

A black and white photograph of two women looking at a smartphone together. The woman on the left is holding the phone and looking down at it, while the woman on the right is looking over her shoulder at the screen. They are standing in front of a stone wall. The image is partially overlaid with a blue graphic element at the bottom.

inMOBI™

Everything You
Need to Know About

HEADER BIDDING & MEDIATION

SEPARATING FACT FROM FICTION

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1.

UNDERSTANDING HEADER BIDDING & MEDIATION

In the app monetization space, header bidding and mediation have become hot terms of late. While both concepts have been around for years now, a number of big names have jumped into the fray in 2018, claiming to offer best-of-breed in-app header bidding technology.

But does what they offer live up to the hype? In the world of in-app header bidding and mediation, how do you separate fact from fiction?

In this guide, we will review what mediation and header bidding actually are, and how these technologies can help you monetize your users.

2.

WHAT IS MEDIATION?

In short, a **mediation solution connects publishers with up to dozens of ad networks**. It helps publishers to more easily work with a wide variety of ad sources and inventory, all through a single self-service platform. A mediation platform is like a highway, allowing multiple ad networks to traverse through a single path to reach the final destination (your app).

Mediation platforms make it easier for app publishers to manage all of their SDKs and ad network publishers. Typically, it gives publishers a single pane of glass for overseeing all of their ad activity.

But, it's critical to know that **not all mediation platforms function the same way**. Some just make it easier for publishers to oversee and manage their waterfalls, while others facilitate Header Bidding.



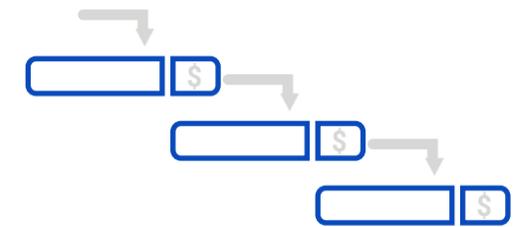
3.

EXPLAINING WATERFALLS: THE CURRENT DEFAULT IN-APP AD DELIVERY MECHANISM

Before we go into what these terms actually mean, it's helpful to go back to the beginning.

What's in place now, and how did it come about?

The vast majority of apps today utilize the waterfall methodology. Under such a system, once an app has an ad opportunity, the call goes out to a single ad network to bid on that inventory. If the ad network doesn't fill or respond with an ad, then another ad network is pinged to retrieve an ad. This process continues until an ad is found, all ad networks in the waterfall are exhausted, or the user navigates away.



Waterfalls were often an ad hoc approach. Publishers often started off working with just one or a few ad networks. As more options came on the scene, and publishers needed more buyers to compete for their scaling inventory, they needed a way to add these ad networks into the mix and manage them, which is how sequential waterfalls rose to prominence.

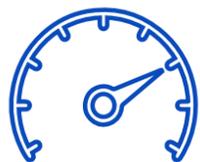
4.

PROBLEMS WITH WATERFALLS

As waterfalls have proliferated, issues related to this kind of setup became too big to ignore. Publishers typically find **three major problems with waterfalls:**



- ▶ **Price:** Many ad networks base their bids on historical data, even if they're potentially willing to pay more for a particular user, ad display placement, etc. As such, waterfalls often mean that **publishers aren't fully maximizing the ad revenue per individual user.**



- ▶ **Speed:** It only takes a few hundred milliseconds for one ad server to review all available inventory and make bids. But, in a waterfall, with all the passbacks, typically multiple ad networks are pinged separately and sequentially to review available options before all of an app's ad spots are bid on. This means it can sometimes take multiple seconds before an ad is found - and that doesn't factor in latency that occurs with certain buyers, or users without a strong Wi-Fi location. This may not seem like a lot of time, but **it can mean the difference between a good or bad user experience.** Users also often scroll through apps quickly, so **an ad spot that isn't filled ASAP could end up unfilled in the end.**



- ▶ **Opportunity Cost:** Because of the sequential nature of waterfalls, the first ad network that is able to meet pre-established requirements will win a bid. An ad network further down the queue may have been able to pay a higher CPM or offer better ads, but if they're too far down in the established sequence then **the benefits they can provide won't be realized by the publisher.**

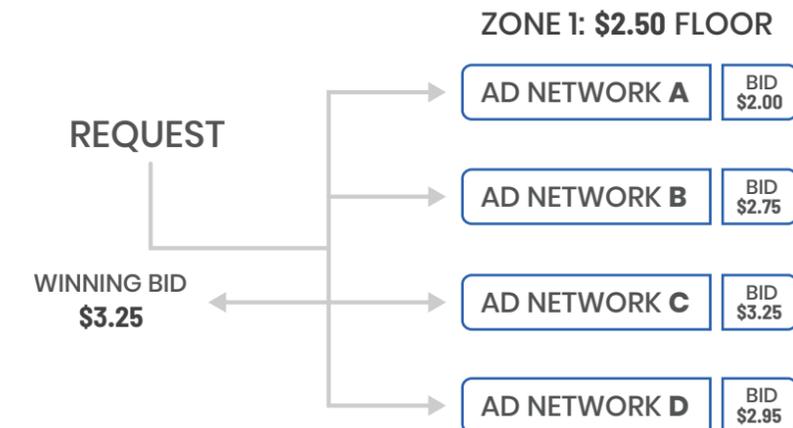
5.

WHAT IS HEADER BIDDING?

Header bidding describes a system through which publishers can make their inventory available to multiple buyers simultaneously, allowing them to send dynamic bids back to compete for their ad inventory. As soon as the header tag on a web page loads, buyers are sent bid requests and allowed to pass back a bid if they wish to buy the inventory. It attempts to solve some of the issues with waterfalls by **eliminating volume constraints associated with prioritization and inaccurate pricing that fails to factor in real-time bids.**

As its name implies, header bidding originated with browsers, and really took off in 2015 and 2016. In 2017, **more than 50,000 advertisers benefitted from mobile (i.e. browser) header bidding. Close to three out of every four publishers in the U.S. are utilizing header bidding for programmatic** on the browser side.

What is In-App Header Bidding? In mobile apps, since there is no physical header, header bidding works a little differently. In this environment, the same benefits of header bidding can be realized, but the ad server or mediation platform must be built in a certain way.



3 out of **4**
publishers in the U.S.
 are utilizing header bidding

50k

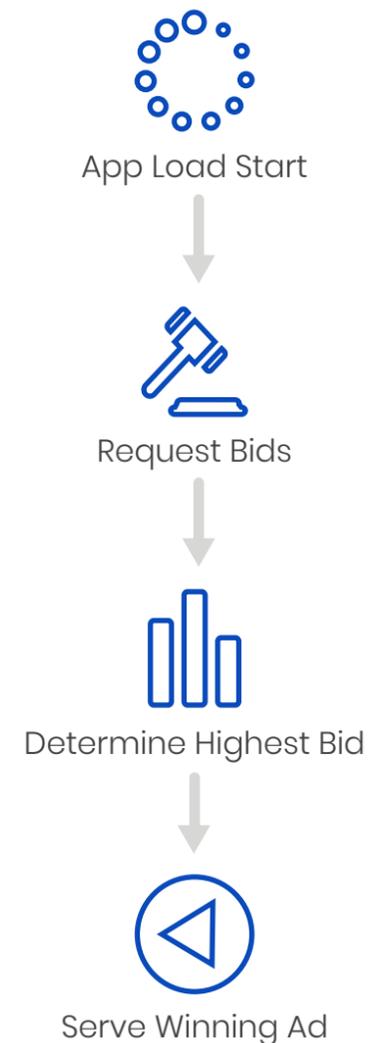
advertisers benefitted
 from mobile

6.

HEADER BIDDING VS. UNIFIED AUCTIONS

Header bidding was a short-term solution to a long-term problem. While header bidding allowed publishers to capture programmatic revenue on top of their waterfalls, **it didn't solve for the root and fundamental problems caused by waterfall technologies.**

As ad tech providers have rushed to capitalize on the header bidding craze, the initial purpose and goal was left behind. In most cases, in-app header bidding technologies sit alongside or atop of existing waterfall platforms, bringing programmatic demand into the waterfall into designated slots. Typically, a small subset of the buyers are included in the auction, the calls are made outside of the waterfall process, and then the winning bid is placed into the waterfall.



In contrast, a unified auction solves for the principle issues posed by waterfall systems, and the pain points associated with programmatic advertising. With a unified auction, all buyers are included and presented with the inventory in real time, getting the opportunity to send back a “bid” to be considered. **A unified auction replaces a waterfall system, using simultaneous ad calls and allowing programmatic buyers to use the real-time bidding technology that makes them so powerful and valuable.**

In a typical auction, like at an auction house like Sotheby's, only a select audience is invited to bid on a particular item. If no one bids, then the auction house will open up another auction until someone eventually purchases the item. This is not too dissimilar to a waterfall.

Unified auctions, in contrast, are more like eBay. Everyone in the world (theoretically) is bidding at the same time, and the highest bid wins.

7.

BENEFITS OF UNIFIED AUCTIONS

Unified auctions go a long way towards **addressing the three main concerns brought about by waterfalls.**

- ▶ **Price:** In a unified auction, with everyone bidding at the same time, **the highest bid wins.** This helps to guarantee that publishers get the maximum value for their inventory and users. And, considering that **advertisers will pay up to 100% more than average for critical inventory like a first impression,** the open auction format is key for app monetization.
- ▶ **Speed:** A unified auction helps to **identify the best, winning bid in milliseconds** – as opposed to seconds – which is crucial for the user experience.
- ▶ **Opportunity Cost:** Publishers can rest assured knowing that all buyers have access to their inventory, a chance to bid, and they are always receiving the best price for their inventory at all times.



8.

CONSIDER IN-APP HEADER BIDDING THE FUTURE

On the browser side, header bidding has by and large been quite successful. In 2017, approximately **70 buyers aimed to buy ad** placements on publisher websites through header bidding.

While many mediation platforms now offer a kind of header bidding for in-app ad placements, too often they are just a slight tweak on the classic waterfall. Just because “header bidding” is in place doesn’t mean waterfall’s problems disappear.

Only a unified auction can address all of the issues with waterfalls and unleash the full potential of header bidding for in-app environments.

Interested in further monetizing your app’s users and improving the user experience? Email Andrew Gerhart, InMobi’s VP of Publisher Platforms, at andrewg@inmobi.com to learn more about how unified auctions are right for you.



ABOUT INMOBI

InMobi is the world's largest independent mobile advertising platform that specializes in delivering the best ROI for mobile marketers. A mobile-first and mobile-only platform, InMobi has been pioneering the next generation of video ad experiences, deep-learning based optimization algorithms, and header bidding to deliver maximum value to advertisers, users and publishers.

InMobi's platform help brands, performance marketers and app publishers engage mobile users across different stages of their lifecycle, converting each mobile moment into an opportunity to drive engagement and revenue. Recognized by Fast Company as one of the 2018 Most Innovative Companies, InMobi reaches over 1.5 billion unique mobile devices worldwide and is redefining business models for the mobile ecosystem.

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