

# **EXECUTIVE SUMMARY**

For years, publishers have relied on header bidding as an improved method of programmatically monetizing ad inventory and prioritizing demand partners in a more equal fashion. Header bidding and wrapper solutions have become commonplace for desktop and mobile web publishers: a September 2020 study suggests more than 9 in 10 US publishers use header bidding to monetize desktop inventory today, with 84% doing the same for mobile web.

However, use across more advanced screen types and ad formats, namely in-app, connected TV (CTV) and over-the-top (OTT) is today much less common. There is a perceived lack of resources, technical challenges, and a disbelief that the payoff to overcome these obstacles will result in marked monetization improvements. These are just some of the many roadblocks publishers face in implementing header bidding and wrapper solutions for these advanced screen types and ad formats.

But as the world continues to shift to a more omnichannel, identity conscious advertising environment, publishers increasingly see the value in turning to wrapper partners that can help them make sense of—and monetize—their inventory across their broader portfolio.

PubMatic commissioned Advertiser Perceptions to research how publishers were taking advantage of wrappers today and uncover the major trends, challenges and opportunities publishers face as they look to incorporate wrappers for omnichannel monetization.

This whitepaper describes the key findings of the research conducted in September 2020 by surveying 150 US publisher decision-makers involved in selecting and using header bidding and wrapper solutions for their desktop, in-app or connected TV (CTV) monetization needs. Publishers and app developers of various sizes and digital property types were surveyed, and we sought the opinions of various roles, including those involved in monetization/revenue strategy, programmatic sales and partnerships, ad operations, and product development. A subset of publishers was also interviewed for a more extensive look at their current and future monetization practices.

### **TABLE OF CONTENTS**

Key Findings	2
Decision-maker Profile	3
Wrapper Usage Today	4
Challenges and Roadblocks	6
Wrapper Benefits	7
Omnichannel Wrapper Usage	8
Choosing an Omnichannel	
Wrapper Partner	10

Vendor Market Landscape	1
Choosing an Omnichannel Partner:	
A Publisher's Checklist	12
Conclusion	14
Research Methodology and	
Respondent Profile	15

# KEY **FINDINGS**

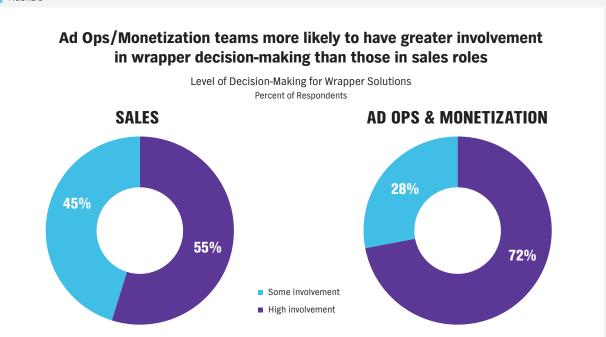
- While header bidding and wrapper use is commonplace for desktop and mobile web, adoption for monetizing ads delivered in-app and on CTV is much smaller. Publishers are aware that capabilities exist, but technical limitations and perceptions regarding scaled demand have kept many from moving ahead with these more complex setups.
- Monetization, reporting and ease-of-use matters most when considering a wrapper. Yet publishers also place priority on additional criteria when choosing a wrapper partner capable of monetizing more than desktop and mobile web: The ability to provide broad and unique access to demand and offer an open and scalable solution are core requirements for publishers vetting wrappers for CTV, for example.
- Open source is the most common—and most considered—wrapper technology today, especially for omnichannel publishers. Nearly two-thirds of publishers rely on open source wrappers, and publishers already using wrappers to monetize desktop, mobile web and another screen type (e.g., inapp or CTV) are even more likely to use open source and consider it for future setups, particularly as the future of third-party cookies and Apple's identifier for advertisers (IDFA) remains uncertain.
- PubMatic, Index Exchange and Prebid are the three leading independent wrappers used by omnichannel publishers, according to the research: While Google Open Bidding (OB) and Amazon Transparent Ad Marketplace (TAM) are the most commonly used wrappers, roughly a third of publishers monetizing three or more screens today use PubMatic OpenWrap, with about three in 10 using Index Exchange Wrapper or Prebid Open Source wrapper. Omnichannel publishers on average use 3.7 wrapper partners, and roughly two-thirds are also considering using one of these three wrapper solutions within the next 12 months.

## THE DECISION-MAKERS

Who is responsible for choosing a wrapper partner? Among the 150 US publishers, we found:

- One-third are involved in leading or directing the sale of digital ad inventory on their properties/sites. Among these decision-makers in sales roles:
  - 55% have high involvement in wrapper decision-making
  - 29% are VP-level and above; 53% were director level and 16% manager level
  - 86% also have a hand in monetization/revenue strategy, and 43% have a role in product strategy
- Two-thirds are involved in the operations or monetization of their digital ad inventory that is sold programmatically. Among these decision-makers in ad ops and monetization roles:
  - 72% of these ad ops and monetization professionals have high involvement in wrapper decision-making
  - 29% are VP-level and above; 43% are director level and 27% manager level
  - 40% are involved in sales and partnerships, with 37% involved in business development. One in five are also involved in product strategy
- 3 in 10 publishers are using header bidding and wrappers to monetize three or more screens (e.g., desktop, mobile web, in-app, connected TV (CTV).





Question: In your role, how much level of influence or involvement do/would you have in your company's decision-making for wrapper solutions (i.e., purchase decisions and/or implementations)?

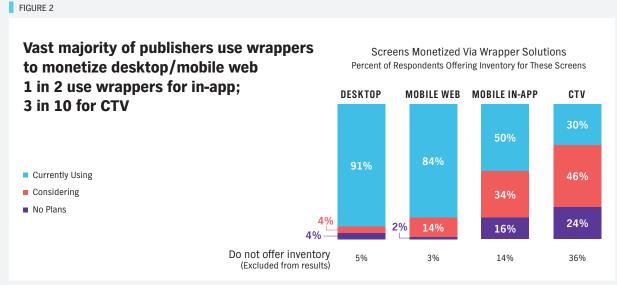
Base: Total respondents

# WRAPPER USAGE TODAY

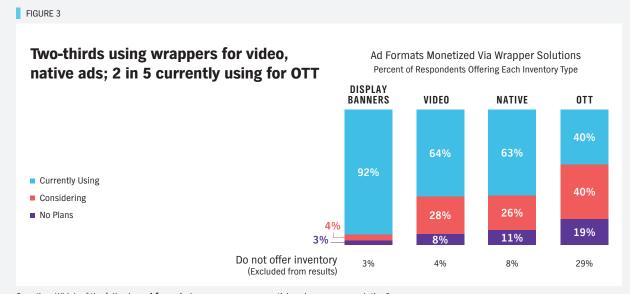
Prompted by a desire to improve ad monetization and selling efficiency, the vast majority of US publishers use wrapper technology to monetize their desktop and mobile web ad inventory.

However, use of wrappers for in-app and CTV ad monetization is much less common today, though publisher interest in these areas is high, thanks to growing advertiser demand and increased time spent in-app and with CTV—a trend accelerated by the coronavirus pandemic.

Just half of publishers selling in-app advertising monetize via wrappers, with just 30% of those selling CTV ads doing the same (Figure 2).



Question: Which describes your company's use of wrapper solutions to monetize ad inventory designated for the following **screen types**? Base: Currently Using a Wrapper Solution (n=119)



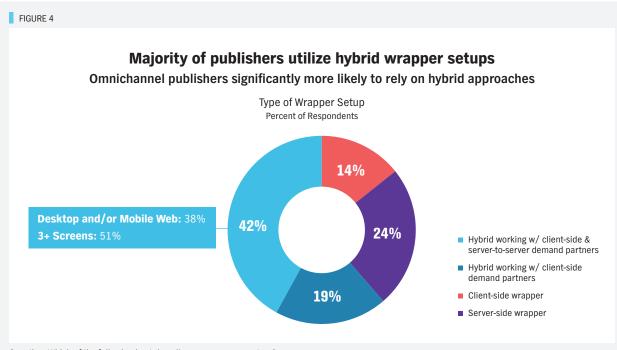
Question: Which of the following **ad formats** is your company monetizing via a wrapper solution? Base: Currently Using a Wrapper Solution (n=119)

There is also a variance in wrapper usage across ad formats. More than 9 in 10 publishers currently sell display banners via wrappers, with nearly two thirds also monetizing video and native ads. Only 40% of OTT inventory is currently monetized via wrapper technology (Figure 3).

Many publishers surveyed had the potential to monetize inventory across three or more screens (e.g., desktop, mobile web, mobile app, and connected TV), just 30% of publishers indicated they were currently using wrappers to monetize their inventory in an omnichannel fashion. However, the study found that those monetizing three or more screens, or "omnichannel wrapper users," had significantly different challenges, opportunities and benefits for their wrapper use. Where applicable, these differences are profiled below.

Most publishers utilizing wrappers today do so via hybrid setups—that is, they use a combination of both server-side and client-side wrapper solutions. Hybrid setups, in which publishers have both client-side and server-to-server-wrapper partners, are the most common, with 42% of total publishers using this setup (Figure 4).

Omnichannel wrapper users were also more likely to rely on hybrid wrappers that included both server-to-server and client-side demand partners (51% vs. 42% of total publishers). In many of these setups, additional header bidding or app bidding partners may sit outside of a primary wrapper. While publishers would largely prefer to streamline complexities and technology requirements, they are often willing to make exceptions for partners capable of offering unique demand at scale, but that are incapable or unwilling to integrate into the broader wrapper framework.



Question: Which of the following best describes your wrapper set-up? Base: Currently Using a Wrapper Solution (n=119)

## CHALLENGES AND ROADBLOCKS

Publishers continue to feel the effects of the coronavirus on advertisers' budgets and demands for brand-safe content. This is all while consumer privacy regulation threatens current audience monetization strategies; as does the impending phase-out of third-party cookies.

The bottom line: The future of the wrapper is important, but the resources many publishers are capable of devoting to it may be diminishing. As such, lack of development resources was the top-cited obstacle to wrapper adoption and investment among those surveyed (Figure 5).

Digging deeper into the specifics around publishers' decisions to not incorporate various screens and inventory types into their wrappers such as CTV, OTT, and in-app, a lack of resources is once again seen as a top obstacle. But lack of perceived format and inventory capabilities, as well as the belief that the payoff was not great enough to implement wrappers for these inventory types, also sidelined publishers.

As publishers become more aware of wrapper solutions and capabilities for these inventory and screen types, there will likely be a growing understanding of the benefits of investing time and resources to move to a more omnichannel monetization setup. And this research indicates that publishers actively look to their technology partners for assistance with everything from setup to proper education to optimization and much more.

41

We're a big company, but we have a lean team. We lean on those outside resources as much as possible...We request a lot of those account teams, and the ones that play nice and have quick, timely responses are more favorable than those who don't."

-VP REVENUE,

FIGURE 5

### Lack of format/inventory capabilities and internal resources limit in-app & CTV use; Lack of format/inventory capabilities leading challenge for OTT& CTV

Top Reasons for Not Monetizing on Screens/Formats

Percent Ranking 1

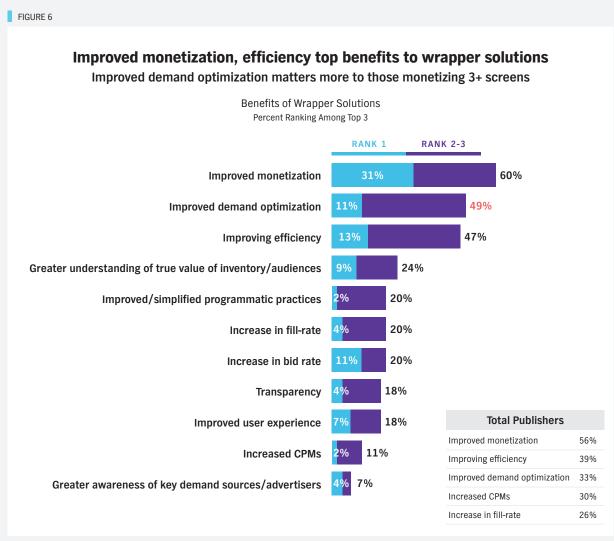
Lack of format/inventory capabilities		Lack of internal resources for implementing		Don't believe payoff is great enough to implement		Cost to implement necessary solutions	
ОТТ	27%	In-app	19%	Video	15%	Video	22%
CTV	19%	Video	17%	In-app	15%	CTV	16%
In-app	18%	CTV	17%	CTV	15%	OTT	12%
Video	15%	OTT	13%	OTT	7%	In-app	12%
Not satisfied with current market solutions		Unaware of partners/ solutions to work with		Too complex to implement		Too disruptive to UX	
ОТТ	11%	OTT	9%	In-app	13%	CTV	9%
Video	7%	CTV	9%	OTT	9%	Video	9%
VIUCU				a=1.	E0/	1	70/
CTV	6%	Video	9%	CTV	5%	In-app	7%

Question: Thinking about the screens/formats that your company is NOT currently monetizing, what are the top reasons? Base Using a wrapper Solution and Not Monetizing Screen/Ad Format (Variable Base)
Display (banners) removed due to very low base (n=13)

# WRAPPER BENEFITS

The challenges publishers face incorporating wrappers, particularly for omnichannel monetization, are significant, but so are the benefits of successfully transitioning to this more advanced wrapper setup.

According to the study, improved monetization, improved efficiency and improved demand optimization were the top three benefits publishers gained from utilizing wrapper solutions. Omnichannel publishers stated they were more likely to see improved demand optimization as a benefit of incorporating wrappers, compared with those just monetizing desktop and/or mobile web inventory (Figure 6).



Question: What are the top **benefits or advantages** of using a wrapper solution?

Base: Total Respondents (Currently Using or Considering a Wrapper Solution) n=150

Significantly higher than other comparison group at 90% LOC in RED

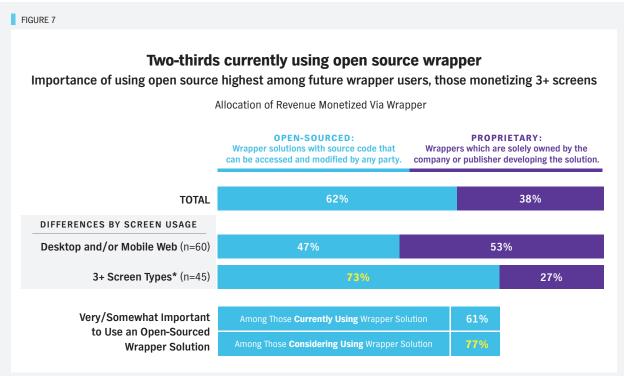
<sup>\*</sup>Includes publishers using wrappers to monetize via three or more screen types

# OMNICHANNEL WRAPPER USAGE

As noted above, publishers value header bidding for its ability to deliver on the true value of their inventory and audiences, and to provide a neutral way of monetizing that value across all direct-sold and programmatic demand sources.

Today, according to the study, nearly three-quarters of omnichannel publishers utilizing wrappers rely on open source solutions. In comparison, just 47% of publishers monetizing desktop and/or mobile inventory via wrappers rely on open source (Figure 7).

Publishers raised the importance of relying on a neutral partner to grant fair and equal footing to all demand partners; they also expressed the belief that open source solutions may be in a better position to handle widespread adoption and implementation of alternative solutions to third-party cookies as they become available. For omnichannel publishers, such demands are even greater considering the need to manage partners and audiences across multiple screens—a feat that today typically requires a greater number of partners and identity solutions to accomplish.



Question 1: How would you classify your company's wrapper and bidder usage?

Base: Currently Using a Wrapper Solution (n=119)

Question 2: How important is it for you to use an open-sourced wrapper solution? Base: Total Respondents (Currently Using or Considering a Wrapper Solution) (n=150)

Significantly higher than other comparison group at 90% LOC in YELLOW

<sup>\*</sup>Includes publishers using wrappers to monetize via three or more screen types

Omnichannel publishers also lean more heavily toward private marketplace (PMP) vs. open exchange deals. Here again, the heightened importance of their cross-screen audience may play a role, as publishers look to make their first-party data available in more controlled programmatic setups (Figure 8).

To me, open source is the ultimate neutral party, but we do still work with a partner company to implement that and get some technical work done around it."



### Open exchanges still account for majority of revenue monetized via wrappers PMP share significantly higher for those monetizing 3+ screen types Allocation of Revenue Monetized Via Wrapper PMPs: **OPEN EXCHANGES:** Invitation-only auction-based marketplaces Public auction open to all buyers and sellers. where publishers make their inventory and audience available to select buyers. 42% 58% **TOTAL** DIFFERENCES BY SCREEN USAGE Desktop and/or Mobile Web (n=60) 35% 3+ Screen Types\* (n=45) 56%

Question: What portion of revenue are you currently monetizing through your wrapper via open exchanges vs. PMPs (Private Marketplace) today? Base: Currently Using a Wrapper Solution (n=119)

Significantly higher than other comparison group at 90% LOC in YELLOW

<sup>\*</sup>Includes publishers using wrappers to monetize via three or more screen types

## CHOOSING AN OMNICHANNEL WRAPPER PARTNER

As omnichannel publishers look to wrapper partners that can help them improve monetization, improve efficiency and demand optimization, what criteria matter most?

Advertiser Perceptions' research looked to understand which product-specific criteria mattered to publishers when choosing wrapper solutions. Among those monetizing three screens or more, monetization performance was the most important consideration when choosing a wrapper partner. Reporting and analytics were the second-most-important features, followed by a host of requirements focused on making wrapper use less complex and easier to manage. These included simplified operations/workflow, customer experience/support teams, as well as ease of implementation. Open and scalable was also an important factor for omnichannel wrapper users (Figure 9).

While the below are criteria that all omnichannel publishers consider, criteria selection changes depending on the specific screens publishers intend to monetize. Publishers investigating CTV partners are more likely to value solutions that can offer broad and unique access to demand. Partners that were open and scalable mattered relatively equally for publishers both in pursuit of in-app and CTV wrapper solutions (Figure 10).

FIGURE 9

**Top-5 Most Important Vendor Selection Criteria** for Omnichannel Publishers (n=45)

Monetization performance	82%
Provides reporting/data & analytics	80%
Simplifies operations/workflow	78%
Customer experience/support team	78%
Ease of implementation AND Open & scalable	71%

FIGURE 10

### **Monetization Performance Matters Most for In-App** and CTV Wrapper

Broad and unique access to demand more important for CTV Top-5 Most Important Criteria for Types of Wrapper Solutions Percent Ranking 1-3

IN-APP WRAPPER SOLUTION		CTV WRAPPER SOLUTION	
Monetization performance 70%		Monetization performance	60%
Provides actionable reporting/data 35%		Broad and unique access to demand	33%
Simplifies operations/	34%	Open and scalable	29%
Ease of implementation — technical implementation; 33% client & server-side wrapper		Ease of implementation — technical implementation; client & server-side wrapper	28%
Open and scalable	27%	Provides actionable reporting/data	28%

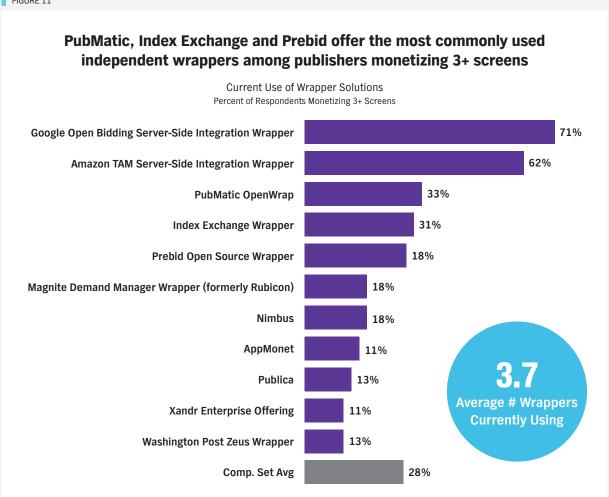
Question 1: When considering an in-app wrapper solution, which of these three criteria are MOST important? Question 2: When considering a "onnected TV wrapper solution, which of these three criteria are MOST important? Base: Using or Considering solution (In-app n=86; CTV n=58)

# **VENDOR MARKET LANDSCAPE**

Publishers monetizing three or more screens rely on an average of 3.7 wrapper partners to meet their needs. Google Open Bidding and Amazon Transparent Ad Marketplace (TAM) server-side integration wrappers are most used by 71% and 62% of omnichannel publishers respectively. According to the survey, among independent wrappers, PubMatic leads, with 33% of omnichannel publishers currently using PubMatic OpenWrap. Approximately three in 10 omnichannel publishers use either the Index Exchange Wrapper or Prebid, the latter being the most common open source solution (Figure 11).

An even greater portion of omnichannel publishers are considering or intending to use these wrapper partners. Nearly two-thirds are considering or planning to use PubMatic OpenWrap, Index Exchange Wrapper or Prebid Open Source Wrapper in the coming year.





Question: Which describes your usage of each wrapper solution to monetize your inventory? Base: Currently Using a Wrapper Solution (n=119)

# **CHOOSING AN OMNICHANNEL PARTNER**

## A PUBLISHER'S CHECKLIST

Looking to expand your current monetization capabilities and improve efficiency and demand optimization? Choosing the right partner is important to realizing this. While the driving decision in choosing an omnichannel solution should be based on whether a partner can truly increase overall monetization, there are additional facets to consider for optimizing monetization strategies. Based on the surveys and interviews, these are added criteria publishers should consider when choosing an omnichannel wrapper partner.

**Omnichannel capabilities at scale.** While the best-of-breed approach may often be ideal, it's not always efficient or effective. Publishers interviewed for this noted the more types of inventory a wrapper incorporated—and the greater the scale of that inventory—the more likely they were to consider them.



The more somebody can supply more of an all-in-one solution and do it well, the more likely we are going to go with them, because then we don't have 17 different pieces of code on the page, all doing specialist things."

-VP MONETIZATION

A consultative service style, particularly for the implementation and setup process. Given time and resource constraints, publishers want partners that can help with setup and optimization; they're also looking for partners to provide expertise and perspective on what lies ahead.



For us, it really came down to the account team on the other end; the customer service they provide. We're a big company, but we have a lean team. We lean on those outside resources as much as possible to help us in troubleshooting or whatever the case may be... We request a lot of those account teams, and the ones that play nice and have quick, timely responses are more favorable than those who don't."

-VP REVENUE

**Level of demand; adoption on the buy side.** Increasingly, publishers are also looking for demand partners that have favorable or preferential relationships with key buying platforms, agencies and brands. This is especially relevant for publishers looking to up private marketplace (PMP) deals.



If they can introduce us to dollars and budgets that we can't access normally, or we don't have the time to access through our sales efforts, then we like that. Especially if they can help implement those deals and those partnerships on our behalf."

-VP REVENUE

• PMP capabilities and support. With omnichannel publishers more inclined to utilize PMPs, relevant capabilities and support are also top-of-mind.

> We are trying to grow our PMP business as much as humanly possible. For us, the bidders and the partners, or the SSPs with an actual demand-facilitation team, or a sales team on behalf of our publisher is important to us, because we're looking for the partners with relationships to bring in the more premium advertising, the more premium dollars and

higher CPMs. So that plays a pretty big factor in who we choose to work with."

-VP REVENUE

 Protection of first-party data. As privacy concerns rise and the fate of third-party cookies is increasingly called into question, consideration of partners' abilities to protect publishers' firstparty data is growing.

> First-party data is one of our biggest and most unique selling points. We need either a wrapper partner or SSP or both who we can trust to work with our first-party and make it accessible when we want it to be accessible."

-VP MONETIZATION

# CONCLUSION

Omnichannel publishers have been slow to transition to omnichannel wrappers, but the benefits are there. While technical limitations and perceptions of scaled demand sidelined many from pursuing these more complex setups, respondents who were able to find the people, technology and resources to make the shift are seeing added benefits in the form of improved monetization, demand optimization, and efficiency.

For many, open source is a preferred wrapper solution, given its greater compatibility and a growing belief that they can more quickly adapt to future disruptions to third-party cookie use. Today, PubMatic, Prebid, and Index Exchange are the most-used and mostconsidered open source wrappers among omnichannel publishers. As publishers consider these and other omnichannel wrapper solutions, they would be wise to look to partners that can provide greater PMP capabilities, scaled access to omnichannel demand and greater protection of first-party data, alongside a more consultative approach to partnership.

# **GLOSSARY OF TERMS**

**Connected TV (CTV):** A television set that is connected to the internet and can obtain OTT content services. This can be in the form of a Blu-ray player, gaming console, smart TV with built-in internet capabilities or a device such as Roku, Apple TV, Amazon Fire TV, and others.

Open Source Technology: Open source solutions are the most scalable options, since exchanges and the large development community maintain the adapters. Prebid is the most popular code base on which hundreds of publishers have built solutions.

Over-the-Top (OTT): The delivery of video content via the internet or "over the top" of infrastructure providers (that is, without the use of traditional cable or satellite TV service). OTT video refers to the content or service, such as Netflix, Hulu, Amazon Prime, and others. While OTT streaming video content can be seen on any internet-connected screen, the majority -at least in the US-occurs on a connected TV device. In other markets, particularly in the Asia-Pacific region, the majority of OTT viewing occurs on mobile devices. Therefore, it is important to differentiate between the two terms.

Omnichannel Header Bidding: Header bidding has mostly been applied to desktop and mobile web. However, mobile app and video header bidding are growing and a wrapper solution that works across multiple formats will prove to be important as digital marketing advances.

# RESEARCH METHODOLOGY AND RESPONDENT PROFILE

### **SAMPLE**

U.S. publishers involved in programmatic digital advertising and advertising technology decision-making sourced from Advertiser Perceptions Ad Pros Community.

#### **FIELDWORK**

Sept 23 - Oct 1, 2020

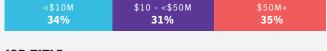
#### **QUALIFICATIONS**

- Company uses or is considering header/app bidding
- Have influence or decision-making involvement in wrapper solution purchase decisions/implementations
- Manager+ job level
- Job functions
  - Business decision-makers/influencers handling monetization/revenue strategy, growth strategy, programmatic strategy, sales/partnerships, ad ops or business development
  - Product/technology decision-makers involved in product, development, technical operations/ solutions, engineering
- Mix of small, medium and large companies
- Mix of digital property types setups

### **DIGITAL PROPERTY TYPES**

- Lifestyle
- Arts & Entertainment
- Business
- Commerce
- Education
- Finance
- Gaming
- News
- Technology
- Shopping
- Social
- Sports
- Weather

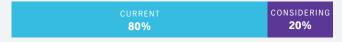
#### ANNUAL REVENUE



### **JOB TITLE**

JUNIOR	міD	SENIOR
<b>23%</b>	<b>47%</b>	<b>29%</b>

#### **USER OF HEADER BIDDING**



### **USE OF WRAPPER SOLUTIONS**



### **About Advertiser Perceptions**

Advertiser Perceptions is the global leader in research-based business intelligence for the advertising, marketing, and ad technology industries. Our expert staff delivers an unbiased, research-based view of the advertising market with analysis and solutions tailored to clients' specific KPIs and business objectives. These insights provide clients with the confidence to make the very best organizational, sales and marketing decisions, driving greater revenue and increased client satisfaction.

### **About PubMatic**

PubMatic delivers superior revenue to publishers by being a sell-side platform of choice for agencies and advertisers. The PubMatic platform empowers independent app developers and publishers to maximize their digital advertising monetization while enabling advertisers to aim to increase ROI by reaching and engaging their target audiences in brand-safe, premium environments across ad formats and devices. Since 2006, PubMatic has created an efficient, global infrastructure and remains at the forefront of programmatic innovation. Headquartered in Redwood City, California, PubMatic operates 14 offices and 8 data centers worldwide.

PubMatic is a registered trademark of PubMatic, Inc. Other trademarks are the property of their respective owners.

#### **PUBMATIC CONTACT**

**Research Contact:** 

**SUSAN WU** 

Director, Marketing Research susan.wu@pubmatic.com

**Press Contact:** 

**BROADSHEET COMMUNICATIONS** 

pubmatic team@broad sheet comms.com

**Sales Contacts:** 

EMMA NEWMAN

Chief Revenue Officer, EMEA emma.newman@pubmatic.com

**JASON BARNES** 

Chief Revenue Officer, APAC jason.barnes@pubmatic.com

**KYLE DOZEMAN** 

Chief Revenue Officer, Americas kyle.dozeman@pubmatic.com

