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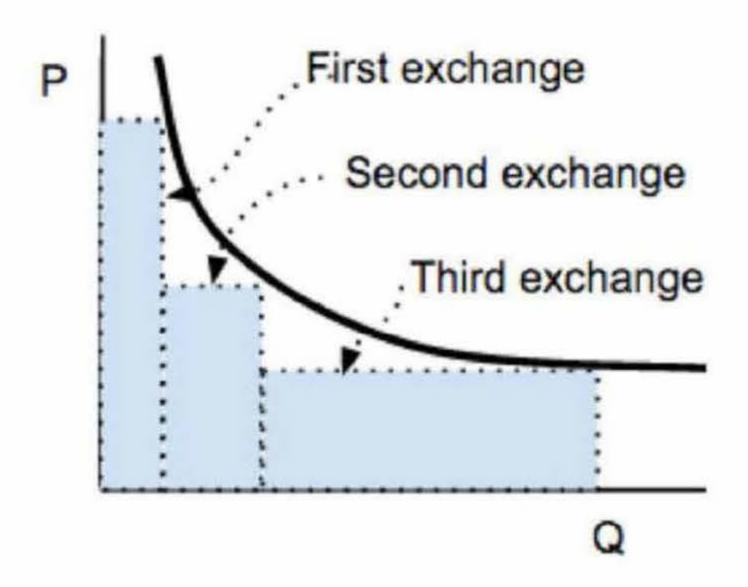
What is header bidding?

"Header bidding, also known as advance bidding or prebidding, is an advanced programmatic technique wherein publishers offer inventory to multiple ad exchanges simultaneously before making calls to their ad servers"

Digiday

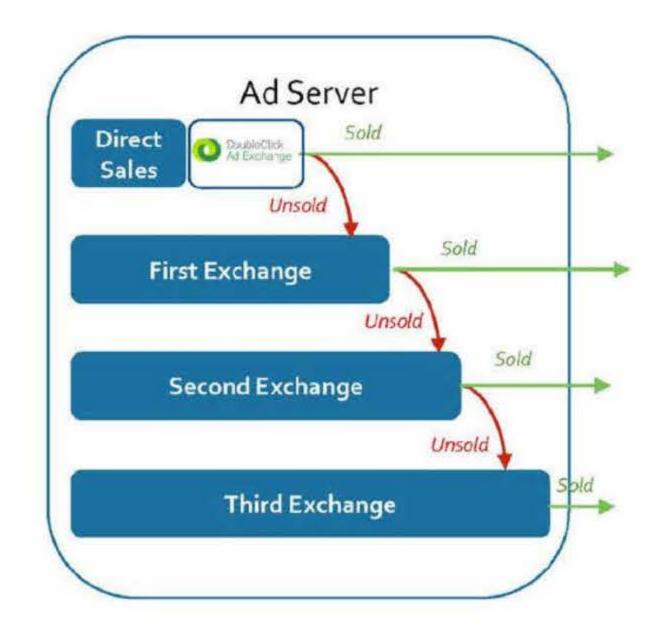
Source: "WTF is Header Bidding?", Digiday, August 2015

Ad tech before header bidding



Source: AdExchanger, January 2015

The Publisher Waterfall



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The Publisher Waterfall

Inefficient

Inflexible

Unfair advantage to Google

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Google's position before header bidding

Google's ad server is used by almost all publishers (77% market share in 2015)



Google's SSP was tightly integrated with its ad server, allowing preferential access to ad inventory before other SSPs



As a result, Google had a significant competitive advantage in the programmatic ad market



Source: Datanyze, ad server market share for top 1M Alexa-ranked websites, 2015

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Header bidding levels the playing field

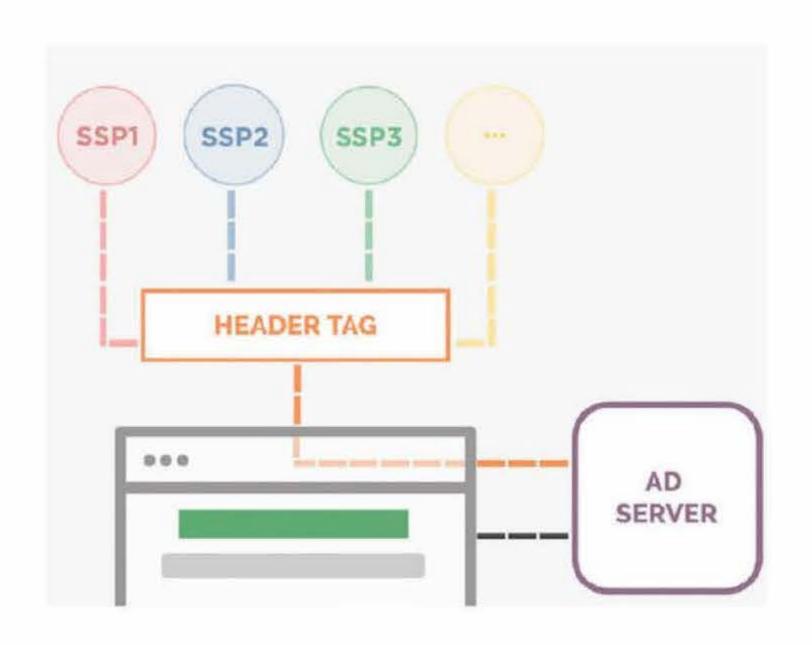


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() the Trade Desk

PALOOZA'17

How it is implemented



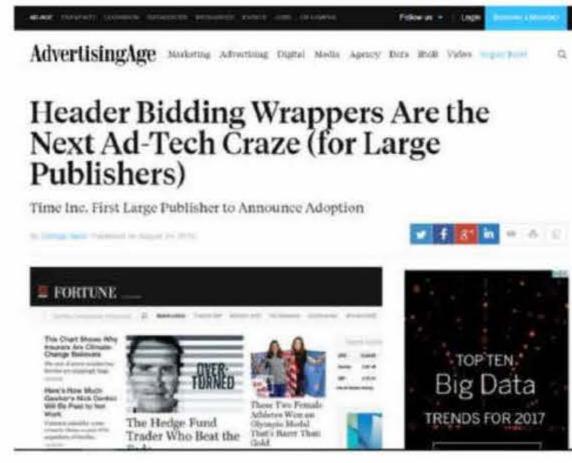
- Publishers insert Javascript code into webpage header
- Circumvents waterfall auction, enabling simultaneous bidding by multiple SSPs
- Lower barriers to entry for smaller SSPs

Source: OpenX

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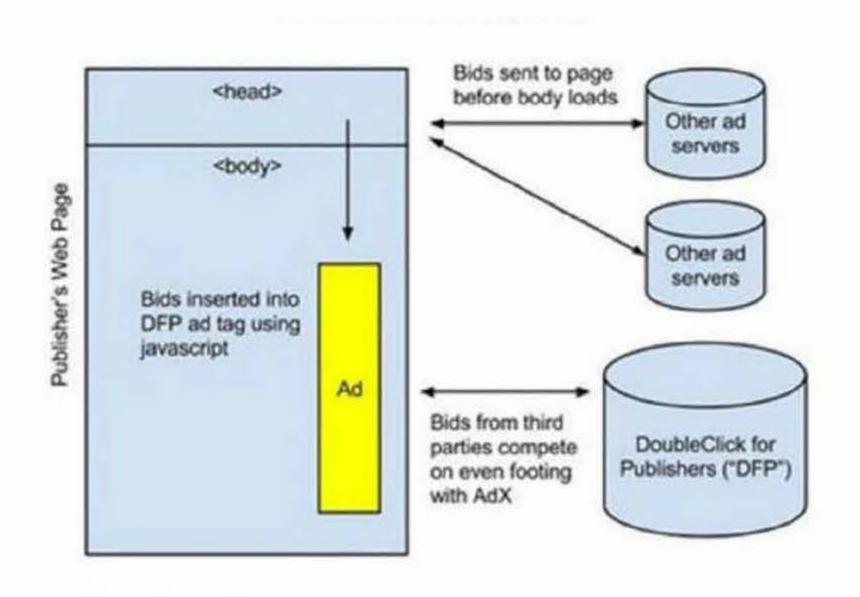
Wrappers accelerated header bidding adoption







How header bidding works



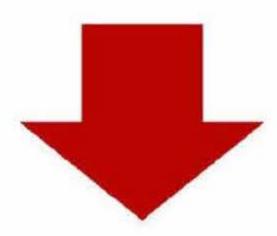
- · User visits a webpage
- Header code calls SSPs for bids before calling ad server
- DSPs simultaneously pass bids to ad server
- Ad server selects highest bid and serves the ad

Source: Business Insider, 2016

How header bidding impacts publishers



- Increases price
- Increases yield
- Higher revenue overall



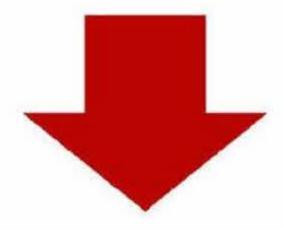
- Page latency
- Operational complexity of managing more SSPs

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How header bidding impacts SSPs



- Lowers barriers to entry
- Access to more inventory



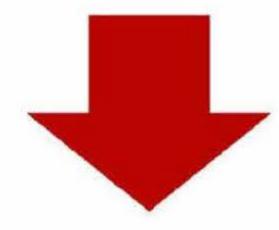
- Increases competition
- Publisher relationships are less sticky
- Higher infrastructure costs, lower margins

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How header bidding impacts DSPs



- Access to more inventory
- Access to higher quality inventory previously reserved for direct buys



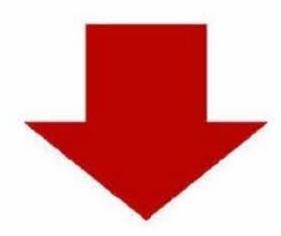
 Higher costs from submitting multiple bids for same impression

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How header bidding impacts advertisers



- Access higher quality programmatic inventory
- Better forecasts of available inventory
- Campaigns can have greater scale



Higher CPMs

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Why should we care about header bidding?



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() the Trade Desk



Commoditization of SSPs





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What's next?

- Header bidding was a client-side hack designed to loosen Google's control of programmatic inventory
- Not a long-term solution
- Google, Amazon, OpenX, Pubmatic, Rubicon Project known to be developing more efficient solutions for header bidding on the server-side





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Server-side header bidding

- Server-side header bidding gets us closer to realizing true potential of RTB
- Pages will load faster, publishers will see more bids and better yield
- Requires SSPs to collaborate on implementations
- Creates some complexity in cookie matching

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What does header bidding mean for TTD?

Short-Term:

- Duplicate bid requests will inflate QPS
- Transaction costs will rise
- SSPs will work with TTD to make the supply path more efficient

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What does header bidding mean for TTD?

Long-Term:

- TTD gains market share
- Smaller set of SSP partners; SSPs become more differentiated
- Programmatic advertising becomes more transparent
- TTD emerges as a stronger company at end state



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