

# Header Bidding

When online advertising hit its stride in the 2000's, DoubleClick "ad serving" service became the premier technology used by publishers to configure their website's ad space. With overwhelming market share, this technology continued to grow and balloon into a massive organization. In 2007 it was purchased by Google. Doubleclick was making \$300 million in revenue at that point, primarily from the publisher technology. Doubleclick for Publishers, or DFP, is a program used by major publishers across the world to set up the targeting schemes advertisers demand from their publisher partners (see Figure 1).

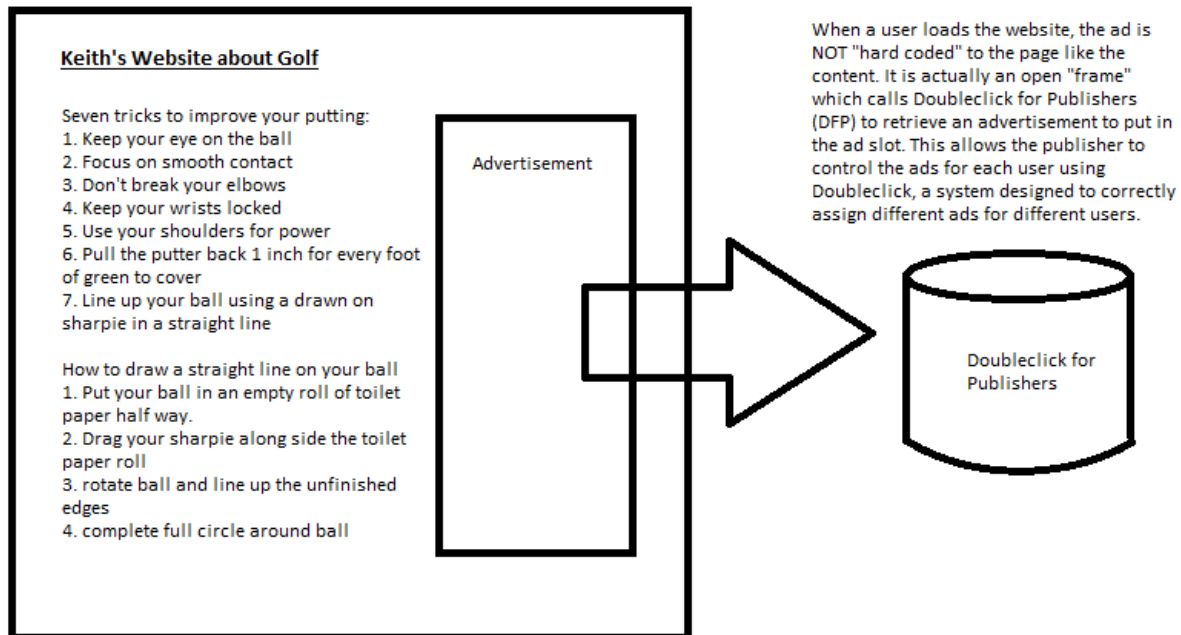


Figure 1: DoubleClick Set Up

With the advancements of real-time bidding (see 'RTB & Programmatic Media' White Paper), DFP would allow the publisher to sell the ad on the 'Ad Exchange' via Doubleclick AdExchange (AdX). This is the ad exchange product produced by Google for publishers to use to sell their ads in real time with very strong results. Although AdX is not the only exchange in the market. There are several other competitors to the Doubleclick exchange which publishers can use.

AdX integrates seamlessly with the DFP. This is not surprising, because they are both produced by the same company and can build the technology into the same program. But, AdX is not the only ad exchange on the market. Many other technology players have built exchanges, such as AppNexus, Index Exchange, Rubicon, Pubmatic, Mopub, Smaato, OpenX. These systems do NOT integrate as seamlessly into DFP. In the below chart they are the ‘other networks’.

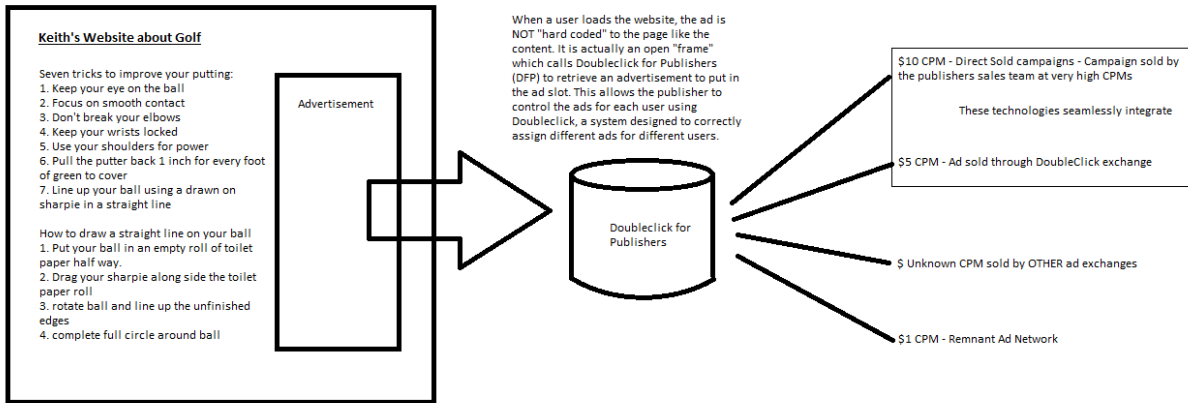


Figure 2: DoubleClick Set Up with Other Networks

Because of Header Bidding, these other exchanges now seamlessly integrate with AdX, allowing the publisher to give these other exchanges equal opportunity to participate in auction for the ad space.

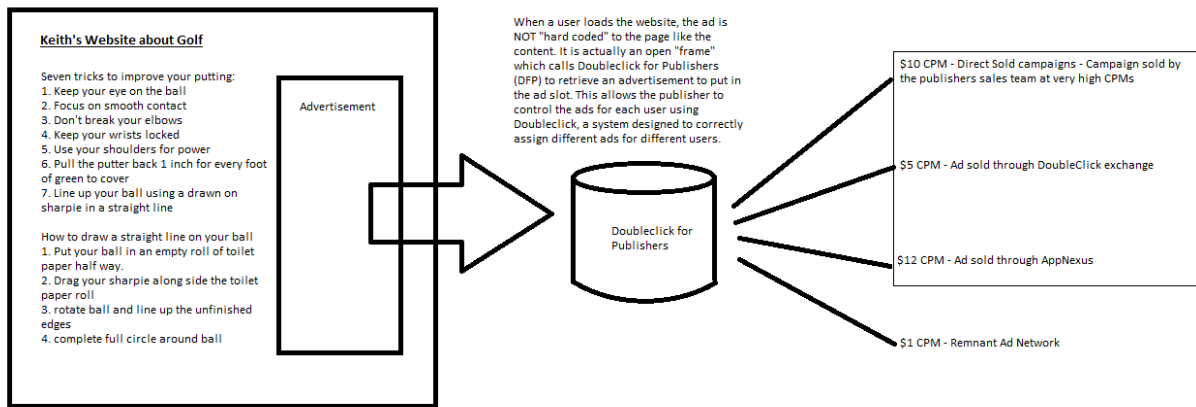


Figure 3

This is better for the publisher, as the fair competition across exchanges yields them higher CPMs. Because the auction happens in the header, there are some concerns on page load time for the user, but this can be mitigated with controlling the ‘latency’ of each partner participating in the header exchange.

## How does this impact Demand Side Platforms?

At the end of the day, the ones most effected by Header Bidding implementation are the Demand Side Platforms (see 'How the Ad Exchange Works' White Paper). The instantaneous auction the Demand Side Platform (DSP) responds to happens when the exchange makes the ad available while the user is loading the webpage. This is the definition of Real-Time bidding and the technology driving Programmatic advertising. Before header bidding, the SSP would only auction the ad when their slot was called in the publisher waterfall. Now, each time the page is loaded, the SSP makes the ad available for auction, even if it rarely is responsible for selling the ad unit. DSPs must 'listen' or ingest the ad calls from billions of web pages a day. With the advent of header bidding, now DSPs see 3x – 5x the amount of traffic they saw previously. This is an increased load on the need for servers to respond to all these available ad units. Many of the smaller DSPs are having a difficult time keeping up and, in the end, they are not able to see as many available ad spaces as the used to see.

For prospecting campaigns, or video campaigns, this is not a big deal. DSPs can still pick off the ads they want to target and typically get performance similar to what they saw before header bidding. But for remarketing campaigns, which are the money-makers in this business, these smaller DSPs are having a hard time 'listening' to enough inventory to compete with the larger-scaled DSPs on remarketing campaigns.

Another, buyer-be-ware change with the increased use of header bidding is the introduction of 'First-Priced Auctions'. Typically, an SSP would see all the DSP bids, award the ad space to the highest bidder, but charge them the PRICE OF THE SECOND HIGHEST BID. This was done to increase competition and buyer's interest in this technology as it first appeared. As a buyer this statement made this landscape very intriguing (although, still extremely complicated): "You will NEVER pay more than the second highest bidder is willing to pay for each individual ad space". It was in the interest of developing a perfect market. Well, things don't always work out like that.

Now, with the need for the exchanges to push the highest price to DFP through the header auction, they are now passing the price they receive directly from the DSP to the publisher. This is a 'first priced auction'. Or, if as the exchange would justify "we are taking the highest bid we saw to increase the publishers CPM". This is not a bad thing. It does question why we have the SSP layer at all. But, ignoring that statement, this is ultimately going to drive better pricing for the publisher who must exist for us to have the ad tech ecosystem at all!

But, with the increase in first price auctions, DSPs must now build into their technology the ability to identify first-priced auctions versus second price auctions and enable the buyer to correct their bid strategy to avoid getting hurt by this change in auction mechanics.

## **What does this mean for a Trading Desks?**

Well, to be honest, not much. If anything, it is a positive change in the ecosystem. Most trading desk practices license technology from the largest DSPs in the world who have no problem seeing all available bids, even with the increase in header-bidding auctions. Any reputable trading desk, would already have implemented advanced bidding algorithms to drive the strongest cost per acquisition. Whether or not they pass those savings onto their client is a whole other story, hence the shift for a more transparent partner like ProgMechs. In the end, not much changes with this introduction except that publishers are able to make more money through programmatic channels. With that, more publishers make more inventory available, allowing Trading Desks to see more inventory, increase performance, and continue to offer stronger, more 'high-impact' style ad units.