Message

From: Tobias Maurer [tmaurer@google.com]

Sent: 1/16/2019 7:00:19 PM

To: Chris LaSala [chrisl@google.com]

CC: Rahul Srinivasan [rahulsr@google.com]; David Goodman [davidgoodman@google.com]; Martin Pál

[mpal@google.com]; Jim Giles [jimgiles@google.com]; Ali Nasiri Amini [amini@google.com]; Bryan Rowley [browley@google.com]; Nitish Korula [nitish@google.com]; Jason Bigler [jbigler@google.com]; Nirmal Jayaram [nirmaljayaram@google.com]; Giulio Minguzzi [gminguzzi@google.com]; Vivek Rao [vivekrao@google.com]; Sagnik

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Subject: Re: Rollout plan for 1p

PRIVILEGED

I'm wondering if it's helpful to talk about what needs publishers have today that cause them to set floors.

If we had a way to address these in a 1P world, then perhaps it's easier to separate the concerns of floor setting and type of auction. Essentially explaining that floors work differently in the subset of inventory that transacts in first price context.

Today, AdX pubs set floors in a second price context for three reasons: 1. channel conflict, 2. yield management, 3. restricting to specific buyers. In my mind, if we want publishers to not feel like we are restricting them in their ability to control for these concerns, then there would have to be an answer for all three in a first price world:

- 1. Channel conflict could be handled via unified floors & advertiser specific floors
- 2. Price yield management is not really applicable to first price auction; this is the area that requires a change in thinking rather than driving up price, publishers should be concerned about buyers low balling bids, this could be addressed by some form of automatic floor setting
- 3. Restrict to specific buyer PG/PA are tools that sellers/buyers can use for this

Curious to hear what others think.

On Tue, Jan 15, 2019 at 12:37 PM Chris LaSala < chrisl@google.com wrote: PRIVILEGED

Hi Team,

I just had a few hallway chats with Rahul, Bryan, Goody (adding to this thread). Trying to take a balanced approach to this . . . seems like the GDN team is trying to ensure that we are able to bid into new 1P auctions in a way that mitigates risk of losing advertiser budgets while sell-side is trying to ensure we successfully launch the move to 1P and removal of floors without losing publisher trust. So I get this a nuanced problem to solve.

I agree with Rahul's summary. The risk of separating the move to 1st price from the unification of floors is in the possibility that Ali's thesis doesn't prove to be true, and that managing separate floors per buyer does in fact drive incremental lift for pubs or serves another valuable purpose such as diversifying revenue. Then we are at a point down the road where we have to deprecate per buyer floors, but in an environment where we do not have the 'gift' of moving to a 1P to go along with it. This will not engender trust.

On the recommendation to test on a subset of publishers, namely Jedi pubs, the risk is that we create an incentive for those pubs to opt out of Jedi.

What are the commercial risks of running tests/experiments that bundle the move to 1P with unified floors that cross all publishers?

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Thanks, Chris

On Tue, Jan 15, 2019 at 12:32 PM Rahul Srinivasan < rahulsr@google.com > wrote: PRIVILEGED and CONFIDENTIAL

Based on feedback from pubs, there seem to be a few other reasons that pubs see "benefits" from setting differential floors for different buyers today (which mostly manifest in higher floors on AdX as a whole or for GDN/DBM on AdX as buyers):

- 1. to simulate a real-time waterfall and fish for different prices on the same inventory from the same buyer through different exchanges/channels (eg. \$2 floor for DBM on AdX, and a \$1 floor for DBM on Index through header bidding) -- buyers can't always effectively dedup these to be the same query in real-time
- 2. global Bernanke may "subsidize" pubs that set higher floors, and hence pubs sometimes see yield benefit in increasing floors on AdX for GDN
- 3. revenue diversity (increase floors on AdX to reduce perceived dependency on Google as a revenue source), sometimes at the expense of some incremental yield
- 4. publishers have the perception that undesirable ads on AdX (primarily from unclassified advertisers) is correlated with low CPMs, and setting higher AdX floors will "protect" them

Note that if we allow per-buyer floors after the 1P migration, pubs will still be able to subject DBM through AdX at a higher floor, and Index as a whole (we don't always have clarity on who the bidder is, esp when Index bids through header bidding) at a lower floor, meaning they could still access DBM demand through a lower floor on Index, while setting a higher DBM floor on AdX.

Benefits from #1 and #2 will be reduced through the move to a 1P auction (provided we ignore floor prices, or they at least play a significantly less prominent role in our bidding models). Benefits from #4 is reduced to a certain extent through our improvements in advertiser classification and pub protection controls. But wouldn't #3, and the the short-term benefits that pubs see from the remaining buyers who continue responding to floors in a 1P auction, still be valid reasons for pubs to push back on the removal of this functionality. Pubs are also not always scientific in determining whether there is true yield benefit in setting differential floors, and may arrive at conclusions slightly different from ours and still be loathe to give up this per-buyer reserve functionality.

The above concerns are still valid in a world where we unilaterally take floors away, in conjunction with the 1P migration (which is why comms is already tricky), but it may be the best opportunity we have to clean this up - wouldn't it be more effective in getting us to our end goal, rather than relying on pubs to voluntarily give up this functionality, esp if they start using it widely in a 1P world?

On Tue, Jan 15, 2019 at 12:44 AM Martin Pál < mpal@google.com > wrote: I can't speak for Ali, but let me try to talk through my reasoning.

We all agree that somewhere along the way we want to deprecate adx rules, and switch all pubs to unified rules. We fear this may generate pushback from publishers who may view the move as us taking away functionality they are rather attached to, and consider critical to their business. One way to manage the transition is with a big bang: announcing a transition schedule and sticking to it, and hoping that once the dust settles pubs will realize that the new world order isn't as awful as they feared. An alternative option is to prepare the ground first, by changing our buy-side behavior to stop rewarding pubs for setting differential high floors. Yes, there will always be 3p bidders who might bid myopically, but the combined response of GDN+DBM will make floor price games considerably less attractive.

Note that meaningful buy-side bidding changes could be accomplished even in a 2p auction (I personally might have proposed it that way). We do however want to commercialize this bidding change to get pubs think about why equalizing their floors is a good idea. If we're commercializing, we may as well go all the way and say that GDN and DBM are switching to 1p bidding, and that RTBs have the option as well.

At this point, we will have launched 1p bidding, but we're still stuck maintaining both legacy adx and unified rules. We will still want to announce deprecation of adx rules, which will still generate pushback -- but the pushback will be much less because by now pubs will have discovered that differential pricing rules aren't all that useful in generating revenue.

I'm not saying this path is a walk in the park, but it doesn't seem to be obviously worse than the alternatives. The upside (at least as I see it) is that it avoids a big-bang moment, and gives us more freedom to adjust along the way. Downsides include being more drawn out, and having to deal with stragglers at the end.

On Mon, Jan 14, 2019 at 10:59 PM Jim Giles < jimgiles@google.com > wrote:

But it will still be useful for them right, at least in the short term? Not for the biggest buyers, but looking purely at what gives publishers the most benefit in the short term, there will be buyers who would respond to floors.

On Mon, Jan 14, 2019 at 4:49 PM Martin Pál < mpal@google.com > wrote: Thank you Ali.

I think your point about first price bidding teaching pubs that per-buyer floors aren't nearly as useful is an excellent one, and worth thinking about. It also happens to turn our sellside strategy upside down (ok by me, but I'm not calling the shots here).

On Mon, Jan 14, 2019 at 3:03 PM Ali Nasiri Amini amini@google.com wrote: Thanks Jim and Martin. Here is my thought process on this topic and messaging:

Let's focus on immediate pubs revenue excluding second order effects. Having different reserve-prices per buyers is a good/useful feature for publishers (to increase their revenue) ONLY in the second-price world. Big buyers like GDN and DBM have a very large bid range, so pubs exploited this and put high reserves which gave them higher revenue at a lower match rate. This was exactly the scenario that GDN team feared to happen many years ago when we introduced this feature (I guess only Martin and I remember those days). So I was always in favor of deprecating per-buyer floor and moving to unified floors and I am still in favor of that but the question is how to travel this path given the current state of the market.

In the first-price world, even if we offer per-buyer floor the nature of the market will push them to use the same floor for all buyers, i.e. they will see overall revenue drop if they put a higher floor for big buyers. Note that pubs romantic relationship with per-buyer reserve prices is a problematic symptom not the cause. So if we remove the cause (second-price, ...), the symptom will go away naturally. Assuming that some pubs love this feature and look at it as an "empowering knob" and will hate us if we take it away from them then why do we need to hurt their feeling. Let them see it themselves, we give them this feature initially and watch how they learn to put the same floor for everyone (We will educate them to expedite the process).

I also like to add a bit more on messaging. I think we can have three possible narratives

- 1) Google is doing this, because it is good for everyone.
- 2) A fair request from Publishers.
- 3) A fair request from Buyers.

I think by focusing on Jedi pubs, we can start by (3). Buyers request is that "when the ultimate auction is a first-price auction, we want to participate directly and being represented by our own bid". If we do not take per-buyer floor from pubs then effectively the first change needs very little messaging for pubs. Finishing this step and hopefully seeing what we expect to see will give us enough evidence to declare "Google is doing this, because it is good for everyone" and move everyone to first-price and unified floors.

On Mon, Jan 14, 2019 at 7:21 AM Martin Pál < mpal@google.com > wrote: PRIVILEGED and CONFIDENTIAL

<just a rant; feel free to disregard.>

Jim, I think your argument would carry even more weight if we managed to get rid of first look pricing rules before starting on the first price migration. (As things stand, FL rules will still be per-buyer, and we don't have a plan on the books to replace them with something else.)

I do agree that we should not launch first price auction on top of existing per-buyer rules. We should launch unified rules either first, or simultaneously with transition to first price auction. I personally think it would be viable to roll out unified rules first, and migrate Google demand to first price bidding later (just my personal opinion, not anyone's official position).

In my ideal world, with infinite time and engineering resources, we would

- 1. Introduce the unified rules, roll them out to all pubs, and have them apply to all demand (for 2p demand, old adx rules would still apply on top of the unified rules)
- 2. Have our buy-side start a conversation with pubs on why it's mutually beneficial to have Google demand bid directly into 1p auction (and bypass legacy adx rules), get a number of pubs opt in and experience the benefits
- 2.5 Design and build a first-price alternative to First Look Rules
- 3. Once we have enough pubs transacting with Google demand via first price, we can start talking about deprecating 2p and forced migration for the rest.

Executing this way would take us until the end of 2020. This is of course much slower than the currently proposed schedule. I'm on board with executing aggressively, but if we're talking about delays I thought it might be useful to say how a slow and methodical approach might look like.

<end of rant. back to work.>

On Sun, Jan 13, 2019 at 8:42 PM Jim Giles <<u>jimgiles@google.com</u>> wrote:

They wouldn't look at it as punishment -- that is true -- but we would have a very hard time introducing the unified floors without coupling it with the first price move. Publishers would not understand why we took it away and would not accept it since we were able to do it during the beta. I think we would lose trust of publishers with a move like this (bait and switch).

On Sat, Jan 12, 2019 at 11:17 PM Ali Nasiri Amini <a mini@google.com > wrote:

@Chris If we keep the ability to set per-buyer reserve price until migrating all pubs to first-price auction (i.e. let Jedi pubs to have it and take it away from all pubs at the same time post migration to 1st price), then Jedi pubs should not look at step (1) as a punishment? Do you agree?

On Thu, Jan 10, 2019, 9:30 AM Rahul Srinivasan < rahulsr@google.com wrote: PRIVILEGED and CONFIDENTIAL

@ Chris

- Extending the bid translation service will potentially make our transparency narrative less compelling, but it is (a) a temporary service to ease the transition and our long-term commitment to increased transparency is still compelling (b) one could argue that Optimized Pricing/ Live CPM++ (on app) are similar blackboxes that pubs/buyers haven't necessarily *violently* reacted to (c) buyers will have the option of opting in/out of it when they are ready to submit 1P bids (d) I don't think increased transparency is what we'll lean on to justify the floor functionality removal -- it would be simplicity (given you don't have a bid-price discount in a 1P auction, and you don't need to constantly fine-tune floors in this environment)
- On the staggered segment roll out, would your concern about Jedi pubs viewing this as a "punishment" be mitigated if we compressed the time frame between migrating Jedi pubs and migrating the remaining pubs to under 6 month?

On Thu, Jan 10, 2019 at 11:15 AM Tobias Maurer < tmaurer@google.com > wrote: PRIVILEGED

One important nuance to B1 (or B since we seem to say starting w/ small pubs is a no-op) is that we can scale this up over time on a per-buyer basis. This gives us a lot of flexibility to correct for undesired outcomes. More than any other option we discussed in my mind.

To the remaining open questions:

- Jedi first yes, we'd start with JEDI see the plan Ali laid out on how to proceed (also slide 11 in the deck).
- AdMob agreed we have to have a conversation with them to ensure this aligns with their plans.
 Ali/Nirmal might be closer to this and able to comment.
- Control 1st vs. 2nd the lever here is that we can decide where buyers buy during the ramp. For example, we can start w/ small % of GDN buying 1P and ramp from there.
- Market perception re: Google moving to 1P I think we're realizing we're already running 1P w/
 JEDI and folks are comfortable with that so that seems the logical path for transition. If we can get
 comfortable with that, there's no need for philosophical 1P vs. 2P discussions.
- Rubicon like offering we're not entirely sure that we should do this but if we did, we should
 make clear it's transitional and put an end date to it so it's easy to retire. We'll need legal advice on
 this in particular.
- Punishing Jedi pubs there's a chance I'm missing a nuance here but I don't see this as
 punishment at all. We're improving some inefficiencies of JEDI and the team believes this will be
 better for all parties involved. We are in full control how fast we move with the proposed setup. That
 said, I agree that the commercialization/handholding will be more involved with this option.

On Thu, Jan 10, 2019 at 7:10 AM Chris LaSala < chrisl@google.com wrote: ATTORNEY-CLIENT PRIVILEGED AND CONFIDENTIAL. @Chech, please advise on any legal concerns.

I just met with Bryan and a few comments/questions:

- If the primary concern we are addressing with option B is that we are worried about market perception of Google abandoning the 2P auction, we should seek the input of sales via GSL, namely Andy Miller and Dan. It isn't clear to me this is meaningful risk that can't easily be explained away by pointing to the complexity of the programmatic ecosystem being meaningfully different from a closed auction on O&O inventory. We should not ask Philipp this question on Friday unless his lieutenants have shared a POV with him, otherwise we risk him rejecting the entire idea.
- if we offer the Rubicon like offering to buyers, including GDN/DV360, we run the risk of harming our fair and transparent narrative given there will still be this 'black box' translation of a 2nd price bid to a 1st price bid. I'm not sure it is worth it, given our narrative to the market of why a pub should be OK with the removal of floors is because we are now operating in a clearly lit room. I am particularly uncomfortable with this option if the primary reason we are doing it is because we aren't confident that we actually *want* to move to 1st price (e.g. that we may end up losing money). If we need to run experiments to have more confidence that this is a good decision, I might suggest we delay until we are more confident instead of asking our partners to bear the burden of our discomfort.
- I am still uncomfortable with any segmentation that portrays opting into, and expanding the use
 of, Jedi as punishment.

Thanks, Chris

On Thu, Jan 10, 2019 at 8:30 AM Bryan Rowley <<u>browley@google.com</u>> wrote: Nitish, Ali, thanks for the explanations. Much appreciated.

I'm happy to write-off option B2. The only reason that one made an any sense is that it bought us time. I believe offering a bid translation service is a better solution if our goal is to buy more time.

Option A does have the benefit of a consistent message and timeline for all pubs and for that reason there are still reasons it might be the best commercial option. It does involve introducing a 1st price auction to non-Jedi partners that do not currently have a 1P auction operating on their site and that means we have to announce to the market that we are moving to 1st price and we have less flexibility going forward.

Option B begins as a Jedi announcement which is softer than a full 1st price announcement and I believe rationalizing the Jedi auction environment is a good message. I do not believe moving to 1st price or removing 'last look' will be concerns to any pubs, Jedi or otherwise. The problem comes with the Unified Floors. Pubs will likely see this as negatively impacting their monetization strategies. We have counter arguments to minimize their concerns. Still, my number one fear with this approach is that some pubs will consider abandoning Jedi until 1st price applies to all.

Nitish mentioned this and I would like to hear more from other closer to the buy-side and our O&O business. Is there really a concern that our announcing 1st price would create enough confusion around our O&O auction strategies that for this one reason we should we considering another goto-market plan?

Other Questions:

Would we run a detectable 1st price experiment across non-Jedi pubs if we went with the Jedi
first argument? I don't think this would be a good idea. If we move forward with the Jedi scenario
1st price activity and unified floors should only apply to Jedi pubs.

- Would the 1st price logic hold for all AdMob Jedi partners? If yes, want to make sure the AdMob team does not feel this fact compromises their 2019 strategy.
- It was mentioned that we can control what percent of partner traffic is 1st price and what is 2nd price under-the-hood. Is that just for Google Demand? If an Authorized Buyer choses to bid 1st price, I assume, we will always honor that and by controlling the transition of Google demand we feel we can stay within the publisher tolerance range.

Bryan

On Thu, Jan 10, 2019 at 7:53 AM Nitish Korula <<u>nitish@google.com</u>> wrote: Thanks, Ali.

Regarding the internal transition period and the "bid translation service", I think your description is fair and we're aligned.

Regarding announcement / commercialization, I think that one thing that might help is if we discuss the pros and cons of the two approaches:

Option A: Announce all publishers moving together. The advantage of this (if I can speak for the sellside sales / GTM team) is that it's an easy commercialization story, and we're not perceived as 'punishing' our biggest / most strategic publishers by forcing them to be early adopters of a drastic change (even though yes, they already have a 1p auction for some buyers).

Option B1: Announce that we're moving Jedi, don't say anything about other publishers immediately, and then announce the other publishers later this year (possibly even moving the other publishers later this year, with some use of the bid translation service). I think articulating the advantages of this would be helpful.

- (a) I believe you mentioned there's less risk of market confusion about why Google says 2nd price is good for Search / O&O, but 1p is good for third-parties. AI(Rahul / Bryan / Tobias): Prepare draft messaging on this, as was discussed in the big review yesterday
- (b) If we were to see bad outcomes (in terms of revenue, or advertiser value, or anything else), it's easier to understand and potentially address these for Jedi publishers than for others. Would you say that's accurate? (A partial counter-argument to this could be that we care relatively less what happens to the not-so-strategic publishers, but of course there are some large non-Jedi publishers, and that doesn't say anything about advertiser value on this large chunk of inventory.)

Ali / Nirmal, could you confirm these are accurate, or modify accordingly? Are there other advantages of Option B1 that I'm missing?

Option B2: Announce the change for all publishers, but start with Small Business publishers. There's not much advantage to this as far as I'm aware, but if we want to minimize risk, it allows us to experiment with some publishers that are relatively less likely to push back. I don't think anyone really has this as a first preference.

Thanks, Nitish

On Thu, Jan 10, 2019 at 2:34 AM Ali Nasiri Amini amini@google.com wrote:

As Nitish mentioned we met and discussed an alternative option. I prefer to give a bit more background and explain the proposed option in a different way. I do not consider it as running a

second price auction "under the hood" and in fact I think that view is problematic. Here is how I like to explain the option:

Background:

Google runs a weird unorthodox cascade of auctions for Jedi publishers which is not a first-price or a second-price. While ultimate decision of who wins is made in a first-price auction, Google runs a second-price auction for GDN, DBM, & RTBs. Then the winner will be sent to compete with others in the main first-price auction. Buyside team agreed to this setup as a transient solution when we started Jedi (as GDN and DBM ultimately prefer to compete in the main auction as we have already built an advanced bidding tech to compete in any type of auctions). The main beneficiary of the current setting are "dumb" RTB buyers as the sub-auction allows them to participate into a first-price auction without building the technology needed for first-price bidding. Furthermore, "Last-look" is a feature that provides more incentives/advantages for such RTB buyers (and it helps GDN/DBM to some extent too). However, sell-side is under pressure as "last-look" is considered as an unfair advantage that sell-side gives to its own demand. Given all this, the business logic of Jedi needs to be "rationalized" and move into a steady-state.

With this background, buyside recommendation is to think of a two-step approach.

Step (1): Move to a sell-side setting that we have two reasonable options for pubs:

- (A) Regular Adx second-price auction
- (B) Rationalized/New Jedi: one consolidated transparent first-price auction

Step (2): Deprecate (A) and consolidate all pubs into (B) using all the learnings from step (1).

Finishing Step (1) in 2019 is a significant achievement and has many advantages by itself. Note that at the end of the step (1), we are almost done for step (2) from eng perspective. When and how to execute step (2) can be determined later this year as we get more real data from step (1).

Now on how to do Step (1):

- 1) Communicate to pubs regrading only step (1) in Feb. We explain that for Jedi queries, we force all Adx buyers (RTB, GDN, DBM) to transition into the main first-price auction as we will deprecate internal second-price auction and "last-look" and consolidate everything into one transparent 1st-price auction. In this communication we avoid any discussion on 1st price vs 2nd price. We just focus on new Jedi as a fair solution for all buyers and all sellers by having one consolidated transparent auction.
- 2) We will set a transition period that during this transition period, Adx buyers (RTB, GDN, DBM) should gradually move out of the second-price auction. Sell-side team will build the tech that is necessary for buyers to gradually transition into the new Jedi world. Additionally, sell-side offers a basic "bid translation tech" for "less sophisticated" RTB buyers to ease their transition into a first-price bidding. DBM and GDN and other advanced RTB buyers will use their own technology and use the transition period to adjust their algorithms.

On Wed, Jan 9, 2019 at 8:58 PM Nitish Korula <<u>nitish@google.com</u>> wrote: ATTORNEY-CLIENT PRIVILEGED AND CONFIDENTIAL. @Chech, please advise on any legal concerns.

[Keeping to a small-ish group to focus the discussion]

Hi all,

Rahul and I met with Ali, Tobias and Nirmal this evening, and we have a proposal to mitigate potential adverse impacts, at least to a reasonable extent.

Roughly speaking, we can run a second-price auction 'under the hood', which would give us the ability to have the auction look like a first-price auction from the publisher point of view, but deliver outcomes that are similar to status quo. If we set tolerance thresholds (e.g. we're willing to lose up to 4% revenue, or 4% advertiser performance degradation), we can have some traffic fraction go through the new bidding logic, and some traffic fraction go through this second-price-under-the-hood flow which delivers status-quo like outcomes; by adjusting the fraction that flows through each path, we could bring the outcome to within our tolerance thresholds. (It's important to note that from the publisher's PoV, 100% of traffic will be first-price.)

If we can take that approach, my sense is that the risk of not being able to "launch" (from the publisher PoV) in 2019 is relatively low. We may end up moving 100% of traffic on some / all publishers completely to the new flow only by 2020, but that would be entirely behind the scenes. And we would be comfortable that any adverse impacts in 2019 would be relatively small.

Even if we align on this, though, we still have a question about whether to launch to all publishers at one shot in 2019, or to take a phased approach. I'm asking some questions here to help gain clarity on where we align, and where the remaining sticking points.

@Bryan, Chris and others: If I understand correctly:

- (A) Your primary concern with a cohort-based approach is the commercialization cost, and that's particularly true if there's a long gap between the first group and the last one. Would you be ok with a world where (for example) Cohort 1 was somewhere between ~July 7th and July 31st, and the remaining publishers are right after Labor day?
- (B) See question 2 for buyside folks below.

...

@Ali, Tobias and others:

- (1) In a world where we have the second-price auction under the hood for some traffic fraction as needed, would you be comfortable with officially 'launching' to all publishers (from their PoV) in 2019, even if the 100% migration of bidding only completes in 2020?
- (2) Even if the answer to (1) is 'yes', my understanding (please correct me if I state this incorrectly) is that you prefer to not *announce* "Ad Manager is moving 100% of traffic to a first-price auction" right away, because of the implications on search and other O&O. Would you be ok in a world where we announce "Jedi publishers have this strange / broken / inefficient hybrid auction, and we want to make it better" in February, launch to that cohort in July, and then (potentially depending on how that message lands) say "We've heard great feedback from the market, and we will be extending this to all publishers" slightly later, launching to them in September?

Thanks, Nitish

Chris LaSala / Managin	g Director, Global Programmat	ic Sell-Side Solutions / 212-565-8801 (offi	ce
Tobias Maurer	Senior Product Manager	tmaurer@google.com	

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