

■ PubMatic

LESSONS LEARNED IN HEADER BIDDING

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Amidst all the major headwinds in the digital media and advertising world, the subject of header bidding has been persistently at the heart of many industry conversations.

To level-set, header bidding is a **programmatic advertising tactic** implemented by a publisher to attract more bids on its ad inventory, which can drive ad revenue growth significantly.

This is executed through an on-page piece of JavaScript code in the “header” of a publisher’s website—thus the term, “header” bidding. To media buyers, header bidding enables a new way to access typically exclusive or priority (i.e. “first-look”) inventory across a publisher’s sites. In a world once dominated by inefficient “waterfall” ad serving prioritization—which is essentially

a method by which a publisher’s ad server requests demand sources, typically sequentially, most often by publisher or ad server preference—header bidding is paving a new path forward in digital advertising and leading to further innovation in wrapper tag solutions and custom ad servers (to be discussed later in this paper).

While the technology behind header bidding is not new and is already used by hundreds of premium digital publishers, it's caught on in recent months for three key reasons.

1

Publishers have reached a tipping point in header bidding adoption where fill rate, CPM and revenue gains from the solutions are now proving to outweigh implementation costs. This is important because, today, publishers are playing in an increasingly competitive environment, vying for consumers attention across platforms and devices, and competing against nimble Internet companies, such as social networks and content aggregators that attract a large percentage of time spent and ad spending. Publishers need to identify new ways to monetize their digital content and evolve their advertising strategies.

2

Media buying behavior has changed dramatically over the past several years. The old ways of Mad Men-style, relationship-driven, insertion order ("IO") ad sales are being replaced by targeted, scalable, automated buying. As agencies search for the highest-quality inventory to meet their advertisers' campaign goals, header bidding allows them to access and bid on all available inventory, at significant scale. In practice, many buyers often favor and prioritize publishers that offer header bidding, because buyers may have more opportunities to access guaranteed impressions on those publishers' sites.

3

Given the constant shifts in the publisher and advertiser landscape, the digital media and advertising trade publications have caught onto the topic. The buzz is almost on par with that of social media approximately a decade ago. The topic is also hot because header bidding isn't a straightforward technology. Discussions raise significant debate on its efficacy, implementation complexity and, more broadly, questions of whether this is the evolution of digital advertising.

We, at PubMatic, have spent the last several years developing a leading header bidding solution, called Decision Manager. In this paper, we seek to share what we've observed in header bidding over the past year and what trends will drive innovation in media buying over the next several years. Specifically, we detail:

- **How can publishers make the most of this approach to advertising sales?**
- **What role do technology partners play in this endeavor?**
- **And finally, how can the industry collaborate to drive innovation through header bidding and promote growth for all industry constituents?**

Keep reading for five of the industry's **lessons learned in header bidding** over the past year.

LESSON #1:

Understand if Header Bidding is Right for You.

When a publisher decides to adopt a header bidding solution, it's tempting to jump into the process on day one. After all, the digital media and advertising industry was founded on a "test and learn" approach to all new products and technologies. However, that can be risky given the numerous factors involved in header bidding implementation.

Below, we've put together a **set of standardized pre-sale and pre-implementation questions** (with simple yes or no answers) that both strategic and technical teams at a publisher should ask themselves before implementing header bidding.

PART I: UNDERSTANDING YOUR INVENTORY MIX

1. Are you struggling to sell out your digital ad inventory (both direct and indirect)?

- Yes
 No

2. Do you have a large percentage of impressions going to remnant or house ads?

- Yes
 No

3. Does your site traffic show major fluctuations where inventory sometimes goes unsold due to lack of demand & fill rates are below average?

- Yes
 No

PART II: TAKING STOCK OF RESOURCES

4. Do you have sufficient development and ad operations resources to take on a new one- to two-month project?

- Yes
 No

5. Do you have members of your team who understand ad serving and have experience working with ad decisioning?

- Yes
 No

PART III: DIRECT VS. INDIRECT SALES PRIORITIES

6. Does your company sell a mix of direct and indirect inventory?

- Yes
 No

7. Are media buyers often looking for better access to your higher-quality, guaranteed inventory?

- Yes
 No

KEY: Yes: 1 point to header bidding; No: 0 points to header bidding

SCORING: 4 or more points and you should strongly consider a header bidding solution

EXTRA CREDIT:

Setting a Baseline for Performance (If you can answer these, you'll be in much better shape when measuring your header bidding performance.)

8. What is your current priority setup in your ad server? _____

9. What are average CPMs and fill rates for your demand partners? _____

10. Do you have any other header bidding solutions in place, and if so, how are they performing? _____

LESSON #2:

Heed Expectations and Understand the Potential Pitfalls.

While all the marketing and media attention around header bidding would lead most to believe that results are dramatically positive, with immediate 50 to 200 percent CPM and revenue gains evident in only a few days, the truth is that results take time to develop and depend on a number of factors.

1

While header bidding isn't a new technology in the marketplace, it's a new marketing tactic for many publishers. Therefore, most publishers require significant education and consultation to learn how to audit their ad server line items and allocate inventory to an increased number of demand sources delivered by header bidding. Publishers with a higher level of understanding into ad serving tactics will experience a flatter learning curve and see positive results sooner.

2

Publishers must understand that header bidding is not a plug-and-play, automated solution. Success requires dedication from operational and technical teams in utilizing available tuning controls, followed by careful, meticulous analytics and reporting to optimize on these campaigns. Lesson #4 details the key role players on both the publisher and tech partner side—and their respective responsibilities—required for effective implementation. While manual efforts are required from publisher teams, leading header bidding solutions will provide the tools—especially in tag performance optimization, price setting, analytics and reporting—to empower those individuals and set them up for success.

3

Because header bidding is code on page, success can depend on a publisher's site traffic. Gains from header bidding will likely emerge most notably when a site experiences traffic spikes that attract higher volumes of inventory demand. An example of this is when a news site reports on a sudden, major news story, and creates inventory demand or "fluctuation peaks." In this instance, header bidding brings more demand sources to the publisher, resulting in higher fill rates, CPMs and revenue than without a solution in place. And while these fluctuation peaks might only come once a week or month, incremental improvements should be carefully tracked through an integrated analytics and reporting platform. The highest-performing header bidding solutions are optimized for the unpredictable ebbs and flows of a publisher's site traffic.




LESSON #2: CONT'D

Additionally, there are differences in implementation success depending on the size of publisher—e.g. large publishers (i.e. approximately more than 500 employees and/or 10 million monthly unique visitors) versus small publishers (i.e. approximately less than 500 employees and/or 10 million monthly unique visitors). Larger publishers with more technical resources and more unsold inventory are often better positioned for header bidding implementation. Those with less direct-sold inventory (as a percentage of total inventory sales) are also better positioned for header bidding, because header bidding can create direct channels where they didn't previously exist.

Smaller publishers, on the other hand, might need more consultation to effectively implement a solution. This steepens the learning curve in header bidding and might drain an ill-prepared publisher's resources until the implementation is completed. However, for smaller publishers looking to expand their advertising efforts in order to compete with the much larger media companies, header bidding could help attract major media buyers to smaller niche sites.

There is a significant risk, especially for smaller publishers, that implementing header bidding at the wrong time could entirely consume a publisher's technical resources. Put simply, header bidding entails a challenging implementation process that some publishers may not be prepared for. While header bidding might be part of the inevitable future of digital advertising with the current tools in-market, it may not be for everyone just yet. We saw the same dynamics in the early "dot com" days of the Internet when companies got ahead of their business models and monetization strategies.

Regardless of the type of publisher, large or small, it is imperative to conduct a preliminary audit of their demand sources to fully understand how they are currently allocating impressions prior to implementing header bidding. This pre-implementation preparation helps set expectations in both the short- and long-term.



“You have to put a lot of tech into using a header bidder, and a lot of publishers may not have the tech resources to do it or understand it. It's a lot.”

— Jana Meron, VP of Programmatic and Data Strategy at Business Insider (Digiday, 11/17/2015) ¹

LESSON #3:

Set Both Short- and Long-Term Expectations in Header Bidding.

Before embarking on a header bidding implementation process, all parties must reach an understanding of expectations and desired goals. The pre-implementation questionnaire from Lesson #1 should help in this endeavor. Obviously, given the numerous factors that determine if a header bidding solution is right for a publisher and how it should be integrated, expectations for results might vary dramatically as well. In most digital campaigns, there are a typical set of publisher goals around yield performance (e.g. impact on fill, win rates for bidders, CPMs and revenue) and site performance (e.g. latency etc.). In header bidding, these goals are the same but vary based on timeframe, i.e. short-term versus long-term.

In the short-term, priorities should be around setting up a sustainable, low-touch process, where publisher-side technical staff understands how to manage their ad server line items. This allows a publisher to identify higher bids from the increased number of demand sources. This might have a positive impact in the short-term on fill rates (to sell more previously unsold inventory) and reduce passbacks on bids that were not filled. Pricing may also increase significantly in the short term as demand rises. In the medium term, this might also lead to a stronger relationship between buyers and sellers and, given that trust, potentially agreeing to higher-value private marketplace (PMP) deals.

“For us, we’re looking at balance between fill rates and eCPMs, as success metrics. However, a rhetorical term I’ve been using to pitch header bidding internally has been ‘market price.’ With header bidding reporting, we can show buyers a true market price, rather than a list price, which can be less relevant for the buyer. With market price, it’s less likely to be a CPM negotiation...”

— Lars Näslund, Head of Data and Programmatic at Egmont




LESSON #3: CONT'D

In the longer-term, the header bidding process should get easier. Once data is collected from post-implementation, rules can be created on the ad server side to automate more of the decisioning necessary to deliver on increased demand coming in. Similarly, publishers can reduce reliance on tech partners as they further integrate within their back-end systems. One example of this is server-to-server integration, which is when a header bidding tech partner leverages its owned-and-operated servers to host ads served using its header bidding solution. This empowers publishers in new ways by allowing them to manage the entire header bidding process on their end.

In terms of long-term results, header bidding should lead to higher overall CPMs, as the both buyers and sellers

“learn” how to better price inventory. Essentially, higher bids are incorporated into bidding algorithms, which drives the winning bid price up. Sellers learn how to manage the pricing of their auctions more effectively. Over time, this will drive revenue growth, making all of the technical implementation worth the time and investment.

The end goal in all this technical setup should be to create a foundation for ad buying that allows media buyers to access a publisher's entire ad inventory and buy any inventory that meets a buyer's campaign objectives, such as reach, demographic or geographic targeting, specific formats, etc.



“ The future is to put programmatic first... Whether it's buy or sell technology, the idea is to get the most out of the advertising. If a publisher is doing header bidding, call them and ask them how they're selling it up.”

— Sam Cox, VP of Global Partnerships at MediaMath (Dmnews, 3/8/2016) ²

“ We think that because of header bidding, buyers will see us as ‘the good guys,’ offering true programmatic. In the Nordics, we've heard that agencies are starting to give preference to publishers that offer header bidding, so we believe this will be a differentiator.”

— Lars Näslund, Head of Data and Programmatic at Egmont

LESSON #4:

Define Who is in Charge and of What.

When implementing a header bidding solution, publishers and technology partners **need to define the roles and responsibilities** of team members on both sides. Here's a quick chart of the role players necessary to successfully implement a header bidding solution.

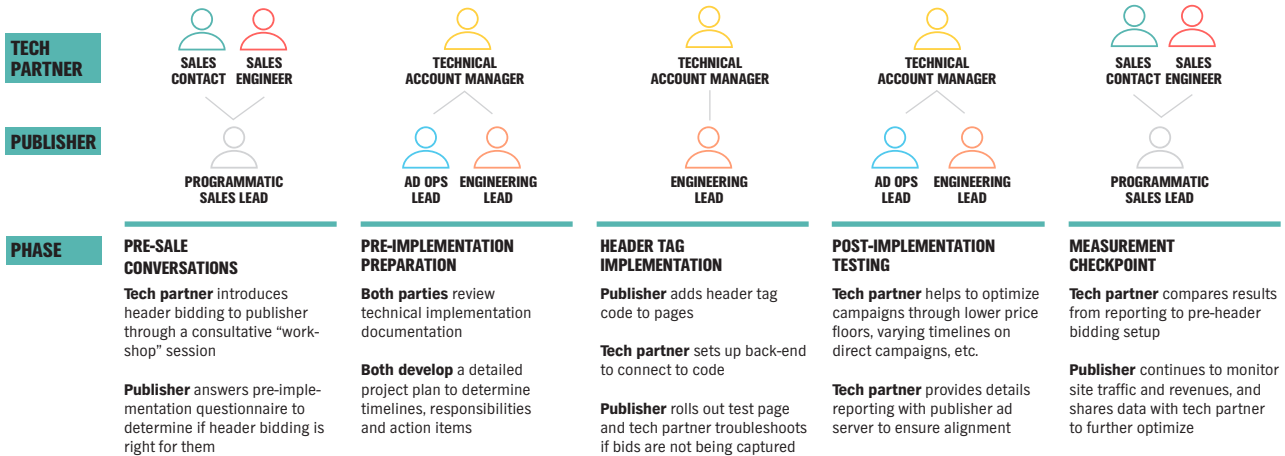
Figure 1: Tech Partner- and Publisher-Side Roles for Header Bidding Implementation

TITLE	SOMETIMES KNOWN AS...	TECH PARTNER OR PUBLISHER	ROLE DESCRIPTION
Sales Contact	Publisher Development Manager Customer Success Manager	Tech Partner	Day-to-day account manager on tech partner side for publisher account
Sales Engineer	Technical Sales Manager	Tech Partner	Engineering resource on product implementation
Technical Account Manager	Solutions Engineer	Tech Partner	Lead on product implementation
Programmatic Sales Lead	Digital Sales Manager	Publisher	Publisher-side programmatic product owner, and ad sales contact and relationship manager
Ad Ops Lead	Ad Ops Coordinators Ad Campaign Managers	Publisher	Publisher-side ad operations owner and ad server manager
Engineering Lead	Software Engineer	Publisher	Publisher-side engineering resource and back-end site manager

LESSON #4: CONT'D

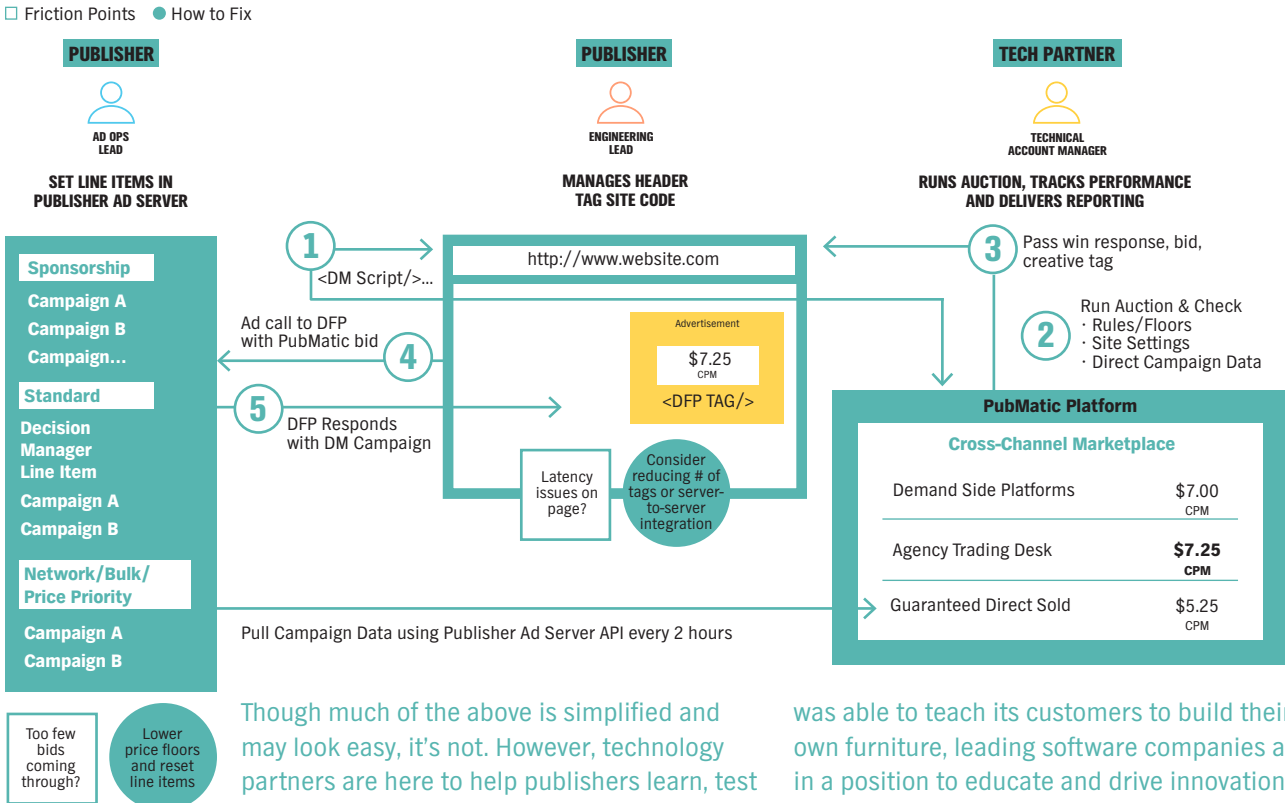
Once a team is assembled, it's important to understand how team members interact with one another. Figure 2 outlines a diagram of the entire header bidding implementation process. Publishers interested in header bidding should follow these phases to guide their approach to integration.

Figure 2: Phases of Header Bidding Implementation with Tech Partner & Publisher Roles Defined



After understanding the general timeline and phases of header bidding implementation, key technical staff members need to understand their day-to-day roles in integrating and testing a solution. Figure 3 details how tech partners and publishers work together in a continuous process to: add header tag code to sites, run auctions and track performance, set line items in the publisher ad server and finally track bids.

Figure 3: Detail into Header Bidding Implementation Cycle, Technical Roles & Common Friction Points



Though much of the above is simplified and may look easy, it's not. However, technology partners are here to help publishers learn, test and succeed through all of these steps. In the same way Swedish furniture company, Ikea

was able to teach its customers to build their own furniture, leading software companies are in a position to educate and drive innovation in digital media.

LESSON #5:

Test, Test... and Then Test Again.

Successful optimization requires post-integration testing on a daily basis, combined with weekly check-ins with a tech partner's strategic and technical team members. This phase is critical to success because, as mentioned in Lesson #3, header bidding might not yield immediate results.

1

A first key step to post implementation testing is to open communication and agree to data sharing. Both publishers and tech partners should agree on short- and long-term goals, and publishers should share relative performance information (i.e. all bid performance from the entirety of its inventory) with tech partners to allow for more holistic optimization. To some, this may seem like data leakage, but having full transparency over a publisher's performance data is the only way that a tech partner can accurately set price floors to increase win rates (i.e. the percentage of times a buyer wins a bid) for bidders. This is similar to an auto mechanic needing to open the hood or keeping your car overnight to see what's wrong with your car. The key is to work with trusted technology partners with track records of success.

2

Publishers should also be open to a reset of success metrics or key performance indicators (KPIs). CPMs tend to fluctuate naturally over the course of a year, with a variety of factors determining average levels. Therefore, price alone may not be the best metric to track success. In this increasingly competitive digital media environment, a reset of metrics should be considered. Basically, a holistic view is necessary in order to optimize on header bidding. Publishers need to track price, fill rate, bid rate (i.e. the number of bids coming in from buyers) and win rate and analyze why each might be over or underperforming. For example, if a bid rate is high for one buyer, but its win rate is low, a publisher needs to understand if this interested buyer is having issues or just bidding too low. Another example might be to optimize for a certain buyer if both its bid rates and win rates are consistently high. The best way to track these metrics is through in-depth reporting capabilities, coupled with strategic consultative services to guide these strategies.

3

No publisher should sacrifice latency when implementing a header bidding solution. Consumers are more critical than ever when it comes to site load times, especially on mobile devices that might have low-bandwidth connections. Therefore, when analyzing latency during the post-implementation phase, it is important to measure the bid response latency and creative latency separately. Bid response latency—or the ad tag load time—might have an impact on whether inventory is monetized. This can be tested and adjusted with a tech partner. It's also important for publishers to test timeout settings as timing out might lead to lower win rates, and thus lost revenue opportunities. For example, if bids are timing out after 500 or 800 milliseconds, a publisher should try to adjust latency to capture those bids. On the other hand, if enough bids are coming in under 300 milliseconds, a publisher can cut all bids after that time and improve latency for the consumer.

THE FUTURE:

What's in Store for Header Bidding in 2016?

While the past year in header bidding has been both exciting and uncertain, the next twelve months are shaping up to be a momentous year for advertising technology.

Wrapper tags are a major development that will impact not only header bidding, but also the way in which publishers typically collaborate with technology partners. In short, a wrapper tag is a single tag that encompasses multiple header tags. Publishers often implement wrapper tags to save engineering resources from having to implement individual header tags. Essentially, these tags allow publishers to update header tags without having to touch site code, creating operational efficiencies. As an added efficiency, wrappers also allow for consolidating line item setting in the ad server. By setting common line items, header tags within a wrapper can also load asynchronously.

“Integrate additional partners, implement existing partners on mobile, rollout wrapper tags”

— Jason Terry, Manager of Sales Operations at Topix (AdMonsters, 12/7/2015)³

New developments are also emerging in ad serving. As previously mentioned, server-to-server integrations allow publishers to better control their header bidding setup and leverage a tech partner's proprietary servers to increase performance and reduce latency. Many new ad server solutions are emerging that cater to specific needs of different publishers and reduce inefficiencies caused by legacy ad server setups (e.g. “waterfalls”). For larger-scale publishers, custom ad servers help make the ad serving process easier—for example, by integrating newer formats, including video, mobile, connected TV and native, into a single ad server. For smaller publishers, this could allow them to scale to new levels in an increasingly multiplatform world.

Both wrapper tags and server-to-server solutions carry some potential risk. Different solutions might not be compatible with each other. For example, while some header bidding solutions (including PubMatic's Decision

Manager) are compatible with all other setups, other solutions are not. This dichotomy between open and closed solutions forces publishers to decide between taking control of its ad operations or ceding partial control to tech partners. While this might not have short-term ramifications, in the longer-term, ceding control of ad operations puts a publisher's digital assets at risk. To avoid these risks, as previously stated, publishers should only engage with trusted tech partners.

One fact remains true, however, that every publisher's primary objective should be developing meaningful, engaging content experiences for its audiences. At PubMatic, we understand that, which is why we are proponents of technology platforms driving innovation among publishers, so they can focus on creating compelling content for all of us.

LESSON 6:

Prepare for Wrapper Tag Solutions in 2016

Looking ahead, innovative publishers should be focused on that next logical step after header bidding: wrapper tags.

As mentioned in the previous section, wrapper tags provide a number of benefits in header bidding implementation and ad operations but can be even more challenging to integrate, requiring more technical resources than most header bidding setups. To prepare for the wave of wrapper tag solutions coming in 2016, publishers need to understand what to expect in these solutions. Publishers considering a wrapper tag solution should be asking themselves several questions, including

Should I integrate a wrapper tag, and if so, when?

Similar to Lesson #1, the answer to this question largely depends on how advanced a publisher's technical resources are and where the publisher is in its header bidding evolution.

For publishers with limited resources, a wrapper tag can precede a header bidding setup. Think of it like building a garage for your cars before you actually buy the cars. A wrapper tag is an infrastructure to house multiple header bidding tags. However, as any car owner knows, taking care of multiple cars can be a hassle. The same is true for multiple header tags, so publishers should take heed.

For publishers with significant resources that are well-versed in header bidding, wrapper tags can improve on header tag setups by creating operational efficiencies in header tag management and providing more consolidated, enterprise-level reporting and analytics. However, even for publishers that are experienced in header bidding, wrapper solutions involve sufficient technical resources to implement.

What can I expect from a fully integrated wrapper tag solution?

Leading enterprise-level wrapper tag solutions provide publisher's operations teams with a number of key features:

Control panels are an important part of a wrapper tag solution. This is the dashboard that effectively gives control to a publisher's ad operations team and eliminates the need to involve engineering teams (think of the workflow chart in Lesson #4 without having to rely on engineers in the optimization process). Ad operations teams can also manage (i.e. add or remove) all of their header tags from this control panel.

Demand levers that allow publishers to automate ad decisioning from both direct and indirect demand sources. These levers give publishers the ability to give preference to buyers that might have higher bids or win-rates.

Integrated analytics and real-time reporting capabilities will also be built into this control panel. Leading solutions will provide not only the tools to monitor and measure yield (e.g. CPM, revenue, etc.), but also tools to measure performance metrics (e.g. bid rate, win rate, timeout rate, etc.) and latency, to preserve a high-quality experience for publishers' audiences.



LESSON #6: CONT'D

How do open source wrapper solutions, like Prebid and Pubfood, differ from other solutions in market?

Open source solutions are free but potentially costly in technical resources.

Given that self-service, open source solutions are free, they seem highly attractive to publishers managing a tight bottom line. Zero upfront costs might amount to much more in implementation and optimization, straining a publisher's precious technical resources. And while free support may be available from message boards and industry peers, this support is not reliable and certainly isn't responsive when something goes wrong at 2:00 a.m.

Open source might not offer a holistic view. One shortcoming in most self-service, open source header bidding solutions is the lack of deep analytics and reporting capabilities. Publishers need advanced analytics capabilities to sift through all of this data and granular reporting on the back-end to communicate performance data throughout an organization and optimize on consequent campaigns. Self-service open source solutions cannot provide this, unless a publisher is willing to build it on top—which, again, might put pressure on its technical resources.

Open source could lead to first-party data underutilization or leakage. Given that open source solutions are not proprietary technologies owned by organizations, implementing them could lead to mismanagement of valuable data assets. In addition, popular open source solutions, such as Prebid and Pubfood, are actually created by software providers that sell their own paid solutions. In order for publishers to effectively understand and optimize their ad operations, they must ensure that all aspects of data are captured. As the digital advertising industry increasingly shifts to audience buying at scale, first party data will become the truest currency for ad pricing and should be captured whenever and wherever possible.

What should I do now?

Understand the evolution of media buying behavior and spread the word. Just as ad decisioning tools developed over a decade ago gave birth to programmatic advertising, header bidding, wrapper tags and advanced ad servers are giving publishers more control of their yield management and their media buyers better access to inventory. We're on the cusp of next generation programmatic, so, if you're a publisher, you should communicate that to all levels of your organization.

Review all the available software solutions and lean on technology partners to drive innovation. As previously mentioned, publishers' first priority should be developing compelling and engaging content for its audiences. That's why technology partners can help drive header bidding innovation within publishing organizations and supplement a publisher's technical resources.

Create a 6-9 month plan, execute and test. Once a publisher understands the evolution of media buying and available wrapper tag solutions, it's time to execute on those plans. Testing is critical to uncertain, new implementations, so be prepared to get your hands dirty.

About PubMatic

PubMatic is the leading marketing automation software company for publishers. Through real-time analytics, yield management, and workflow automation, PubMatic enables publishers to make smarter inventory decisions and improve revenue performance. Focused on serving the needs of premium publishers, PubMatic inspires buyer confidence by providing flexibility in audience discovery and planning media campaigns through its Media Buyer Console and APIs. The company's marketing automation software platform provides a global roster of comScore publishers with a single view into their advertiser relationships across every screen, every channel and every format. PubMatic was ranked by Deloitte as one of the fastest growing companies in the US for the fourth

consecutive year in 2015. The company has offices worldwide, and is headquartered in Redwood City, California.

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Sources

¹ Digiday, 11/17/2015 (<http://digiday.com/publishers/publishers-header-bidding-downsides/>)

² Dmnews, 3/8/2016 (<http://www.dmnews.com/digital-marketing/header-bidding-could-be-transformational-for-marketing/article/481815/>)

³ AdMonsters, 12/7/2015 (<https://www.admonsters.com/blog/meeting-header-tags-head>)