



Changes to Ad Manager auction

ACM Review
2019-01-11



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Executive Summary

Objective: Seeking approval to launch auction changes in July w/public announcement Feb 6 '19

- Product changes: Simplification of Ad Manager by (1) moving AdX to a 1P auction* (2) unifying reserve prices across all indirect demand channels (tags & programmatic) (3) removing 'last look' for AdX
 - *Sell-side messaging (AdX publishers/buyers)*: increased simplicity, fairness and transparency
 - *Buy-side messaging (DV3/ GDA advertisers)*: leverage existing bidding optimizations to adapt
- Major risks: (1) revenue drop for some pubs (2) negative pub reaction (loss in ability to set per-buyer floors) (3) negative adv reaction (DV3 spend share ↑ on AdX)
- Mitigants: (1) fine-tune Google bidding to improve yield on strategic pubs (2) tight comms. for reserve price changes / spend shift concerns
- Contingency plan: Buy additional time to fine-tune bidding by either (1) delaying launch or (2) continuing 2P auction under the hood for Google demand (not externally visible)

Google

*This change will also extend to Admob in July '19 and AdSense later in H2'19 for consistency

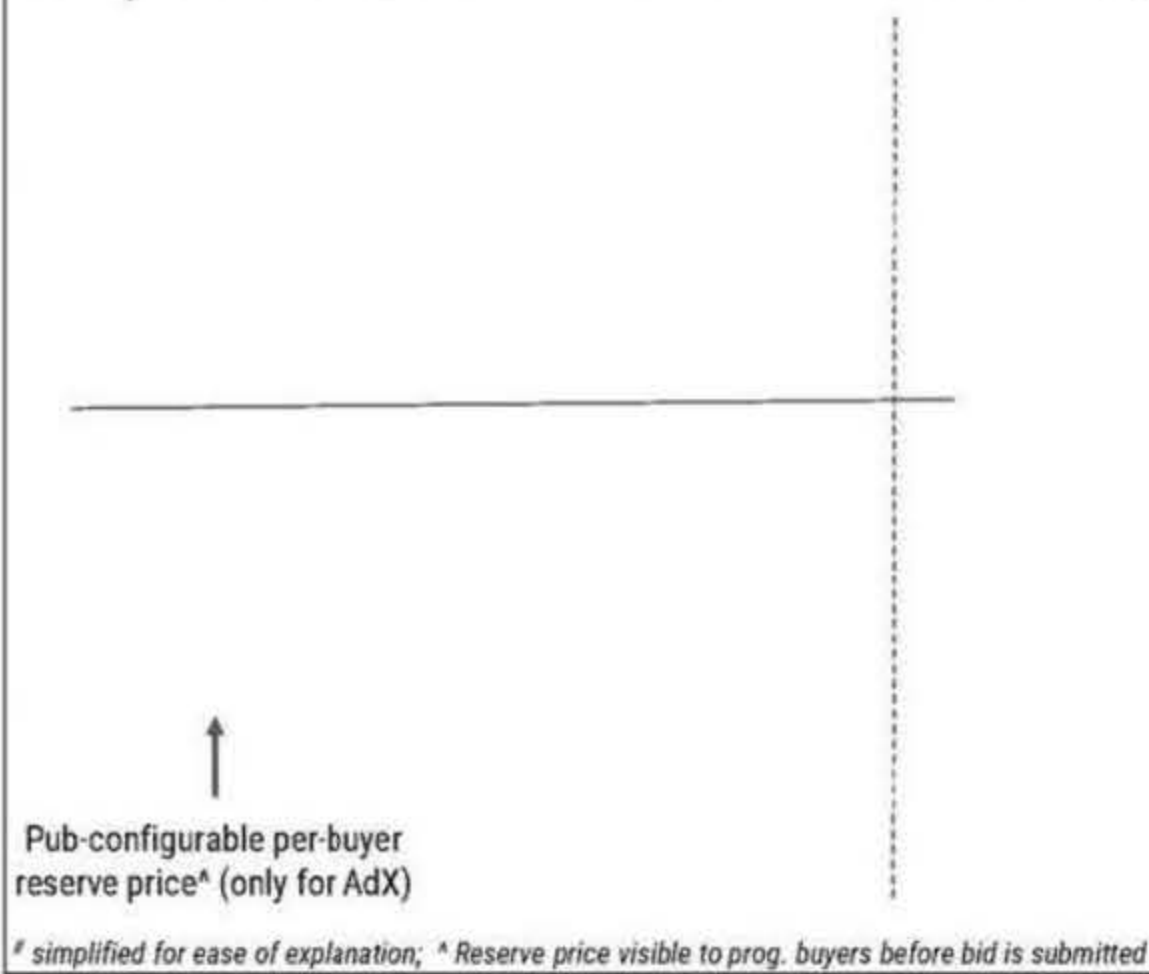
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Migration to a 1P auction will also be extended to Admob and AdSense inventory -- focus of this deck is on Ad Manager for simplicity

The auction changes improve AdX competitiveness (Direct access to the 1P auction, unification of reserves reduces prevalence of price-based incremental inventory on 3P SSPs)

Aim to announce on Feb 6, 2019 ahead of IAB ALM, and provide 5+ months advance notice before full launch to allow adequate transition time for buyers and pubs

Unified Auction changes simplify the auction and equalize access across indirect demand



AdX has always run a 2P auction; Ad Manager introduced the third stage (unified auction) with the launch of Exchange Bidding (EB), which is a 1P auction

As EB has grown, feedback from partners has been that Ad Manager auction dynamics is very complex and difficult to understand

DV3 and GDA can submit bids through all three indirect channels (remnant, AdX and EB), sometimes with different outcomes (due to differences in floor prices/ auction dynamics)

Differences in access across different channels include

AdX and EB have visibility into remnant price before they submit bids (commonly referred to in market as 'last look')

AdX bids are 2P, while EB bids and remnant line items pay what they bid into Ad Manager; AdX bids sometimes lose out to EB bids, even if the buyer has a higher willingness to pay

Only AdX is subject to pub-configured ad manager reserves; most other SSPs have basic reserve-price functionality, but pubs typically higher floors on AdX compared to other SSPs, sometimes resulting in price-based incrementality of inventory on other SSPs

Unified Auction changes simplify the auction and equalize access across indirect demand

Current: Complex multi-stage auction[#] with differential access for diff. indirect channels



Post-launch: Single, fair Unified auction[#] for all indirect demand



[#] simplified for ease of explanation; [^] Reserve price visible to prog. buyers before bid is submitted; * Changes in red, benefits to AdX partners in blue, benefits for Google in green

Three big changes to the auction (right side of slide)

removing 'last look' for AdX and EB demand -- no visibility into remnant prices before submitting bids, ensuring fairer access for remnant

moving AdX directly into the Unified auction by transitioning to a 1P auction

unifying reserve prices across all indirect demand

Simplifies the auction and equalizes inventory access for Ad Manager publishers and buyers

Messaging for **Ad Manager partners** will highlight increased simplicity, fairness and transparency

	Simplicity: Enables focus on long-term value creation	Fairness: All indirect demand competes on equal footing	Transparency: Ensure fair auctions; gain better insights
Publishers	<ul style="list-style-type: none"> Easier to understand auction Reduced need to optimize floors (no bid-price discount) Central control of reserves across all indirect Removal of complex floor features 	<ul style="list-style-type: none"> No last look for AdX -- all indirect demand compete on equal footing 	<ul style="list-style-type: none"> Visibility into every Unified Auction bid
AdX Buyers	<ul style="list-style-type: none"> Easier to understand auction Aligns with Industry / 3P SSPs - reduced need to maintain different bidding set-ups 	<ul style="list-style-type: none"> Equal access across indirect (access to 1P auction, uniform floors) 	<ul style="list-style-type: none"> Visibility into highest other bid after the fact, to improve bidding Cleaner auction w/o clearing price games (pay what you bid)

Publishers have asked us to Listening to our customers:

https://docs.google.com/document/d/1S7vTZ95iHscfHgXN47FvjRpoWks-f_wTKTsI45IIlGpU/edit

Other SSPs have been shifting to 1P for the past 18+ months:

https://docs.google.com/presentation/d/1ICGglQSJjwNLDv4w3RrtGMKSn9ntFWJ8_A06NfgAjA/edit?ts=5c35140e#slide=id.g44b61876b0_0_584

Messaging for **Advertisers and Exchanges** will highlight Simplicity, Fairness, Predictable Outcome

	Simplicity: Inventory directly available in Unified Auction	Fairness: Same floor applies to all buyers	Predictable outcome: First price auctions
Advertisers	<ul style="list-style-type: none"> Instead of multiple, chained auction, all inventory now is offered in the unified auction 	<ul style="list-style-type: none"> Allows for more direct buying vs. complicated supply path optimization 	<ul style="list-style-type: none"> First price offers predictable outcome, Google buying tools have proven bidding mechanisms
Exchanges	<ul style="list-style-type: none"> Google no longer has a last look advantage 	<ul style="list-style-type: none"> No buyer disadvantaged by high floor that only applies to them 	<ul style="list-style-type: none"> AdX moving to industry standard

Google

Privacy & Security

Minimal comms required for GDA and DV3 advertisers

DV3 advertisers/agencies can opt in to automated bidding or optimized fixed bidding to adapt to new dynamics

40% campaigns by revenue already on automated bidding; 60% in fixed bidding

Of the fixed bidding campaigns, 99% opted in to Poirot

Huge incremental investments in further improving these bidding optimizations, which will improve performance across all SSPs

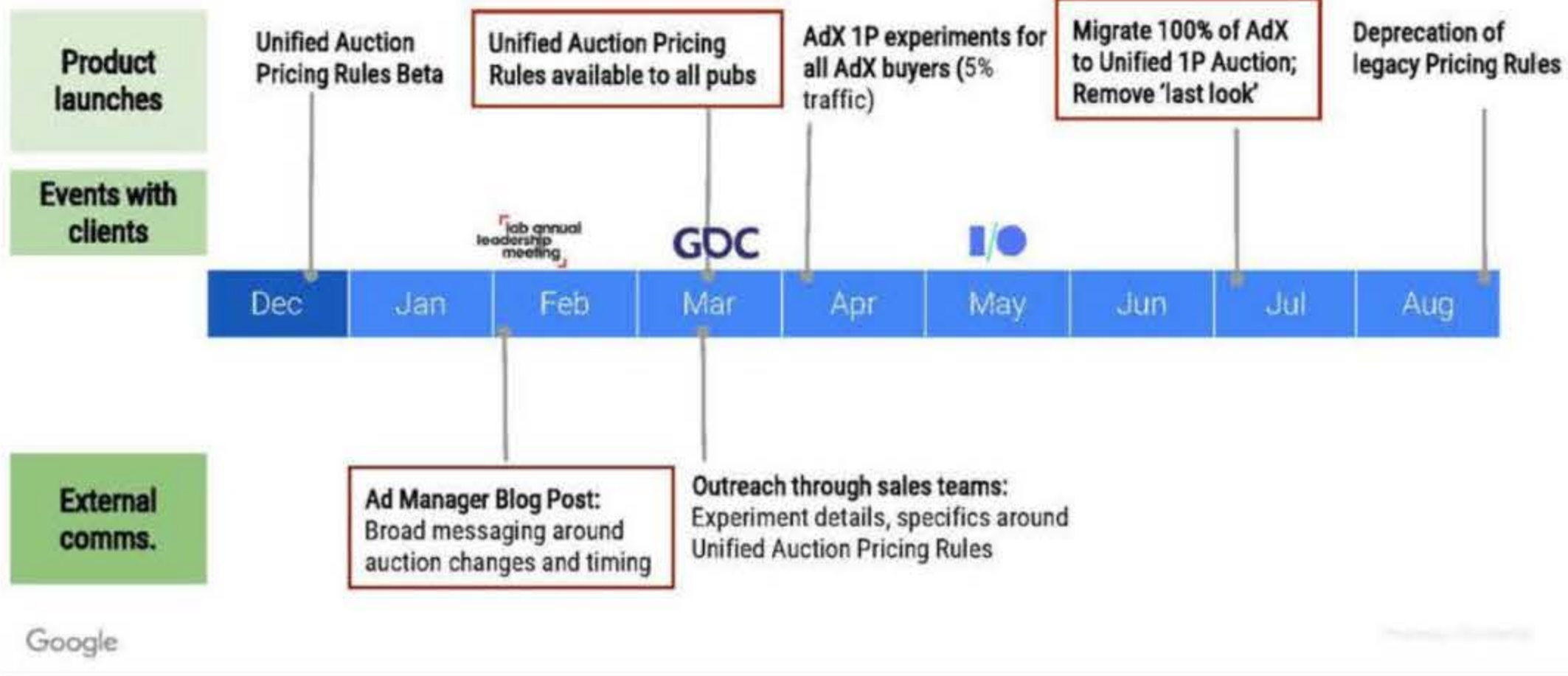
Migrating all pubs together in Jul preferred approach, to reduce commercialization complexity

WIP

	Option A (Rip the band-aid): Migrate all pubs over in July	Option B (gradual ramp-up): Jul Alpha, Sep Beta, Q1'20 GA
Advantages	<ul style="list-style-type: none"> Simpler GTM effort: One-time commercialization with no publisher opt out 	<ul style="list-style-type: none"> Additional time to address unknown unknowns/ new issues, prior to full launch
Costs/ Risks	<ul style="list-style-type: none"> Risk of bidding models not ready/ bugs/ unknown unknowns 	<ul style="list-style-type: none"> More frequent pub touchpoints & objection handling Increased auction complexity for buyers until full launch Alpha/Beta may not show true impact of full launch to help us fine-tune bidding
Mitigant/ Contingency	<ul style="list-style-type: none"> Delay launch to Q1'20 Continue running 2P auction for Google demand under-the-hood 	<ul style="list-style-type: none"> x

Changes to be announced before Feb '19 IAB ALM event, and implemented by Jul'19

WIP



Seeking to announce in early Feb and begin external experiments ~2 months later in early April
Legal has advised

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Redacted - Privilege

Launch carries commercialization risk, but can be mitigated

Potential risk	Level	Mitigant	Contingency plan
A: Not launch-ready by Jul'19	High	<ul style="list-style-type: none"> Close tracking of progress; stagger non-critical changes (eg. AdSense migration) 	<ul style="list-style-type: none"> Delay launch to Q1'20
B: Drop in yield for some pubs, with no ability to opt out	High	Closely monitor transition metrics and fine-tune Google bidding, if <ul style="list-style-type: none"> Total pub payout < -3% Payout on top strategic pubs < -2% Fraction of top strategic pubs with >5% payout drop > 5% RevIntel to guide pubs in setting floors that don't compromise yield	<ul style="list-style-type: none"> Delay launch to Sep'19 (additional time to fine-tune bidding) Continue 2P auction on Google demand under the hood for more flexibility
C: Negative reaction to reserve price changes (loss in ability to set per-buyer floors /extension to remnant)	High	<ul style="list-style-type: none"> Tight comms: highlight convenience of centrally managed floors (across indirect), reduced need to fine-tune individual floors in 1P auctions (no bid-price discount) Extend buyer blocks and advertiser floors to restrict specific buyers/ prevent channel conflict Invest heavily in optimizations to improve publisher yield 	<ul style="list-style-type: none"> Extend differential buyer floors/ opt-out for remnant demand, if pressured

Features we will offer to pubs to mitigate loss of ability to set per-buyer floors (Risk C):

We will offer advertiser-floors across AdX and EB to manage channel conflict

We will offer buyer-blocks in Protections UI so that pubs do not need floors as a tool for managing bad ads

"Unified" floors allow pubs to finally set floors on not just AdX, but EB and remnant to centrally manage all floors in 1 UI

Invest heavily in optimizations to improve publisher yield

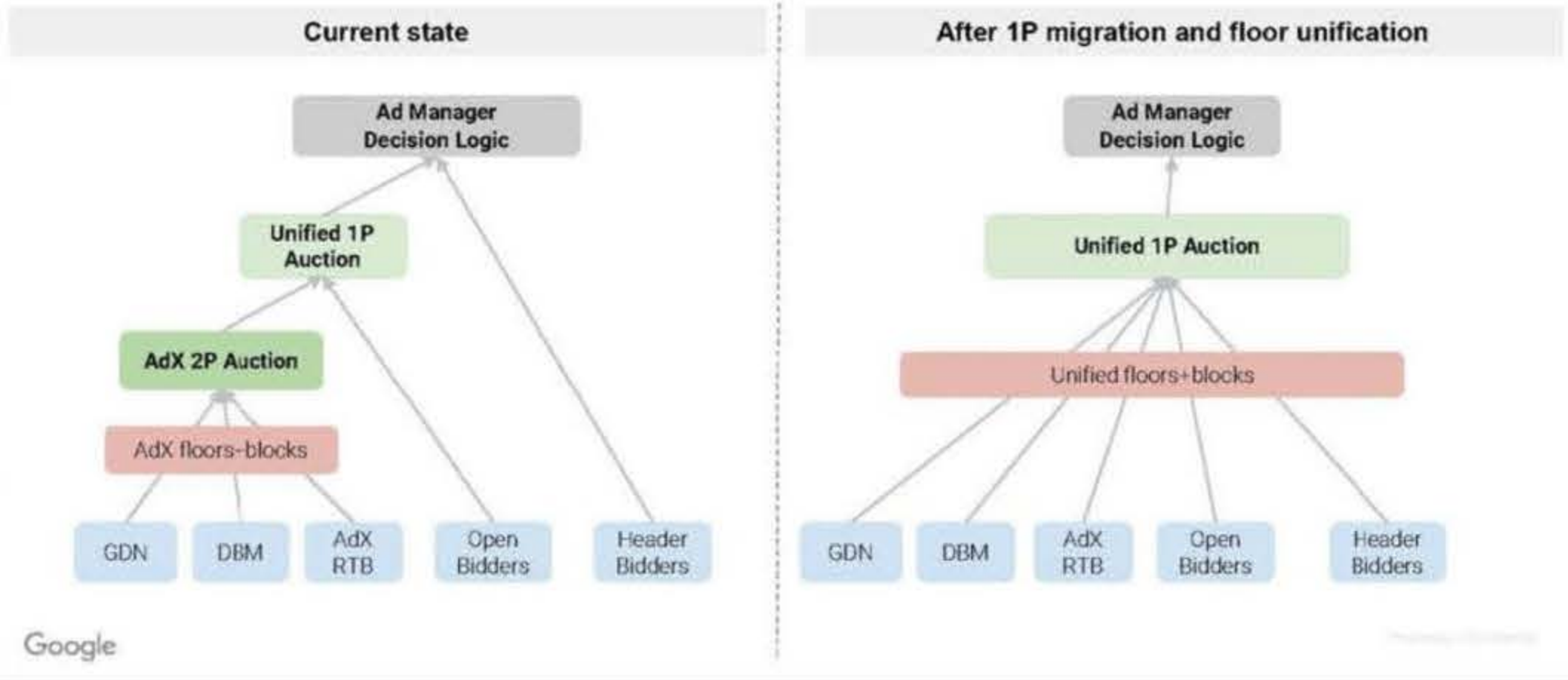
Launch carries commercialization risk, but can be mitigated

Potential risk	Level	Mitigant	Contingency plan
D: DV 360 spend further shifts to AdX due to lower/uniform floors, impacting perception as cross-platform product	Medium	<ul style="list-style-type: none"> Tight comms highlighting increased efficiency of DV3 buying as a result of uniform floors across SSPs 	<ul style="list-style-type: none"> Consider offering HOB capabilities to third parties also
C: Insufficient time for AdX buyers or Google to adapt to 1P bidding	Low	<ul style="list-style-type: none"> Announcement ~5 months in advance of full launch; 3 month experiment phase allows bidding fine-tuning Other SSPs already run a 1P/hybrid auction -- most buyers at least have basic 1P bidding systems 	<ul style="list-style-type: none"> Delay launch to Sep'19 Extend temporary service for buyers that intelligently converts a 2P bid to 1P
F: Negative impact on Google buy-side and/or net revenue	Low	Monitor transition metrics and fine-tune bidding if <ul style="list-style-type: none"> GDN & DBM revenue < -1% CPD/ROI for GDN adv < -1% Google net revenue < -1% 	<ul style="list-style-type: none"> Delay launch to Sep'19 (time to fine-tune bidding) Continue 2P auction on Google demand under the hood for additional time flexibility

Appendix

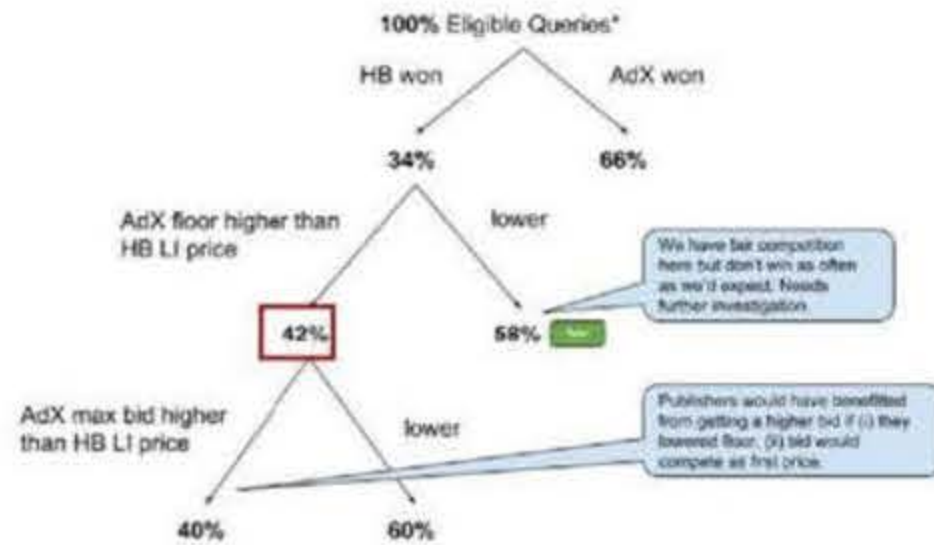
Analysis and Industry Trends

1P migration will be leveraged to unwind high AdX floors, and give it an equal footing vs 3P SSPs



Pubs list inventory on multiple SSPs, and floors tend to be higher on AdX

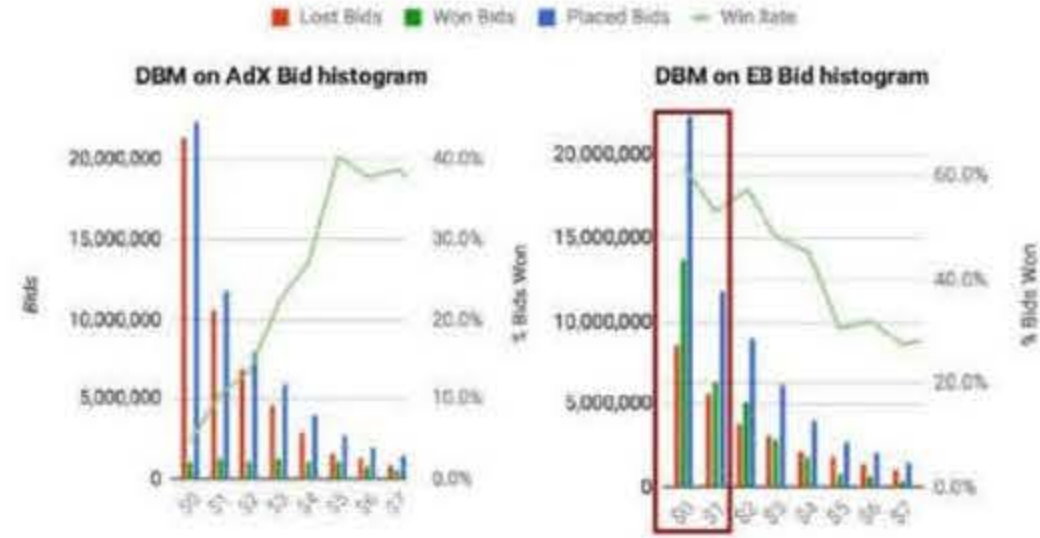
AdX vs HB: 42% of HB won queries have a higher AdX floor than the HB LI price



* Queries where any header bidding line items submitted an eligible bid, even if the top competing line item with the auction was not HB.

Google

AdX vs EB: DBM's EB transactions concentrated on low bid values (low DFP floors, exempt from AdX/RPO floors)



Can assume the histogram for Header Bidding looks similar to EB

The industry has been moving to 1P over the last year

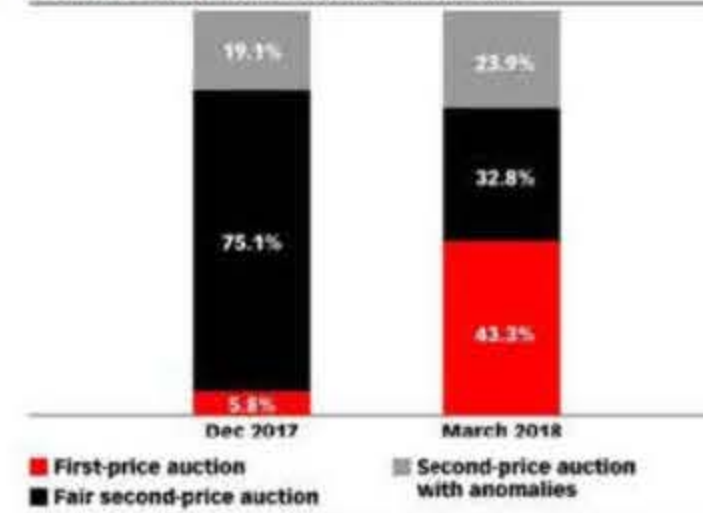
Most SSPs already run 1P auction on segments of inventory

- Index: Primarily 1P (began testing Nov 2017)
- PubMatic & OpenX: estimated 40-60% 1P
- Rubicon: 1P "on all header bidding auctions" (Dec 2017)
- Appnexus: Mix of 1P and 2P, chosen by AN with "Bid Optimizer"

Many DSPs are ready to handle 1P/2P mix

- "We are seeing 25% to 30% on a daily basis closing on the first price,"
 - Lewis Rothkopf, GM of supply at MediaMath
- "For a sophisticated bidder, it could provide an advantage."
 - Marc Grabowski, SVP at Criteo

Digital Ad Impression Share Among US Supply-Side Platforms (SSPs), by Auction Type, Dec 2017 & March 2018
% of total impressions analyzed by Getintert



Note: represents activity on the Getintert platform, broader industry metrics may vary
Source: Getintert, April 30, 2018
237466 www.emarketer.com

Given state of industry, we aim migrate AdX/Admob/AdSense to a 1P auction aggressively (6 month notice), without a publisher or a buyer control/opt-out

Google

Sources:

1. <https://www.emarketer.com/content/nearly-half-of-programmatic-impressions-are-sold-through-first-price-auctions>
2. <https://rubiconproject.com/insights/thought-leadership/greater-transparency-choice-in-auction-dynamics/>
3. <https://wiki.appnexus.com/display/adnexusdocumentation/Bidder+Transparent+Auction+FAQ#BidderTransparentAuctionFAQ-Whodeterminesiftheauctionisfirstpriceorsecondprice>
4. <https://adexchanger.com/platforms/big-changes-coming-auctions-exchanges-roll-dice-first-price/>
5. <https://digiday.com/marketing/programmatic-advertising-readying-first-price-auction-era/>

Sellside comms

Announcement plan

2 Phase announcement

1. Announce 1P auction change
 - Feb 6 - Blog post to announce change leading up to IAB ALM and have teams prepared to discuss with top customers at ALM meetings
2. Communicate unified floor change directly with publisher partners
 - Mar ? - Maximize awareness of floor behavior changes amongst key publisher accounts before ramping up 1P auction testing

Alternative - Flip the order of customer notification

1. Discuss 1P auction change with top customers at IAB ALM
 - Feb 14 - Announce 1P auction change on blog
2. Communicate unified floor change to publisher customers
 - Mar ? - Maximize awareness of floor behavior changes amongst key publisher accounts before ramping up 1P auction testing

1. Announce 1P auction change

Headline: Simplifying programmatic buying with first price auctions in Google Ad Manager

- Pre announce auction change before any testing to show transparency to buyers

Timeline:

- Jan 30 onwards - Train sales teams buy and sell
 - Feb 5 - Key customer conversations to give them early notice
 - Feb 5 - Brad Bender or Jason Bigler - Pre-brief journalists
 - Feb 6 - Blog post announcing 1P auction change
 - Feb 11 -12: IAB ALM customer meetings (share detailed comms 1:1)

Publisher Messages:

- As part of the move to a unified Google Ad Manager platform, we are simplifying our auction mechanics by having all demand compete in a single first price auction.
 - **More insights** - With this change we will provide new bid landscape data for publishers to make better decisions
 - **More time** - Were cutting operational complexity for publishers. By removing multiple auction types, and last look for Authorized Buyers in Ad Manager, it will make managing yield simpler and faster.

2. Communicate unified floors to publisher partners

Headline: Simplifying pricing management with unified floors in Google Ad Manager

- Pre announce unified floors before ramping up 1P test to maximize publisher awareness

Timeline:

- Early Mar ? - Train sales teams buy and sell
 - Mar ? - Key customer conversations to give them early notice
 - Mar ? - Update HC content,

Publisher Messages:

- More time - Unified price floor simplify inventory management with floors that apply across all buyers, network, DSP, Exchange. Now publishers don't have to manually adjust pricing across multiple platforms, unified price floors in Ad Manager set minimum pricing across all demand sources.
- Minimize concerns about no agency/DSP level floor pricing. Use Bidder level blocks instead.
Support advertiser level floors

Blog outline

Today, publisher ad ops teams spend too much time trying to manually optimize their inventory pricing across multiple platforms in an effort to maximize yield. This situation is not sustainable. To help publishers, we believe that we must reduce the complexity in programmatic buying.

Over the last few years we've been working to help publishers create sustainable growing businesses with advertising. Last year we took a major step toward simplifying our publisher ad platforms with the launch of Google Ad Manager, a unified solution for publishers to manage their ad revenue. Today we're announcing our plans to continue simplifying our systems by transitioning to first price auctions across our systems.

This change will not happen overnight, that's why we're taking this step to be transparent about our plans. We will be following up directly with our advertiser and publisher partners with more details in the coming months. This change will radically simplify inventory pricing for publishers, provide additional price transparency for advertisers and publishers, and bring all programmatic and direct buyers into a single unified first price auction.

Buyside comms

Buy-side Reactive Q & A for AdX Changes

What is changing in AdX and how does it affect DV360 buyers downstream?

1. Simplifying their auction implementation to allow for what they call "Unified Auctions".
Previously, AdX had different levels of auction that were available to different buyer types with different floor prices. Due to daisy chaining of demand, this resulted in some inventory being bought and resold inefficiently through other SSPs. In addition, Google had a last look advantage, which with this change is going away.
2. Moving to first price, in reaction to industry events. Over the past 2-3 years most exchanges have moved to first price auction, partly driven by the emergence of header bidding)

Google

Graveyard -- old slides

Executive Summary

**To be
updated****Objective: Update on upcoming product changes and launch plan.**

- Simplified 1P Ad Manager auction to be launched in July '19, by unifying auction and reserve prices across all indirect demand (AdX, Open Bidding and Remnant)
- **Simplicity, transparency and fairness** to be highlighted as key benefits for pubs and AdX buyers
- DV 360 and Google Ads partners can leverage existing bidding optimizations to adapt to new dynamics
- External announcement to Publishers and AdX Buyers on Feb 6 (prior to IAB ALM event)
- Complex commercialization due to risk of revenue drop for some pubs, loss in publisher functionality (in setting differential reserve prices for different demand) and potential launch delays
- Close collaboration with gTrade team to fine-tune Google bidding (to improve yield on strategic pubs), and tight comms narrative to mitigate risk; Contingency plan includes delaying launch/ running an internal 2P auction under the hood for Google demand for additional time flexibility

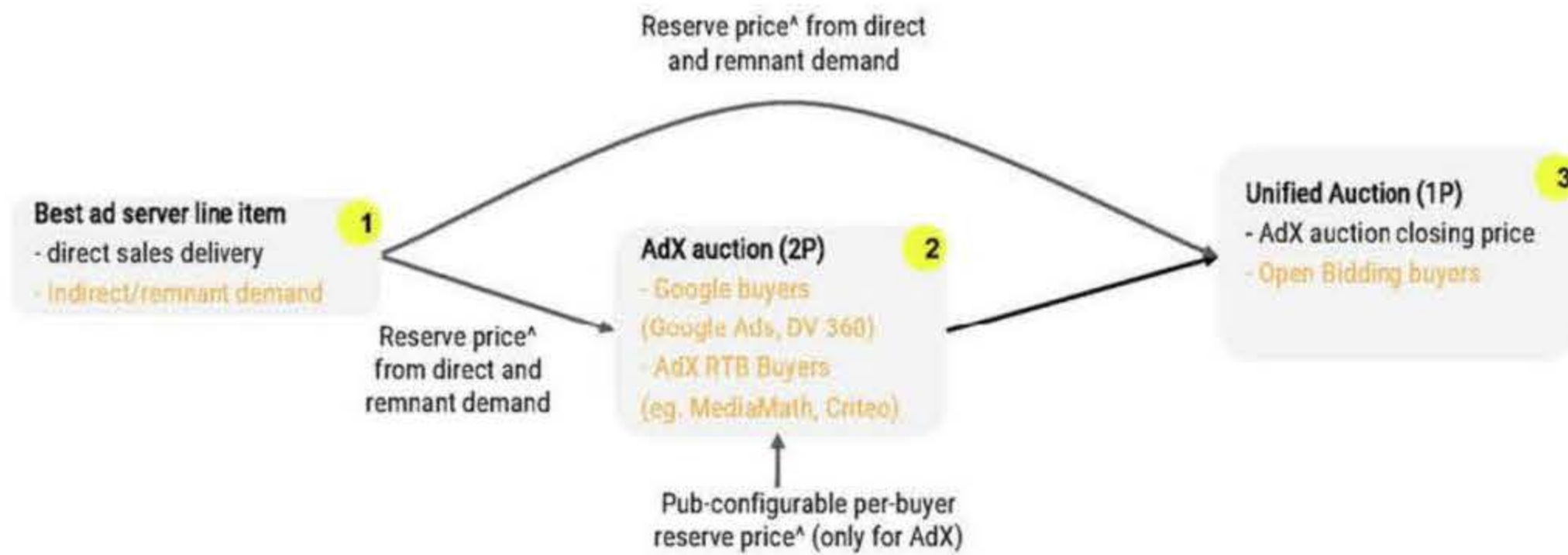
Google

**This change will also extend to Admob in July '19 and AdSense later in H2'19 for consistency*

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Ad Manager runs complex multi-stage auction with differential access based on channel

Current Ad Manager auction dynamics[#]



[#] simplified for ease of explanation; [^] Reserve price visible to prog. buyers before bid is submitted;

AdX has always run a 2P auction; Ad Manager introduced the third stage (unified auction) with the launch of Exchange Bidding (EB), which is a 1P auction

As EB has grown, feedback from partners has been that auction dynamics is very complex and difficult to understand

DBM sometimes submits bids through all three indirect channels (remnant, AdX and EB)

Differences in access across different channels

AdX and EB have visibility into remnant price before bidding -- 'last look'

AdX bids are 2P, while EB bids are 1P

Only AdX is subject to pub-configured ad manager reserves

Executive Summary

To be completed after all slides are completed

- AdManager, Admob and AdSense will move to a 1P auction in 2H'19
- Motivation: Migration will be leveraged to unify floor prices across AdX, Open Bidding and remnant demand (incl. Header Bidding) and improve inventory access on AdX
- Risks: (1) drop in yield on some pubs (2) negative pub reaction to loss of functionality and yield maximization strategies

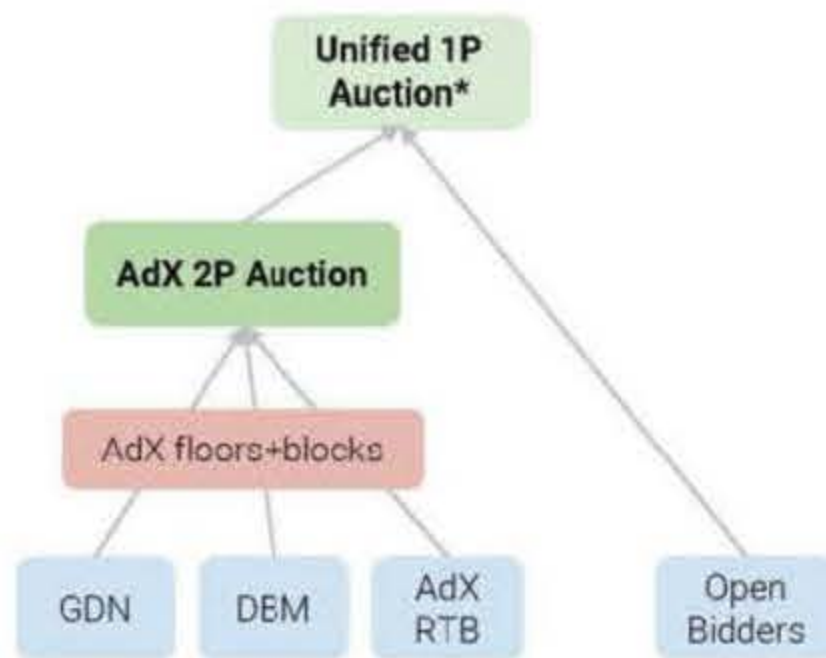
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- Ask: Approval to begin external comms & outreach: Feb 6 blog post leading up to IAB ALM

Google

Motivation

Current state



* Remnant line items are also exempt from AdX floors and blocks currently.

Google

Internal - Increase Google Demand's win rate on Ad Manager, AdMob and AFC Inventory

- **Improve AdX competitiveness:** Clearing price of internal AdX 2P auction not always competitive in the unified auction. Google Ads would rather bid into a 1P auction when competing against exchange and network bidders.
- **Ensure fair access across channels:** Opportunity to leverage migration to 1P to unify cross-channel Ad Manager floors (across Jedi, AdX and remnant LIs) to allow AdX to compete at the same floors as 3rd party exchanges.

External

- **Bolster AdX transparency narrative:** Opportunity to position Google as transparent (no clearing price "games", bid data transparency)
- **Embrace industry standard:** All other SSPs have moved part of their inventory to a 1P auction

What is changing

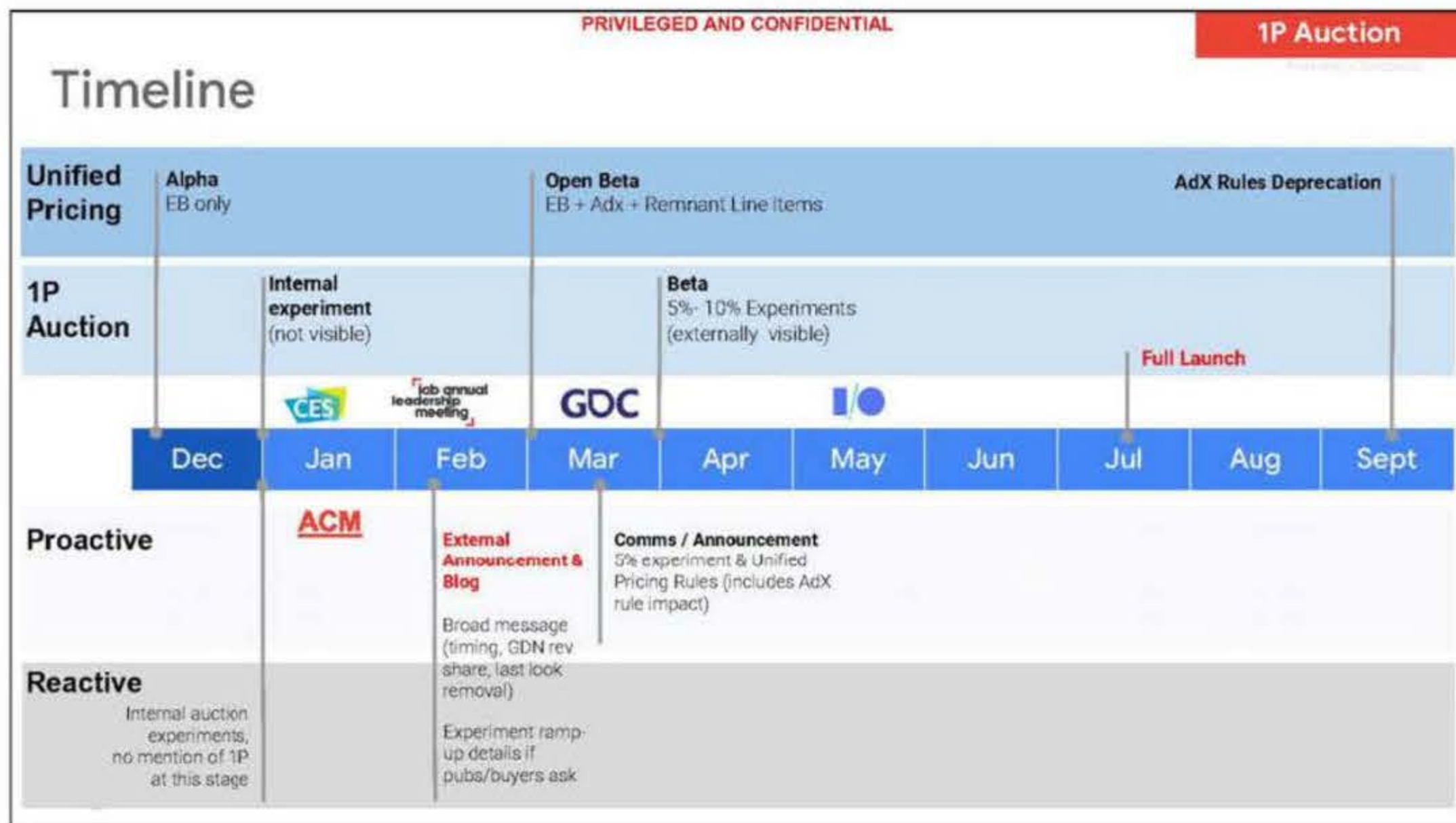
	Current State	After Migration
Auction Dynamics	AdX auction on 2P; Open Bidding (EB/NB) on 1P Google and 3rd Party Demand bid 2P into AdX	All auctions on 1P Google and 3rd Party Demand bid 1P into AdX
Ad Serving Dynamics	AdX auction considers reserve price from DFP when establishing 2nd price - AdX has 'last look'	No "last look". All bids compete on price and not bid or reserve price can set the clearing price.
Bidder Blocks	Not available today; buyer blocks feasible by setting high floors	New bidder blocks in Protections UI
Floors (aka "Pricing Rules")		
Unified Floors	Floors apply to AdX auction only	Floors apply to AdX, EB/NB, and Header Bidding ¹
Buyer Floors	Ad Manager pubs can set buyer-level floors	Buyer floors deprecated
Advertiser Floors	Advertiser floors apply to AdX auction only	Advertiser floors apply to AdX and EB/NB ²

1. \$0 CPM line items, house line items, and SDK mediation will be exempted to mitigate serviceability escalations

2. Advertiser floors influence <1% of AdX revenue; incremental effort to extend to remnant is significant

Google

Product/Service/Feature



How would partner with pubs to help with flooring strategies

Timeline (tentative) :

<https://docs.google.com/spreadsheets/d/1STWHgEIQyfd3BokTm2FyRSjiCvwvePrSA4mEexnMTyQ/edit#gid=0>

Transition to

Unified Floors

On 2nd price traffic, both Unified and Adx floors apply (highest is chosen)

On 1st price traffic, only unified floors apply

Recommendation is to create unified floor. Set them thinking about 1P auction already → lower than Adx floor (cause no YM use case anymore)).

If they don't, Adx rules will be ignored on 5% of their traffic

Messaging

	Publishers	3rd Party Buyers	DV360 Customers
Transparency	- All buyers opted in to bid sharing	- End confusion over floor mechanics - All buyers receive "min bid to win"	- End confusion over floor mechanics on AdX
Simplicity	- Same auction mechanics for AdX & EBs - Remove unnecessary complexity like buyer floors; managing yield simpler & faster	- Same auction mechanics for AdX & EBs - What you bid is what you pay	
Industry Standard	- All other SSPs on 1P	- All other SSPs on 1P	- DV360 already buys on 1P SSPs today
Floors	- Floors not needed for yield in a 1P world - Easily apply same floor to all demand sources	- Same floors for AdX / EB / NB	
Timeline	~ 6 months notice	~ 6 months notice; 3 months experiment period to fine-tune	~ 6 months notice; 3 months experiment period to fine-tune
Goog Spend Shift	N/A	N/A	<i>To do: how to communicate if spend shifts from 3PE to AdX</i>

Buyer Messaging

- **Fair access for all** - everyone will now compete in a 1st price auction
- **Fair floors for all** - when a publisher sets a pricing floor, the floor will apply uniformly to the Google auction, Open Bidders (including EBs), and header bidders.
- **Industry standard** - most other auctions are partially or completely 1P; Google is following the industry direction.

Google Ads

- Does Google Ads need message this change to its advertisers?
Back end change, probably no different than any other auction changes / optimization

DV360

- Already bidding on 1P auction on most other SSPs
- Messaging would be similar as one used when other SSPs made the move

Authorized Buyers

Better transparency

- What you bid is what you pay, eliminating confusion over floor price mechanics.
- All bidders will have access to the "min bid to win" to tune bidding algorithms

Publisher Messaging

As part of the move to a unified Google Ad Manager platform, we are simplifying our auction mechanics by having all demand compete in a single first price auction.

- **More insights (transparency)** - With this change we will provide new bid landscape data for publishers to make better decisions
- **More time (simplicity)** - We're cutting operational complexity for publishers. By removing multiple auction types, and last look for Authorized Buyers in Ad Manager, it will make managing yield simpler and faster.

Ad Manager

AdMob

AdSense

Risks and Mitigations

Risk	Likelihood	Mitigations (Technical & Comms/PR)
A: Drop in yield: Some pubs may experience yield impact from migration, with no ability to opt out	High	Coordinating closely with gTrade team to ensure yield on strategic pubs is maintained
B: Potential negative reaction from pubs due to changes to floors (loss in floor functionality/extension to header bidding)	High	Prepare narrative re: difficulty in yield optimization (using floors) in 1P auctions; introduce bidder blocks instead for the other use cases; Highlight convenience of managing floors uniformly in a single UI
C: Pubs could use loopholes to eliminate impact of Unified Floors	Medium	XX - house ads, \$0 remnant line items, guaranteed line items
D: Buyers may complain about needing to adapt to 1P bidding	Low	Allow buyers to experiment with 1P bidding before migration; Lean on fact that other SSPs already run a 1P auction. Could provide a service to help buyers set their 1st price.
E: Delays in eng. work, affecting July deadline	High	Close tracking of progress; stagger some non-critical changes (like AdSense migration to 1P to H2)

Google

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DV3 & GDA will adapt existing bidding optimizations to new dynamics

- Most other SSPs have already migrated to a 1P/hybrid auctions (industry standard) -- prior bidding optimization features have helped partners adapt to these market trends
- DV 360 partners can opt into Automated Bidding available to ensure inventory won at best possible price irrespective of the auction dynamics
- DV 360 Fixed Bidding campaigns can also leverage optimizations that apply appropriate discount factors to intelligently modify bids to adapt to the new auction dynamics
- **How do we handle**
 - **DV360 partners not opted into Poirot?**
 - **Risk of more DV3 spend shifting to AdX**
 - **Messaging for DV360 3P SSP partners?**
 - **Google ads partners?**

Google

Minimal comms required for Google ads advertisers

DV3 advertisers/agencies can opt in to automated bidding or optimized fixed bidding to adapt to new dynamics

40% campaigns by revenue already on automated bidding; 60% in fixed bidding

Of the fixed bidding campaigns, 99% opted in to Poirot

Huge incremental investments in further improving these bidding optimizations, which will improve performance across all SSPs

Budgets have already been shifting from 3P SSPs to AdX over 2018 -- this change could trigger a further increase, but we'll lean on the incremental investments in improving bidding algorithms to highlight increased budget efficiency