First-Price Auctions Are Driving Up Ad Prices

Ad buyers should adjust their bidding strategies

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Programmatic platforms are changing the way they price inventory, and their moves are driving up ad prices.

Automated ad auctions used to predominantly operate on a second-price basis, which is where the second-highest bid determines the amount of money the auction winner will pay. But many vendors have shifted toward using first-price auctions, which is where the highest bid determines what the winner will pay. This pricing transition was provoked by the increasing popularity of header bidding, which allows multiple platforms to simultaneously bid on the same inventory.

Ad agency Hearts & Science recently ran a test where—for three weeks in Q2 2018—it purchased inventory across 15 different publishers' websites using first- and second-price auctions. It found that CPMs were 59% higher in first-price than second-price auctions. From a publisher's perspective, this looks good because higher yield equals higher revenues. But from an ad buyer's perspective, this price bump suggests that in first-price auctions, buyers are paying more than they should.

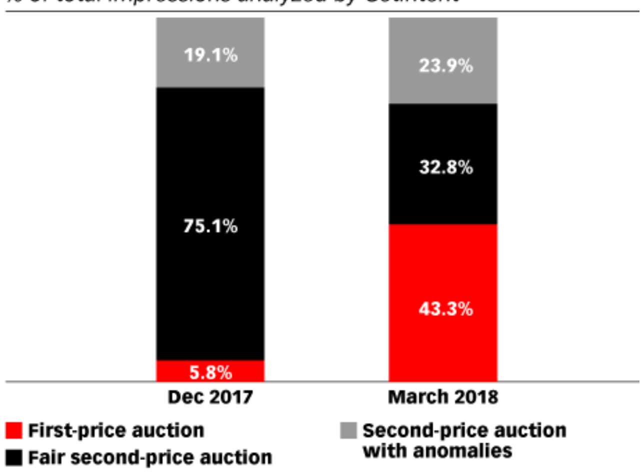
Hearts & Science also tested buying inventory with a demand-side platform (DSP) that uses bid shading, which is a technique that splits the difference between first- and second-price winning bids. Prices in this test were slightly lower than they were in the first-price auction test, but the CPMs were still 54% higher than those purchased through second-price auctions. Improvements in bid shading algorithms could further shrink the gap between first- and second-price CPMs, according to Ben Hovaness, executive director of digital activation at Hearts & Science.

The transition to first-price auctions was supposed to bring more transparency to programmatic bidding. For instance, in second-price auctions some supply-side platforms (SSPs) resorted to gamesmanship by raising their price floors after bids come in, which allows the SSPs to pocket extra money from advertisers and their DSPs.

In March 2018, the DSP Getintent analyzed 338 billion ad impressions across 39 US SSPs and found that about one-fourth of impressions were sold through second-price auctions that have these types of anomalies. Getintent also found that 43.3% of impressions were sold through first-price auctions. That figure was significantly higher than in December 2017, when just 5.8% of the 171 billion impressions analyzed were sold that way.

Digital Ad Impression Share Among US Supply-Side Platforms (SSPs), by Auction Type, Dec 2017 & March 2018

% of total impressions analyzed by Getintent



Note: represents activity on the Getintent platform, broader industry metrics may vary
Source: Getintent, April 30, 2018

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Hovaness notes that despite the calls for more transparency, advertisers still can't see the bids of other advertisers; DSPs cannot track bids from other DSPs; SSPs cannot see all the bids that other SSPs receive; and publishers often only have visibility into the winning bids that their SSPs send to their ad server. The industry's move to first-price auctions has left ad buyers wanting more information about the auctions in which they spend money in.