## PRIVILEGED & CONFIDENTIAL

## Hi Sissie and Sagnik

As part of the migration to AdX first-price auctions, we are giving up a significant advantage Google has retained over the past few years, namely, last look. Last look allowed us to beat header bidders (and other remnant line items) as long as our bid value is above the header bidder (HB) bid. To see how this works, in the second-price world, suppose Adwords submits a bid of \$5, Criteo submits a bid of \$2 to the AdX auction and the HB bid is \$3, Adwords will win this auction and pay \$3 to the publisher. Note that \$5 is Adwords's maximum bid while HB's \$3 is their actual willingness to pay; so this dynamic has provided a significant advantage to Adwords (and DBM, other RTBs). Without last look, AdX would be comparing the runner-up in the AdX auction (\$2, which what the publisher will actually receive from just the AdX auction) to \$3 and the header bidder will win.

As part of the first-price auction, even without last look, Adwords has a higher chance of being more intelligent against the header bidder (i.e., if our value is \$5 and we somehow knew the header bidder bid is \$3, we could bid \$3.01), but we will still see a significant loss in efficiency since the HB bidder's bid can only be predicted using historical data and not known accurately.

The two most common reasons given to give up last look are: (a) it's perceived as unfair in the market and we have to give this up at some point and (b) the \$3 that the publisher tells us is the header bidder bid is actually not true - this is some boosted price that the publisher uses to price AdX demand (Adwords, DBM, RTBs) higher, and giving up last look will eliminate this. For instance, header bidder is willing to pay \$2, but the publisher boosts it by 50% before sending this number to the AdX auction to floor the Google demand is higher. Case (b) is supposedly prevalent, and publishers should have less incentive to do this in the first-price world without last look.

We haven't, however, (a) quantified how often this boost gets applied and what the impact is today (c) how likely it is that the publishers will remove this boost (d) what would happen to Adwords and DBM demand once this boost goes away. A more problematic issue is that if this boost continues to exist in the first-price world, header bidders will have a significant advantage over Google demand (i.e., our willingness to pay is compared to a boosted HB's willingness to pay).

As we get closer to the migration date, we wanted to bring this to your attention as a possible risk that Adwords and DBM demand could be significantly disadvantaged during Q4 if these boosts continue to exist or get manipulated in ways that end up being suboptimal for Google demand.

Please let us know if you have thoughts or concerns around this. Happy to provide more details as needed.

**Thanks** 

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