Five Charts: The State of Header Bidding

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As the amount of advertising that is bought programmatically continues to rise, header bidding has become a go-to ad selling tactic for publishers.

Four years ago, publishers began using header bidding to sell their digital inventory. This revolutionized automated advertising because it allowed them to simultaneously offer inventory to multiple ad exchanges before making calls to their ad servers. Previously, programmatic publishers used an approach called waterfalling that passed bids sequentially from one exchange to the next.

The way publishers and advertisers approach programmatic has changed significantly since header bidding debuted. Here are five charts about the state of header bidding.

How Common Is Header Bidding?

Despite drawbacks like latency, header bidding continues to gain popularity. Among the internet's most popular 1,000 sites that sell programmatic ads, 79.2% used header bidding in March 2019, according to ad serving company Adzerk. As the chart below shows, header bidding is still incrementally gaining adoption even though a high share of publishers have been using it for a while.
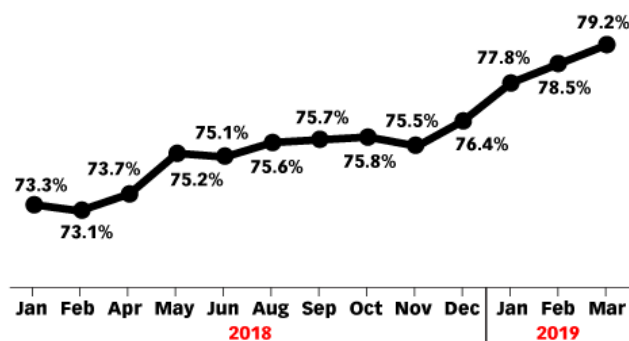
What Is Driving the Popularity?

Since header bidding allowed more exchanges to compete for the same inventory, publishers that adopted it saw the prices of their inventory go up due to increased competition. The downside was that making all those ad calls simultaneously slowed down page load times, since the original format of header bidding hosted the ad calls on users' browsers. The proliferation of ad calls that header bidding prompted also made it easier for publishers to inadvertently leak audience data. But the rising use of header bidding indicates that most publishers have found that the pros outweigh the cons.

Each year, the share of ad dollars that are transacted programmatically continues to increase. This year, US programmatic advertising will account for 84.9% of US digital display ad spending, or $59.45 billion. Double-digit growth will continue for the next two years, but it will decelerate as programmatic matures. US advertisers are expected to send more than four out of five digital display ad dollars via programmatic this year, so it's logical that publishers want to capitalize on that spending with header bidding.

US Programmatic Digital Display Ad Spending, 2016-2021

billions, % change and % of total digital display ad spending*
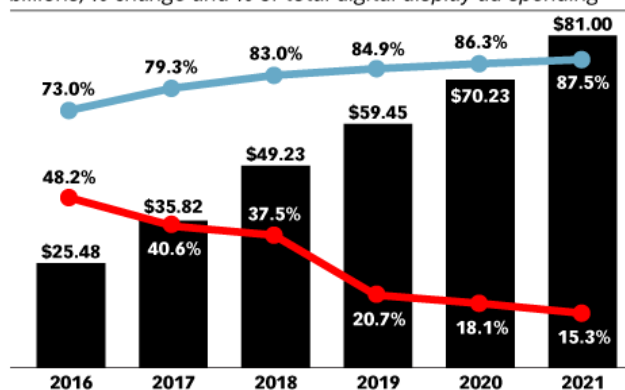
- ■ Programmatic digital display ad spending
- ■ % change ■ % of total digital display ad spending*

Note: digital display ads transacted via an API, including everything from publisher-erected APIs to more standardized RTB technology; includes native ads and ads on social networks like Facebook and Twitter; *includes advertising that appears on desktop/laptop computers, mobile phones, tablets and other internet-connected devices
Source: eMarketer, April 2019

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Is Header Bidding Common on Mobile?

In Q1 2019, the supply-side platform (SSP) PubMatic found that 29% of its header bidding impression share was served on mobile phones, up from 23% in 2018. PubMatic's study included both mobile web and in-app inventory. While mobile's share of overall header bidding impressions is growing, it is out of line with how people spend their time online.

Programmatic Ad Benchmarks Worldwide: Header Bidding Impression Share, Desktop vs. Mobile, Q1 2018 & Q1 2019

% of total via PubMatic's platform and % change

	Q1 2018	Q1 2019	% change
Desktop	77%	71%	47%
Mobile	23%	29%	97%
Total	**100%**	**100%**	**59%**

Note: represents activity on PubMatic's platform, broader industry metrics may vary; mobile includes apps and web
Source: PubMatic, "Q1 2019 Quarterly Mobile Index," May 15, 2019

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We forecast that US adults will spend 155.27 minutes on their mobile phones per day in 2019 compared with 118.37 minutes per day on their desktop and laptops. While people spend more time on their

phones than they do on their computers, most header bidding activity still occurs on desktop.
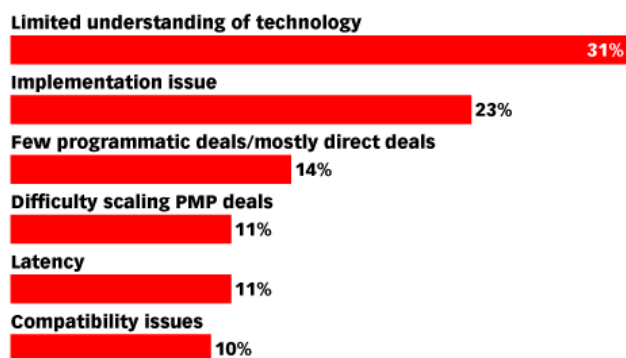
What Limits Mobile Header Bidding?

There is not an actual header within apps so the phrase "in-app header bidding" is a misnomer. Industry insiders instead call this practice "mobile bidding," "advanced bidding" or "unified auction."

Difficulties with server-to-server setups and software development kit (SDK) integrations have kept in-app unified auctions at bay. Also, a lack of understanding about the practice prevents more app publishers from adopting header bidding.

A July 2018 poll conducted by mobile ad network InMobi found that 31% of app publishers in North America said that a limited understanding of in-app header bidding technology prevented adoption. Additionally, 23% of respondents cited implementation issues.

What Is the Main Factor that Prevents App Publishers in North America from Using In-App Header Bidding?
% of respondents, July 2018

Limited understanding of technology	31%
Implementation issue	23%
Few programmatic deals/mostly direct deals	14%
Difficulty scaling PMP deals	11%
Latency	11%
Compatibility issues	10%

Note: among respondents not currently using in-app header bidding
Source: InMobi, "Header Bidding Research Report 2018: The Current State of Mediation and In-App Header Bidding," Sep 24, 2018
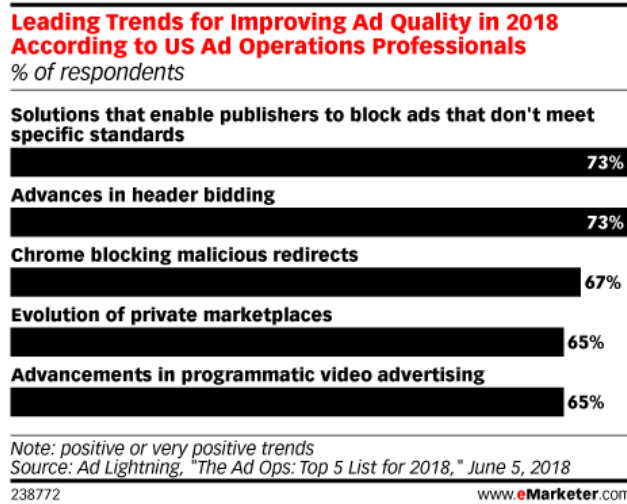242198   www.**eMarketer**.com

Can Header Bidding Facilitate Transparency?

The widespread adoption of header bidding has led to practices such as demand- and supply-path optimization that are designed to give ad

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buyers and sellers greater transparency into how much money ad tech intermediaries take from each transaction.

Although certain iterations of header bidding can make it easier for vendors to hide pricing tricks, ad operations professionals seem optimistic about header bidding's ability to bring greater transparency and ad quality to the space.

Leading Trends for Improving Ad Quality in 2018 According to US Ad Operations Professionals
% of respondents

Solutions that enable publishers to block ads that don't meet specific standards	73%
Advances in header bidding	73%
Chrome blocking malicious redirects	67%
Evolution of private marketplaces	65%
Advancements in programmatic video advertising	65%

Note: positive or very positive trends
Source: Ad Lightning, "The Ad Ops: Top 5 List for 2018," June 5, 2018

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According to a 2018 poll by ad monitoring firm Ad Lightning, 73% of US ad operations professionals cited header bidding as a top trend for improving ad quality.