starting with selling CPC
 - Can we do opaque margin without arbitrage (buy and sell CPMs)?
 - Hard to sell to advertisers, they can likely derive CPMs
 - We should also charge more for additional features
 - Goals for DP
 - Inventory access on buyside
 - Work with pubs we can't otherwise see
 - Compete with HB
 - Agency angle
 - When we do arbitrage we move risk from agency to platform, agencies might not like it
 - Could mitigate by giving agencies control over definition of, say, viewable
- · Next time: share OKRs

12/12

Discussed "3 doors" for margin support

- Outcome-Based Buying
 - take non-transparent margin on the buyside for arbitrage based buying (clicks, viewable, Market Maker etc.)
 - Does not only apply to performance focused buyers MMKR, for example, is also for Brand
 - Opt-in: Payam estimates we could get to 10% of RTB buying in this mode in 2018
- Demand Product
 - Sell side non-transparent margin for inventory we don't see through DRX, or are in AdX-direct today.

PTX0578

Comment [1]: Add link

1:23-cy-00108

- Finer grained rate cards
 - Charge more for features like auto-bidding (although probably can't go back on things we've included in overall rate so far)
 - Could also be on sell side, eg. "everything is still 20 but there is now a new thing where we take additional margin when google buyers use secret sauce"
- Need to quantify options, since all are incremental and involve gradual move to more margin flexibility on buy and sell side
 - Related slide

11/30 - Sustainable Platform Margins

Aparna, Payam, Chris, Dan, Tobias, Paul, Bahman, Jim, Brad, Vivek, Ali Move all margin to buy side, support two modes:

- 1. platform fee + margin for AdX portion
- 2. Outcome based buying

Tell large buyers when you buy AdX through DBM, there's a 20% fee (32% on AdSense). Might result into sticker shock for buyers.

1C likely wouldn't have to tell buyers anything. This is similar to another SSP changing the way they operate. Publishers we'd have to tell that there's a new type of buyer that generates higher yield at higher fee.

Abstracted to buy/sell side margin. Requires contracting - hard to read from this proposal.

11/21

Aparna, Jim, Payam, Ali, Tobias, Max

Reviewed Payam's deck We most worry about option 1. Specifically the subset of non-backfill supply and our ability to maintain margin there. We could differentiate via GAIA features or make DRX/DP more interesting (over AdX direct) by clearly positioning it as direct access to DBM advertisers, as part of DBM direct story.

11/15

Payam Shodjai, Ali Amini, Bahman, Tobias, Aparna, Max Loubser, Jonathan Bellack, Liz Daley, Jim Giles, Chris LaSala

Summary of 2 hour session

Goal:

Comment [2]: +pshodjai@google.com

can you link your deck, please?

Comment [3]: +bahman@google.com +jimgiles@google.com +amini@google.com +pshodjai@google.com +chrisi@google.com , +maxl@google.com +tmaurer@google.com can you all review the summary - i reworded it a bit. Is this the full list of our options? We have a one hour meeting with P/E next week and would like to make sure we've spent enough time thinking about all options

- Plan for eventual margin pressure on sellside if and when that happens have a plan as opposed to being reactionary
- 2. Long term stable state for buy and sell side wrt to margins

Consensus: In the short term we recommend incremental approach as listed below - no radical band aid rip. Radical options discussed were 0% revshare, DBM only buying on Google. We think these are too aggressive and not required at this stage.

- 1. Performance based buying (DBM Arbitrage)
 - a. Already on the DBM roadmap but can it be accelerated? Al@ali/payam
 - b. [AP random idea needs buyside vetting] [Given Brand Safety concerns can we take on risk and provide "curated" inventory at a price where they can run their 3rd party this is basically a "no-side" inventory source separate from DP because it's sourced from DRX only verifiers re brand safey and if it doesn't meet the bar we'll pay up.
- Accelerated Demand Product and Promote direct access mode in DBM are we being aggressive enough? Unique point in time that allows us to lean into direct only story for buy side. Harder to understand perceived value on sell-side. Sellers only care about yield. There are some intangibles of fairness and diversity. Likely direct access will lead to lower yield.
 - a. Demand product will consist of switched 3PE and AdX supply.
 - Promote direct access mode in DBM, shifting away from middlemen (also apply this measure to our own exchange; convert all of AdX to this direct pipe, eg. NPM, audience extensions no longer direct; define nature of AdX direct access relationships)

No Consensus but proposed

- Lower sell-side margin to 5% for undifferentiated buying- lower all margins on sellside to 5%. When Google buys and uses Google differentiated data then increase rev share no upper bound.
 - a. Sell-side thinks this is not sellable the industry wants more transparency not less. What if we report on incremental revenue inclusive of blind revshare to show publishers the benefit? Imagine we get 25% incremental revenue and we take half of that as margin. Reference it off of lift.
 - b. We can't tell publishers that it is in their best interest to not be transparent. Maybe make it transparent for DRX but not for Demand Product. Sliding scale for Google secret sauce (GAIA). Why not start w/ 20% we have today and increase for differentiated features?

Agenda

- 1. Revshare for direct non-DFP relationship
- 2. Prep for Paul/Eisar meeting in NYC

Comment [4]: +pshodjai@google.com +amini@google.com thoughts?

Comment [5]: Does this mean that we refund the advertiser when their stuff shows up on non-brand safe inventory, or that we give them extra compensation on top of a refund? Who decides whether it was safe or not?

Comment [6]: I wonder if we can actually build this feature, if the grading happens by a 3P2

Comment [7]: i agree its risky for us but that will be the very reason it may be attractive to buyers - we can certify a 3P to grade it. this puts the onus on us to do a way better job with policing this

Comment [8]: I think if we can build this, we can probably sell it. I would want to validate with some of our sales folks.

Comment [9]: +apappu@google.com One option for direct on the platform is that it means buyers who are buying through Jedi (rather than ADX) - it could also more specifically mean when DBM buys through Jedi (rather than ADX). The rational would be "not going through any exchange" -- instead going through the Ad Server's aggregator (Jedi), also Jedi is the path for direct contracts with publishers, and the Jedi path has lower cost since we are thinking for networks will be closer to 10%. In this case we would have DBM buy through Jedi whenever possible and that would be considered a "direct" path. We'd need to deal with the fact that not all inventory is jedi eligible (but we can probably accelerate that) and whether the total margins are high enough.

Comment [10]: Not sure that's sellable because while we charge the publisher a fee the SSP also charges an extra fee and we cannot be certain that the fields filled in by the openRTB call to the DSPs are by any means accurate.

Comment [11]: I had in mind that we call it direct when DBM buys on Jedi

Comment [12]: that's what I am saying is not sellable (to me) am not convinced at all this is direct

Comment [13]: In this option, I think an open question was what the Google rev share for "direct mode" would/should be. If it is > 10% or so, how would we differentiate it from the direct access alternatives that a DSP with a header tag and a pub contract can provide (eg. what TDD is said to be selling)

Comment [14]: This is the fundamental question about direct access -- does it also need to be cheap(er) or is it more about trustworthiness/safety/reduced risk.

Comment [15]: Am unconvinced AdX direct should be called direct. I think DFP via backfill for sure because we "see" all of it

Lager question: provided we lose our ability to take 20% sell-side margin, how do we supplement? For how long can we defend 20% on AdX? When do we expect it to change?

- PS: Margin already went down a lot on buy side. Went from 11% to 10% in last year alone. Agencies have tiered rates that reduce their platform fees. There's a few efforts around DBM to get back up to 11%. Sales negotiation: automatic discounting will be harder, tiering of rate card will be adjusted. We should consider other ideas: charging for data, moving margin to no-side.
- JG: We should stay away from hitting magic number. Hitting growth rate might be better.
- PG: Programmatic tech commoditized on both buy- and sell-side. Do we see more erosion coming?
- AP: Scale is commoditized. Undervalued some of the unique things we do. We don't fully understand what that is and how we should price.
- CL: Market is not telling us we're losing based on price.
- JG: Differentiate SSPs (little value) vs. AdServers. We should be able to charge more for the combination of SSP + AdServers. Most others don't have that. Unclear where Amazon is going.
- JB: Which competitors are operating a sustainable business? Understand outside pressure. Customer perception of value matters more than what we think. Malware goes undetected; a lot of what we do doesn't matter as much as it should.
- AP: Need to understand our unique value and market perception of this value.
- JB: Changing price vs. sacrificing PM heads to focus more on marketing.
- AA: GDN/Networks more price defensible. Getting away w/ 20% b/c AW demand still exclusive.
- JB: Nobody complained about Criteo's take rate (45-50%). Might be confusion of pubs when moving from AdSense 32% to AdX 20% they don't see the additional 15% GDN buy-side fee. Could result in sticker shock if we move to more transparency.
- AP: State where we have sustainable 32%?
- AA: Don't need to commit to target margin. Rather not have set fixed margin in mind. Prefer to have a way to react to market demand. Flexible entity in the middle.
- CL: Adv. should be happy if they can get better performance for price. Publishers should be happy if they get better bid than anyone else.
- AP: All of DBM has to change how they are buying.

AA: Change what advertisers are buying. Make the transaction on what we sell/buy be in different units. There are days where we are taking negative margin. In this world, it makes less sense to talk about transparent margin.

- Why are dynamics AW/DBM different in the first place? Different advertisers, adding own
 value, looking for neutral access. AW is free. Your only cost is cost by media. Use DBM
 for free, Google will handle everything else, gets the right to decide for \$1 of media
 spend we're paying to publishers on platform and off.
- On buy-side not in a price war but tiering led to downwards trend. On sell-side might
 face more pressure due to HB. We are subsidizing this to some extend w/ our buy-side.
 Margin was never the reason why pubs like HB the main reason is yield. Fake auction
 pressure + cheaper access.
- Say DBM/GDN only buys on AdX + exclusive inventory on SSPs. Essentially only when
 we have a direct publisher agreement. Demand Product, DRX, AdSense, Okay to
 have this flow through Shipstead/AN.
- We should do pay per action buying on DBM regardless. This will happen. Direct buyers seems straightforward. Agencies are more difficult. Could make life easier for agencies, they would appreciate it. Charge for lifte user, completed views, quality impressions, When people move from AW to DBM there's more transparency of data, which makes a big difference to large buyers. Should we provide all of these services for free?
- Need legal advice to what extend we are we able to prefer more profitable paths? On sell-side we are favoring deals.
- Fee might be good to keep advertisers on AW. On the other hand dropping fee makes it easier to transition. Arb, investigate if we can charge for data, sales initiatives.
- Scarcity problem on video inventory. Premium inventory we're not getting should be prioritized via demand product. Versus today routing through path of least resistance.
- If we stop buying on exchanges we/ DBM, outcomes could be
 - Always thought DBM was biased, good thing I'm still buying through DSPs
 - o Exchange area has come to an end

Direct route is a more gentle route to do this. Can also include non-Google publishers. Buy-side marketed thing doesn't have to bundle w/ AdX. Could be marketed as direct access, you don't have to buy on other exchanges for this inventory any longer. Or can say Google has expanded access with demand product. Makes it harder to justify as a direct way to access.

Could be Google announcing Direct Access program. Make it neither buy- nor sell-side.

Demand platform + Platform only buy.

AwBid rev share is way too low at 15% why is it so low? It should be higher TODO

10/31

Sam Temes, ChrisL, Liz, Payam, Max, Vik, Aparna, Ali

Next time: Figure out revshare for "direct" non DFP relationship

Vivek/Payam have a couple of options:

Option1: Demand Product with fixed / transparent buyside and non-transparent / dynamic sell-side revshare

In this option, DBM initially continues with the fixed / transparent buyside revshare. We have a new sell-side product that runs an auction exactly like ADX does today. That sell-side product has a new contract with a non-transparent sell-side revshare. We take the closing price from the new auction, deduct the non-transparent sell-side revshare, and then submit it as a take-it-or-leave it bid into the final auction.

Practically, we would start with a fixed non-transparent sell-side revshare which we can adjust up/down as needed. We could move to a dynamic non-transparent revshare at any time.

Over time, if we decide to move to option 2, we can reduce/eliminate the non-transparent sell-side revshare in favor of that.

Option 2: Demand Product

In this option, DBM changes to a non-transparent buyside revshare across the board (or at least for Google sourced demand) and as low as 0 on the sell-side. This might be a good long-term state if we think that the buyside can support high enough non-transparent margins.

Both options can be coupled with Ali's ideas about taking risk in exchange for margin.

Option 1 is the fastest path to get started and can easily transition to Option 2 over time if we think that is the best end state.

- What is "direct" relationship with publisher?
 - Proposal to classify Niche pubs, DFP+AdX pubs, AdX direct (top three boxes in diagram) as direct
 - 3p exchange would not qualify as direct

Comment [16]: +vivekrao@google.com +pshodjai@google.com can you fill this out - I didn't quite follow the two options +jimglies@google.com +amini@google.com

Comment [17]: added a description of what I believe are the two options

- o Spam not so much an advantage of direct
- o Advantages of direct
 - For platform and DP we have information about our level of access and whether it is likely to be on equal footing
 - We also have information about inventory (say, whether inventory is "mature" content)
 - PG could work for PD, but needs lots of work from seller
- Does "direct" mean DBM has the pub relationship, or Google has the relationship?
 - Argument for the latter (Google relationship): If another SSP has a relationship with pub, and DBM buys there, we don't say DBM has a direct relationship
 - TDD is going to advertisers and saying they are cutting out the exchange with DSP-pub relationship
- Two problems to solve
 - o 1) show DBM customers we have direct relationships
 - 2) how do we make Google demand for sellers and buyers best through direct relationship channels
- For (1), should we present all direct relationships the same way?
 - o Only if we can get extra value
- Bidder is able to distinguish between different sources of inventory / relationships do you get the same demand as seller?
 - o Do we want demand availability to be a platform differentiator?
- Who gets DP?
 - You can use it with another ad server, but we pay the pub directly

10/24

Attendees: Aparna, Jim, Tobias, Vik, Liz, Ali, Max, Bahman

- Possible pressure on DBM to market to advertisers "direct access to inventory", other DSPs are apparently doing this
 - And using Header Bidding (HB) in their marketing pitches selling presence of tags as direct relationship
 - Unclear how much advertiser/agency understands what having a tag on page means for access
 - o Need further clarity from DBM (sales?) on whether this pressure is critical
 - Agreement in room that doing something about HB would be more a proactive step than a worry about losing budgets to HB
- Still open questions on what exactly "direct access" means
 - Possible answer from those with HB tags: "We've got all the direct stuff that Google has anyway, our Header tags provides new/incremental stuff outside of Google's footprint"

- o Is DFP+AdX "more direct" than just AdX yes, shading updated in diagram below
- o Is DBM on DRX the same as MediaMath on DRX?
 - Technically, no (serving implementation different for Google buyers)
 - From marketing perspective, possibly no: Google has relationship with pub (DFP), therefore DBM has. MediaMath does not necessarily talk to pub.
 - Google also pays the publisher (and other DSPs don't)
- With Demand Product (DP), we can also claim direct relationship, while non-Google buyers can't (if they end up being included in DP)
- Discussion of DP revshare wrt DBM
 - Need to get clarity on legal position for buy vs sell revshare when Google runs auctions (the DP case) vs 3p exchange running auction: Can we "split" DP into buyside and sellside auctions?
 - Al: tobias to do writeup of options for revshare
- Al tobias: write up options for positioning of different supply sources in DBM

10/10

Attendees: jbellack, jimgiles, chrisl, apappu

- We cleaned up taxonomy and understanding of the supply and the interactions with Demand Product
- 2. Listed out areas of possible alignment and non-alignment

Supply Taxonomy: we have two buckets of supply

- a) **Direct**: Have direct publisher relationship/contract does not mean fair pricing, fair access at all this includes AdX sourced inventory whether via AdXDirect or via DFP Backfill. In both cases we have a direct pub contract and a transparent revshare. Also includes API integrations with DBM
- InDirect: Do NOT have direct publisher relationship/contract currently bought via 3PE on DBM, 3PE on AwBid. NPM Data from AdX is also indirect. Any reseller program is indirect.

Of all the supply coming in right now it falls into 4 entry paths and each can be classified as Direct or Indirect but not both.

Comment [18]: Al tobias: write up options for positioning of different supply sources in DBM +tmaurer@google.com
Assigned to Tobias Maurer

Comment [19]: ping

Comment [20]: Unfair pricing is something that we can protect against. Fair access is strategic and could be used as a way to define direct/indirect differently ---

based on if we directly participate in the final ad decision or not. Perfect inventory access would mean being part of all final ad decisions.

This definition has the downside, that some of our current sell-side products probably wouldn't be considered direct.

Direct:

DFP (we run the ad decision, it's final for everything that comes in, tag is on the page) DP (pubs guarantee direct access) AdSense (though some funny setups might exist)

Indirect:

Comment [21]: AdX direct pubs we have a direct contract with the publisher and have the ability to police how we are treated - we cannot police fair access but we deal with pub direct!

Comment [22]: Seems like a bold claim that DBM has "direct" access to AdX inventory. Do we think every buyer on AdX should also claim that - DBM has no special relationship with

Comment [23]: There is a difference here - for GOOGLE buyside this is a direct relationship because GOOGLE sellside has a relationship with the publisher directly and pays pub direct

Comment [24]: It all depends on the definition of "direct" that is critical to buyers. If direct means.

Comment [25]: +pshodjai@google.com to see if he can resolve the previous question.

Comment [26]: Who can resolve this? With payam on vacay are we really on hold till the 27th? No one else in dbm - maybe Sam Temes or Vivek?

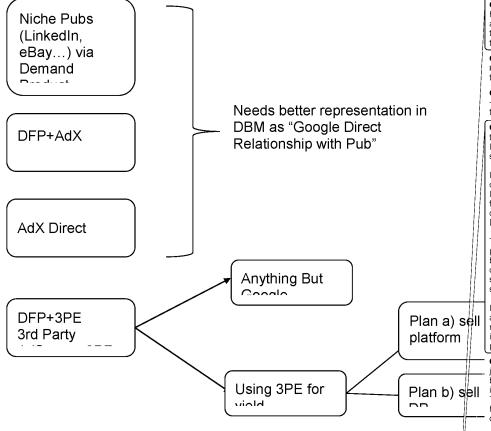
Comment [27]: +temes@google.com , +vivekrao@google.com

Comment [28]: MY 2c would be: DBM should probably represent all exchange inventory based on the pub relations of the exchange. If another exchange has a direct relation to the

Comment [29]: I agree with Vivek and I share 100% Bahman's concern. DBM treats AdX in the same commercial manner as any other SSF integration. Similarly, AdX treats 3P buyers if

Comment [30]: From a DBM perspective, the buckets might be framed as follows:

DBM Direct: APIs / Direct to Publisher



One of Jonathan's points was that we need to find a way to make more money for the publisher when DBM/GDN buy through ADX only versus when DBM/GDN is also bidding and buying through third party exchanges (this doesn't mean that the publisher makes the same amount of money they do today -- just that DBM/GDN through ADX is better than when DBM/GDN also bids on this inventory through third party exchanges). Things that may or may not help: 1) auction dynamics -- 1p, soft floors, etc 2) much more aggressive yield optimization (rpo/drs), 3) Poirot + other launches to address dirty auctions, 4) stop bidding on 3pe completely (go to network model), 5) don't buy when seeing inventory through multiple exchanges, 6) others ideas the

Email to the working group on 10/11

We had our first supply sourcing working group meeting yesterday across buy and sell. Part of the problem in the lack of alignment I think is the taxonomy of supply.

Comment [31]: Poirot is only one thing - we'll have plenty of launches to penalize dirty actions. Not that doing (2) and some of the things under (1) will cause AdX to be penalized, too

Comment [32]: Yes, that's my concern with #1 and #2 – there are limits to what we can do there

Comment [33]: +apappu@google.com +jbellack@google.com added the other part of the discussion that I remember

Comment [34]: Is you point here that you think when buying direct only publishers make less money because our demand no longer is subject to the shenanigans of intermediaries?

In my mind, in order to address this we should challenge our current pricing approach. With less demand (coming through different paths from the same buyer), pricing pressure goes down but we should not pay less to pub A via DP compared to pub B via 3P.

There's multiple ways to deal with this, as you point out. Worth discussing this in more detail but I think right now we're going down the path of: (1) avoiding overpaying in current shenanigan situations, (2) first price bids, (3) solid RPO

I'm wondering if there's a different way to think about this and attribute a value to an impression not based on market dynamics so that a similar impression gets the same bid no matter the path it takes.

Comment [35]: Yes, shananigans, and then just market basic market pressure. Value to a bid would be good —! guess part of the problem is that we still have so much fixed bid as well. The problem with #3 is that there is a limit to how far we can go before it looks like we are doing shenanigans.

Comment [36]: +apappu@google.com +jbellack@google.com added the other part of the discussion that I remember

Comment [37]: Is you point here that you think when buying direct only publishers make less money because our demand no longer is subject to the shenanigans of intermediaries?

In my mind, in order to address this we should challenge our current pricing approach. With less demand (coming through different paths from the same buyer), pricing pressure goes down but we should not pay less to pub A via DP compared to pub B via 3P.

Comment [38]: Yes, shananigans, and then just market basic market pressure. Value to a bid would be good – I guess part of the problem is that we still have so much fixed bid as well. The problem with #3 is that there is a limit to how far we can go before it looks like we are doing shenanigans.

Comment [39]: is there an email thread w/

I think we have it represented correctly and I believe the goal for this group is to figure out two things a) non-controversial: represent "direct" relation ship inventory in DBM prominently to counter other DSPs touting this. This includes Platform inventory but also will include Demand Product sourced inventory. (I've left admob and adsense off for now for simplicity). Buysde folks what is the priority of this in your view? I heard it was super high and we are happy to help make it happen. There are pools in this platform sourced inventory that are not direct (NPM but we'll deal with that edge case)

b) Pricing strategy for platform and for DP so that all addressable inventory that CAN be sourced via platform or as a fall back Demand Product is infact sourced by those two as opposed to 3PE (which is an indirect relationship).

This is the frame work with which I hope we can discuss.