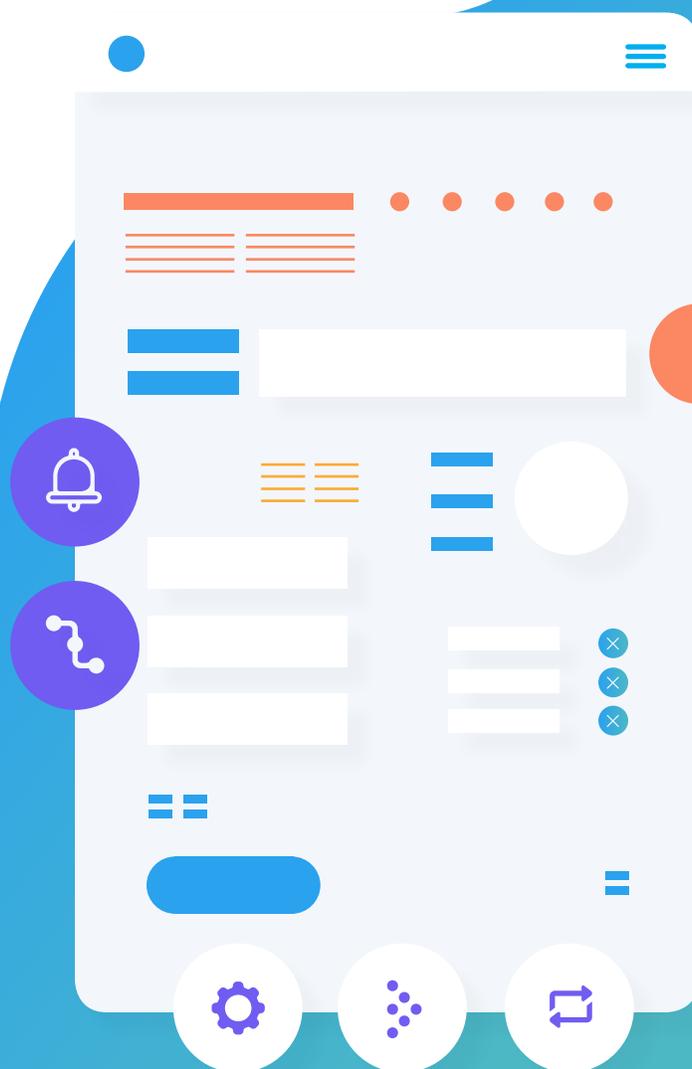


# WTF IS HEADER BIDDING FOR MOBILE APPS?

DIGIDAY | mopub





# CONTENTS

---

- |          |                                  |           |   |
|----------|----------------------------------|-----------|---|
| <b>1</b> | Introduction                     | <b>7</b>  | UX Drawbacks                                  |
| <b>2</b> | Same problem, different platform | <b>8</b>  | The options: one step forward, two steps back |
| <b>3</b> | Capitalizing on engagement       | <b>9</b>  | The situation has come to a head(er)          |
| <b>4</b> | It's not as simple as it sounds  | <b>13</b> | No more chasing waterfalls                    |
| <b>5</b> | Lack of resources                | <b>14</b> | But it's got good bones                       |
| <b>6</b> | SDK Implementation               |           |   |



# INTRODUCTION

---

A lot can happen in a year in digital media. In roughly that time, the process known as header bidding went from a programmatic hack publishers hoped would streamline the bidding process and squeeze more revenue out of their ad inventory to a widely adopted industry standard.

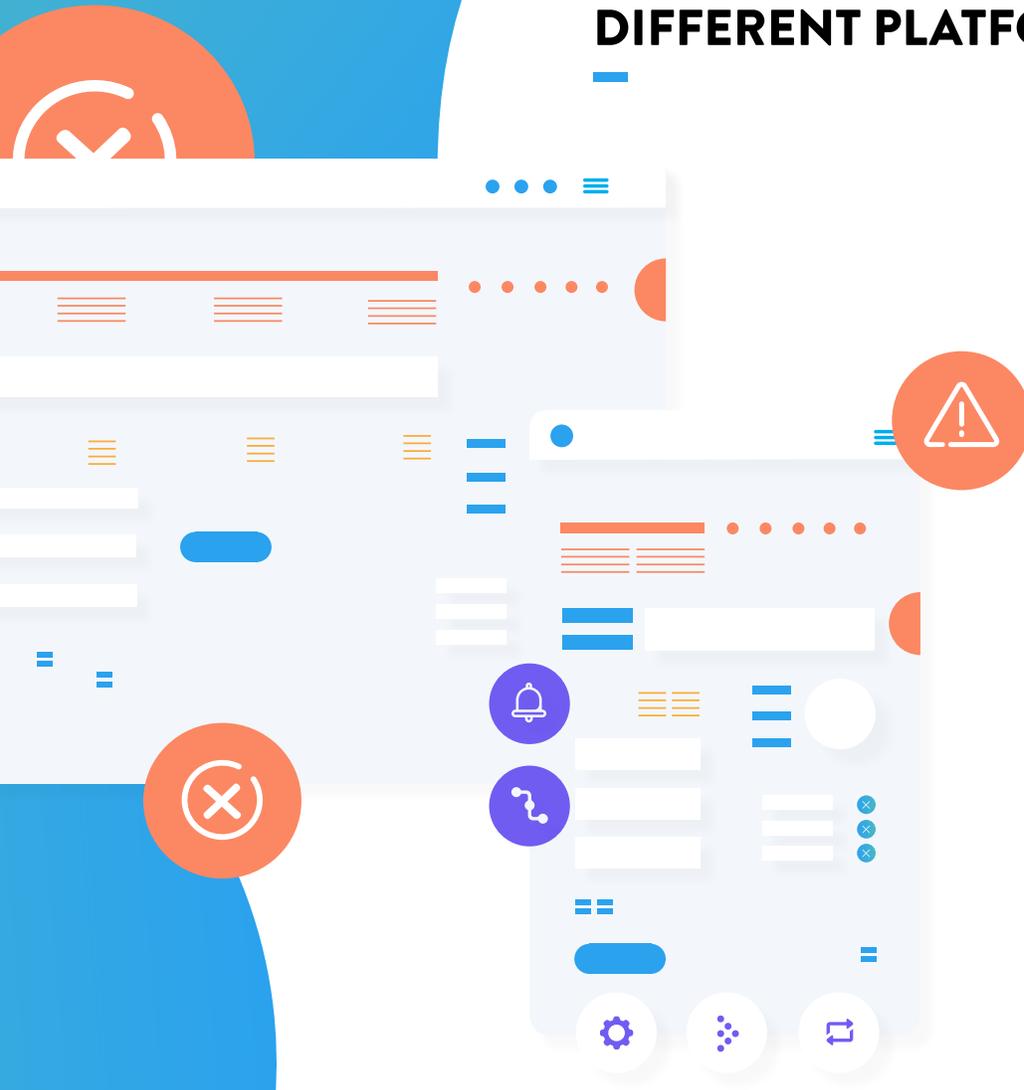
If you're reading this, you already know what header bidding entails: **Publishers offer ad inventory to multiple exchanges simultaneously before making calls to their ad servers.** Previously, publishers tried to move inventory and maximize yield through a process known as waterfalling, wherein ad impressions are offered first to a preferred network (AKA the one

offering the highest rates), and then, if that buyer balks, pushed down to less and less valuable channels until they finally sell through. This process, also known as "daisy-chaining," was inherently inefficient, resource-intensive and left inventory (read: cash) on the table.

In the desktop world, header bidding addressed those inefficiencies on multiple levels. Simultaneous auctions meant more competition, which increased ad values and yield. At the same time, consolidating inventory into a unified, server-side silo allowed publishers to sell inventory per impression, letting them see more clearly what each impression is actually worth.



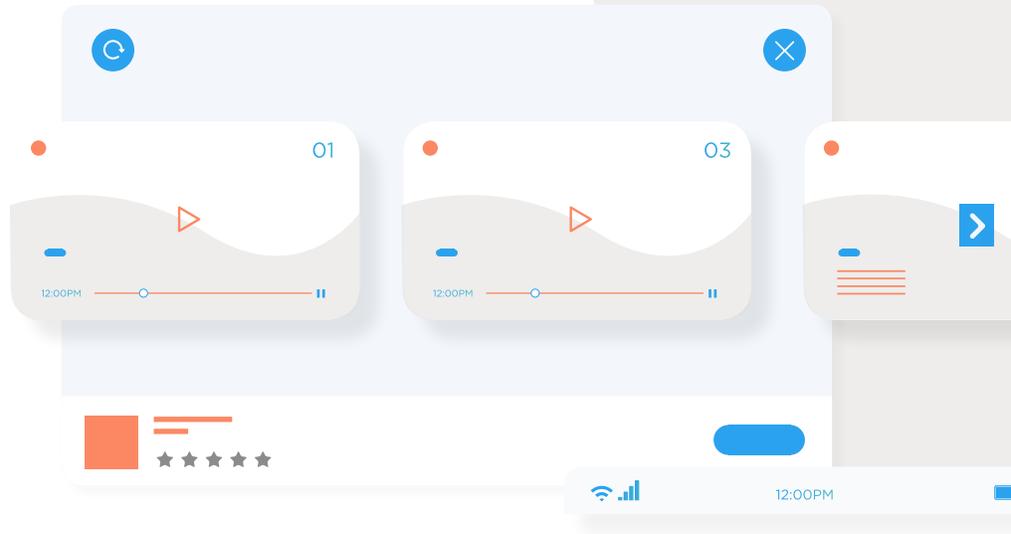
## SAME PROBLEM, DIFFERENT PLATFORM



As quickly as one solution gained critical mass, a new problem emerged: Header bidding attempts to solve a desktop problem in a mobile world. This isn't such a big deal on mobile web, where publishers can more or less tack on their desktop header bidding solutions and move on. **But mobile apps don't look, feel or function like desktop or mobile websites, and that's an issue for publishers who have long struggled to monetize their content in apps.**

"Ad tech companies have been trying to figure this out, and there are some solutions out there, but it comes up to the determination of the publisher," says Chip Schenck, SVP of data and programmatic solutions at Meredith. "The entire programmatic industry is a test and learn environment. So it comes down to the risk tolerance of the publisher." Evidence suggests the risk is worth the potential reward.

# CAPITALIZING ON ENGAGEMENT

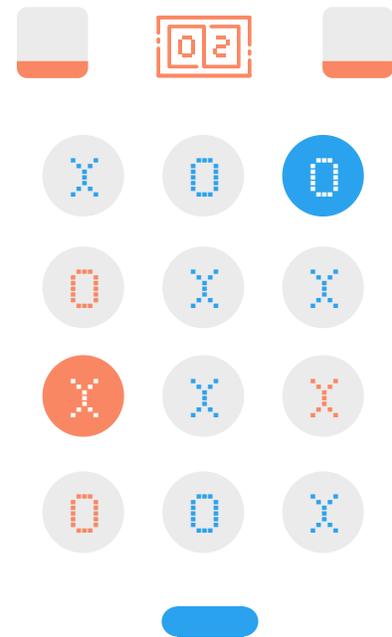


According to comScore, half of all time spent on digital devices is spent in mobile apps; eMarketer data would have you believe it's even more. Apps help publishers build direct connections with their most loyal users and control those users' experiences in ways they cannot by simply pushing their content on Facebook. And app super users can be highly engaged, with long session times and, especially in the case of games, a willingness to spend on in-app purchases.

The app environment has also been a rich developing ground for intriguing, innovative ad formats. For example, playable ads engage users by wrapping game mechanics in brand messaging, and rewarded videos give users exclusive in-app content, features and virtual goods and currencies in exchange for a 30-second view. These new ad formats are potential game changers because they

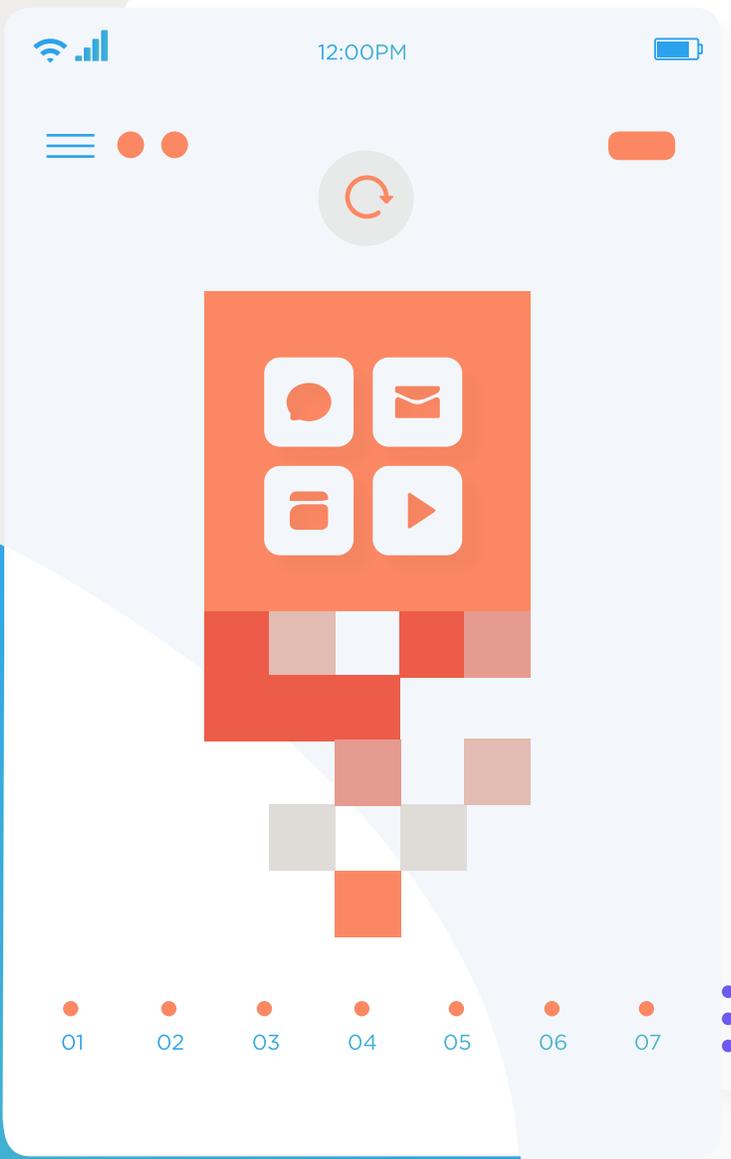
offer an objectively more pleasant user experience than the traditional desktop ads we all know and love, er, tolerate. **An app-focused bidding solution would, ideally, help preserve that type of mobile-first innovation for the sake of both sides—publishers delivering for their advertisers and users, and demand sources leveraging their own SDKs while still being able to bid in real time.**

Finally, there is a very practical reason why header bidding makes sense for mobile app publishers. "A lot of these publishers are smaller developers—sometimes two-to-three-person shops running the most popular mobile apps you know," says Casie Jordan, director of professional services at [MoPub](#), Twitter's mobile app monetization platform. "They can't run large-scale, direct advertising businesses. So they leverage programmatic heavily. They want to maximize yield and get back to iterating on their games and developing their apps."



## IT'S NOT AS SIMPLE AS IT SOUNDS

So why can't app publishers just adopt a header bidding system and call it a day? For starters, there are no headers—no browsers at all—in apps. **But this isn't just a semantic argument.** There are technical and business-related hurdles that are wholly unique to the app environment.



## LACK OF RESOURCES

---

For one, header bidding systems could require app publishers to take on more bidders' SDKs, which pulls development resources and can have the unfortunate side effect of latency and poor user experience. "We went through this sort of evolution in desktop when the idea of performance digital advertising came about," recalls Oscar Garza, executive vice president of media activation for the data-driven agency Essence. "I'd ask our webmaster to place a

couple pixels on a site or include an ad server or tracking technology or tag management solution and they'd look at me like, 'I'm not putting anything else on my site that will make it any slower than it already is.' The same thing is happening with mobile app developers, which are often startup type companies that are product-driven versus marketing-driven. In many cases they don't do frequent updates because of what it takes to do that in the app stores."



## SDK IMPLEMENTATION

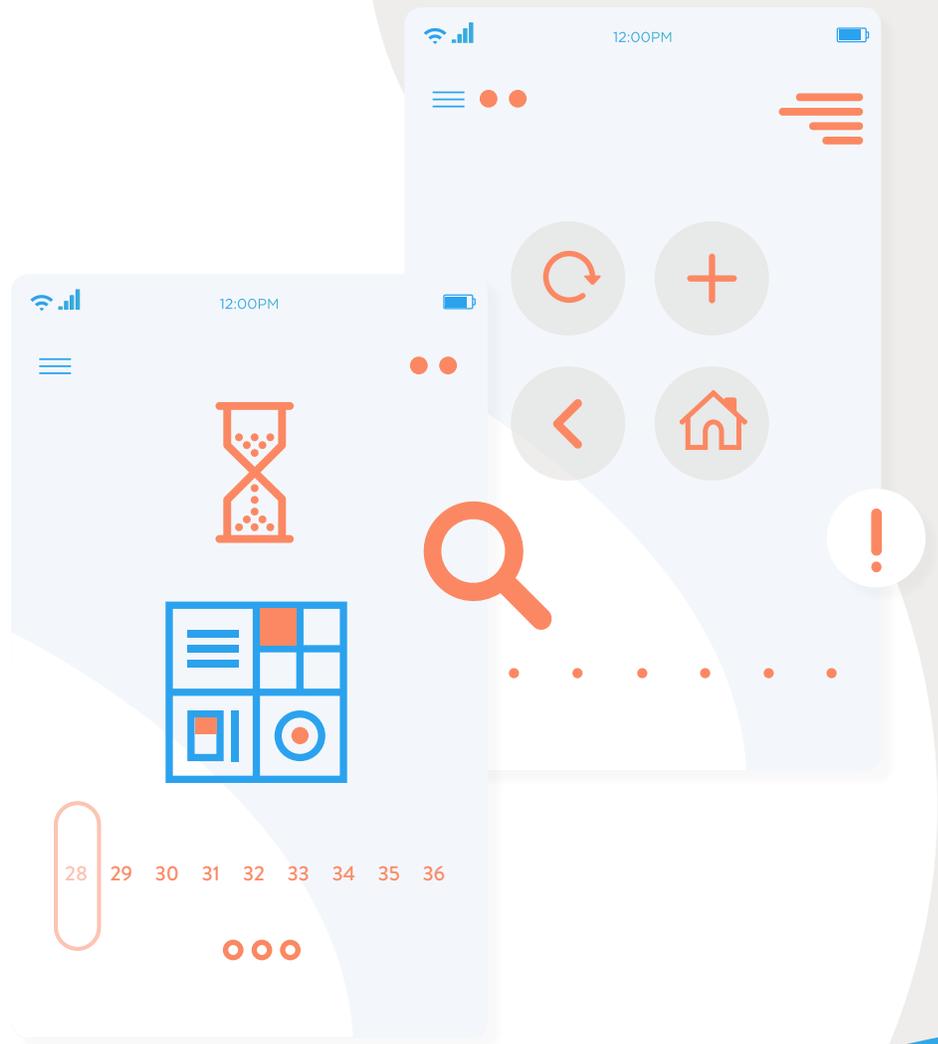
---

Even if app developers and publishers willingly committed the resources to add more SDKs, Garza notes that fragmentation in the in-app market makes it challenging to arrive at a unified solution. “The demands on SDKs are changing all the time, and the standards are all over the place; there are few standards for SDK implementation, few standards for device ID passback to enable measurement for ad serving. For a shop like ours that’s so concerned with measuring the impact of media on our clients’ businesses, we need to have appropriate measurement consistently across all the inventory sources we buy from in order to describe that to our clients.”



## UX DRAWBACKS

---



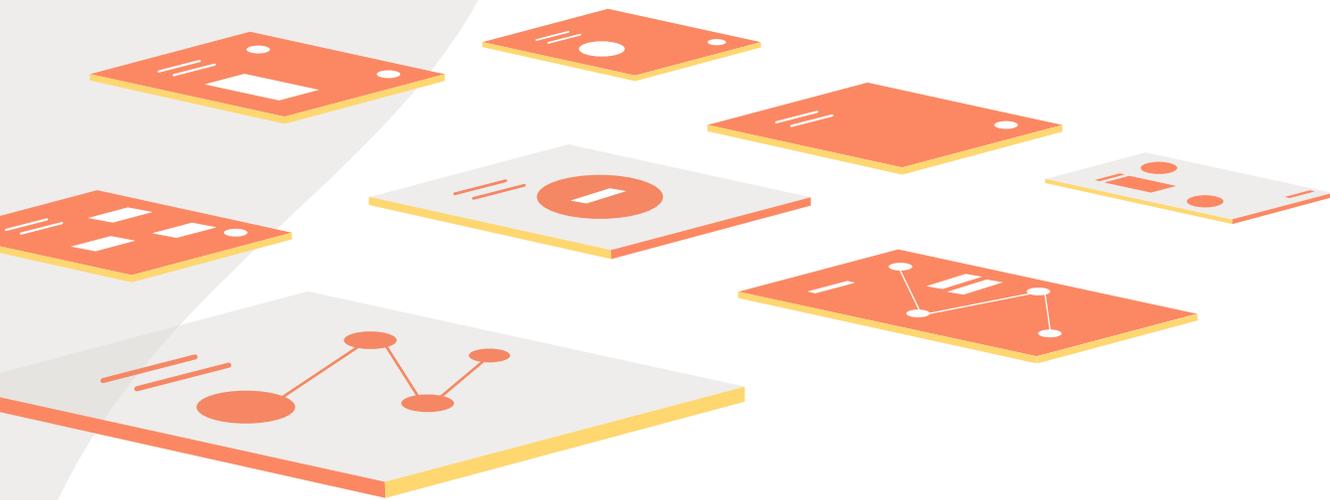
There are also potential disruptions to the app user's experience. "If you remember that whole thing from a couple of years ago, the 'One-Second Rule'—everything in mobile takes one second," says Schenck. When you step into an app, you've got an additional step that has to be built into either the SDK or the ad call. "So, you've got the traditional challenge with mobile connectivity and bandwidth being a little bit slower than desktop, the latency issue you normally have

with header and then, on top of that, you've got the latency you've added with that step. *It's a risky proposition.*"

Finally, publishers' current waterfall setups, flawed as they may be, took a lot of work to establish. It's reasonable to expect that calls to change their entire approach to an automated, real-time bidding system might be met with a healthy dose of skepticism, fear of lost revenue and pushback.

## THE OPTIONS: ONE STEP FORWARD, TWO STEPS BACK

---



In response to those challenges, adtech companies (who prefer to view them as opportunities) have started working to develop mobile app-specific solutions.

Automated price optimization tools built by mediation platforms help those still swimming against the waterfall capture historical prices and maximize future values. They offer some operational relief towards what can otherwise be a near-constant monitoring process, but fail to account for demand partners that might be willing to pay more for impressions in a particular moment.

Other companies use server-side products to manage in-app header bidding, which reduces latency. However, implementation requires a ton of technical expertise,

cooperation between vendors and hundreds of line items signifying different price points.

“I tried to demonstrate to my team what this looks like by printing out a publisher’s waterfall setup in a header bidding solution that wasn’t the primary ad server,” says Jordan. *“I ended up with something like 5,500 line items and the paper trail stretched almost 55 meters from my desk to the ladies’ room.”* There’s a metaphor in there somewhere about the quality of solution this represents, but we’ll leave you to conjure your own image.

Even if and when all that comes together, buyers are still reliant on the app’s ad server to get them coveted user data, something that’s harder to do with the onset of GDPR.

## THE SITUATION HAS COME TO A HEAD(ER)

---



“ At the end of the day, all header [bidding] is doing is providing additional demand to be concurrently considered. ”

- Chip Schenck, SVP of data and programmatic solutions at Meredith

“So the question becomes, how are ads being served? How is the ad server prioritizing and decisioning? That’s what I talk to my tech teams about trying to

figure out. At the end of the day, all header [bidding] is doing is providing additional demand to be concurrently considered, hack of a hack.” Schenck says.



# Advanced Bidding

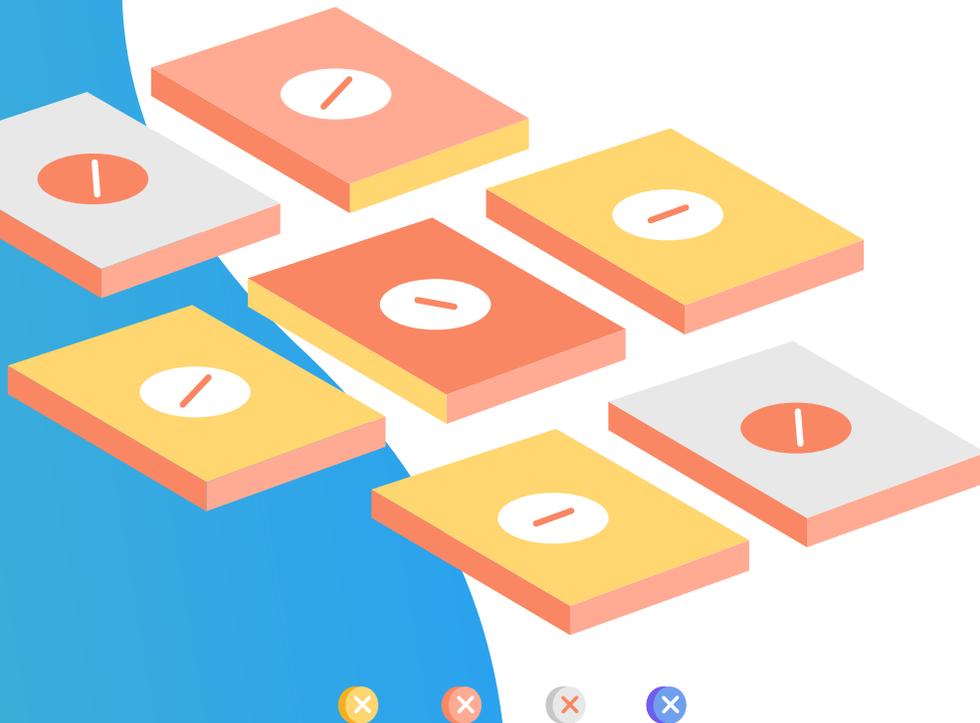
## Bringing the benefits of header bidding to the mobile app ecosystem

Learn more at  
[www.mopub.com](http://www.mopub.com)



## THE SITUATION HAS COME TO A HEAD(ER)

---

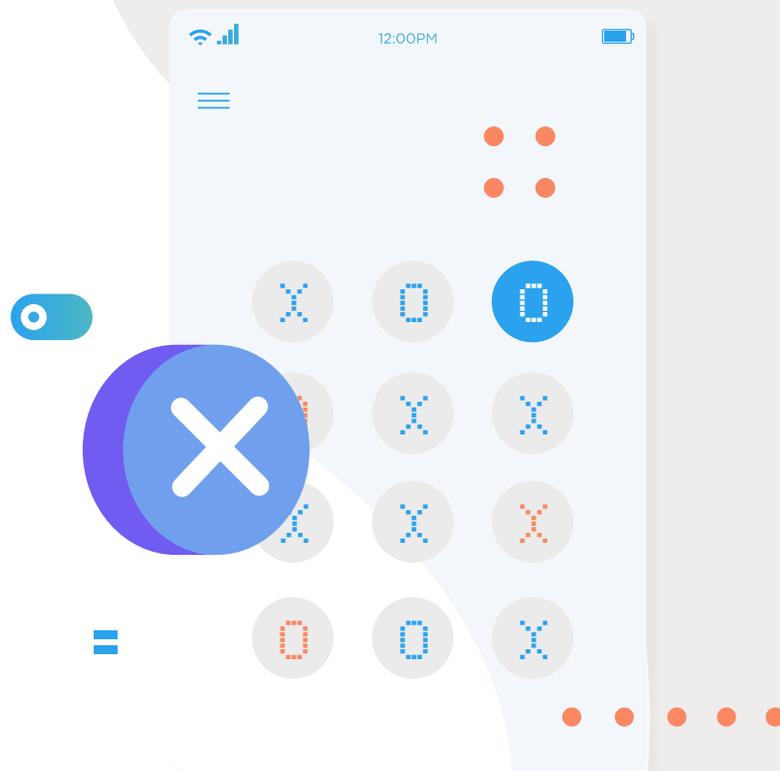


Given all these challenges, what will a true in-app header bidding solution require to be successful for both publishers and buyers? First, it will be fully supported by the publisher's own ad server. Remember that 55-meter paper trail that led straight to the toilet? That may have been a visual representation of a waterfall metaphor, but for publishers' ad ops teams who must implement thousands of incremental price points that literally count up from two cents to three, to four, to five and beyond, the headache is very real.

A system that supports the entire process from within the publisher's primary ad server is like a major dose of aspirin. And in a digital publishing environment where user experience is king, such a platform represents the best experience possible not just for users who will see faster load times, but also for the ad ops professionals who have to administer it all.

"Not all header bidding solutions are equal; this alone is a really big difference maker for publishers," says Jordan.

## THE SITUATION HAS COME TO A HEAD(ER)



Second, the platform that wins will be the one that gives ad networks a chance to play. “Ad networks make up such a big portion of publisher revenue, you have to let them into the game,” Jordan says. Giving networks real-time access to bid on publisher inventory and name their highest price fosters competition and diversifies demand, which increases ad values and helps publishers determine and realize the highest price per impression.

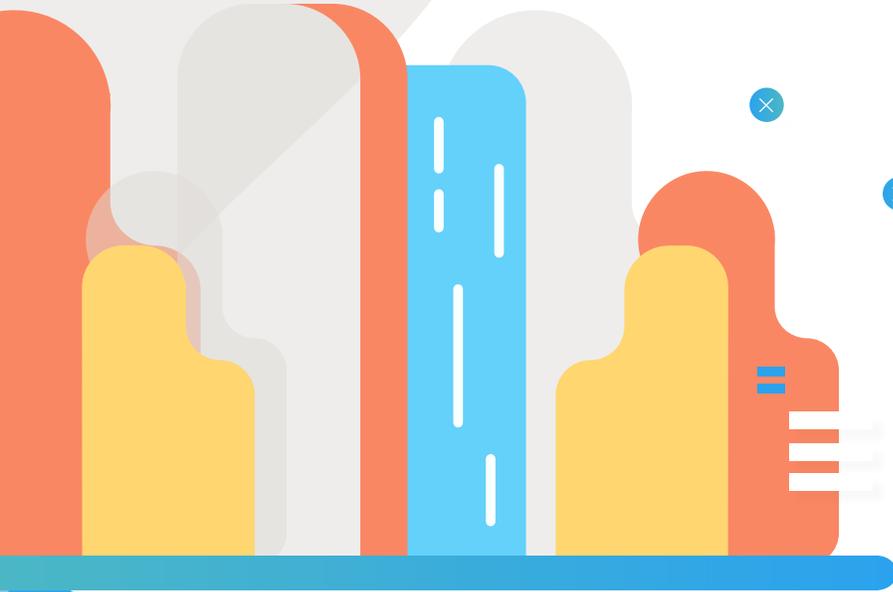
Next, Jordan says the platform must allow publishers to preserve all of the interesting innovation happening on mobile apps in terms of ad formats. These ads represent something much closer to the ideal ad experience—and are therefore

potentially much more lucrative—than their aggressive, auto-sound, “Where the heck are they hiding the damn ‘X’ button?” desktop cousins. That’s worth nurturing.

Finally, let’s level the playing field. Competition is good for inventory values, but fair competition is best. The bidding platform that wins will give transparent proof to publishers and buyers that inventory values were consistent, everyone’s bids were placed fairly and equally and the highest price won. That proof might come via log files or push notifications or some other form, but it doesn’t really matter how—it just matters that it’s there. “Basically, show the receipts,” Jordan says.

# NO MORE CHASING WATERFALLS

---



Flattening the waterfall doesn't just help publishers maximize yield and stick to the rivers and the lakes that they're used to. (Sorry, making up for the time it took to drop this guide's first TLC reference.) **Flattening the waterfall is also good for buyers.**

"What I want for the people on my team to have is a single platform to be able to approach all these different inventory sources and

address a consumer," says Garza. Simple logic explains why.

Enabling concurrent, real-time bidding removes priority tiers for guaranteed CPMs, makes it harder for publishers to inflate price points and improves access to more, higher-quality inventory.

That all means more competition, which means greater value.

## BUT IT'S GOT GOOD BONES

---

“What I want for the people on my team to have is a single platform to be able to approach all these different inventory sources and address a consumer.”

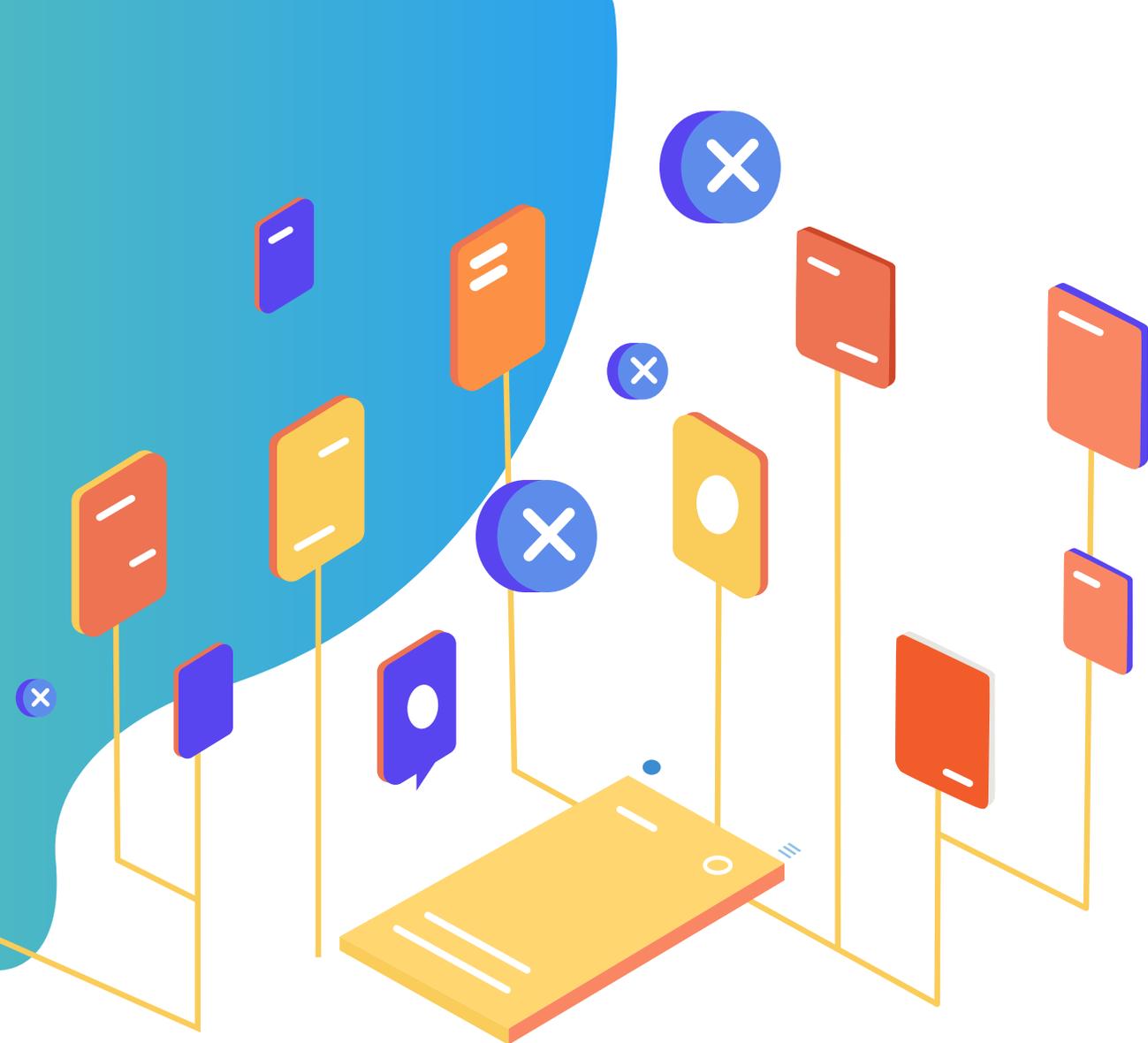
*- Oscar Garza, executive vice president of media activation for Essence*

If header bidding for mobile apps is so good for everyone, why aren't there mobs of publishers clamoring for a change to the system? The answer could simply be that change is scary and work is hard. Jordan is quick to allay those fears.

If you think of in-app programmatic as a house, she says, the amount of work required to shift from the waterfall or “hack of a hack” repurposed desktop solutions to a concurrent bidding system like the one outlined above would be “somewhere between a light

bathroom renovation and adding an extra story to your garage.” You're not gutting your house to the studs, but it'll definitely take some technical and operational work to optimize your resale value.

“It requires businesses to spend a bit of effort now, both in modifying some of their apps' technologies and their general ad operations, but results in a solution for the future that's more valuable, more technically sustainable and will ultimately require fewer man hours to maintain,” Jordan says.

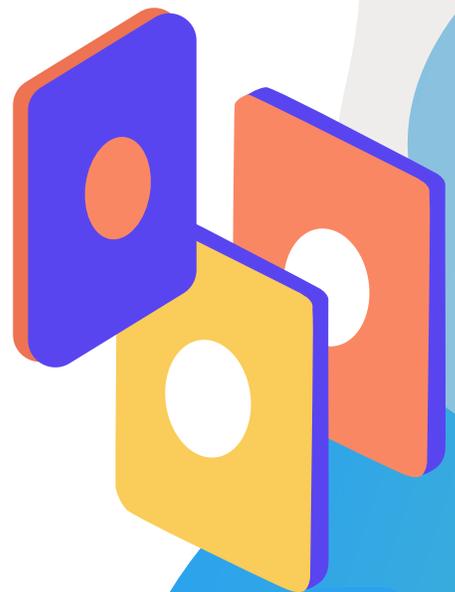


That might be reason enough for app owners to finally sign off on the renovation. With a mobile app-specific header bidding solution in place, publishers wouldn't have to tie up development resources to add on each new bidder's SDK, which just ends up slowing load times and diminishing user experience anyway.

Beyond that, it just makes sense. *The in-app environment is so unique and has fostered such innovative display ad creative that*

*it's only right for there to be an equally innovative header bidding solution specifically engineered for that world.*

Desktop publishers may have been surprised when header bidding gained mass adoption after they had laughed it off as a hack. When mobile app header bidding goes the same way—and it seems fair to assume it will—those same folks shouldn't be caught off guard. They may still be laughing, but this time they'll be in on the joke.



---

**PRODUCED BY CUSTOM FOR DIGIDAY MEDIA**

Custom is a creative content agency that translates tech-speak into human-speak. Our journalists, strategists and artists help companies in disrupted industries stand out.

---

**WANT TO WORK WITH US?**

Contact Digiday James Palma, SVP, [james@digiday.com](mailto:james@digiday.com)

---

**TO LEARN MORE ABOUT MOPUB**

[@MoPub](https://twitter.com/MoPub); [www.mopub.com](http://www.mopub.com); [sales@mopub.com](mailto:sales@mopub.com)