

PROGRAMMATIC MEDIA SUPPLY CHAIN TRANSPARENCY STUDY

FIRST LOOK

First Look Overview



Over the past decade, open web programmatic advertising has grown dramatically and is now an important and large media investment for most marketers. For marketers, programmatic advertising offers key benefits, including the ability to target the right audience and cost savings from automation.

When programmatic tools are used diligently, the open web provides one of the best opportunities for advertisers to reach broad and diverse audiences efficiently across the entire internet. In addition, programmatic advertising across the open web allows marketers to leverage a wide array of data to reach and grow audiences. But if marketers take their eye off the ball, suspect inventory can find a way into media plans, diminishing the potential of programmatic advertising as a useful tool to drive results.

Unlike the walled garden world, open web programmatic advertising allows for more independent performance measurement while simultaneously supporting quality journalism, diversity of choice, and minority-owned and operated media.

But at the same time, there are challenges.



First Look Overview



Size of the Prize

Open web programmatic advertising is estimated to be an \$88 billion global market. But not all inventory is equal, and it is often difficult to distinguish between good and bad or low quality and high quality. Our log-level analysis across \$123 million in spending with 21 advertisers and 35 billion impressions found that 15 percent of the spending went to Made for Advertising websites. Assuming marketers prefer to avoid placing ads in those environments, the minimum efficiency gains from course correcting through recommendations laid out in this report are \$13 billion (\$88 billion global market with 15 percent on MFA sites equals \$13 billion). As we follow up with the complete report, we are confident that there will be opportunities to drive a total of at least **\$20 billion** in efficiency gains for open web programmatic advertising.

Results of this ANA Programmatic Media Supply Chain Transparency Study will be released in two phases:

- Phase 1 is ANA's "First Look" edition. In this report, ANA is releasing findings on subject matter areas where the analysis has been completed and is ready for publication. Doing so will allow for public discourse to commence laying the groundwork for a more detailed, complex and completely integrated Phase 2 report in a few months.
- Phase 2 will represent the complete report that integrates the "First Look" with additional findings and insights. Phase 2 will dive deeper into the programmatic media supply chain and tackle subjects such as cost waterfalls, media cost analysis, and ad quality (specifically viewability and fraud). The complete report will be issued in the next few months along with a "handbook" that will provide explicit guidance for marketers to better navigate the programmatic media supply chain.



¹ State of the Open Internet Report, Jounce Media, 2023

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First Look Key Findings

Information Asymmetry is a Serious Issue for Advertisers, Leading to Inefficient and Unproductive Media Investment Decision Making - Resulting in Substantial Waste

Information asymmetry is an imbalance in the nature and quality of information possessed by different parties in a transaction. Within the programmatic supply chain there are strong characteristics of information asymmetry in cases where sellers typically have more or better information than buyers about the quality of media inventory being sold in auctions. If buyers are unable to properly access the price of the programmatic inventory (and audiences), they tend to overpay. Our findings identify information asymmetry as a roadblock that makes transparency difficult to achieve and, instead, serves to perpetuate a system that is opaque, confusing, and potentially inefficient.

2. Data Access is Lacking, Resulting in Transparency Issues, Leading to Inefficiencies and Waste

The majority of companies interested in participating in this study were unable to do so as they were not able to make it through legal and other hurdles to get access to log data from DSPs, SSPs, and Ad Verification providers. While brands appear to have more access to data today, data gaps and lack of transparency still plague the programmatic space. The most common explanation is simple: if brands don't own their supply contracts attached with specific data rights, or require their agency to obtain access to such data for them, then they are blocking themselves from turning data into valuable information to optimize decision making.

Misaligned Incentives: Advertisers Prioritize Cost Over Value

A major reason for the apparent lack of transparency in the programmatic ecosystem is that incentives driving advertiser behavior are often misaligned with the goals of their marketing campaigns. When advertisers prioritize cost over value, they do so to their own detriment. Said another way, chasing cheap CPMs will likely lead to a cascade of downstream ad quality issues that might not be initially detectable. The primary incentive driving programmatic media buying behavior is cost — getting the most impressions for every dollar. On its face, this might seem like a very sensible incentive. However, in the media world not all inventory and not all impressions are equal. Common sense should tell buyers that not all "cheap" inventory is "quality" inventory.



First Look Key Findings

4. More Waste - The Average Campaign Ran on 44,000 Websites It is deeply concerning that the average number of websites for study participants was 44,000 top-level domains. It is hypothesized that the "long tail" of the web adds minimal reach yet likely performs badly in areas such as fraud, viewability, and brand safety, assuming such issues can even be measured there. Of course, there are always exceptions where the long tail makes sense. Care must be taken to ensure any reduction is both fair and equitable for small or minority-owned or minority-targeted service providers and the audiences they deliver.

5. Made for Advertising (MFA) Websites Represent 21 percent of Impressions - Indicating Advertisers are Not in Control of Media Placement Decisions

Made for Advertising (MFA) websites comprised a startling 21 percent of study impressions and 15 percent of spend. MFA sites typically use sensational headlines, clickbait, and provocative content to attract visitors and generate page views, which in turn generate ad revenue for the site owner. MFA sites also usually feature low-quality content, and may use tactics such as pop-up ads, auto-play videos, or intrusive ads to maximize ad revenue.

6. Sustainability Efforts Can Be Enhanced by Productive/ Non-Wasteful Programmatic Media Buying

Sustainability issues are of increasing importance to the ad industry. The programmatic ecosystem has grown rapidly and has had a negative environmental impact, given that it's energy-intensive. Every impression and ad call for every ad anywhere along the supply chain creates carbon emissions. The longer the supply chain and the more ad calls, vendors and SSPs, the higher the carbon emissions. Some of the lower quality websites, especially Made for Advertising sites, create more carbon emissions than the average site. That is because they have many ads per page and indiscriminately make ad calls to as many demand sources (like SSPs, DSPs, and ad networks) as they possibly can. According to Scope3 (a new industry organization with the mission to decarbonize advertising), MFA sites are 26 percent higher in carbon emissions than non-MFA inventory.



First Look Key Findings

The Previously Identified "Unknown Delta" can be Virtually Eliminated with a Full Path Log-Level Data (LLD) Analysis

The "unknown delta" was first coined in ISBA's 2020 Programmatic Supply Chain Transparency Study.² It is defined as the unattributable ad spend between the funds that leave a DSP and the gross funds received by an SSP. While it was initially thought to eat into 15 percent of working media, ISBA's follow-up study in 2023 revealed just a 3 percent unknown delta due to improved data matching. In this new ANA study, analysis of deterministically 1-to-1 matchable impression data results in a zero percent delta. The good news for advertisers is that this mysterious delta is not about missing money but about missing data capabilities.



² Programmatic Supply Chain Transparency Study, ISBA, 2020

First Look Recommendation Summary

- Advertisers must become far more responsible and provide more active stewardship of their media investments. Media is often the largest marketing expenditure at most companies. Advertisers need to "lean in" and be more active stewards of their media investments rather than delegating that entirely to their agencies. If delegated, they need to ensure the agencies are working in the marketer's best interest. Advertisers who outsource their media management without active internal stewardship do so at their risk. This is especially important with programmatic media given its complexity and opacity and the fact that it's the biggest area of advertising spend for most companies. Lack of stewardship increases the risk of wasteful and inefficient media buys.
- 2. Have direct data access contracts with all primary supply **chain partners.** Transparency maximization and data access rights go hand-in-hand. Consider having direct contracts with all primary supply chain partners – DSPs, SSPs, and Ad Verification vendors. Often the best starting point is with the DSP contract. If owning your own supply chain contracts does not make sense for your organization, then at the very least ensure your client/agency agreement requires the agency to obtain and provide access rights to supply chain partner data.
- 3. Construct agency partnerships that provide complete access to data and full transparency of websites purchased on media buys; know the difference between agent and principal. It is important for advertisers to know when their agency is acting as their agent and when the agency is acting as principal. If an agency is acting as a principal, it does not need to act in the best interests of the marketer. unless contractually required to do so. Nor is it legally obligated to be transparent, unless contractually required to do so. When an agency is acting as a principal, advertisers need to be diligent in ensuring they are contractually able to get the information they need to make informed decisions.



First Look Recommendation Summary

- 4. Prioritize quality media buys. Low cost/"cheap CPM buys" can lead to non-viewable/non measurable media purchases. Advertisers must better balance their pursuit of low cost inventory in programmatic with ad quality — meaning viewable, fraud free, and brand safe. The "cheapest" media may not be the "best" media. And there should be a greater focus on the importance of context.
- 5. Accessing log-level data (LLD) from every AdTech vendor across an advertiser's supply chain and stitching that data together can inform where value is hiding and where there is no value at all, helping to make better decisions. When advertisers can see, compare, and contrast how a supply chain is performing with impression-level granularity in real-time at the campaign, brand, portfolio, country, and regional levels, they will have information balance to make better decisions. With clean and deterministically matched log data in hand, buyers can compare Quality CPMs (aka "qCPM") across different strategies on a like-for-like basis. Buyers should routinely assess log-level data on an always-on dashboard basis or engage an independent third party, not their agency, to make the assessment on their behalf. Buyers need to ensure that there is a balance between the price they're paying and the quality of inventory they're receiving.
- 6. Advertisers should streamline the number of websites used. In this study the average participant used 44,000 websites. Streamlining the number of websites used will diminish the risk of purchasing non-viewable and fraudulent inventory. Advertisers can reach a high percentage of target audiences using a few hundred websites. Care must be taken, however, to ensure any reduction is both fair and equitable for small or minority-owned or minority-targeted service providers and the audiences they deliver.



First Look Recommendation Summary

- 7. Demand that Made for Advertising websites be excluded from a media buy unless they are specifically wanted or needed. Advertisers must be aware that Made for Advertising (MFA) websites can account for a significant portion of their overall campaign. A startling 15 percent of spending and 21 percent of impressions in this study appeared on sites made only for advertising. Advertisers should determine if MFA sites fit with their brand suitability standards for content and user experience and clarify their tolerance for the inclusion of MFA inventory in their campaigns.
- 8. Prioritize the creation and use of website "inclusion" lists versus any focus on "exclusion" lists. There are just too many websites for exclusion lists – some 4,500 MFA sites alone. Make sure your partners are aware of your inclusion lists and monitor compliance.
- 9. Use only partners where quality metrics viewability, fraud, and brand safety - are available. In some cases, impressions may be considered unmeasurable for viewability or IVT (invalid traffic) decisions may be unmeasurable due to reasons such as ad blocking, signal collection, or technical limitations. The MRC defines and requires reporting of both Viewability Measured rates and IVT Decision rates for accredited vendors. When it comes to unmeasurable impressions or situations where an IVT decision cannot be made, it's important for advertisers, publishers, and measurement vendors to work together to minimize such occurrences and improve measurement accuracy. This can involve implementing best practices to address ad fraud, leaning into LLD, and aligning buying to the best prospects of viewability. Publishers can play a role and therefore publisher signal availability and measurability are encouraged.
- 10. Demand to understand the sustainability impact of programmatic media purchases. More productive buys can often lead to lower **carbon emissions.** The longer the supply chain, the higher the carbon emissions; so consider where reductions in your supply chain can be made. According to Scope3 (a new industry organization with the mission to decarbonize advertising), MFA sites are 26 percent higher in carbon emissions than non-MFA inventory.



First Look Project Background The RFP/The Team



The RFP

In April 2021 the ANA announced the launch of a comprehensive study of the programmatic media buying ecosystem, which it described at the time as "riddled with material issues including thin transparency, fractured accountability, and mind-numbing complexity."

Goals of the RFP were:

- Drive business and brand growth through the elimination of wasteful and unproductive spending.
- Make the digital media supply chain understandable, highly transparent, and analytically rich.
- Institute corrective solutions and industry standards that have long-term sustainability.
- Determine whether industry oversight bodies are needed to ensure the integrity of the programmatic ecosystem.
- Improve marketers' decision-making.



Awarding the Job

In December 2021, the ANA awarded the job to:

- **PwC US** who supported the study with its Media Intelligence platform to ingest and analyze log data.
- **TAG TrustNet**, an industry initiative to drive transparency, accountability, and efficiency across the digital advertising industry with a technology platform enabling deterministic matching of impression LLD.
- **Kroll**, a provider of services and digital products related to valuation, governance, risk, and transparency, served as the investigative/qualitative research partner.



CMO Growth Agenda

This project builds upon the work of the CMO Growth Council, which was established by the ANA and Cannes Lions to focus on driving enterprise growth. The CMO Growth Council has identified four global growth priorities and a 12-point industry growth agenda. Media and Supply Chain Transparency is a key area of focus for the ANA Growth Agenda, under the Brand, Creativity, and Media growth priority.



In June 2022 the CMO Growth Council released "The CMO's Guide to Programmatic Transparency" which provided a step-by-step guide to help maximize investment in programmatic advertising.

Now, the Programmatic Media Supply Chain Transparency Study goes further and deeper to help advertisers get more value from programmatic advertising.



Study Focus: Addressable Market

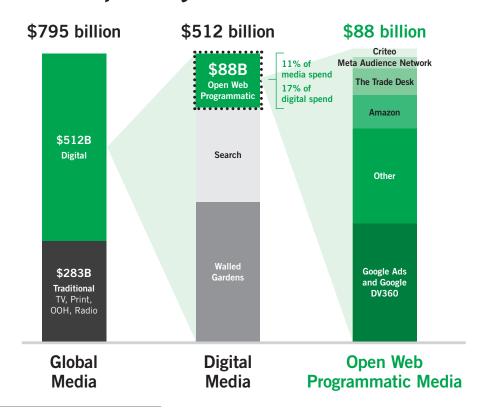
The study focused on open web programmatic advertising, an \$88 billion global market.

According to Jounce Media, \$88 billion of global advertising money left DSP platforms to buy open web classic banner and video ads (~11 percent of global media) in 2022.³

\$512 billion (65 percent of total ad spend) in global digital spend breaks down into three broad buckets: Search, Walled Gardens (Meta, Snap, TikTok, etc.), and Open Web Programmatic advertising. The latter is the focus of this study.

Advertisers spend Open Programmatic Web budgets through at least one DSP, oftentimes more than one. From DSPs, these funds move down the supply chain through multiple supply-side platforms (SSPs) and are "touched" by other supply chain vendors (e.g., audience data, ad verification technology, and ad serving) with some portion making its way into the publisher's hands.

Open Programmatic Web Media



³ State of the Open Internet Report, Jounce Media, 2023



First Look Project Background **Past Precedent**

This study is not the first supply chain examination and will not be the last. Several past precedents have come before. And each one is a steppingstone to what advertisers want in exchange for their open web programmatic media budgets: measurable effectiveness, provable value, and trustable transparency.

	WFA	2014 WFA Guide to Programmatic Media ⁴	Log-Level Data
	ebiquity IIII AD/FIN	2017 Programmatic: Seeing Through the Financial Fog ⁵	
	ANA	2017 The State of Programmatic Media Buying ⁶	
	tag TrustNet	2021 TAG TrustNet UK Pilot ⁷	
IS	BA pwc UK	2020 and 2023 Programmatic Supply Chain Transparency Study ⁸	
	ΑNA	2023 Programmatic Supply Chain Transparency Study	



⁴ WFA Guide to Programmatic Media (2014)

⁵ Programmatic: Seeing Through the Financial Fog (2017)

⁶ The State of Programmatic Media Buying (2017)

⁷ TAG TrustNet UK Pilot Report (2021)

⁸ ISBA Programmatic Supply Chain Transparency Study (2020) and ISBA Programmatic Supply Chain Transparency Study (2023)

First Look Project Background **Timeline**

From team assembly to "First Look" findings, the project took 18 months.

ISBA releases "Programmatic Supply Chain May 2020 Transparency Study" revealing the "unknown delta" ANA kicks off discovery process to initiate July a U.S.-based programmatic supply chain study February 2021 **ANA** begins RFP development RFP released April RFP responses due; more than two dozen June companies respond Job awarded to: PwC, TAG TrustNet, Kroll December January 2022 Study kickoff with advertising recruiting Project team met with supply chain delays and constraints around data permissions and access September **Data collection begins** Live collection ends, data matching and January 2023 analysis begins "First Look" report released June



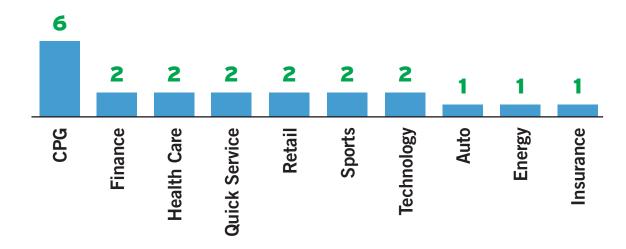
Marketer Participants

Sixty-seven (67) ANA member companies raised their hands to participate in this project, yet only 21 were ultimately able to do so. The 46 others were not able to make it through legal and other issues to get access to log data from DSPs, SSPs, and Ad Verification providers.

Advertiser Interest to Participation



21 advertisers across 10 categories participated in the study



Supply Chain Participants

The ANA is appreciative of the DSPs, SSPs, and Ad Verification companies who participated and provided frictionless log data for this study.

Supply chain participants consisted of:

- 3 DSPs
- 6 SSPs
- 3 Ad Verification companies

Notably, several past studies have included log data analysis, and that was also the case with this study. As an entire body of work across various industry associations, it is certainly encouraging to see more log data usage as a trending norm. It is also encouraging to see working media to publishers trending upward.

As pointed out in the RFP, an important point of difference in this study was to focus on working media after ad impressions are served to the publisher to gain a better understanding of ad quality and value. There will be an in-depth analysis of that in our follow-up report.

	Advertiser	Agency & Trading Desk	DSP	Other Tech	Unkown Delta	SSP	Working Media to Publisher	Ad Quality	Overall Working Media
	\$		ioi Total		V	ioi L		X	v
2014	WFA	20%	10%	25%	Not Studied	5%	40%	Not Studied	Not Studied
2017 with log data	ebiquity IIII ADFIN	6%	22	2%	Not Studied	Not Studied	72%	Not Studied	Not Studied
2020 with log data	ISBA pwc UK	7%	8%	10%	15%	9%	51%	Not Studied	Not Studied
2023 with log data	ISBA pwc UK	Not Studied	9%	7%	3%	10%	71%	Not Studied	Not Studied
2023 with log data	DWC KROLL	Not Studied	8%	7%	0%	16%	69%	15% Made-for- Advertising	More to come in detailed report



Log-Level Data (LLD) as a starting point

The data analyzed in this report is based on LLD, the detailed record of everything about an impression obtained from the tech vendor. It should be collected daily and contain timing stamps, delivery data, campaign meta data, financial information and other details about each impression. There are usually hundreds of millions to billions of impressions to process.

LLD from each technology vendor is incredibly valuable on its own. It becomes a game changer when matched to LLD from other tech vendors and with other data sets in a deterministic and automated way.

The simple use case of viewing working media on a daily basis at the campaign, brand, portfolio and control levels moves the advertiser from reactive audits to proactive monitoring and managing based on data-driven insight and performance benchmarking.

Additionally, when LLD and matched impressions are joined to other data sets such as Sustainability, DEI, Privacy and others, the advertiser has answers to questions that have gone unanswered to date.

Supply Chain Log-Level Data Log-Level Data = Fundamental Data Set Insights on buy-side value linking prices to ad impression quality Ad **DSP** SSP Verification Linking buy-side and sell-side verifies impression delivery Linking buy-sides and sell-side with ad impression quality reveals supply path value

The previously identified "unknown delta" can be virtually eliminated with a full path Log-Level Data (LLD) analysis

The unknown delta is defined as the unattributable ad spend between the funds that leave a DSP after transaction fees are deducted from media budgets and the gross funds received by an SSP before the SSP take rate is considered.

The unknown delta is zero when impressions can be matched deterministically using common RTB Bid Request and Bid Request Impression Identifiers between DSP and SSP. When impression identifiers do not exist between DSP and SSP, analysts will attempt to match aggregated "lumpy" data resulting in a large discrepancy or "unknown delta."



First Look Project Background **Study Fundamentals**

For PwC and TAG TrustNet, the study period was between September 2022 and January 2023.

- \$123 million in ad spend
- 35.5 billion impressions

Kroll conducted 35 qualitative interviews, primarily with supply chain intermediaries.

The study focused on open web programmatic advertising. Unlike past studies that tapped into log data but only looked at dollars moving from advertisers to publishers, this study also used log data and combined other data sets to understand ad impression quality making it (or not) to consumers.

Notably, the lion's share of impressions from an ad placement perspective were classic banner and video ads served on sites and apps.



Information Asymmetry is a Serious Issue for Advertisers, Leading to Inefficient and Unproductive Media Investment Decision Making - Resulting in Substantial Waste

Information asymmetry is an imbalance in the nature and quality of information possessed by different parties in a transaction. Within the programmatic supply chain there are strong characteristics of information asymmetry in cases where sellers typically have more or better information than buyers about the quality of media inventory being sold in auctions. If buyers are unable to properly access the price of the good in question (i.e., programmatic inventory and audiences), they tend to overpay. If buyers are unable to know enough about the underlying quality of the good being sold, particularly in auctions, they cannot know how to price it with any precision or certainty.



Information Asymmetry is a Serious Issue for Advertisers, Leading to Inefficient and Unproductive Media Investment **Decision Making - Resulting in Substantial Waste**

Kroll conducted interviews with the goal of illuminating, clarifying, and demystifying the U.S-based programmatic supply chain. Kroll identified information asymmetry as "a roadblock that makes transparency difficult to achieve and, instead, serves to perpetuate a system that is opaque, confusing, and potentially inefficient." Specifics from Kroll on information asymmetry:

One of the reasons for the apparent lack of transparency in the programmatic ecosystem is information asymmetry. Our study found that this imbalance exists not only between the advertiser and the other players in the supply chain, but also internally within the advertiser. This is fueled by a complicated, decentralized, highly technical system comprised of many disparate players that has and is subject to minimal oversight or regulation. Paradoxically, the information necessary to alleviate this asymmetry is largely available, at least in theory. In practice, however, it appears that many advertisers are either not aware that this information is available and/or lack the knowledge of how to use it. Our source interviews provided some insight into the reasons for this phenomenon.

The structure of contracts in programmatic buying appears to be a contributing factor to this imbalance. For instance, our sources cited the fact that contracts between the various parties are generally only one level deep. As a simplified example, the advertiser contracts with their agency, the agency contracts with the DSP, the DSP contracts with an SSP, and the SSP contracts with the publisher. As such, the advertiser is often only privy to the terms and conditions of the contract with their agency. This lack of insight into the contracts with downstream partners creates an inherent information asymmetry, as the advertiser likely does not have any contractual right to know the terms of the deals their agency is making.

Notably, our study also found that agency contracts with downstream partners often span across the agency's business and are not specific to any particular brand — i.e., the contracts govern all of the agency's clients. This has the benefit of giving the agency leverage in negotiating better rates due to volume, which ultimately benefits the advertiser. However, it is important to note that the agency is contracting as a principal and not as an agent of the advertiser. This naturally impacts decisions being made by the agency, such as which ad tech partners to use and how much work to flow through them. Such decisions may make sense for the agency's entire body of clients but may not be in the best interest of any particular advertiser. Alternatively, if advertisers owned their contracts with downstream partners, they may not be able to secure the same rates as their agency, but they might benefit from other terms that are more suitable for their specific needs.



Information Asymmetry is a Serious Issue for Advertisers, **Leading to Inefficient and Unproductive Media Investment** Decision Making - Resulting in Substantial Waste

Another complicating factor that emerged from our interviews is that the various individuals within the advertiser who are negotiating these contracts are likely to be from the procurement and/or legal functions, as opposed to marketing. This creates an inherent disconnect within the advertiser itself, as those executing the contracts have little to no insight into the contact's terms and how those terms might impact cost, data partners, and incentives for the agency.

Similarly, at the back end of a campaign, those receiving and reviewing invoices related to programmatic media spend are likely to be from the finance function. Again, information gleaned from our source interviews suggested that it is uncommon for anyone from marketing to be involved in this review. As such, they have no insight into the information available in various line items, much of which reveals how media dollars were spent.

Another cause of information asymmetry in the programmatic space is the differing levels of education about how programmatic works. Our sources were clear in their belief that it is rare for anyone at the advertiser to truly understand how programmatic buying operates. This lack of education naturally leads to a heavy reliance on the agency, thereby making knowledge a valuable commodity for the agency.

We found that advertisers were mostly content to rely on their agencies to guide them through this confusing and highly technical space, as it is often cost-prohibitive to maintain those resources in-house. Just as important, sources reported an awareness that knowledge comes with a responsibility to act on that knowledge. As such, some advertisers have abstained from taking their programmatic buying in-house because they "don't want the liability," and "agencies have a lot of resources that are hard to replicate."

Throughout the study, several interviewees made it a point to say that transparency was in fact fully available to buyers. When asked how, they repeatedly pointed to the existence of detailed log files that show the flow of each impression from brand to publisher. And yet, our study found that many buyers did not even know what log files were, how to acquire them, or what to do with them if they got them. In addition, several interviewees also indicated that the invoices showed the full programmatic pathway and its ultimate cost.

"Marketers are really great story tellers, story creators. Few of them know media. If few of them understand media, even less of them understand technology and they're using technology to transact billions and trillions of dollars." — DSP Account Manager

The full Kroll report is available at www.ana.net/Kroll.



Information Asymmetry is a Serious Issue for Advertisers, Leading to Inefficient and Unproductive Media Investment Decision Making - Resulting in Substantial Waste

Recommended Actions

- There are strong consistencies between learning in this current 2023 study and that of the 2016 media transparency report. It was stated in that report (Media Transparency: Prescriptions, Principles, and Processes for Marketers):
 - Advertisers are responsible for more active stewardship of their media investments. Media is often the largest marketing expenditure at most companies. Advertisers need to "lean in" and be more active stewards of their media investments rather than delegating that entirely to their agencies. Advertisers who outsource their media management without active internal stewardship do so at their risk.

This is especially important with programmatic media given its complexity and opacity and the fact that it's the biggest area of advertising spend for most companies. Lack of stewardship increases the risk of wasteful and inefficient media buys.

- It is important for advertisers to know when their agency is acting as their agent and when the agency is acting as principal. If an agency is acting as a principal, it does not need to act in the best interests of the marketer, unless contractually required to do so. Nor is it legally obligated to be transparent, unless contractually required to do so. When an agency is acting as a principal, advertisers need to be diligent in ensuring they are contractually able to get the information they need to make informed decisions.
- Tapping log-level data from every AdTech vendor across an advertiser's supply chain and stitching that data together informs where value is hiding and where there is no value at all. When advertisers can see, compare, and contrast how a supply chain is performing with impression-level granularity in real-time at the campaign, brand, portfolio, country, and regional levels they will have information balance to make better decisions.



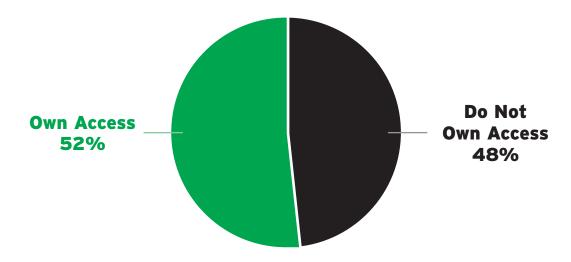
2. Data Access is Lacking, Resulting in Transparency Issues, Leading to Inefficiencies and Waste

Sixty-seven (67) ANA member companies raised their hands to participate in this project, yet only 21 were able to do so. The 46 others were not able to make it through legal and other hurdles to get access to log data from DSPs, SSPs, and Ad Verification providers. While brands appear to have more access to data today. data gaps and lack of transparency still plague the programmatic space.

The most common explanation is simple: if brands don't own their supply contracts attached with specific data rights, or require their agency to obtain access to such data for them, then they are blocking themselves from turning data into valuable information to optimize decision making.

Brands frequently lack an understanding of what data they legally have access to. Fifty-two percent of the 67 advertisers who initially expressed interest in participating in the study own direct DSP data access through their contracts. DSP access for the other advertisers was executed via their agency's DSPs contracts.

52 percent of brands own direct DSP data access through their contracts.



2. Data Access is Lacking, Resulting in Transparency Issues, Leading to Inefficiencies and Waste

Recommended Actions

Transparency maximization and data access rights go hand-in-hand. Consider having direct contracts with all primary supply chain partners – DSPs, SSPs, and Ad Verification vendors. Often the best starting point is with the DSP contract. If owning your own supply chain contracts does not make sense for your organization, then at the very least ensure your client/agency agreement requires the agency to obtain and provide access rights to supply chain partner data.

When brands own the contracts, they'll get log data rights enabling easy, fast, and frictionless access.



3. Misaligned Incentives: Advertisers Prioritize **Cost Over Value**

Kroll found that another major reason for the apparent lack of transparency in the programmatic ecosystem is that "incentives driving advertiser behavior are misaligned with the goals of their marketing campaigns." When advertisers prioritize cost over value, they do so to their own detriment. Said another way, chasing cheap CPMs will likely lead to a cascade of downstream ad quality issues that might not be detectable. Specifics from Kroll:

According to many of our sources, one of the primary incentives driving media buying behavior is cost — i.e., getting the most impressions for every dollar. On its face, this would seem like a very sensible incentive. However, in the programmatic world, not all inventory and, therefore, not all impressions are equal. For example, paying \$5 for 1,000 impressions may actually be worse for a specific campaign than paying \$10 for 500 impressions; the key variable is the relative quality of the impressions. Despite this, the individuals handling agency contract negotiations within the advertiser are given clear incentives that cause them to be "focused on making things more efficient financially... cheaper." Per an agency account manager with whom we spoke, "agencies have an aggressive desire to continually win business, which ultimately has created a race to the bottom." In fact, agency performance payments are often tied to how much savings they generate for the client. The natural result of this incentive is that value can be lost or overlooked.

"If I look at buying certain inventory and look through different SSPs and one is 20 percent more expensive, I can't say that it's more expensive due to a certain thing, I will just cut it out because it's more expensive." — Agency Consultant

This misalignment between cost and value is problematic because it drives behavior that is directly contrary to the achievement of the stated goal.

Further, some of our sources noted that most advertisers lack incentive to buck the status quo of prioritizing cost over effectiveness due to the difficulty of measuring the effectiveness of a campaign and true ROI in the programmatic space. According to sources, as long as buyers are staying within budget and meeting their KPIs, they are perceived as being successful. There is simply no reason for them to do more. As one source said:

"A big part of strategy of advertising is how can I get the same amount of media and same audience with less money... If I do that, I win." — Publisher, Former SSP Account Manager

Few players in the supply chain, to include the majority of advertisers, incentivize or prioritize value or transparency over cost.

"People have gotten to the point where they confuse efficiency with value." — Agency Trading Desk Lead, former SSP and DSP Manager

3. Misaligned Incentives: Advertisers Prioritize **Cost Over Value**

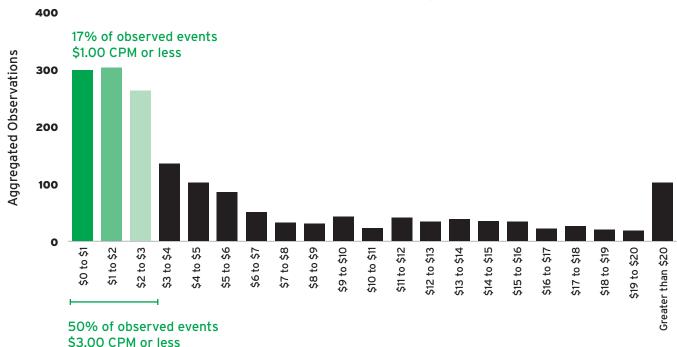
The project team conducted an analysis of the CPMs paid by advertisers who participated in our study.

- Advertiser CPM: The overall average CPM paid by advertisers in the DSP-Ad Verification matched data set was \$2.66.
- Media Cost CPM from DSP: After accounting for buy-side transaction fees, the average CPM paid to the SSP exchanges was just \$2.23.
 - o The lowest-paying advertiser participant had an average media cost CPM of just \$0.57 and the highest had an average of \$20.75.
 - o 17 percent of the impressions were bought for less than \$1.00 CPMs.
 - o 34 percent of the impressions were bought for less than \$2.00 CPMs.
 - o 50 percent of the impressions were bought for less than \$3.00 CPMs.

There is clearly too much attention on driving costs down.

CPM Distribution

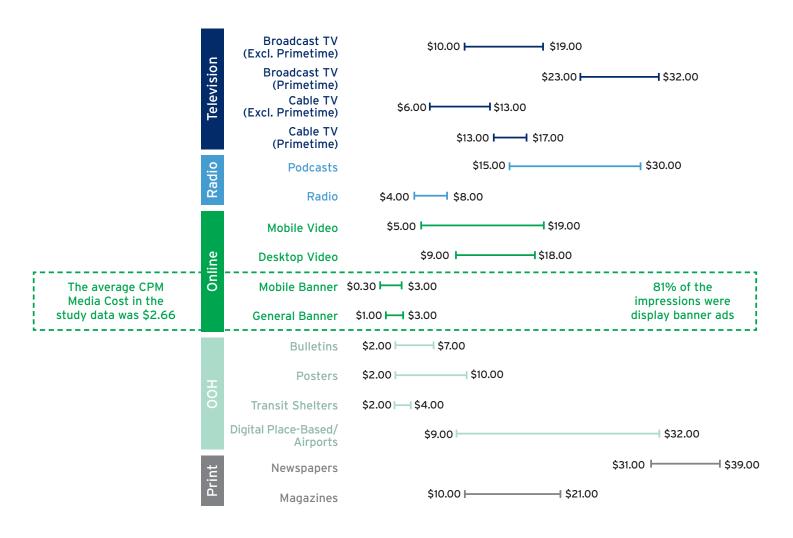
Cheap Reach is the name of the game.





3. Misaligned Incentives: Advertisers Prioritize **Cost Over Value**

Viewing CPMs across various channels on a relative basis helps put open web programmatic buying into a sharper perspective. The majority of the data collected in this study was for display banner ads, averaging a \$2.66 CPM. This CPM is cheap compared to other media and in the same range as bulletins and posters.



Source: Billboard Insider



3. Misaligned Incentives: Advertisers Prioritize **Cost Over Value**

Again, there is clearly too much attention on driving costs down. The primary incentive driving programmatic media buying behavior is cost — getting the most impressions for every dollar. On its face, this might seem like a very sensible incentive. However, in the media world (open web programmatic advertising in particular), not all inventory and not all impressions are equal. Common sense should tell buyers that not all "cheap" inventory is "quality" inventory. Quality includes factors such as viewability, human traffic (not IVT), and the context of the ad placement. This issue is further complicated when cheap reach buying is conflated with "vanity" KPIs⁹ that make such practices appear like they deliver ROI when the contrary is the more likely outcome.

Recommended Actions

Advertisers must better balance their pursuit of low cost inventory in programmatic with ad quality – meaning viewable, fraud free, and brand safe. The "cheapest" media may not be the "best" media. And there should be a greater focus on the importance of context.

When pricing information from DSP and SSP log data is married with ad impression quality data from Ad Verification provider log data, buyers get a relative sense of value to make better decisions. With clean and deterministically matched log data in hand, buyers can compare Quality CPMs (aka "qCPM") across different strategies on a like-for-like basis. Buyers should routinely assess log-level data (LLD) or engage an independent third party, not their agency, to make the assessment on their behalf to ensure that there is a balance between the price they're paying and the quality of inventory they're receiving.

Consider working only with partners where quality metrics — viewability, fraud, and brand safety — are available.



⁹ Vanity KPIs refers to Key Performance Indicators that may look impressive or appealing on the surface but do not provide meaningful insights or contribute significantly to business objectives. These metrics often focus on superficial or easily manipulated measures that may not directly impact the core goals of a company or accurately reflect its success.

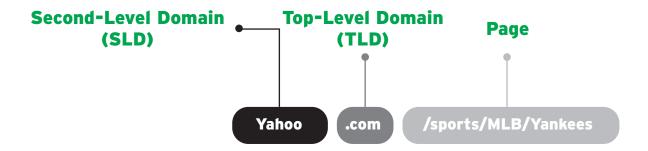
4. More Waste - The Average Campaign Ran on 44,000 Websites

Give yourself a test. Can you think of 44 websites for your programmatic advertising campaign to run on? How about 440? Or 4,400? Now 44,000?

It is deeply concerning that the average number of websites for study participants was 44,000 top-level domains.

That is amazingly consistent with the ISBA 2020 report, where the average was 40,524.

Notably, inside each TLD (www.yahoo.com) is one or more unique URLs (www.yahoo.com/sports).



While the initial promise of programmatic advertising was about audience targeting, advertisers need to reconsider the importance of context.

Is there confidence that the context of those 44,000 websites is appropriate for brands? Do some of those websites present brand risk issues? Or does context and risk mitigation represent less important concerns for brands?



4. More Waste - The Average Campaign Ran on 44,000 Websites

The reality is that advertisers can reach a high percentage of target audiences using a few hundred websites.

It was hypothesized that the "long tail" of the web adds minimal reach, and likely underperforms in the quality metrics of fraud, viewability, and brand safety. To test that hypothesis for fraud and viewability, an analysis by TAG TrustNet divided all websites into three groups:

- 1. Top 1–500 domains by impressions, representing 62 percent of total ad spend and 63 percent of total impressions
- 2. Top 501–3,000 domains by impressions, representing 22 percent of total ad spend and 23 percent of total impressions
- 3. Next 3,000 domains (long tail) by impressions, representing 16 percent of total ad spend and 14 percent of total impressions

Compared to the long tail, the top 1-500 domains:

- Had 50 percent lower fraud rate
- Were 13 percent more viewable

This provides strong directional support for concentrating programmatic media activity on a smaller number of top websites.

Of course, there are always exceptions where the "long tail" makes sense. Care must be taken to ensure any reduction is both fair and equitable for small or minority-owned or minority-targeted service providers and the audiences they deliver.



4. More Waste - The Average Campaign Ran on 44,000 Websites

Recommended Actions

Advertisers should streamline the number of websites used. In this study the average participant used 44,000 websites. Streamlining the number of websites used will diminish the risk of purchasing non-viewable and fraudulent inventory. Advertisers can reach a high percentage of target audiences using a few hundred websites. Care must be taken, however, to ensure any reduction is both fair and equitable for small or minority-owned or minority-targeted service providers and the audiences they deliver.

Similar to the 80/20 rule, advertisers should work with audience data partners and media partners aiming to reach the largest share of their intended target audience by buying the fewest properties possible and using the most direct path possible.

Consider having "inclusion" lists¹⁰ for your programmatic advertising – not "exclusion" lists¹¹ (as there are just too many websites). Make sure your partners are aware of your inclusions lists and monitor compliance.

Only work with websites where quality metrics – viewability, fraud, and brand safety – are available.

Be aware of the sustainability impact of the websites you are using (more in a later section).

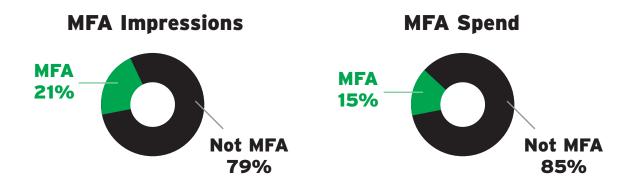


¹⁰ An inclusion list is a list of sites or domains and bundle IDs that an advertiser considers to be safe, acceptable, and trustworthy environments to serve ads to. Several factors are considered when adding sites or domains to an inclusion list, including the brand safety and brand suitability requirements of the product or service being advertised. Source: Smartclip

¹¹ An exclusion list typically contains domains that an advertiser wants to avoid serving their advertisements to, whether it be due to a conflict of interest, or if the domain is known to engage in fraudulent practices or display inappropriate content. Source: Smartclip

5. Made for Advertising (MFA) Websites Represent 21 Percent of Impressions - Indicating Advertisers are Not in Control of Media Placement Decisions

Made for Advertising (MFA) websites comprised a startling 21 percent of study impressions and 15 percent of spend (analyzing a subset of data).

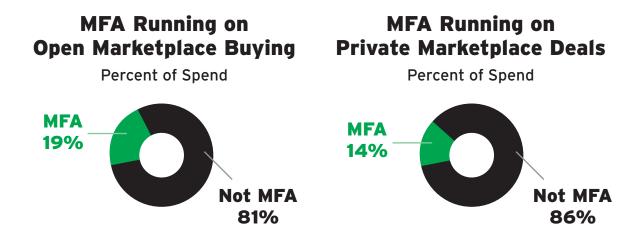


MFA sites typically use sensational headlines, clickbait, and provocative content to attract visitors and generate page views, which in turn generate ad revenue for the site owner. MFA sites also usually feature low-quality content, and may use tactics such as pop-up ads, auto-play videos, or intrusive ads to maximize ad revenue.

The project team layered a top-level domain subset from DSPs with data from DeepSee.io, made available to TAG TrustNet, consisting of 4,500 known MFA sites to identify this wasteful area of spending.

5. Made for Advertising (MFA) Websites Represent 21 Percent of Impressions - Indicating Advertisers are Not in Control of Media Placement Decisions

In addition, it was surprising to see such a high percentage of spending of MFA sites with private market deals: 14 percent.



Finally, the sustainability impact of MFA sites is especially troublesome (more on that later).

Recommended Actions

Advertisers must be aware that Made for Advertising (MFA) websites can account for a significant portion of their overall campaign. Advertisers should determine if MFA sites fit with their brand suitability standards for content and user experience and clarify their tolerance for the inclusion of MFA inventory in their campaigns.

Have "inclusion" lists for your programmatic advertising – not "exclusion" lists (as there are just too many websites – some 4500 MFA sites).



6. Sustainability Efforts Can Be Enhanced by Productive/Non-Wasteful Programmatic Media Buving

Sustainability issues are of increasing importance to the ad industry. The programmatic ecosystem has grown rapidly and has had a negative environmental impact, given that it's energy-intensive. Every impression and ad call for every ad anywhere along the supply chain creates carbon emissions. The longer the supply chain and the more ad calls, vendors and SSPs, the higher the carbon emissions.

Some of the lower quality websites, especially Made for Advertising sites, create more carbon emissions than the average site. That is because they have many ads per page and indiscriminately make ad calls to as many demand sources (like SSPs, DSPs, and ad networks) as they possibly can. According to Scope3 (a new industry organization with the mission to decarbonize advertising), MFA sites are 26 percent higher in carbon emissions than non-MFA inventory.

Recommended Actions

- Be aware of the sustainability impact of your programmatic advertising. The longer the supply chain, the higher the carbon emissions; so consider where reductions in your supply chain can be made. Reevaluate the use of Made for Advertising websites.
- Be aware of, and consider joining, Ad Net Zero the advertising industry's drive to reduce the carbon impact of developing, producing and running advertising to operate at real net zero.



7. The Previously Identified "Unknown Delta" can be Virtually Eliminated with a Full Path Log-Level Data (LLD) Analysis

The "unknown delta" was first coined in ISBA's 2020 Programmatic Supply Chain Transparency Study. 12 It is defined as the unattributable ad spend between the funds that leave a DSP and the gross funds received by an SSP. While it was initially thought to eat into 15 percent of working media, ISBA's follow-up study in 2023 revealed just a 3 percent unknown delta due to improved data matching. In this new ANA study, analysis of deterministically 1-to-1 matchable impression data results in a zero percent delta. The good news for advertisers is that this mysterious delta is not about missing money but about missing data capabilities.



¹² Programmatic Supply Chain Transparency Study, ISBA, 2020

Next Steps

Again, this report provides a "First Look" at the findings of the ANA Programmatic Media Supply Chain Transparency Study. There is still a lot of data "left on the cutting room floor" for this report that needs to be analyzed.

A complete report will follow soon. That will include findings on ad quality, analysis of media costs, and more.

Acknowledgements

The ANA would like to recognize core members of the project team for this report.

TAG TrustNet

- Mike Zaneis, CEO, TAGTrustNet
- Tim Brown, CEO, Fiducia
- Lou Paskalis, CEO, AJL Advisory
- Phil Hayman, Customer Success Director, Fiducia
- Igor Alferov, CTO, Fiducia
- · Pascal Zahner, COO, Fiducia
- · Kevin Broom, CXO, Fiducia
- Bob Filice, Product Director, Fiducia

Kroll

- Richard Plansky, Regional Managing Director, North America, Kroll
- Sherine Ebadi, Managing Director, Kroll

Reed Smith

- Keri Bruce, Partner, Reed Smith LLP
- Nick Swimer, Partner, Reed Smith LLP
- Doug Wood, Senior Counsel, Reed Smith LLP

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PROGRAMMATIC MEDIA SUPPLY CHAIN TRANSPARENCY STUDY

