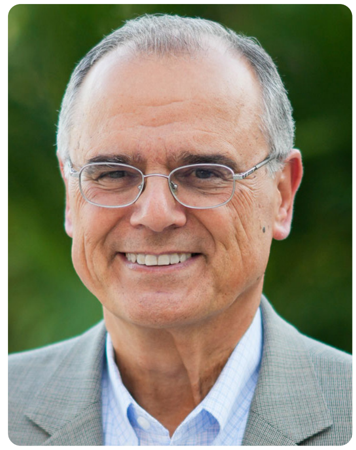
PROGRAMMATIC MEDIA SUPPLY CHAIN TRANSPARENCY STUDY

COMPLETE REPORT

PLAYBOOK SUMMARY PAGES 20-26

DECEMBER 2023 ANA.NET

Foreword



Bob Liodice
CEO
ANA

The ANA's Programmatic Media Supply Chain Transparency Study is a critically important body of work for the advertising industry at large. For too long, marketers have struggled under the weight of making the most optimal media decisions for their businesses and brands. Despite the proliferation of media opportunities, and the increased number of pathways to reach their intended audiences, brands increasingly struggle to optimize their media spending.

Most of the challenge stems from three related data themes:

- **Data Strategy:** Marketers are not fully skilled in optimizing the management of their data. Of critical importance, marketers are even less skilled in securing log-level data — a principal pathway to effective decision-making and driving growth via programmatic activities.
- **Data Access:** Marketers are not able to fully retrieve their brand performance data because of unfortunate contractual limitations with their respective partners in the digital media supply chain.
- **Information Asymmetry:** Marketers suffer from an imbalance of available data in the supply chain and are left with sub-optimal information to make the most effective marketing decisions for their brands.

The purpose of the ANA's Programmatic Media Supply Chain Transparency Study is to look at one slice of the digital media supply chain — the $88 billion open web — and to understand its relative productivity as well as areas of wastefulness across the client-side marketer community. After more than two years of time, financial investment, and active engagement with a community of subject matter experts and contributors, the ANA has completed a hefty analysis that provides unique insights from multiple angles. What the ANA found is an ecosystem that is clearly under-serving the marketing community.

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The study revealed that of the $88 billion in open web spending, some $22 billion is wasteful or unproductive. That amounts to *one in four dollars* — a massive opportunity loss. Furthermore, when the flow of dollars through the supply chain is more deeply examined, a mere *36 percent (or less) of those investments* actually reaches their intended audiences.

Where this especially weighs on marketers is for those brands/companies that do not have the resources, capabilities, or partnerships to parse through the complex maze of the digital media ecosystem to leverage the full suite of advantages that technology has to offer (including many small and medium sized marketers). And they are at risk of slipping further behind those that do have access to such resources.

For all marketers, this presents a perfect opportunity to do a media management self-assessment. When asking where brand leaders and budget holders can generate substantially increased productivity to free investments yielding higher returns and outcomes, these leaders need to look to their own media management practices first.

This is precisely where our study can provide substantial guidance for marketers. The study found productivity shortfalls and waste in multiple areas that can only be corrected by knowing about it and taking disciplined action. The following questions, directed to your media decision-makers and advisors, can guide leaders and budget holders to answers that create value.

- Ask why Made for Advertising (MFA) websites are utilized, as they are largely useless for growth-oriented strategies.
- Ask why they "spray and pray" across 44,000 websites per campaign when less than 5,000 will probably be sufficient.
- Ask why they utilize exclusion lists when inclusion lists would yield better investment management.
- Ask why they suboptimize direct inventory supply paths.
- Ask why they do not have direct contracts with more vendors within the supply chain.
- Ask why they do not have an SSP optimization strategy.
- Ask why they do not challenge imbalances caused by information asymmetry, the root cause of so many bad media management practices.

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- Ask why their own management behavior — including that of their chief financial officers — is not increasingly focused on opportunities to become more financially productive.
- Ask if their agencies are acting as principals or agents. If they are acting as principals, are brands getting the best media deals possible?
- Ask whether they know what is inside Private Marketplace deals and if it is any different from what they get with Open Marketplace buying.
- Ask why they have so little understanding of the ad-quality/price-value equation as part of their media buying strategy. Brands' lack of knowledge generally results in overpaying, and in most cases they probably have no idea about "winner's curse."
- Ask why they have not already embraced log-level data, a principal pathway to more effective decision-making with programmatic media.
- If they do use log-level data, ask if they are maximizing its deployment and use cases and how they can execute strategies to optimize this critical swath of data.
- Ask if they are fighting fraud optimally. Or better yet, ask if they know where to look for fraud and how to fight it when they find it.
- Ask if they understand how programmatic media affects their sustainability programs and becoming carbon-neutral.

These questions represent a broad portfolio of media management shortfalls that the ANA found within the open web programmatic marketplace. Clearly, without a comprehensive programmatic media buying strategy and oversight, there are multiple problem spots where brand investments will be irretrievably lost. Meanwhile, as AI technologies proliferate and optimization models become commoditized, it is the detail and validity of advertisers' data — made possible through access to and reconciliation of the complete log-level data of their campaigns — that will make the difference. Control of this data needs to be in marketers' hands for them to have proper management of their investments and the insights that data provides.

There is so much to be learned. I know that I learned "a ton" throughout this study. I was thoroughly amazed at how many leaky buckets there are. What I found even more troubling was the lack of support systems that brands can lean on to make higher-quality decisions. Most senior executives do not know where to look or how to move forward.

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This study shows the way forward. It is incumbent on chief marketing officers and related functional support staff to come together and behave differently. And why not? As the findings of this study show, the behavior changes that are called for are relatively simple to execute with common-sense due diligence and a little sweat equity. With a relatively small investment to support in-house media management capability, or a "control tower," brands can and should own these internal management processes to address a substantial proportion of the waste that permeates their programmatic world. Quite simply, the investment will easily pay for itself.

As a reminder, all of this is about the open web only. None of this addresses the larger area of opportunity with walled gardens, which is exponentially more difficult to address than the open web. The ANA's counsel to all brands is to buckle up and get going on addressing weaknesses in their open web media management practices. There is no time to waste.

Read on to learn what you must do to succeed with your open web programmatic media supply chain. Before you do, I would like to take a moment to acknowledge and offer my gratitude to the core team that has dedicated itself to unraveling these mysteries of the programmatic media supply chain. Their relentlessness produced a flood of insights, making a more productive media ecosystem for all:

- Bill Duggan, ANA
- Julie Weitzner, ANA
- Doug Wood, Reed Smith
- Keri Bruce, Reed Smith
- Tim Brown, Fiducia
- Mike Zaneis, TAG TrustNet
- Tom Triscari, Lemonade Projects
- Rich Plansky, Kroll
- Sherine Ebaldi, Kroll

See page 124 for the full list of project team members.

This Study is for informational purposes only. It is intended to provide marketers, advertisers, and other industry participants with information relating to media spending to help educate them in making their own independent decisions with respect to their media spend.

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Overview

A profound transformation has taken center stage in media and data-driven marketing. The advent of open web programmatic media has revolutionized how brands think about and interact with their audiences, promising unparalleled precision, efficiency, scale, and accountability in advertising outcomes. However, this transformative journey has not been devoid of challenges.

Welcome to the ANA's comprehensive *Programmatic Media Supply Chain Transparency Study: Complete Report*.

As a follow-up to our *First Look* study published in June 2023, this enhanced report delves deeper into the dynamic world of open web programmatic advertising, with a keen focus on a pivotal issue: transparency.

Over the past decade, open web programmatic advertising has become an indispensable investment opportunity for most marketers. It offers a plethora of potential advantages, including the precision to target the right audience and substantial cost efficiencies through automation. When used diligently, the open web emerges as an ideal arena for advertisers to efficiently reach and engage different audiences by leveraging big data and AI, while simultaneously supporting a wide range of ad-supported publishers to enable quality journalism, including the growing area of diverse-owned media.

Nonetheless, it is essential for marketers to maintain vigilance. Taking your eye off the ball can lead to questionable inventory practices, thereby diluting the potential of programmatic advertising as a potent tool for driving results.

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This journey is not without its formidable challenges. We examine the topic of information asymmetry and propose strategies to level the playing field for marketers. For example, we analyze the vast landscape where the average campaign spanned 44,000 websites.

Going further, we unpack the nuances of Made for Advertising websites and provide guidance on how to approach inclusion lists and trusted seller lists. And with more advertisers getting directly involved with SSPs, we delve into the importance of having an SSP optimization strategy and explore the benefits of direct supply chain contracts, with particular regard to DSP contract ownership. There are insights on Private Marketplace (PMP) versus Open Marketplace (OMP) deals. Plus, there are tips to help marketers take control in accessing their data for increased transparency, to drive efficiencies, and to keep their brands safe.

There is some $22 billion in productivity available to the client-side marketer community. Due diligence is the most important posture in order for brands to leverage the opportunity for savings, improve efficiencies, and reduce the carbon footprint of their programmatic media activity.

In the end, this report is meant to drive marketers into thinking critically about their programmatic media spend and to consider ways to align incentives along their supply chain to maximize value by paying the right price for the ad quality being offered in programmatic exchanges. Ultimately though, every marketer has to make its own decision because what is right for one company may not be right for another.

Read on!

Overview

In June 2023, the ANA released our *Programmatic Media Supply Chain Transparency Study: First Look*. That report presented the initial findings of a study that launched via an **RFP** in April 2021. The key objective of that RFP was to:

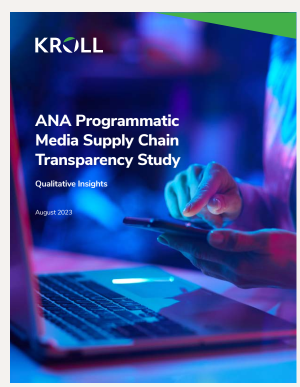
- Drive business and brand growth through the elimination of wasteful and unproductive media spending.

First Look covered important topics, including:

- Information Asymmetry
- Data Access
- Misaligned Incentives, i.e., advertisers prioritizing cost over value
- Number of Websites Used
- Made for Advertising Websites
- Sustainability
- Log-Level Data

In August, the report *ANA Programmatic Media Supply Chain Study — Qualitative Insights* was released from Kroll. Kroll served as the investigative/qualitative research partner for this study. That report provided depth to Kroll's findings and insights reported in *First Look*.

The *First Look* report is available at **www.ana.net/programmatic2023**.



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

Overview

Media coverage of these two reports has been extensive — approaching 100 placements to date.

AdAge	*Advertisers Waste 23% Of Programmatic Ad Dollars, ANA Study Finds*
ad exchanger	*Advertisers, Here's One Weird Trick From The ANA That Could Save You $20 Billion*
admonsters	*MFA Sites: Are They All Bad?*
ADWEEK	*Made for Advertising Sites Are Programmatic's Latest Boogeyman*
DIGIDAY	*The Rundown: The ANA's Latest Programmatic Transparency Audit Confirms Many Open Secrets*
MARKETING BREW	*Advertisers are (still) spending billions on clickbait*
MARKETING DIVE	*ANA: 15% of programmatic ad spend is wasted on click-bait websites*
The MediaLeader	*The ANA's media transparency redux and the need for more honesty*
MediaPost	*ANA Finds As Much As $20B Wasted On Programmatic Ad Buys*
Be Prepared MediaVillage.org	*Sustainability Should Be Reason Enough to Reconsider Programmatic Media*
Performance Marketing World	*Five ways marketers can optimise their programmatic media and supply chain transparency*
The Drum	*New Parameters for Spammy "Made for Advertising" Sites*
THE WALL STREET JOURNAL	*Marketer Trade Group Report Shows Ad Spending "Rife With Waste"*

Overview

We are now releasing the *ANA Programmatic Media Supply Chain Transparency Study: Complete Report*. This supersedes the *First Look* report by reprising key elements of that report and providing additional findings and insights. This report goes deeper on key topics covered in *First Look*: Number of Websites Used, Made for Advertising Websites, Data Access, Sustainability, and others. It also introduces new topics, including:

- Inclusion Lists
- Having an SSP Optimization Strategy
- Optimizing the Mix of Open Marketplace (OMP) and Private Marketplace (PMP) Deals
- Measurement, Viewability, and IVT (Invalid Traffic)

A highly collaborative process was instituted to develop this new report, holding a series of weekly meetings between July and September (10 weeks total), inviting participation from:

- The 21 study participants
- Programmatic media subject matter experts from six ANA board of director member companies
- Key sister trade associations: 4A's, WFA, and ISBA
- A handful of outside subject matter experts

Many of the client-side marketers involved are members of the ANA Media & Measurement Leadership Council (MMLC).

Furthermore, a survey was sent to ANA client-side members who have responsibilities for media management to provide quantitative insight on key topics covered in this report. That **Programmatic Benchmark Survey** was fielded between September 6 and October 5.

This *Complete Report* was developed by the ANA in collaboration with our core project team: Lemonade Projects, TAG TrustNet, Reed Smith, and Kroll.

Size of the Prize

The *First Look* report stated:

> Open web programmatic advertising is estimated to be an $88 billion global market.[1] 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. 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.

It can now be confirmed that there is the opportunity for $22 billion in efficiency gains, estimated as follows:

- **Approximately $10 billion from a re-evaluation of Made for Advertising websites[2].**
- **Approximately $12 billion from other recommendations identified in the report (see page 75 for details), notably:**
  - Website optimization/reduction; use inclusion lists
  - Buy through direct inventory supply paths
  - Have direct contracts with primary supply chain partners: DSPs, SSPs, and ad verification vendors
  - Have an SSP optimization strategy
  - Understand the dynamic of information asymmetry in programmatic advertising and take steps to close the information gap. Advertisers are responsible for more active stewardship of their media investments.

1 State of the Open Internet Report, Jounce Media, 2023
2 The dollar estimate for MFA spend has been re-calculated since the *First Look* study (reported there as $13 billion). Deepsee.io, who we used to identify MFA sites, only provides data on web domains. MFA spend is now calculated to be approximately $10.1 billion — 15 percent of $67.3 billion. That's the $88 billion global market for open web programmatic advertising minus $20.3 billion for CTV (which does not have MFA activity).

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- Know when the agency is purchasing as an agent versus selling inventory on a non-transparent basis or that has been acquired as a principal.
- Keep media agency contracts updated.
- Understand the types of Private Marketplaces (PMPs) you buy from and consider allocating more budget towards Open Marketplaces (OMPs).
- Improve transparency by optimizing measurability and viewability.
- Have a proactive plan to fight invalid traffic (IVT).
- Leverage log-level data.
- Align incentives with your goals. Implement theTrueKPI framework to measure and optimize effectiveness.

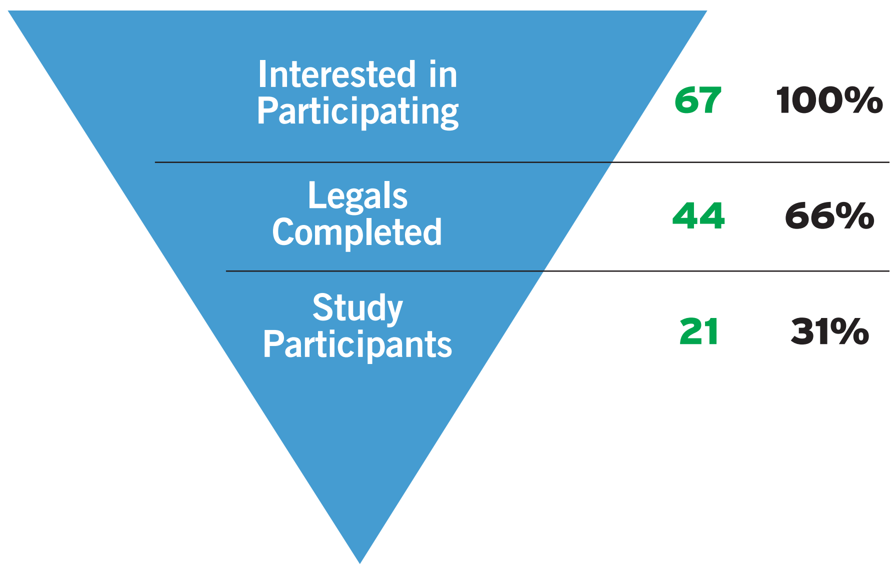
Furthermore, there are sustainability enhancements that can be made as well.

Details follow.

Marketer Participants

Sixty-seven ANA member companies were interested in participating 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 hurdles to get access to log data from DSPs, SSPs, and ad verification providers.

Advertiser Interest in Participation



Marketer Participants

Twenty-one marketers participated in the study. We are appreciative of all marketer participants and especially grateful to those who provided permission to identify them in this report. The 21 marketer participants include a range of big, mid-size, and smaller companies and there was representation from 11 categories (note that category characterization has been updated since the *First Look* report).

Auto	NISSAN
Energy	Shell
Insurance	State Farm
Retail	Walgreens
Health Care	KAISER PERMANENTE; St. Jude Children's Research Hospital
QSR	Little Caesars; White Castle
Spirits	MOLSON COORS; *
Sports	NASCAR; PGA TOUR
Technology	DELL Technologies; hp
Financial	DISCOVER; *; *
CPG	Kenvue; Kimberly-Clark; Mondelēz International; *

*Anonymous

Supply Chain Participants

Twelve supply chain companies participated in the study.

- 3 DSPs
- 6 SSPs
- 3 ad verification companies

The ANA appreciates the DSPs, SSPs, and ad verification companies which embraced transparency and participated, and we are especially grateful to those who provided permission to identify them in the report. Note that supply chain partners provided data for the study but had no role in analysis or commentary.

DSPs	adform	Adobe Advertising	*
SSPs	Index Exchange	Magnite	Microsoft Advertising
	OpenX	*	SpotX also participated as a unique SSP during the study and is now part of Magnite.
Ad Verification	DV DoubleVerify	IAS	ORACLE Advertising

*Anonymous

Supply Chain Participants

Meanwhile, there were other supply chain intermediaries which decided not to participate.

- The Trade Desk, Amazon, and Yahoo are leading DSPs which did not participate. While Google DV360 was not an active participant, the team was able to access their log-level data directly from the advertiser or agency.
- There were 54 SSPs used by the advertiser participants in this study. We requested log-level data from SSPs that represented more than 5 percent of total media spend for an individual advertiser. Freewheel, Google AdX, Pubmatic, TripleLift, and Yahoo[3] declined participation or could not provide data in the required timeframe.

Despite the non-participation of some supply chain intermediaries, we are confident that the key findings and suggested action steps in this report are representative across the broader programmatic media ecosystem.

> **"Everyone says they are supporters of transparency … until they're the ones asked to be transparent."**
>
> —Overheard at an ANA conference

3 Yahoo Shuttering Its SSP

Study Fundamentals

Our 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-level data (LLD) 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 display ads followed by video ads served on sites and apps.

The methodology implemented by TAG TrustNet for processing the data of participating advertisers is based on the reconciliation of impression log-level data (LLD) feeds across their suppliers, assuming those data feeds were made available. The methodology includes the following steps:

- Mapping of advertiser supply chains
- Development of data connectors to harmonize LLD feeds
- Reconciliation of LLD feeds using the TAG TrustNet platform
- Overlay of third-party data sources covering certifications, MFA, privacy, and sustainability
- Analysis of the reconciled LLD feeds, together with data overlays
- Identification of optimization opportunities and areas to investigate to improve ad spend productivity.

Additional background is in the Appendix.

Playbook Summary

The programmatic waterfall quantifies the spend associated with each element in the programmatic supply chain, following the "journey" of an ad dollar invested by an advertiser that enters a DSP until it leads to impressions delivered to the consumer that meet a set of quality requirements. Between the ad dollar that enters the DSP and the consumer there are various intermediaries claiming their share of that ad dollar. We have bucketed them in two ways:

- Transaction costs: primarily DSP and SSP costs, accounting for 29 percent of the original ad dollar.
- Loss of media productivity costs: including non-viewable and IVT impressions as well as non-measurable and MFA ad spend, accounting for 35 percent of the original ad dollar.

After accounting for both transaction costs and loss of media productivity costs, only 36 cents of every ad dollar that enters a DSP effectively reaches the consumer. Complete details are provided in the Cost Waterfall and Wrap-Up section.

Each of the sections in this report provides a "Recommended Playbook" for marketers. These are recommended action steps to help optimize investment in programmatic media leading to a greater percentage of every ad dollar reaching the consumer. This section provides a summary of key playbook recommendations.

Knowledge is power. With programmatic media, data drives knowledge and is the enabler that allows marketers to improve the efficiency and effectiveness of their campaigns. Access to data, pulling insights from data, and then acting on those insights provides a pathway for marketers to optimize their programmatic media investments. Data is the centerpiece for much of this Playbook Summary.

Playbook Summary

1. **Know, and then optimize, the number of websites being used for your programmatic campaigns.** That can easily be done by first pulling a standard report from your DSP. If the number of websites is high (and the average of 44,000 among ANA study participants is indeed high), consider a focus on trusted sellers.[4] Buyers should be able to get the scale they need by selecting 75 to 100 trusted sellers; that will provide access to thousands of high-quality websites. Optimizing the number of websites will diminish the risk of purchasing non-viewable and fraudulent inventory and enhance brand safety.
2. **Advertisers should recognize that Made for Advertising websites can account for a significant portion of their open web programmatic budget** — in this study, 21 percent of impressions and 15 percent of spend. Audit your activity to understand the percent of impressions and spend represented by MFA websites. Advertisers should determine, independently, 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.
3. **Prioritize the creation and use of website "inclusion" lists versus focusing on "exclusion" lists.** Exclusion lists are largely ineffective in practice. Attempting to exclude individual sites from the vast expanse of millions of sites, with new domains being created every day, is a herculean and futile task. Curate publisher domains you trust that attract your desired audience. Focus on what you want rather than what you attempt to avoid. Update inclusion lists monthly.
4. **Buy through direct inventory supply paths.** Directness matters. Most supply chains fork, and the primary seller may buy from a secondary seller. This not only adds cost, but also starts breaking filtrations that are in place for viewability, IVT, brand safety, and inclusion. Importantly, each additional hop to a new supplier drives up your carbon footprint. If a marketer starts with a list of 75 to 100 high-quality, trusted sellers, they'll get thousands of high-quality domains.

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4 Trusted sellers, by definition, are partners known for their credibility and reliability in the programmatic ecosystem. Trusted sellers transact with buyers on direct supply paths as opposed to reseller paths that add more markup and generate carbon waste. Trusted sellers ideally do not engage in the sale of MFA inventory, as their business thrives on transparency and authenticity.

Playbook Summary

5. **Consider having direct contracts with all primary supply chain partners: DSPs, SSPs, and ad verification vendors.** Transparency maximization and data access rights are directly connected. A good starting point is with the DSP contract. The DSP works for the buyer. Increasingly, marketers are working directly with DSPs to have more control over their media investments, greater transparency, and easier access to campaign data. Most marketers also have direct contracts with ad verification partners to monitor viewability, IVT, and brand safety. 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. Refer to the **ANA Master Media Buying Services Agreement Template**.

6. **Have an SSP optimization strategy.** Consolidate spending with a short list of preferred partners that are willing to provide financial incentives in exchange for an elevated share of wallet. Five to seven SSPs are likely optimal and can provide access to close to 100 percent of the supply.

7. **Buyers need to understand the dynamic of information asymmetry in programmatic advertising and take steps to close the information gap.** 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. The study 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."

Playbook Summary

8. **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 should appoint a chief media officer (either in title or function) who should take responsibility for the internal media management and governance processes that deliver performance, media accountability, and transparency throughout the programmatic media supply chain. Advertisers which outsource their media management without active internal stewardship do so at their own risk.

9. **It is important for advertisers to know when their agency is purchasing media for them as an agent versus selling them inventory on a non-transparent basis or that has been acquired as a principal.** Even if an agency is acting as a principal, advertisers can contractually require transparency and should be diligent in ensuring that they are contractually able to get the information they need to make informed decisions about the value and performance of their media purchases. The **ANA Master Media Buying Services Agreement Template** is a great starting point to ensure transparency in your agency agreements.

10. **Increase your understanding of what types of Private Marketplaces (PMPs) you buy from and consider experimenting with allocating more budget towards Open Marketplaces (OMPs).** Some PMP inventory is high quality and may be worth the premium price, however the days of simply assuming all PMP inventory is worth the premium are behind us. Fourteen percent of spend within the PMPs analysed in the study contained MFA inventory (no real difference versus the overall study average of 15 percent). PMPs with more than 500 domains delivered quality similar to OMP deals, but at double the cost. With proper checks, controls, and optimizations in place, OMP inventory can drive comparable quality at a lower cost.

11. **The key challenge in assessing value in programmatic advertising lies in the accurate measurement of ad quality and price.** To address this challenge and enhance value assessment:

(a) Get access to your log-level data. Ingest, match, and harmonize log-level data either in-house or use a third-party company.

(b) Set a definition for myTrueImpression. Your myTrueImpression is an impression that matches your definition for ad quality. Look at the different inventory types you buy and define what ad quality is (or is not) for each.

(c) Set goals and measure performance using TrueCPM as a main KPI that aligns quality and performance.

(d) Implement optimization strategies based on TrueCPM. This allows advertisers to adjust bidding strategies during auctions to secure inventory that aligns with their quality requirements.

The project team has developed the TrueKPI framework to assist marketers in measuring value and aligning supply chain incentives with goals.

TrueImpression	Impressions that meet a set of quality requirements. The default definition for a TrueImpression is that it must have matched data from the DSP and ad verification provider, and be non-IVT, measurable, and viewable according to MRC standards.
TrueAdSpend	Ad spend that is spent on impressions that meet the criteria for being a TrueImpression.
TrueCPM	The cost paid per a thousand TrueImpressions for total ad spend (total ad spend divided by TrueImpressions x 1000).

Playbook Summary

12. **Advertisers must balance their pursuit of low-cost inventory in programmatic media with ad quality** — meaning viewable, fraud-free, and brand safe. The "cheapest" media may not be the "best" media. Be prepared to accept higher CPMs should there be MFA sites that are reduced or eliminated.

13. **Tapping log-level data from every adtech vendor across an advertiser's supply chain is paramount. Marketers must match that data to show 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 the information balance to make better decisions. Initiate an audit of your supply chain with a focus on assessing log-level data (LLD) availability. Begin with a small-scale approach by connecting your DSP and ad verification data. This will help you gain insights into your own price and quality dynamics. This is where much of the benefit resides.

14. **Improve transparency by optimizing measurability and viewability.**
    (a) Marketers, in consultation with their ad verification partners, should prioritize publishers that accept ad verification tags, with the goal of allowing 100 percent of their impressions to be measured. Inclusion lists should be updated to include only such publishing partners.
    (b) Marketers must remain vigilant in employing ad verification services to monitor and help optimize measurability and viewability.
    (c) Marketers should only pay for impressions that are both measurable and viewable.

15. **Have a proactive plan to fight invalid traffic (IVT).** IVT remains a very serious concern for marketers. Based on the learning from this study, the following action steps are recommended.

(a) Work with your internal buying team or ad agency to develop a plan for identifying and filtering IVT from programmatic media campaigns. Marketers should not pay for impressions with IVT.

(b) Know which downstream partners (such as DSPs and SSPs) have engaged an MRC-accredited anti-fraud vendor. Validate their reporting with a different vendor to ensure multiple technologies have been implemented to protect your budget.

(c) Leverage pre-bid and post-bid IVT filtering.

(d) Understand that where you measure matters. Higher levels of IVT will always be reported when coming from the "first responders" that are operating closest to the media source.

(e) Consider working only with trusted, certified partners, including an MRC-accredited anti-fraud vendor. The ANA, 4A's, and IAB created the Trustworthy Accountability Group (TAG) to help identify best actors. In 2016 TAG launched its **Certified Against Fraud** program to help buyers easily identify which companies were meeting the highest levels of fraud detection and filtration.

16. **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. Buy through direct inventory supply paths. Work with trusted sellers, and not resellers. Work with SSP partners that have direct connections to the publishers on your trusted seller list. Evaluate the role of MFA sites, which generate 26 percent more carbon emissions than non-MFA inventory. Concentrate programmatic media activity on a smaller number of curated websites. Familiarize yourself with the work done by Ad Net Zero, the Global Alliance for Responsible Media (GARM), and Scope3.

Detailed Findings

1. The Average Campaign Ran on 44,000 Websites, Creating Risks for Advertisers

It is deeply concerning that the average number of websites (and apps) for the 21 marketer study participants was 44,000.

That is consistent with the ISBA 2020 report[5], where the average was 40,524, as well as a TAG TrustNet 2021 report[6], where the average was 37,000.

The range among the ANA study participants was between 3,627 and 222,534.

To be clear on what is meant by "websites":

- www.ana.net
- www.ana.net/membership
- www.ana.net/events
- www.ana.net/advocacy
- www.ana.net/committees

These would all collectively count as just a single website. And that would be the case whether an ad ran on any of the above just once or on multiple occasions during the course of the study period.

Note that in this report the terms "websites" and "domains" are used interchangeably.

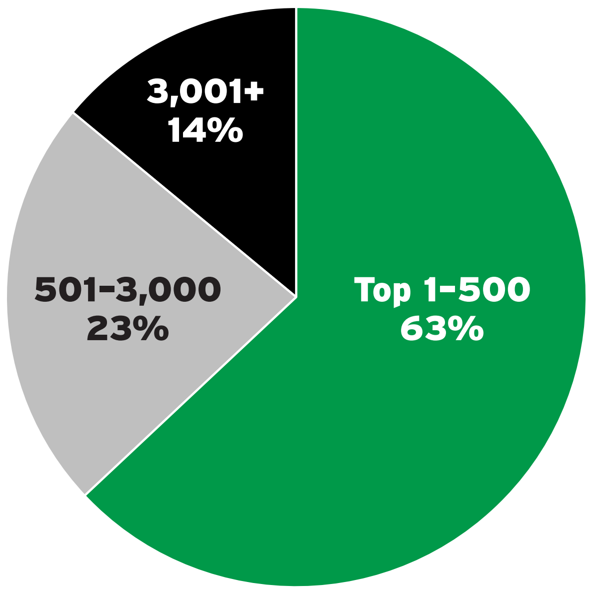
5 ISBA Programmatic Supply Chain Transparency Study (2020)

6 TAG TrustNet UK Pilot Report (2021)

1. The Average Campaign Ran on 44,000 Websites, Creating Risks for Advertisers

Eighty-six percent of all impressions in the study came from just 3,000 websites.

- 63 percent of impressions were from the top (by volume of impressions) 500 websites.
- 23 percent of impressions were from websites 501–3,000.



Meanwhile, websites 3,001+ represent the long tail and accounted for only 14 percent of impressions.

It is hypothesized that the "long tail" of the web adds minimal reach, and likely underperforms in the quality metrics of viewability, IVT (invalid traffic), and brand safety. Per an analysis by TAG TrustNet based on a subset of study data that compared the long tail to the top 500 domains, the long tail:

- Was 12 percent less viewable
- Had 100 percent higher IVT (fraud) rate

This provides strong directional support for concentrating programmatic media activity on a smaller number of websites. That would provide the additional benefit of a reduced carbon footprint.

1. The Average Campaign Ran on 44,000 Websites, Creating Risks for Advertisers

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

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 do context and risk mitigation represent less important concerns for brands? These are questions for each brand budget owner to contemplate and act on.

Marketers incur untenable risk when their ads run on so many websites beyond those listed on their inclusion lists (assuming such lists are in place). These risks range from advertising on sites that do not meet their brand suitability standards to delivering unsatisfactory experiences for their customers and prospects. Any reasonable enterprise risk governance protocol should consider this highly problematic and take immediate steps to mitigate this risk so that, ultimately, their ads only run on those websites listed on their inclusion lists and intermediaries which circumvented their inclusion lists are held accountable.

One approach to optimizing the number of websites used is to focus on trusted sellers.

- **What is a trusted seller?** Trusted sellers, by definition, are partners known for their credibility and reliability in the programmatic ecosystem. Trusted sellers transact with buyers on direct supply paths as opposed to reseller paths that add more markup and generate carbon waste. Trusted sellers ideally do not engage in the sale of MFA inventory, as their business thrives on transparency and authenticity.

Buyers should be able to get the scale they need by selecting 75 to 100 trusted sellers; that will provide access to thousands of high-quality websites. (Note that this is updated guidance from the *First Look* report which suggested "a few hundred websites.")

1. The Average Campaign Ran on 44,000 Websites, Creating Risks for Advertisers

Another approach is to test how the reduction of the number of websites used affects a marketer's performance metrics. As previously discussed, advertising on the long tail has been found to be less viewable with higher IVT rates than the top 500 domains.

JPMorgan Chase was an early adopter of website reduction when in 2017 it reduced the number of sites it ran ads on from 400,000 a month to between 5,000 and 10,000 sites a month without any deterioration in performance metrics and little change in the cost of impressions.[7]

General Motors successfully reduced the number of websites used for programmatic campaigns.

In 2018, General Motors conducted an analysis of its digital media campaigns after repeated incidences of digital ads appearing on questionable websites, despite having exclusion lists in place. The analysis revealed that GM ads were served across over 800,000 web properties with 99 percent of the impressions served on 28,000 web properties.

General Motors conducted two simultaneous tests using inclusion lists of 15,000 and 4,000 to monitor the impact on pre-defined performance metrics. In both experiments, General Motors experienced no negative impact to performance.

By implementing both exclusion and inclusion lists from that point forward, GM has significantly reduced IVT, ad saturation (i.e., too much frequency), and activity on piracy sites and has improved its overall digital ad performance.

7 "Chase Had Ads on 400,000 Sites. Then on Just 5,000. Same Results." *The New York Times*, March 29, 2017

1. The Average Campaign Ran on 44,000 Websites, Creating Risks for Advertisers

Many marketers do not understand the number of websites they are using. Our Programmatic Benchmark Survey asked, "Does your company track the number of websites used for a typical programmatic campaign?"

- 46 percent do
- 39 percent don't
- The remaining 15 percent don't know

Recommended Playbook

1. Knowledge is power. Know the number of websites being used for your programmatic campaigns. That can easily be done by pulling a standard report from your DSP.
2. If the number of websites is high (and the average of 44,000 among ANA study participants is indeed high), consider a focus on trusted sellers. Buyers should be able to get the scale they need by selecting 75 to 100 trusted sellers; that will provide access to thousands of high-quality websites. Optimizing the number of websites will diminish the risk of purchasing non-viewable and fraudulent inventory and enhance brand safety.
3. Prioritize the creation and use of website "inclusion" lists versus any focus on "exclusion" lists. There are just too many websites for exclusion lists. (See more on inclusion lists in a later section.)
4. Buy through direct inventory supply paths. Directness matters. Most supply chains fork, and the primary seller may buy from a secondary seller. This not only adds cost, but also starts breaking filtrations that are in place for viewability, IVT, brand safety, and inclusion. Additionally, each additional hop drives up your carbon footprint.
5. There are various ways to identify trusted sellers. Consider starting with the Comscore 200[8] and the Jounce Media list of 100 Bellwether publishers.[9] Or use your existing data to evaluate top performing domains based on your key performance criteria.

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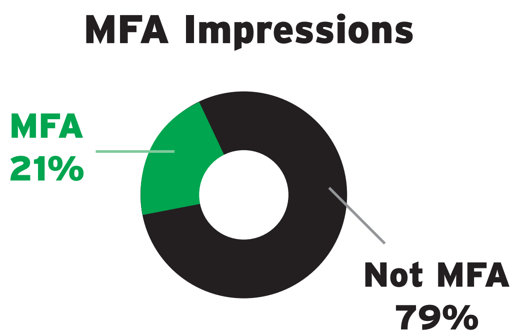
8 See www.comscore.com/Insights/Rankings for the list of the "Top 50 Multi-Platform Properties" which is updated monthly. The full list of 200 is available via subscription.

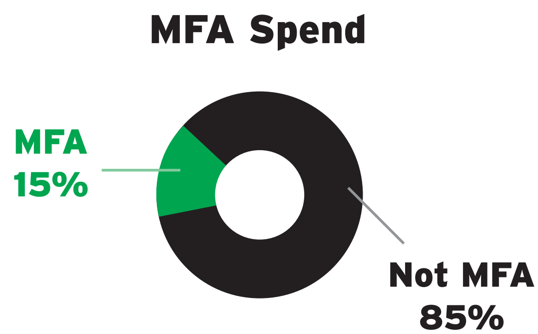
9 See https://jouncemedia.com/marketers-guide-to-spo

2. Made for Advertising (MFA) Websites: Buyer Beware

MFA Background: 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.

Made for Advertising (MFA) websites comprised a startling 21 percent of study impressions and 15 percent of spend (analyzing a subset of data).[10]





Every advertiser recorded at least some media spending on MFA websites, with volumes ranging from 0.13 percent to 42 percent (and, again, an average of 15 percent of spend).

Methodology: 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 potentially wasteful area of spending. About 2,200 of those 4,500 MFA websites provided by Deepsee.io carried media spend from ANA study advertisers. Ninety-eight percent of total MFA spend was accounted for by the top 500 MFA websites.

10 The dollar estimate for MFA spend has been re-calculated since the *First Look* study (reported there as $13 billion). Deepsee.io, who we used to identify MFA sites, only provides data on web domains. MFA spend is now calculated to be approximately $10.1 billion — 15 percent of $67.3 billion. That's the $88 billion global market for open web programmatic advertising minus $20.3 billion for CTV (which does not have MFA activity).

2. Made for Advertising (MFA) Websites: Buyer Beware

Additional insights from the ANA study:

- Display ads account for 56 percent of media spend on MFA websites with video ads accounting for 44 percent, indicating MFA websites arbitrage all ad types.
- There is a huge variation between SSPs, ranging from those that have a very high percentage of MFA media spend across their websites (70 percent) and those with a very low percentage (under 1 percent). That is indicative of SSPs having different publisher acceptance policies and standards.

Prior to the release of the ANA *First Look* report (June 2023), awareness of Made for Advertising websites among the ANA community of media professionals was limited, according to the ANA Programmatic Benchmark Survey: only about 46 percent.

Per the ANA Programmatic Benchmark Survey, a quarter (25 percent) are still not aware of Made for Advertising websites, despite all the recent press on MFAs.

Also, prior to the release of the ANA *First Look* report, only a very small percentage of companies (8 percent) tracked the amount of Made for Advertising websites that were part of their programmatic advertising activity.

Until recently, there has not been a single definition for MFA websites and therefore it could be difficult to identify them and evaluate their role on media plans. Since the publication of the *First Look* report in June, a consortium of industry trade associations (ANA, 4A's, ISBA, WFA) has developed a definition for Made for Advertising websites,[11] leaning on work done by Jounce Media[12] and DeepSee.io[13] as foundations.

11 Leading Trade Groups Define "Made For Advertising" Websites
12 Jounce Media MFA Evaluation Criteria
13 "Two Tales of One Website: How Arbitrage Sites Manipulate Metrics Using Misleading Content Formats", DeepSee

2. Made for Advertising (MFA) Websites: Buyer Beware

MFA sites usually exhibit some combination of the following characteristics:

1. **High ad-to-content ratio**
   - Usually at least twice the internet average, e.g., ad-to-content ratio of 30+ percent for desktop
2. **Rapidly auto-refreshing ad placements**
   - Numerous refreshing banner ads
   - Autoplay video ads flood the site
   - Slide shows forcing visitors to click through multiple pages to access content, with multiple ads
3. **High percentage of paid traffic sourcing**
   - Made for Advertising publishers often have little to no organic audience and are instead highly dependent on visits sourced from clickbait ads that run on social networks, content recommendations platforms, and even on the websites of reputable publishers. Buying paid traffic is the primary cost driver of operating an MFA business. Overcoming paid traffic acquisition costs requires MFA publishers to engage in aggressive monetization practices and arbitrage.
4. **Generic content (non-editorial or templated, low-quality content)**
   - Often syndicated, dated, and non-unique (articles regurgitated)
5. **Usually poorly designed, templated website designs**

Because of the above characteristics, Made for Advertising websites generally provide a poor user experience and potentially damage the reputation of digital advertising overall.

MFA sites are also referred to by the 4A's as "Made for Arbitrage" sites.

2. Made for Advertising (MFA) Websites: Buyer Beware

Buyer Beware. MFA sites generally are designed to fool digital advertising buyers. MFA websites exhibit high measurability rates, good viewability rates, and low levels of invalid traffic, and usually have brand-safe environments. They also perform higher on video completion rates, often with autoplay ads that have the sound off. Notably, media CPMs paid on MFA websites are 25 percent lower than those paid on non-MFA websites. All this makes MFA websites attractive to DSP bidding algorithms.

But typically, MFA websites don't perform well on key metrics like brand lift. According to Jounce Media, ads on MFA websites are at least 50 percent less likely to be attributed with driving a sale than the internet average.

> Jounce Media: MFA is defined as a category of "inventory that achieves superficial KPIs like viewability by creating a user-hostile advertising experience."[14]

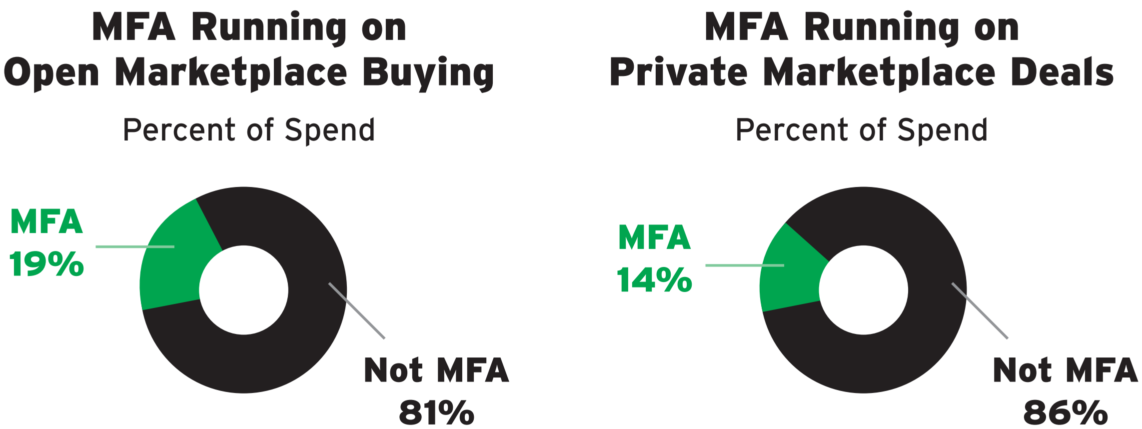
The experience of visiting MFA websites can also fool digital advertising buyers. Going directly to an MFA site (i.e., simply typing in the URL of the site) results in a very different ad experience than clicking on a referral link (often at the bottom of the page on the site of a well-known publisher). In the former case, the user experience is generally cleaner. In the latter case it is not, typically exhibiting characteristics in the aforementioned definition such as high ad-to-content ratio and rapidly auto-refreshing ad placements. While investigating MFA supply, Jounce found that many remove ads when people visit a site directly, but flood the page when people come via social media, search engines, or content recommendation widgets.

The value of MFA sites is somewhat subjective. There may be some marketers — particularly direct response and performance marketers — who find value in placing programmatic media buys on MFA sites.

14 Jounce Media MFA Evaluation Criteria

2. Made for Advertising (MFA) Websites: Buyer Beware

A high percentage of MFA spending in our study ran on Private Marketplace deals: 14 percent.



MFA supply is growing. It represented approximately 5 percent of web auctions in early 2020 and grew to nearly 30 percent of all web auctions by mid-2023.[15]

The trade press widely covered the *First Look* study with dozens of articles, many highlighting MFA inventory as a concern for brands to reconcile[16]. It is important to note that the MFA revelation has sparked a surge of interest from companies along the supply chain, with many now offering new MFA-blocking solutions. One of the biggest announcements was from GroupM, introducing new protections against Made for Advertising domains.[17]

However, it should be noted that advertisers would be well-advised to verify that such MFA-blocking offerings function as sold to ensure policy compliance.

15 The State of Made for Advertising Inventory, Jounce Media
16 "WTF are made-for-advertising sites (MFAs)?", Digiday
17 "GroupM Introduces New Protections Against Made for Advertising Domains", GroupM

2. Made for Advertising (MFA) Websites: Buyer Beware

Additionally, the sustainability impact of MFA sites is especially troublesome. As outlined in the *First Look* report, MFA sites generate 26 percent more carbon emissions than non-MFA inventory, according to Scope3 (a new industry organization with the mission to decarbonize advertising). With many ads per page that indiscriminately make ad calls to as many demand sources (like SSPs, DSPs, and ad networks) as they possibly can, carbon waste becomes an exponential issue.

When asked in the ANA Programmatic Benchmark Survey (September/October 2023), "Do you currently track activity for Made for Advertising websites that are part of your programmatic advertising activity (i.e., amount of spend and impressions)?":

- 21 percent now do
- Another 33 percent don't, but plan to going forward
- 46 percent do not and don't plan to going forward, or don't know

Recommended Playbook

1. Advertisers should recognize that Made for Advertising websites can account for a significant portion of their open web programmatic budget. Audit your activity to understand the percent of impressions and spend represented by MFA websites.
2. Advertisers should determine, independently, 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.
3. Consider running an "inclusion" list strategy for your programmatic advertising, not "exclusion" lists. Exclusion lists are largely ineffective in practice. Attempting to exclude individual sites from the vast expanse of websites (some 4,500 MFA sites alone), with new domains being created every day, is a herculean and futile task. The list of MFA websites is likely growing as a result of artificial intelligence as AI makes it faster, easier, and cheaper to produce MFA websites.

2. Made for Advertising (MFA) Websites: Buyer Beware

4. In addition to inclusion lists, advertisers should also consider adopting a comprehensive parallel strategy that includes ongoing log-level data analysis blended with a constantly updated MFA site list. This enables advertisers to ensure that the delivery or blocking on MFA websites aligns with their respective policies and fully understand how impression quality and price for MFA websites are interconnected to make effective decisions on how to treat MFA as part of an advertiser's spend. It can be done today via the following three steps using available technology:
    a. Get your log data from your DSP(s) or ad servers.
    b. Run it against a constantly updated MFA site list.
    c. Consider whether it is in your company's best interest to cut MFA sites that anti-MFA offerings might have missed.
5. Finally, for those advertisers which decide to reduce or eliminate spend on MFA websites, the CPMs for their media buys will very likely increase accordingly, since CPMs paid on MFA websites are 25 percent lower than those paid on non-MFA websites.

3. Focus on Inclusion Lists, Not Exclusion lists

As noted previously, the average campaign in the study ran on 44,000 websites, and 86 percent of all impressions came from just 3,000 websites. Furthermore, an analysis by TAG TrustNet provides strong directional support for concentrating programmatic media activity on a smaller number of websites.

> The *First Look* report made the broad recommendation:
> *Consider having "inclusion" lists for your programmatic advertising — not "exclusion" lists (as there are just too many websites). Make sure your partners are aware of your inclusions lists and monitor compliance.*

An inclusion list is a list of sites or domains and app IDs that an advertiser considers to be safe, acceptable, and trustworthy environments to serve ads to.[18] 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.

In this report, we provide more specific guidance for advertisers to consider.

Exclusion Lists: A Futile Endeavor

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.[19]

The concept of exclusion lists revolves around the idea of excluding specific websites deemed undesirable. While this strategy may seem appealing in theory, it proves to be largely ineffective in practice. Again, attempting to exclude individual sites from the vast expanse of millions of sites, with new domains being created every day, is a herculean and futile task. It not only demands continuous monitoring and frequent updates, but also invariably misses new, unforeseen risks.

18 Smartclip
19 Ibid.

3. Focus on Inclusion Lists, Not Exclusion lists

Inclusion Lists

In stark contrast, inclusion lists offer advertisers a more precise approach. Instead of trying to exclude unwanted placements from an expanding programmatic landscape, inclusion lists enable advertisers to identify and bid exclusively on the websites and apps that align with their values and policies. By focusing on what you want rather than what you attempt to avoid, advertisers can streamline efforts, reduce complexity, and enhance the effectiveness of their campaigns.

The power of inclusion lists lies in their simplicity and adaptability. Advertisers can start with a curated list of preferred publishers and continuously vet and expand that list as they discover new, high-quality placements. This approach ensures brand safety without the futile burden of constantly updating exclusion lists.

There is a case to be made to run 95 percent of one's programmatic activity through inclusion lists and 5 percent via open marketplace inventory. The latter would provide the opportunity to find and test new domains. If a new site passes the advertiser's policy standards, then that site can be added to the inclusion list.

The initial setup of your inclusion list is fundamental to keeping it intact as your campaign activity evolves. For instance, curating your list in the form of 75–100 high-quality, trusted publishers or sellers (versus individual domains) ensures that many thousands of equally high-quality domains will be included. It will also help avoid MFA sites if that is what is right for your brand.

With log-level verification running in parallel, marketers are able to know the domains where the ads are served and run automated checks against the inclusion list.

One approach to constructing an inclusion list is provided in **"How to build a programmatic inclusion list in 2023,"** from Wayne Blodwell.

3. Focus on Inclusion Lists, Not Exclusion lists

When we mapped all domains found in the log data across our 21 advertiser study participants against Jounce Media's "Bellwether" publisher list, we found that the Top 500 sellers generated 93 percent of total spending.

What's a seller? Hearst is a seller. DotDash Meredith is a seller. Each one of these sellers is a recognized, quality brand. And each one of these sellers represents dozens of websites.

Direct Supply Paths and Seller Inclusion Lists

It can be a daunting challenge for advertisers to curate a list of hundreds or thousands of domains. It's also challenging for brands or agencies to evaluate which domains are of quality and which are not. And finally, it's challenging to audit the list without log-level data monitoring and automated analysis.

Inclusion list strategies have pitfalls too. For example, names like, "Herald Weekly" may sound just as high quality as "The Herald Tribune." Yet the former is an AI-generated MFA site and the latter is a respected news publisher.

While inclusion lists offer more precision and results than exclusion lists, the transition to **trusted seller** lists offers the most impact and is also the easiest to create and maintain. Advertisers that establish trusted seller lists, based on publisher seller IDs, benefit from the precision of preferred placements. By vetting and maintaining a list of trusted sellers, advertisers can confidently transact with reliable partners, reducing the risks associated with the opacity of some resellers in the programmatic ecosystem. Even with trusted sellers, buyers should trust but verify.

What is a trusted seller? Trusted sellers, by definition, are partners known for their credibility and reliability in the programmatic ecosystem. Trusted sellers transact with buyers on direct supply paths as opposed to reseller paths that add more markup and generate carbon waste. The business of trusted sellers thrives on transparency and authenticity.

3. Focus on Inclusion Lists, Not Exclusion lists

What is a reseller? Primary SSPs often turn to secondary and tertiary suppliers behind the scenes, and these duplicative auctions run a high risk of breaking inclusion lists and fraud filters, diminishing viewability, and decreasing working media. These reseller chains create additional fees and also generate excess carbon waste.

Direct Path to Sellers Rule

Partnering with SSPs with the most direct path to sellers and publishers is an effective way to buy inventory from websites on your inclusion list. This can be automated by triangulating log-level, Sellers.json[20], and Ads.txt[21] data. Directness matters. This not only helps lower cost, but also enhances filtrations that are in place for viewability, IVT, brand safety, and inclusion. And directness limits the carbon footprint of the advertising. Using DSP configuration and inclusion lists, marketers can then improve the degree of connection to the desired inventory. It is important to continue monitoring log-level, Sellers.json and Ads.txt data to adopt to inventory changes and keep directness of supply paths under control.

The ANA Programmatic Benchmark Survey asked, “Do you implement inclusion or exclusion lists for your programmatic advertising?”

- 6 percent have inclusion lists only
- 26 percent have exclusion lists only
- 59 percent have both inclusion and exclusion lists
- 2 percent have neither
- 7 percent don’t know

The ANA Programmatic Benchmark Survey also asked, “If you use inclusion lists, how often are they updated?” The most common answer was monthly: 45 percent. Meanwhile, 15 percent update more often than monthly and 15 percent less often than monthly. But 25 percent don’t know. The subject matter experts who provided perspective on this report agree that inclusion lists should be updated monthly.

20 Introduced by the IAB Tech Lab, sellers.json enables buyers to verify the entities who are either direct sellers of, or intermediaries in the selected digital advertising opportunity for purchase.

21 Ads.txt is a simple, flexible, and secure method for publishers and distributors to declare who is authorized to sell their inventory, improving transparency for programmatic buyers.

3. Focus on Inclusion Lists, Not Exclusion lists

Recommended Playbook

1. Prioritize the creation and use of website "inclusion" lists versus focusing on "exclusion" lists. Exclusion lists are largely ineffective in practice. Again, attempting to exclude individual sites from the vast expanse of millions of sites, with new domains being created every day, is a herculean and futile task. Curate publisher domains you trust that attract your desired audience. Focus on what you want rather than what you attempt to avoid. Update inclusion lists monthly.
2. Buy through direct inventory supply paths. Directness matters. Most supply chains fork, and the primary seller may buy from a secondary seller. This not only adds cost, but also starts breaking filtrations that are in place for viewability, IVT, brand safety, and inclusion. Importantly, each additional hop to a new supplier drives up your carbon footprint. If a marketer starts with a list of 75 to 100 high-quality, trusted sellers, they'll get thousands of high-quality domains.

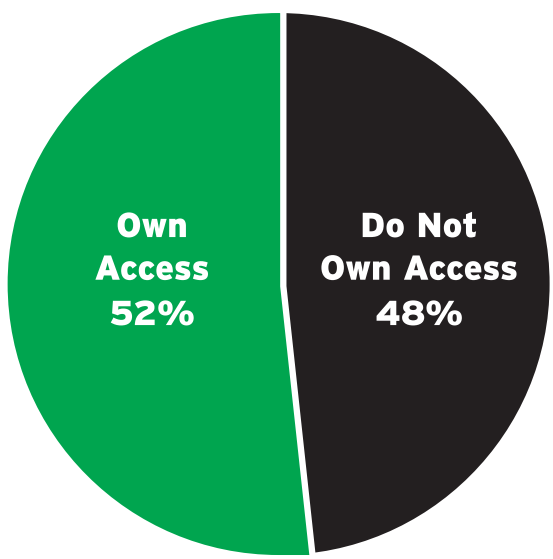
4. Direct Supply Chain Contracts Can Increase Transparency and Efficiencies, Reduce Waste

Sixty-seven (67) ANA member companies were interested in participating 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 programmatic advertising.

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 relevant 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 which 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.



4. Direct Supply Chain Contracts Can Increase Transparency and Efficiencies, Reduce Waste

The ANA Programmatic Benchmark Survey asked, "Does your company own direct contracts with any of the following supply chain intermediaries? Select all that apply." Marketers are most likely to own direct contracts with one or more DSPs and ad verification providers.

- DSP(s): 80 percent
- Ad verification (for viewability, IVT, and brand safety): 78 percent
- SSP(s): 27 percent

Note that the incidence of having direct contracts with DSPs was higher in this survey (80 percent) than among advertisers which initially expressed interest in participating in the study (52 percent). It's the perspective of subject matter experts who worked on this study that the incidence of marketers having direct contracts with DSPs is likely more in line with the 52 percent number.

The survey then asked, "Over the next year, does your company have plans to own direct contracts with any of the following supply chain intermediaries that it currently does not have direct contracts with? Select all that apply." Again, respondents first noted DSPs (as they are more likely to own contracts with more than one DSP) and then ad verification providers. And there was a noticeable increase in the likelihood for marketers to forge direct contracts with SSPs.

- DSP(s): 77 percent
- Ad verification (for viewability, IVT, and brand safety): 73 percent
- SSP(s): 32 percent

4. Direct Supply Chain Contracts Can Increase Transparency and Efficiencies, Reduce Waste

Why Have Direct Contracts with DSPs

A demand-side platform (DSP) is an automated ad-buying platform where buyers — marketers and agencies — purchase audience-targeted advertising, including display, video, and CTV. DSPs provide other services (either on their own or in conjunction with third parties), including frequency management, brand safety, fraud prevention tools, and a real-time view of campaign performance.

The key roles of a DSP are to apply campaign settings and budgets, connect with programmatically enabled supply, and deliver on campaign objectives in a manner that should allow a brand to measure performance.

Increasingly, marketers are working directly with DSPs to have more control over their media investments, greater transparency, easier access to campaign data, and to increase their own education and awareness around best campaign setup and configuration. By owning a DSP contract, the marketer is able to have its own "seat" on the DSP which allows it continued access to campaign data. That access remains even if the marketer is no longer working with its agency. If a marketer contracts with a DSP directly, the marketer can control the configuration of its programmatic media investments, allow its agency to use the DSP under the marketer's direct seat, or a combination of the two. Marketers should always ensure their agency contract makes clear the agency's responsibility and liabilities with respect to the DSP, such as campaign set up and tag management.

The accurate configuration of DSP settings is integral to the health and success of every campaign. DSPs have made it easier to apply audience or pre-bid segments, isolate inventory or device types, implement inclusion or exclusion lists, and control a host of pricing levers. However, with these options comes complexity and room for error. It's important for marketers to implement operational processes and consider using log-level data to help catch these errors in real-time and mitigate risk.

See the appendix for "Tips for Evaluating, Selecting, and Contracting with a DSP."

4. Direct Supply Chain Contracts Can Increase Transparency and Efficiencies, Reduce Waste

Why Have Direct Contracts with Ad Verification Providers and SSPs?

Ad verification providers typically measure viewability, IVT, and brand safety. These providers may also measure attention metrics and sustainability. Many brands recognize the reputational risks of having their content appear in fraudulent and non-brand-safe environments and therefore choose to contract directly with ad verification providers to have more control over these issues.

A supply-side platform (SSP) is a software platform most often used by online publishers to help them sell ad space. While it's less likely for marketers to have direct contracts with SSPs, there are benefits of doing so. Those benefits include increased transparency, cost savings, the environment of curated marketplaces, improved accountability for curated buys, and a clearer chain of liability for make-goods. See more in the section "Having an SSP Optimization Strategy to Make SSPs More Accountable."

Jounce Media has provided this additional perspective on direct contracts with SSPs:

- The average advertiser should not own a direct SSP contract until reaching $50–$100 million in annual spending. Not every buyer can be a preferred buyer, and the SSPs will only engage in deep partnership discussions with the biggest buyers. Above $100 million per year, buyers definitely have leverage to negotiate with SSPs. Below $50 million, they probably don't.
- Another option for advertisers is to let the agency own the contract with the SSP but the marketer can provide input to key terms and add data access rights and other terms such as ad quality and clawbacks (i.e., the recovery of money already disbursed).
- A practical requirement of SSP agreements is DSP seat ownership. If a brand uses its agency's DSP seat, then the agency must also own the SSP contract.
- Negotiating with SSPs to unlock preferred economics and non-standard transparency analysis (like log files) can only be done by the company that owns the DSP seat. Contractually, the way SSPs collect information and handle pricing for the bidding activity of a DSP seat can only be influenced by the owner of the DSP seat.

4. Direct Supply Chain Contracts Can Increase Transparency and Efficiencies, Reduce Waste

A Case Study in Strategic Right-Housing for Enhanced Media Personalization (from a major CPG)

Overview: This case study underscores the importance of strategic right-housing for media tech contract ownership as a means to achieve greater account ownership, data transparency, and improved media personalization. This marketer uses the term "right-housing" to refer to the strategic choices of what they bring in-house versus what remains outsourced. The impressive results — a 47 percent improvement in CPM efficiencies and 37 percent boost in reach — demonstrate the benefits of this initiative. By taking control of DSP contracts and optimizing through data transparency, the organization successfully positioned itself as a more active and capable steward of its media personalization efforts.

Starting Point: The organization recognized the need for greater control over its media tech contracts and data transparency to optimize media personalization efforts. To address this, the decision was made to bring DSP contracts in-house.

Objectives: The primary objectives of this initiative were:

- Achieve greater account ownership and control.
- Enhance data transparency for improved decision-making.
- Become more proactive and capable stewards of media personalization.

Methodology: The organization embarked on a strategic right-housing process for media tech contract ownership. This involved the in-sourcing of DSP contracts, which allowed for increased data transparency and more effective media optimization. The overall process required a strong partnership with procurement, legal, and privacy counsel to ensure partnerships would be operated within the global consumer privacy policies, and to negotiate aspects of the contract and rates to ensure they contributed positively to the company's media objectives.

Challenges: The process of in-sourcing DSP media contracts posed significant hurdles. Negotiating favorable terms as a standalone company, rather than as part of a larger holding company, hindered the company's ability to secure pricing advantages. However, by approaching this task with patience and fostering a partnership with the DSP team, the brand successfully navigated these challenges, ultimately achieving mutual benefits for both the DSP and the marketer.

4. Direct Supply Chain Contracts Can Increase Transparency and Efficiencies, Reduce Waste

Impact: The organization in-sourced two DSPs (and is looking to in-source an additional one next year). The two outcomes of this strategic initiative were impressive:

1. CPM Efficiencies: Through data transparency, the organization identified CPM optimization opportunities, resulting in a remarkable 47 percent improvement. This indicates a significant reduction in advertising costs and more efficient media spending.
2. Increased Reach: The initiative also led to a substantial increase in reach, with an incremental 37 percent households reached by reinvesting media savings. The organization was able to connect with more of its target audience, thereby enhancing its market presence.

Recommended Playbook

1. Transparency maximization and data access rights are directly connected. Consider having direct contracts with all primary supply chain partners — DSPs, SSPs, and ad verification vendors. A good starting point is with the DSP contract. The DSP works for the buyer. Increasingly, marketers are working directly with DSPs to have more control over their media investments, greater transparency, and easier access to campaign data. Most marketers also have direct contracts with ad verification partners to monitor viewability, IVT, and brand safety. 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.
2. The **ANA Master Media Buying Services Agreement Template** (version 3.0, June 2023) is a great place to start to ensure your agency is obtaining access to LLD on your behalf. See in particular the definition of "Transaction Data," Section 6 and Schedule 4.

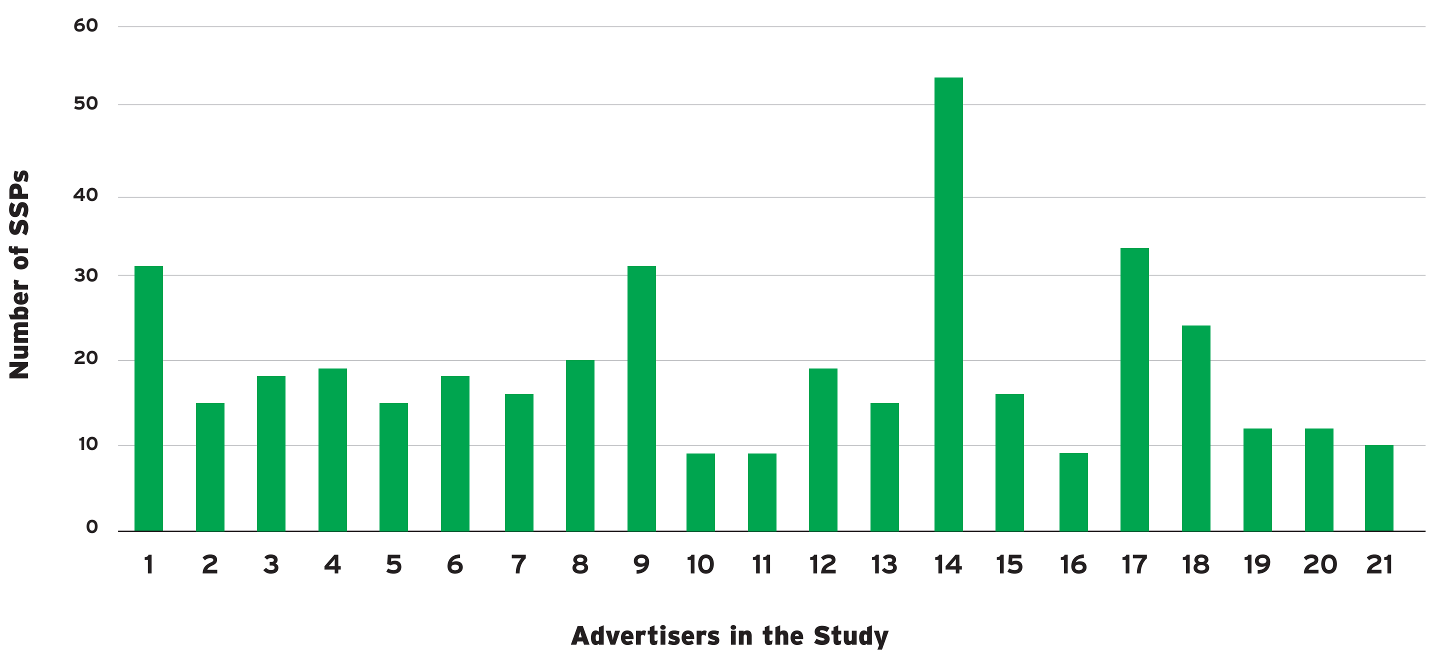
5. Have an SSP Optimization Strategy to Make SSPs More Accountable

A supply-side platform (SSP) is a piece of software used to sell advertising in an automated fashion. SSPs are most often used by online publishers to help them sell display, video, and mobile ads. SSPs allow publishers to connect their inventory to multiple ad exchanges, DSPs, and networks at once. This in turn allows a huge range of potential buyers to purchase ad space.

SSP Data from the ANA Study

In the ANA study the average advertiser had spending of approximately $6 million, serving 1.7 billion impressions. An average of 19 SSPs were used by each advertiser and the overall range was between 9 and 53 SSPs.

Number of SSPs Used



5. Have an SSP Optimization Strategy to Make SSPs More Accountable

Other insights from the study:

- One SSP took close to 45 percent of media spend, with the remaining SSPs seeing 3–8 percent of media spend. Most were less than 5 percent.
- The highest volume sites purchased by study participants went through six to 18 different SSPs.
- Not all SSPs provide the same level of transparency.
    - For example, 19 out of the top 25 SSPs by ad spend volume provide log-level data.[22]
- Not all SSPs are equal.
    - Of the top 25 SSPs in the study that accounted for over 95 percent of all spend, eight had negligible MFA spend, eight were above the 15 percent study average, and one had 71 percent MFA spend.
    - The fees each SSP charges vary significantly, from 5–20 percent.
    - The SSP revenue paid to publishers varied from 40–83 percent.
    - SSPs deliver a range of direct versus indirect access to sites. The highest was 97 percent direct and the lowest 13 percent (i.e., in that latter case, 87 percent was rebroadcast). Rebroadcast programmatic media has supply chains that introduce unnecessary hops between the marketer and the publisher, resulting in elevated fees and a higher carbon footprint.
    - As previously noted, there is a huge variation between SSPs, ranging from those that have a very high percentage of MFA media spend across their websites (70 percent) and those with a very low percentage (under 1 percent). That is indicative of SSPs having different publisher acceptance policies and standards.

Chris Kane, founder of Jounce Media, served as a subject matter expert to the ANA project team and provided the following insights for SSP optimization:

- Advertisers should either forge direct partnerships with sell-side technology companies or delegate this responsibility to their agency partners. In either case, the marketer should have confidence that its media buying team has business relationships with every company in the programmatic supply chain.

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22 TAG TrustNet Log-Level Data Register

5. Have an SSP Optimization Strategy to Make SSPs More Accountable

- The average DSP is integrated with more than 50 SSPs. Marketers likely lose more than they gain by bidding into auctions with all those SSPs. Rather, work with a handful of preferred SSPs.
- Those preferred SSPs should be ones that provide transparency and high scale, direct access to trusted publishers. Ideally, those SSPs also offer financial incentives and elevated service levels to buyers in exchange for an elevated share of wallet.
- Marketers should want some redundancy, but not much — at least two pathways to any specific inventory. Five to seven SSPs are likely optimal and can provide access to close to 100 percent of supply across web, mobile app, and CTV environments.

Having too many SSPs can drive up costs, as the advertiser may be "bidding against itself" in many cases. Similar to the principles of search engine marketing, if there are multiple divisions within the same company bidding on the same keywords (or inventory), an advertiser may be competing against itself and paying too much. As an illustration of this, in the Open Marketplace (OMP), the average number of SSPs used to run ads among the top 100 domains by ad spend was between six and 18. The latter part of that range is alot.

The ANA Programmatic Benchmark Survey asked, "Has your company done any work to optimize its supply-side platform (SSP) activity?"

- 38 percent responded "Yes"

When asked to explain the reasons for doing so, representative verbatim responses were:

- "An audit uncovered the opportunity to reduce the number of SSPs utilized, given overlap."
- "Primarily through working with a small set of preferred partners, limiting the number of hops."
- "We have reduced the number of SSP partnerships and continue to work to understand the optimal path to supply. Our end goal is three to four SSPs with reduced inventory overlap."

5. Have an SSP Optimization Strategy to Make SSPs More Accountable

Recommended Playbook

Buyers should put controls in place to make SSPs more accountable via the following action steps:

1. Ensure that the portfolios of preferred SSP partners collectively provide comprehensive access to premium web, mobile app, and CTV supply. Five to seven SSPs are likely optimal and can provide access to close to 100 percent of supply across web, mobile app, and CTV environments.
2. Work with SSP partners that have direct connections to the publishers on your trusted seller list and can deliver inventory without tapping into other sources. When preferred SSP partners disclose their overall percentage of direct, premium supply, marketers can then take advantage of existing tools like Sellers.json and Ads.txt to verify the seller's degree of connection to the desired inventory.
3. Review the publisher and partner acceptance standards and policies for SSPs. It is important to understand the criteria a publisher must meet to be able to monetize its inventory though an SSP. That can range from the type and number of ads units, auto-refresh polices, the content classification of the website or, whether the publisher is prepared to let the SSP provide its log-level data to buyers.
4. Decide which SSPs you want to buy from via your DSP. Uncheck all other SSPs in your DSP campaign setup.
5. Apply pressure to preferred SSP partners to build curated marketplaces that exclude rebroadcasting auctions (i.e., supply chains that introduce unnecessary hops between the marketer and the publisher, resulting in elevated fees and a higher carbon footprint), cheap reach placements, and Made for Advertising publishers (should the exclusion of MFA publishers be right for your business).
6. Create a policy with your DSP and agency that you will only pay for inventory bought on your named list of SSPs.
7. Implement regular log data monitoring for transparency and to ensure your policies are functioning as planned. Use the data to enforce the payment policy in Step 6.

5. Have an SSP Optimization Strategy to Make SSPs More Accountable

Tom Triscari, advisor to the ANA on this project, notes, "SSP choices are a check box away. Go into your programmatic consoles to see what's available." The Trade Desk, as an example, has **over 350 "inventory partners."**

Regarding Step 4, "Decide which SSPs you want to buy from via your DSP," one approach is to lean on marginal contribution from each additional SSP and check on diminishing returns based on your main KPI(s).

For example, let's say your main KPIs are reach and viewability. Consider starting with the first SSP on your list while excluding all other SSPs and check your KPI achievement. At some point, you will likely not be able to spend your entire budget, which means scale reaches the natural limit of that first SSP. Then add the second SSP and repeat with additional SSPs until your budget is on pace and until reaching a point of diminishing returns with respect to your KPIs. Once there, those SSPs form your "named" partners.

According to Chris Kane:

> "The key point is that a supply path optimization strategy requires much more than a commercial alliance with a handful of SSPs. SPO strategies require identifying portfolio gaps from the largest omnichannel SSPs and engaging with specialists to unlock direct access to high-impact web ad units, mobile game developers, and the most premium CTV media companies. SPO strategies require complementing SSP partnerships with DSP publisher-direct integrations. And most critically, SPO strategies require curating only the highest quality auctions from each supply source."

While the ANA is not in the position to recommend specific SSPs, the participating SSPs in this study should at least be considered: Index Exchange, Magnite, Microsoft Advertising, OpenX, and SpotX (part of Magnite).

6. Information Asymmetry Disadvantages Marketers

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.

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 an imbalance in the nature and quality of information both within the advertiser (internally) and between the advertiser and other players in the supply chain (externally). 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 may be contracting as a principal and not as an agent of the advertiser. This naturally impacts decisions being made by the agency, such as which adtech 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.

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 contract'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.

6. Information Asymmetry Disadvantages Marketers

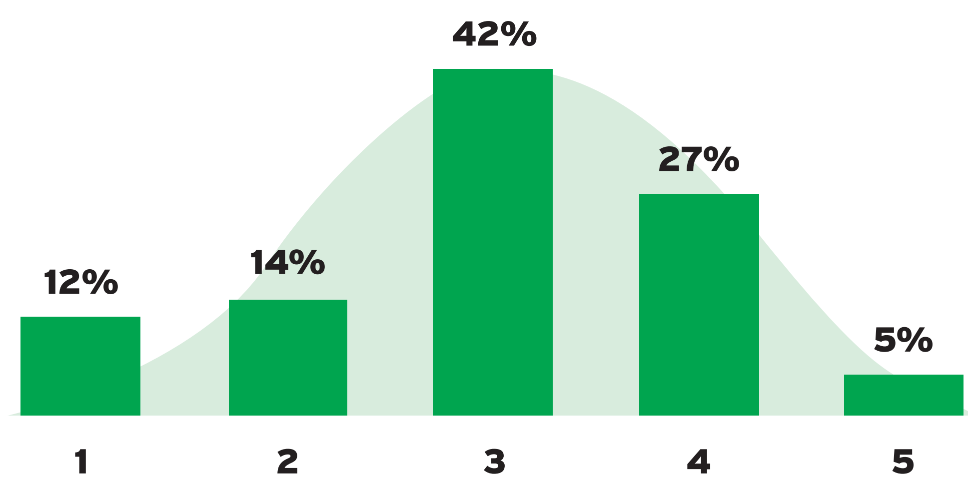
The ANA Programmatic Benchmark Survey provides clear evidence of information asymmetry in programmatic media.

One of the questions posed:

- The ANA *First Look* report identified “information asymmetry” as a serious issue for advertisers. 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. Where is your company on the “information asymmetry scale”? On a scale of 1 to 5, 1 = We are not at all knowledgeable about the quality of inventory being sold in auctions to 5 = We are very knowledgeable about the quality of inventory being sold in auctions.

Results are a bell curve with 26 percent rating their knowledge at 1–2, 42 percent rating at 3, and 32 percent rating at 4–5. Again, clear evidence of information asymmetry.

Where Is Your Company on the Information Asymmetry Scale?



1 = We are not at all knowledgeable about the quality of inventory being sold in auctions.

5 = We are very knowledgeable about the quality of inventory being sold in auctions.

6. Information Asymmetry Disadvantages Marketers

The survey also asked:

- How comfortable are you with the level of transparency you are getting with your programmatic media investments?

Results:

- Very comfortable: 6 percent
- Comfortable: 40 percent
- Neutral: 38 percent
- Uncomfortable: 13 percent
- Very uncomfortable: 3 percent

Therefore, 54 percent are neutral or uncomfortable with the level of transparency they are getting with their programmatic media investments, which is more evidence of information asymmetry.

To a large degree, marketers have influenced the growth of information asymmetry. Consider other insights from the ANA Programmatic Benchmark Survey:

- Only 46 percent of marketers track the number of websites used for a typical programmatic campaign.
- Some 25 percent responded that they are still not aware of Made for Advertising websites.
- Only 21 percent currently track activity on Made for Advertising websites that are part of their programmatic advertising campaigns.

It is concerning that some marketers don't track the number of websites or Made for Advertising websites in their programmatic campaigns. And it's concerning that 25 percent of marketers are still not aware of Made for Advertising websites — despite the significant press coverage since mid-June. Those individuals are advised to pay closer attention to industry issues. Two ways to do that are to regularly read the advertising trade press (such as those publications noted on page 11 of this report) and to join either the **ANA Media Committee** or **ANA Digital & Social Committee**. Both are forums for sharing best practices and discussing industry issues. Further, agencies have a role to play in educating their clients.

6. Information Asymmetry Disadvantages Marketers

Chief media and research officers at client-side ANA member companies can also join the **Media & Measurement Leadership Council (MMLC)**. This is an activist group of client-side marketers who are ultimately responsible for the effective deployment of media expenditures, and measurement and analytics to support those investments. The mission of the MMLC is to set the industry media agenda by identifying and solving those pressing and important initiatives that unlock increased value for advertisers to accelerate business and brand growth.

iab.

David Cohen, CEO at IAB, put it well in an interview with Media Village:[23]

> **"This is not somebody else's problem. Marketers, you need to get engaged, get educated, get involved. This is something that everyone needs to be fluent and conversant in… Get in the game."**

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

Recommended Playbook

1. 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. The study 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." Advertisers should be aware that information asymmetry is an issue that disadvantages them and take steps to close the gap.

23 "Transparency, TiKTok, and a Bit of Nostalgia", Media Village, August 24, 2023

6. Information Asymmetry Disadvantages Marketers

2. There are strong consistencies between conclusions 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**):

- o 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 which outsource their media management without active internal stewardship do so at their risk.
- o Advertisers should appoint a chief media officer (either in title or function) who should take responsibility for the internal media management and governance processes that deliver performance, media accountability, and transparency throughout the client/agency relationship (and now in 2023, throughout all relationships with programmatic supply chain partners). On the most fundamental level, the chief media officer should drive the media strategy, partner with external agencies, and work with third-party suppliers to optimize the media mix and maximize ROI. This executive should be the centralized internal resource to drive integration and share best practices across internal brand teams and external agencies. The chief media officer should be the internal subject matter expert on the many important and complex media issues confronting advertisers today. Digital media expertise should be a foundational skill for this position. Furthermore, it is recommended that the chief media officer develop relationships with key external media properties and programmatic supply chain partners with whom the advertiser conducts business.

With more active stewardship of their media investments, advertisers can fight information asymmetry. 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. The chief media officer role is therefore now more important than ever. Lack of stewardship increases the risk of wasteful and inefficient media buys.

6. Information Asymmetry Disadvantages Marketers

3. It is important for advertisers to know when their agency is purchasing media for them as an agent versus selling them inventory on a non-transparent basis or that has been acquired as a principal. Even if an agency is acting as a principal, advertisers can contractually require transparency and should be diligent in ensuring that they are contractually able to get the information they need to make informed decisions about the value and performance of their media purchases. The **ANA Master Media Buying Services Agreement Template** is a great starting point to ensure transparency in your agency agreements.

4. Seek answers to fundamental questions for your business:

- How many websites are used for an average campaign?
- Do you implement inclusion lists (or exclusion lists) for your programmatic advertising?
- Does your company own direct contracts with any supply chain intermediaries? If not, should you?
- Has your company done any work to optimize its SSP activity?
- How much of your programmatic media activity is running on Made for Advertising websites?

5. Tapping log-level data from every adtech vendor across an advertiser's supply chain and matching that data shows 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 near real time at the campaign, brand, portfolio, country, and regional levels, they will have the information balance to make better decisions. Log-level data analysis is essential to drive additional media investment productivity.

7. 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 initially 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

7. Misaligned Incentives: Advertisers Prioritize Cost Over Value

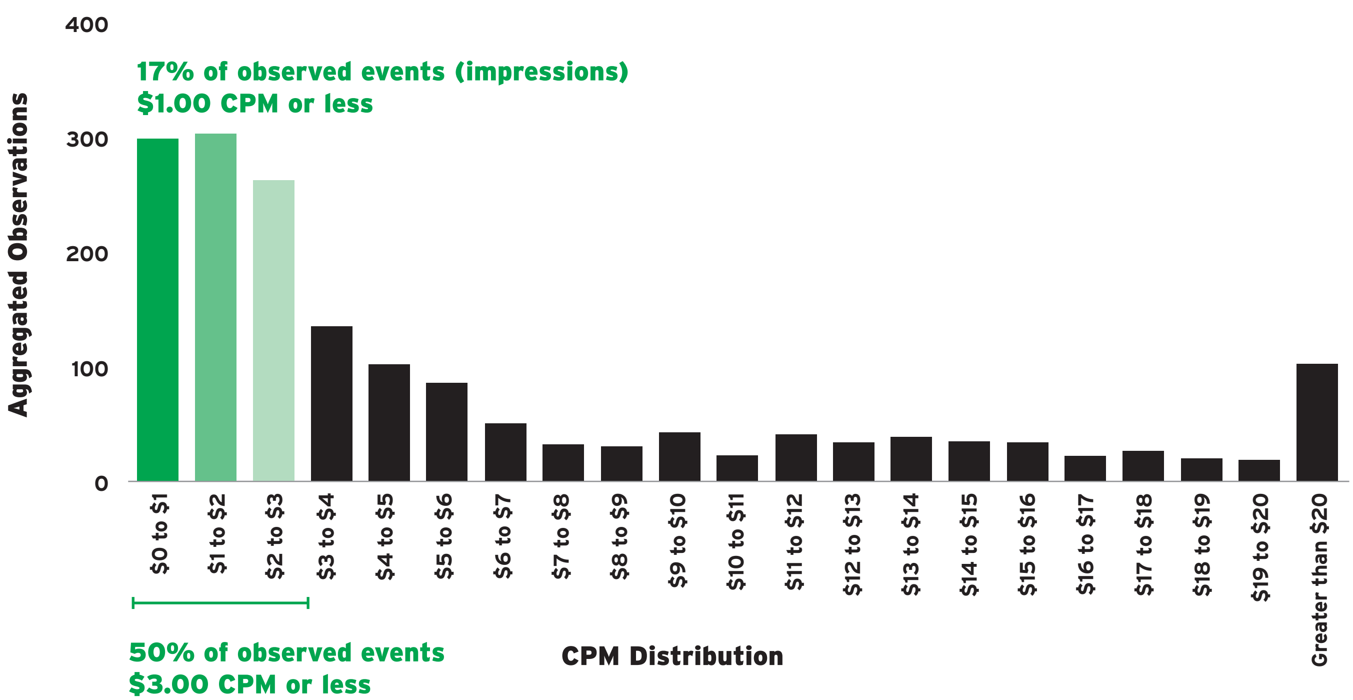
The project team conducted an analysis of the CPMs paid for all inventory types by advertisers which participated in our study.

- **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, as evidenced by Kroll's qualitative findings and the CPM distribution (i.e., cheap reach) of study participants.

CPM Distribution

Cheap reach is the name of the game.

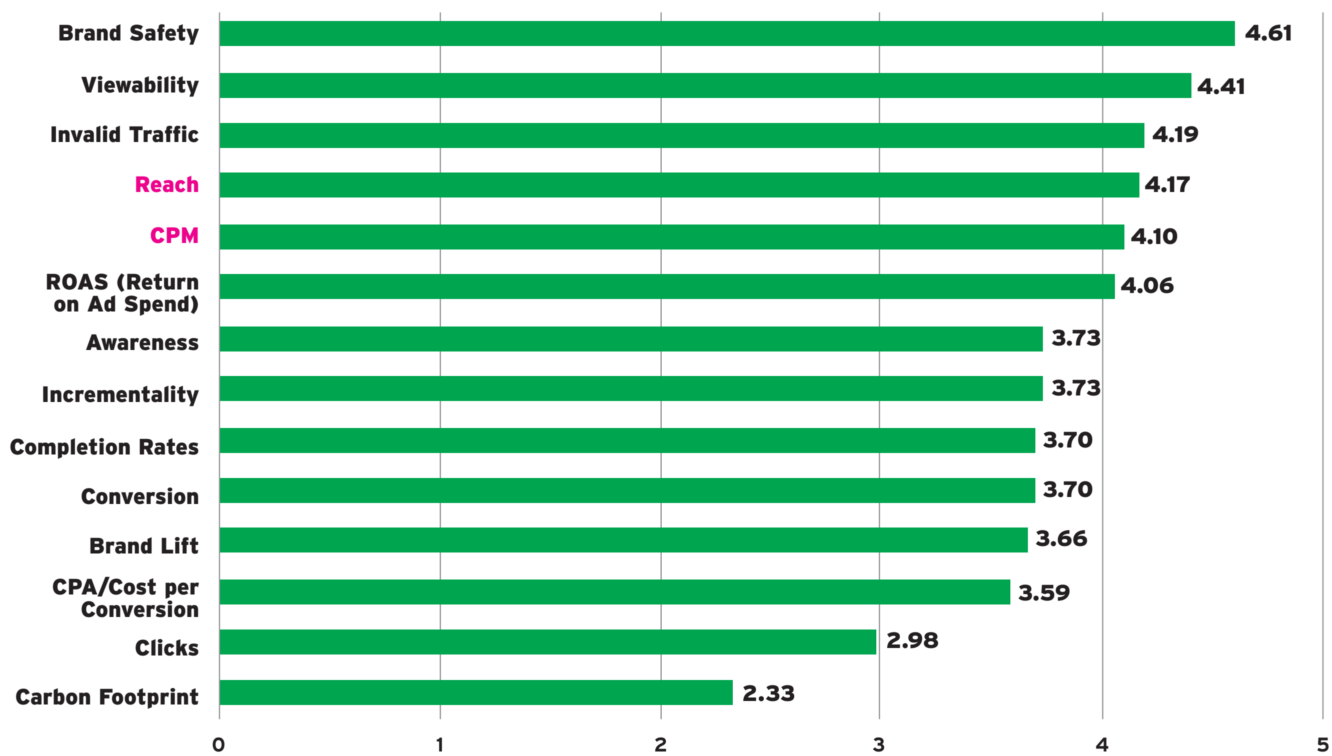


7. Misaligned Incentives: Advertisers Prioritize Cost Over Value

Goals of marketing campaigns are often about driving metrics such as awareness, brand lift and conversion as well as return on ad spend (ROAS). However, in the ANA Programmatic Benchmark Survey we found that the top-rated metrics important for programmatic advertising campaigns are all related to "bad things" that can happen with programmatic media – ads appearing in non-brand safe environments, ads that are not viewable, and ads that are served to bots, rather than humans. These are "table stake" metrics for programmatic advertising.

The metrics of reach and CPM follow. Those are both rated higher in importance than metrics such as awareness, brand lift, conversion, and ROAS (return on ad spend). The survey findings provide further evidence that marketers are chasing cheap CPMs and prioritizing cheap reach.

Metrics Important for Programmatic Advertising Campaigns



1 = Not at all important and 5 = Very important.

7. Misaligned Incentives: Advertisers Prioritize Cost Over Value

The primary incentive driving programmatic media buying behavior is often 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), brand safety, and the context of the ad placement. Poor quality can often lead to inventory that is not viewable, has fraud, and is not brand safe.

As noted earlier, advertisers should determine, independently, 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. For those advertisers which decide to reduce or eliminate spend on MFA websites, the CPM targets for their media buys will very likely increase accordingly, since CPMs paid on MFA websites are 25 percent lower than those paid on non-MFA websites.

Recommended Playbook

1. Advertisers must balance their pursuit of low-cost inventory in programmatic media 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.
2. Be prepared to accept higher CPMs, should there be MFA sites that are reduced or eliminated.
3. When pricing information from DSP and SSP log data is paired with ad impression quality data from ad verification provider log data, buyers can get a relative sense of value to make better decisions. With clean and deterministically matched log data in hand, buyers can compare TrueCPMs[24] across different strategies on a like-for-like basis. Buyers should routinely assess log-level data (LLD) or engage an independent, qualified third party 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.

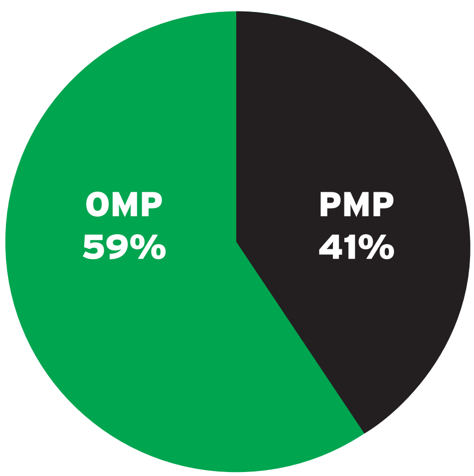
24 TrueCPM is the CPM only taking impressions matching the requirements of an advertiser into account. If the CPM for all delivered impressions is $5 and 80 percent match the advertiser requirements, the TrueCPM for impressions matching the requirements is $6.25.

8. Optimizing the Mix of OMP and PMP Deals

Marketers are faced with a complex dichotomy when allocating their programmatic ad budgets, especially when optimizing the mix of Open Marketplace (OMP) and Private Marketplace (PMP) deals.

- **Open Marketplace (OMP):** Inventory that a seller (SSP, ad network, or publisher) makes available to all advertisers or buyers which have access to an exchange, without price restrictions (with the possible exception of general pricing floors). There is no pre-agreed relationship between either party. For advertisers, the Open Marketplace provides access to the broadest audience in a cost-effective way.[25]
- **Private Marketplace (PMP):** Inventory that a seller (SSP, ad network, or publisher) makes available programmatically on an exchange to select advertisers or buyers. As compared to the Open Marketplace (OMP), with PMPs advertisers have a greater control over what audiences, publishers, and placements their spend goes to and where their ads appear at a pre-agreed price. In some cases, there is also preferential access to ad inventory.[26] PMPs also can offer unique creative units (e.g., rich media ad units).

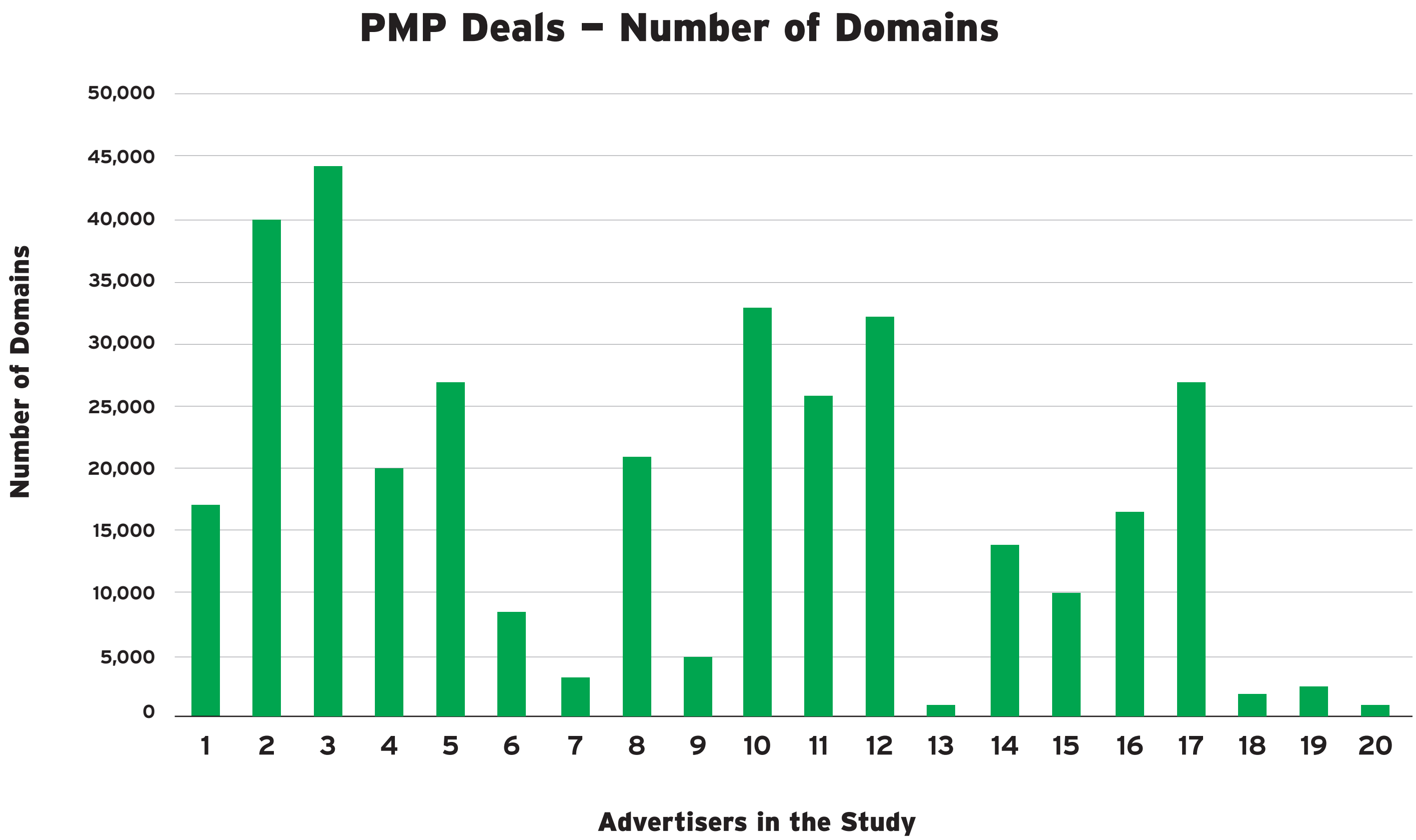
Across the advertisers in the study with data matched between DSP and ad verification, 59 percent of programmatic ad spend was directed to Open Marketplace and 41 percent to Private Marketplace deals.



25 TAG TrustNet Glossary
26 Ibid.

8. Optimizing the Mix of OMP and PMP Deals

Moreover, the number of domains for PMP deals ranged from low to very high — an average of 16,500, with an extreme of approximately 40,000 for two study participants.



8. Optimizing the Mix of OMP and PMP Deals

A number of different profiles of PMP deals were encountered during the study which were categorized into three distinct groups based on the number of domains (i.e., websites) in each deal.

Domains per PMP	Profile Type
1 to 10	Publisher-specific (also called a 1-to-1 private marketplace)[27]
11 to 500	Seller-specific, meaning SSP, ad network, or publisher which may operate numerous sites (commonly called auction packages)[28]
Over 500	SSP direct (curated by the SSP or agency offering access to preferred rates, formats, targeting, etc.)

27 These deal IDs are typically sold by a publisher's sales team. They might include multiple websites or apps, but those properties are all part of a single portfolio. These deals also often include prioritized access to premium supply.

28 These deal IDs are typically sold by a supply chain intermediary (SSP or ad network). They bundle together sites and apps from many publishers and rarely carry auction priority. Instead, the value proposition is inventory curation -- packaging certain types of ad products or content or audience into a single targetable deal ID.

8. Optimizing the Mix of OMP and PMP Deals

When comparing the quality of all PMP deals with available data, PMPs with 500 or fewer domains are of better quality as MFA percentage and IVT percentage are low. Meanwhile, PMPs with more than 500 domains had much higher levels of MFA percentage and IVT percentage than PMPs with 500 or fewer domains. PMPs with more than 500 domains delivered quality similar to the OMP deals, but at double the cost. While the percentage of MFA impressions was highest in OMP deals, IVT and viewability were fairly comparable between OMP and PMP deals with over 500 domains.

Domains per PMP	CPM	MFA % (impressions)	IVT % (impressions)	Viewability % (impressions)[29]
1 to 10	$6.03	0.02%	0.2%	67.7%
11 to 500	$8.49	1.3%	0.2%	75.6 %
Over 500	$5.52	19.8%	1.4%	72.1%
OMP	$2.75	26.8%	1.1%	78.8%

The PMP Conundrum

Private Marketplace deals have long been perceived as “premium” or “privileged” offerings, promising higher-quality inventory and better viewability. This quality assurance is often the driving factor behind PMPs commanding a higher price compared to OMP inventory. Another factor is that PMPs also can offer unique creative units (e.g., rich media ad units). Also, PMPs are now used as the primary access point to specific inventory types such as CTV. However, our analysis suggests that not all categories of PMPs with matched DSP and ad verification live up to the promise of being "premium" or "privileged."

The presence of MFA sites, known for their low-quality content and poor user experience, particularly in the category of PMPs over 500 domains, substantially dilutes the supposed premium nature of some PMPs.

That MFA activity reached over 30 percent in Private Marketplace deals for some study participants.

29 The numbers in the column reporting on “viewability %” were calculated using a different data set than the other numbers in the chart. They should therefore be used directionally and for comparison purposes only.

8. Optimizing the Mix of OMP and PMP Deals

The Need for Data-Driven Verification

Knowledge is power in the programmatic world, and unlocking the true value of PMPs is essential for achieving programmatic advertising success.

The study findings underscore the critical need for data-driven verification to ensure marketers receive the value they expect from PMPs. Transparency is the linchpin for this transformation. Marketers can harness the power of log-level data analysis to peer inside each PMP, classify sites into quality tranches (good, okay, and bad quality), and subsequently reprice PMPs to reflect their true value. This data-driven approach reduces risk with PMP investments, ensuring that marketers receive the quality and performance they rightfully expect.

For advertisers that don't lean on LLD, one can still run a high-level analysis by asking the DSP to build a custom report that lists every domain inside each PMP. Each PMP can also be classified by ad type (e.g., display, video, and CTV). This custom report can be configured to show the SSP behind each PMP deal with the relevant impression and pricing data.

The CDO Analogy

According to Tom Triscari, advisor to the ANA on this project, advertisers should consider drawing a parallel with collateralized debt obligations (CDOs) from the financial sector to understand this PMP conundrum. CDOs typically bundle good or "prime" mortgages with a low risk of default alongside subprime mortgages with a higher risk of default. If bond rating agencies assign high ratings like AA to these CDOs, which masks the underlying risk closer to a B- rating, then buyers will likely misprice the investment. That's exactly what happened leading to a market crash and recession in 2008/2009.

Similarly, if the average PMP mixes high-quality premium inventory with low-quality inventory (including MFA sites) to maintain an overall low CPM, it creates a perception of high quality that does not always align with reality. Most importantly, for advertisers looking to maximize impact against KPIs, the results will be suboptimal.

8. Optimizing the Mix of OMP and PMP Deals

Recommended Playbook

1. Log-level data analysis provides an always-on examination of the individual sites present within any PMP. By assessing factors such as historical performance, engagement metrics, and content quality, marketers can categorize each site into different quality ranges.
2. By scrutinizing the sites within each PMP and classifying them as "good," "okay," or "bad," marketers can unpack and reprice PMPs accordingly, and then update their inclusion lists.
   - "Good" tranches consist of high-quality "bellwether" sites with a proven track record of generating positive advertising impact. Refer back to the section on "Focus on Inclusion Lists, Not Exclusion Lists" which noted the importance of high-quality, trusted sellers.
   - "Okay" tranches encompass sites that are relatively neutral, providing moderate value.
   - "Bad" tranches comprise sites with low-quality inventory, with minimal potential for generating meaningful advertising impact.
3. The fundamental principle is to align pricing with the true value of each PMP, thereby reducing the risk of overpaying for subpar ad placements. Once the tranches are established, marketers can then unpack and reprice PMPs accordingly. And remember to update inclusion lists. This recalibration ensures that PMPs are valued based on the actual quality and performance of the inventory offered.
4. Continuous monitoring is a brand imperative. Some PMP inventory is high quality and may be worth the premium price, however the days of simply assuming all PMP inventory is worth the premium are behind us. Increase your understanding of what types of PMPs you buy from and consider experimenting with allocating more budget towards OMPs. With proper checks, controls, and optimizations in place, OMP inventory can drive comparable quality at a lower cost.

9. Price, Ad Quality, and Unlocking "20 Percent Found Value"

Understanding the relationship between price, ad quality, and value in programmatic advertising is paramount for marketers to unlock more value. The fundamental concept of "value" revolves around the interplay between the price paid for ad inventory and the quality of the advertising space received. On one hand, the prices advertisers pay are directly observable from DSP data. On the other, assessing true ad quality with a high degree of confidence is not directly observable in the DSP data alone.

Determining ad quality starts by accessing ad verification log-level data along with DSP pricing data and defining what ad quality is for the individual advertiser. With a reasonable ad quality definition in place, data can then be collected, thus making it observable. Then the advertiser can match ad quality data to pricing data to identify waste, unlock value, and make better optimization decisions.

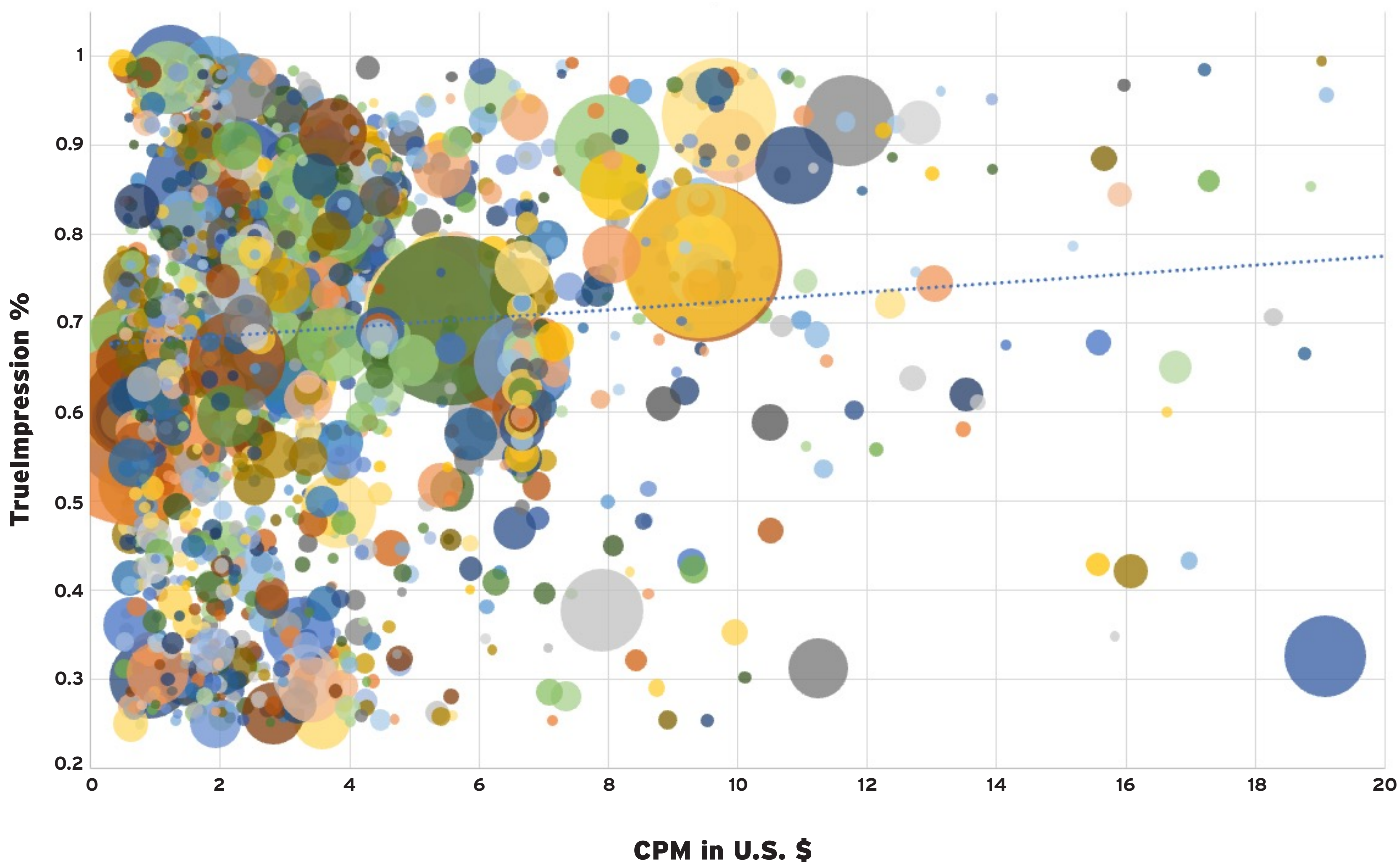
For example:

- Site A has a $5 CPM and only 500 of the 1,000 impressions meet the quality requirements. The TrueCPM or real price paid for the value received is $10 ($5/50 percent).
- Site B has an $8 CPM and all impressions meet the quality requirements. The TrueCPM is $8.
- If you optimize for price only, you would buy site A, but if you were able to combine price and quality and measure true value, you would instead buy site B.

9. Price, Ad Quality, and Unlocking "20 Percent Found Value"

No Correlation Between Price and Quality

Notably, the study team found no discernible correlation between price and quality, as shown in the chart below for display advertising. In an ideal or rational market, where information symmetry exists, CPMs and ad quality should have some correlation. However, in this study we generally found little to no correlation between price and value, which should strike buyers as being quite odd. As Kroll found and detailed in section 7, the probable cause is that cost reduction was prioritized over inventory quality.



Video advertising shows a similar pattern.

9. Price, Ad Quality, and Unlocking "20 Percent Found Value"

The following methodology principles were used to analyze the relationship between impression quality and CPM:

- TrueImpression was defined as an impression that is non-IVT, measurable, and viewable.
- Log-level data was matched between DSPs and ad verification providers and aggregated for the scatter plot by advertiser, DSP, exchange, marketplace type (OMP or PMP), device type, ad type (display or video), and application ID or domain, excluding aggregates with ad spend under $100.
- Aggregates with a percentage of TrueImpressions below 25 were excluded as outliers with abnormally poor quality.
- Scatter plots were constructed to analyze the relationship and correlation between the percentage of TrueImpressions and CPM for display and video inventory. The size of the dot on the scatter plots is proportional to the volume of ad spend, and the trendlines represent linear regressions.
- The **Pearson correlation coefficients** (measuring the linear correlation between two sets of data) were calculated for both scatter plots to confirm a weak correlation.

Increasing Ad Spend Productivity by 20 Percent

The study revealed that if advertisers are able to measure and price inventory based on its quality, they can achieve an approximate 20 percent increase in ad spend productivity (range of 14 to 25 percent). In a modelled scenario, approximately 25 percent of ad spend was reallocated from underperforming to top-performing SSP and publisher combinations. Only those impressions with data matches between DSP and ad verification provider that met these criteria were used: non-IVT, measurable, and viewable according to MRC standards. In this model, we assumed that TrueCPMs of top-performing combinations do not change after an increase in allocated ad spend. Outliers were removed from the simulation for accuracy. Note that a major CPG was able to achieve such results, as demonstrated in the case study in Section 10.

Tracking and improving the correlation between price and quality has a more important longer-term benefit for the industry. Implementing such a common-sense practice would starve poor-quality publishers of revenue and direct spend to higher-quality publishers, creating the right incentive for publishers to provide more quality inventory. This is both a win for the ecosystem and a good consumer experience.

9. Price, Ad Quality, and Unlocking "20 Percent Found Value"

Normalize Your Data to Increase Correlation Between Price and Quality: The TrueKPI Framework

To make informed decisions based on price and quality, it is essential to have access to your log-level data and normalize it by ingesting, matching, and harmonizing data fields. The project team has developed the TrueKPI framework to assist marketers in measuring value and aligning supply chain incentives with goals.

TrueImpression	**Impressions that meet a set of quality requirements. The default definition for a TrueImpression is that it must have matched data from the DSP and ad verification provider, and be non-IVT, measurable, and viewable according to MRC standards.**
TrueAdSpend	**Ad spend that is spent on impressions that meet the criteria for being a TrueImpression.**
TrueCPM	**The cost paid per a thousand TrueImpressions for total ad spend (total ad spend divided by TrueImpressions x 1000).**

Marketers can define their own custom metric, myTrueImpression, which can include additional quality requirements. For instance, they may choose to exclude non-brand-suitable impressions, impressions served on MFA websites, and impressions with unnecessary intermediary hops in the supply path (multi-hop reselling). This enables marketers to measure and optimize their ad spend success in a way that aligns with their specific objectives.

When creating a custom myTrueImpression definition, the buyer has the freedom to assign a value to each component. Inventory that is non-viewable or IVT would have zero value.[30]

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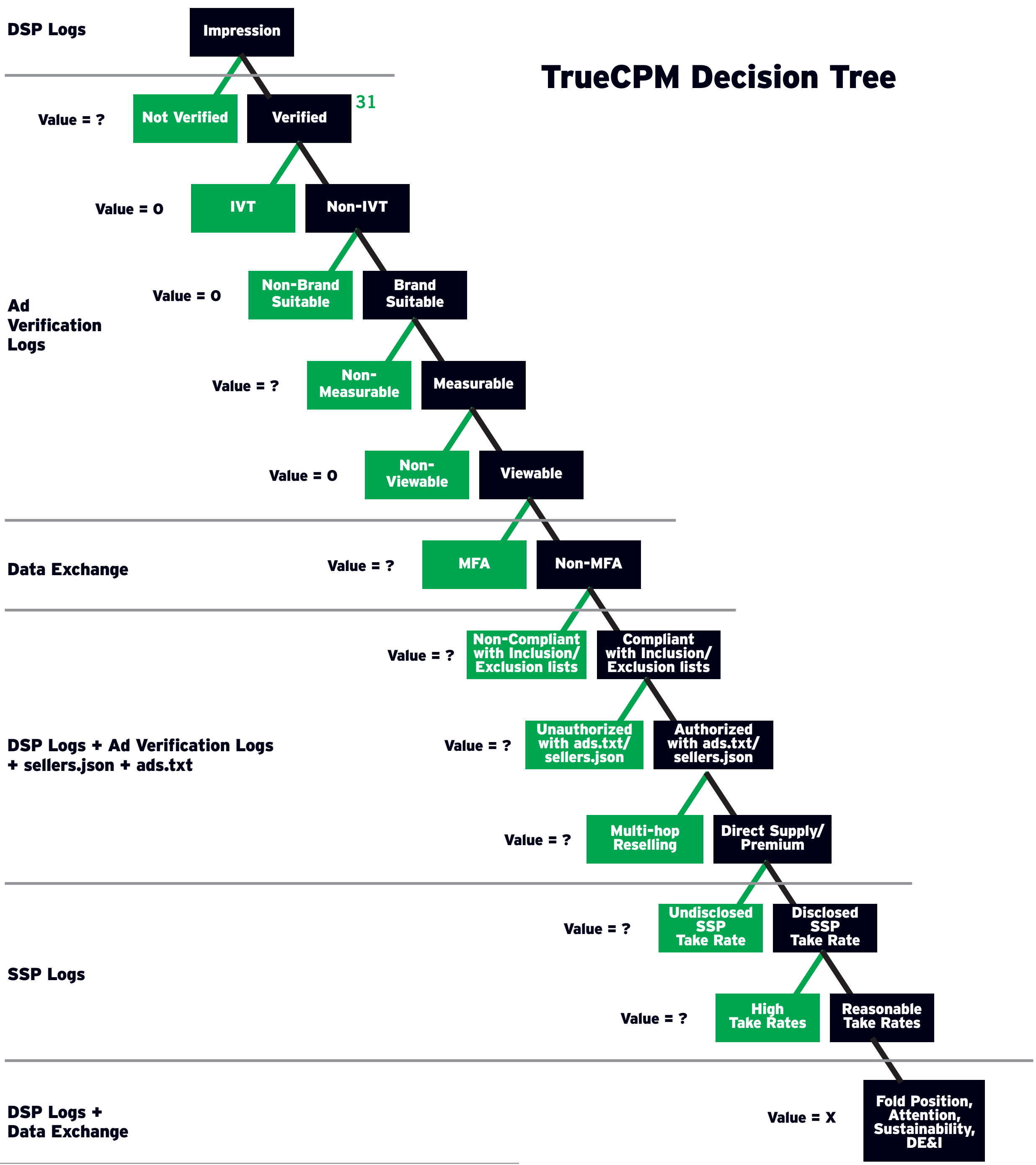
30 Note that the value of non-measurable and MFA impressions is subjective and is also up to the discretion of the buyer.

9. Price, Ad Quality, and Unlocking "20 Percent Found Value"

To visualize and select the components that can come together to define myTrueImpression, one can use a decision tree. TAG TrustNet uses the following template to attribute value when defining a myTrueImpression and myTrueCPM.



31 A verified impression is when two or more LLD sources — DSP, SSP, ad verification provider — agree that there is a unique impression.

9. Price, Ad Quality, and Unlocking "20 Percent Found Value"

Recommended Playbook

The key challenge in assessing value in programmatic advertising lies in the accurate measurement of ad quality and price. To address this challenge and enhance value assessment, consider:

1. Get access to your log-level data from DSPs, ad verification providers, and SSPs. Ingest, match, and harmonize log-level data either in-house or use a third-party company (see section 10).
2. Set a definition for myTrueImpression. Look at the different inventory types you buy (display, video, CTV, audio, etc.) and define what ad quality is (or is not) for each. A decision tree may be handy for this. If you do not have the internal resources, work with your agency or a media consultant. Your myTrueImpression is an impression that matches your definition. There might be a heavier lift on the front end, but once implemented it will be iterative, scalable, and pay for itself.
3. Set goals and measure performance using TrueCPM as a main KPI that aligns quality and performance.
4. Implement optimization strategies based on TrueCPM. This can be achieved manually or be automated. This allows advertisers to adjust bidding strategies during auctions to secure inventory that aligns with their quality requirements.

10. Data Access and the Importance of Log-Level Data (LLD) Matching

This report has already extensively addressed the issue of information asymmetry — 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 evaluate the price of the good in question (i.e., programmatic inventory and audiences), they tend to overpay. Data access and log-level data (LLD) matching are tools buyers can use to address information asymmetry in the programmatic marketplace.

Accessing your programmatic advertising data lies at the core of effective programmatic optimization. Whether an advertiser chooses to do so at an aggregate level due to current contractual or ad spending status, or opts for a granular log-level approach because they have the right mix of vendor contracts and technical infrastructure in place, the advantages of adopting a data-driven approach will unlock substantial opportunity.

The ideal scenario for advertisers is being in a position to access log-level data (LLD) from every tech vendor across their supply chain and then matching that data to show where value is hiding and where there is no value at all, helping people make better decisions. The case study that follows later in this section provides a great example of this.

When advertisers can see, compare, and contrast how a supply chain is performing with impression-level granularity in near real-time at the campaign, brand, portfolio, country, and regional levels, they will have information balance to make better decisions.

With clean and matched LLD, buyers can compare TrueCPMs across different strategies on a like-for-like basis. Buyers should consider routinely assessing log-level data on an always-on basis or engage an independent third party to make the assessment on their behalf.

In essence, buyers should have the tools to ensure that there is a balance between the price they're paying and the quality of inventory they're receiving.

10. Data Access and the Importance of Log-Level Data (LLD) Matching

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 timestamps, delivery data, campaign metadata, financial information, and other details about each impression. There are usually hundreds of millions to billions of impressions to process for the typical advertiser.

LLD from each technology vendor in the supply chain (DSP, SSP, and ad verification) 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. For instance, the simple use case of viewing working media daily at the campaign, brand, portfolio, and control levels moves the advertiser from reactive periodic audits to proactive monitoring and managing based on data-driven insight and performance benchmarking. Matching data throughout the supply chain is a philosophy that requires emphasis.

Additionally, when LLD and matched impressions are joined to other data sets such as sustainability, DEI, and Made for Advertising websites, the advertiser gets answers to questions that have gone unanswered to date. For example, asking "How much of my ad spend is delivered across minority- or female-owned websites?" or "What portion of my ad spend is delivered through direct versus indirect supply chains?" can be answered and put to work.

There is a perspective that should be recognized, however. Some feel that it is difficult to work with LLD. According to the Kroll report:

- "Our study found that many buyers did not even know what log files were, how to acquire them, or what to do with them in the event they receive them. Log files are incredibly voluminous, expensive to store, and difficult for any layperson without a data science background to understand."

The project team is confident that the benefits of LLD far outweigh the challenges.

10. Data Access and the Importance of Log-Level Data (LLD) Matching

Identifying Partners that Provide LLD

Similar to past LLD-based studies, the ANA study has highlighted the complexity and obstacles to accessing log-level data (LLD) at scale. It involves navigating a multitude of legal agreements, consents, data taxonomies, and the ongoing management of each data feed. No two vendors are the same and everyone has a different approach. Where advertisers might expect standardization after nearly 20 years of programmatic technology, the lack of standardization results in maintaining a system of information asymmetry.

Playbook Rules of Thumb: The first rule of thumb is to ask vendors if they are transparent. If so, ask them to provide log data so you can verify it. A vendor cannot be transparent and also be unwilling to provide log data at the same time.

One area of standardization that advertisers can leverage is the **TAG TrustNet Log-Level Data Register** that is updated and published quarterly on the TAG TrustNet website (**www.tagtrust.net/insights**). The TAG TrustNet Log-Level Data Register provides updates on the access and availability of impression log-level data (LLD) that feeds into programmatic advertising. The register classifies supply chain partners across two main criteria: Log-Level Data Supported and Required Data Fields, which will help when profiling technology partners and remove friction to information. It is offered at no cost to buyers and all programmatic media supply chain participants.

10. Data Access and the Importance of Log-Level Data (LLD) Matching

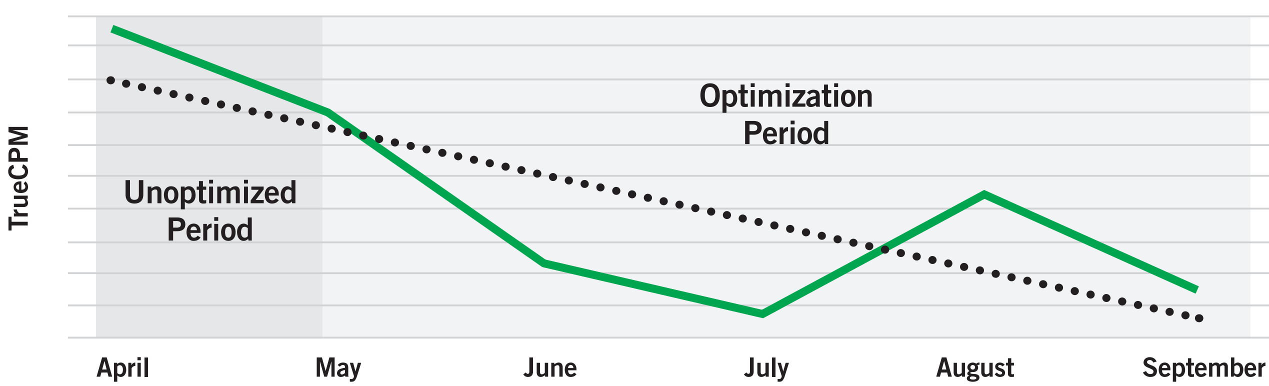
A Case Study in Log-Level Data (from a major CPG)

A major CPG and its programmatic partner, IPG, sought to develop an always-on, data-led approach to increase the percentage of working media and improve the cost efficiency of its media buying using TAG TrustNet.

The marketer updated its contracts to allow access to log-level data from key DSP, ad verification, and SSP partners. LLD was configured, ingested, and matched to create a single dataset and holistic view of cost and quality using TrueCPM as the lead optimization metric.

With this new information, the marketer evaluated ad delivery metrics based on matched ad spend such as DSP and ad verification match rates and measurability to update core market buying strategies. They adjusted existing inclusion and exclusion lists based on the publishers and sellers, and then redistributed underperforming media budgets to top-performing SSPs based on TrueAdSpend and TrueCPM goals.

These actions delivered a **viewable TrueCPM decrease of 27.91% over a five month period**.



10. Data Access and the Importance of Log-Level Data (LLD) Matching

What TAG TrustNet Learned from LLD

- Within the programmatic media 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. Log-level data is an instrument to solve information asymmetry by making ad impression quality information accessible and observable for participants of the supply chain.
- Log-level data is an invaluable source of information about cost and quality of impression delivery. It can be used to establish price and quality correlations.
- The majority of DSPs, ad verification vendors, and SSPs offer support for log-level data reporting, even if most of them were not directly involved in the study. The study ingested log-level data feeds from 12 vendors out of 19 approached. This indicates a growing industry trend toward providing access to detailed data for enhanced transparency and analysis.
- Generally, access to log-level data can be obtained by advertisers based on existing contracts, although in some cases additional terms are needed.
- Advertisers need to ensure that the SSPs they work with have a high percentage of impressions with disclosed fees. To achieve this, the SSPs collect the consent of all their publishers.
- When LLD data is provided, the match rate between vendors is over 99 percent.[32]

32 It is worth noting that data penetration (the total volume of data in scope) can be affected by when LLD feeds start and stop, and which campaigns and tags are setup for analysis.

10. Data Access and the Importance of Log-Level Data (LLD) Matching

Insights from ANA Programmatic Benchmark Survey

The ANA Programmatic Benchmark Survey asked, "Does your company use log-level data (LLD) to analyze its programmatic activity?"

- 41 percent replied "Yes"; the remaining 59 percent were split between "No" (29 percent) and "Don't know" (30 percent).

For those using log-level data, representative reasons for doing so are:

- "Understand all elements of supply chain and verification of impressions."
- "Higher level of accuracy and ability to drive accountability."
- "Advanced analytics and audience enrichment."

For those not using log-level data, representative reasons for not doing so are:

- "Have not had resources or skill set internally or on agency team to collect and analyze log-level data."
- "Bandwidth to do the analysis."
- "Not sure if the value is worth the level of work, cost, time, and resources needed."

Key LLD Benefits

To summarize, the key benefits of log-level data are:

- The only way to analyze the full supply chain cost waterfall.
- Maximize media investment productivity using the highest level of data granularity by establishing price and quality correlations.
- Increase confidence in measurements by cross-referencing impression data.

10. Data Access and the Importance of Log-Level Data (LLD) Matching

Recommended Playbook

1. Initiate an audit of your supply chain with a focus on assessing log-level data availability. Ensure your contracts require access to LLD. Your agency agreement is a good place to start. The **ANA Master Media Buying Services Agreement Template** provides sample language for access to transaction data (i.e., LLD).
2. Begin with a small-scale approach by connecting your DSP and ad verification data. This will help you gain insights into your own price and quality dynamics, where much of the benefit resides.
3. Gain a comprehensive understanding of potential data suppliers and the specific data fields they can provide. The **TAG TrustNet Log-Level Data Register** provides an easy-to-understand profile of suppliers and is updated quarterly.
4. Assess your internal operational and financial resources, as well as those available through your agency, to support an ongoing LLD project. Additionally, explore technology solutions that can help deliver this project.
5. Expand upon this foundation by incorporating SSP log-level data into your analysis. This broader dataset will provide a more comprehensive view of your supply chain costs.
6. Once you have successfully matched DSP, ad verification, and SSP log-level data, you have the flexibility to integrate additional datasets that you deem valuable. Those can include data related to diversity, equity, and inclusion (DEI), sustainability, Made for Advertising websites, and privacy and compliance data.
7. Use data to drive decision-making, solve problems, and generate efficiencies for your programmatic spending.
8. Be aware that in order to properly leverage LLD, dedicated staffing is likely required, either internally at the marketer or outsourced (at an agency, for example). The return from the insights provided by LLD should easily outweigh the investment in staffing.
9. The industry should come together to create standards for data access and log-level data matching. The **TAG Certified for Transparency program** is an existing example. It promotes the flow of media spend to digital advertising organizations that uphold an industry framework for transparency.

11. Measurability, Viewability, and Invalid Traffic

Measurability, viewability, and invalid traffic (or IVT) are all key metrics related to the quality of programmatic buys.

Measurability and Viewability

Determining the viability and effectiveness of a digital ad can be a complex metric for marketers to ascertain. In an effort to create more uniform measurement, the Media Rating Council (MRC) established the "viewability" standard. At its core, viewability is meant to show whether a consumer had the opportunity to see an ad.

> "Viewable Impressions are the foundational element for ultimately defining an Audience Based Currency that will allow the industry — with the addition of context, duration, standards-compliant audience attribution, outcomes and other pertinent information — to better measure ad efficacy and engagement."
> —George Ivie, Executive Director and CEO, Media Rating Council

Methodology

The **MRC Viewable Ad Impression Measurement Guidelines** state that viewable display ad impressions are counted when the following criteria are met:

- Pixel Requirement: Greater than or equal to 50 percent of the pixels in the advertisement were on an in-focus browser tab on the viewable space of the browser page, and
- Time Requirement: The time the pixel requirement is met was greater than or equal to one continuous second for display and two continuous seconds for video, post ad render.

The above are minimal criteria per the MRC. Advertisers and their agencies are free to negotiate higher standards with media partners.

11. Measurability, Viewability, and Invalid Traffic

Viewability is now a commonly understood and utilized measurement standard across the industry, with multiple ad verification vendors accredited by the MRC to provide viewability data. However, not all impressions are capable of being measured for viewability. There are many reasons for this, including:

- The lack of ad verification JavaScript tags on the media property (often because the seller has rejected them)
- Environments that do not support JavaScript, such as some video players and other non-VPAID[33] platforms
- Apps that do not support the Open Measurement SDK[34] standard

When an impression is not capable of being measured for viewability, ad verification companies will classify it as "unmeasurable" (note that terminology amongst ad verification companies may vary; for example, one vendor includes these impressions within their "eligibility" categorization).

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33 The IAB's Video Player Ad Interface Definition (VPAID) establishes a common interface between video players and ad units, enabling a rich interactive in-stream ad experience.

34 A software development kit (SDK) is a collection of software development tools in one installable package.

11. Measurability, Viewability, and Invalid Traffic

Findings:

- The median value for measurability (for viewability) impressions was 86 percent among all study participants.
  - o Almost half the participants had measurability of 90 percent or more.
  - o According to the MRC, the range for measured rates that they typically see are between the high 80s and 99 percent.
- Measurability rates among the study participants ranged from a low of 0.02 percent to a high of 99.61 percent. Four respondents had measurability rates less than 20 percent. Low percentages were due to the reasons mentioned above.
- Of the measurable impressions, 85 percent were viewable impressions. Given that viewability rates vary widely by inventory type and environment, the MRC does not have a benchmark for viewability performance.

Note that viewable impressions are a percentage of measurable impressions. Given that 86 percent of total impressions were measurable and 85 percent of measurable impressions were viewable, only 73 percent of total impressions were both measurable and viewable.

11. Measurability, Viewability, and Invalid Traffic

Invalid Traffic

Digital advertising fraud (invalid traffic or IVT) has been a persistent challenge for the industry. While advertisers expect their content will be viewed by legitimate consumers with the potential to buy their products and services, criminal organizations have attacked the digital ad ecosystem and defrauded legitimate participants in the supply chain. As a result, advertisers may end up paying a material portion of their campaign dollars to criminals who generate ad impressions that are never seen by legitimate consumers.

Methodology

In conducting the study, we used the categorization of the ad impressions by three measurement companies that include measurement for both sophisticated and general IVT. All three companies are accredited by the MRC.

Fraud is a generic term, encompassing a range of nefarious activities. For the purposes of this report, the results focus on the broader metric of IVT, which the MRC defines as, "traffic that does not meet certain ad serving quality or completeness criteria, or otherwise does not represent legitimate ad traffic that should be included in measurement counts."[35]

Unlike viewability metrics, IVT detection is capable of running on both measurable and non-measurable impressions, covering close to 100 percent of impressions. The MRC separates IVT into two categories:

- **General Invalid Traffic (GIVT):** Includes traffic identified through routine and list-based means of filtration — such as bots, spiders, other crawlers; non-browser user agent headers; and pre-fetch or browser pre-rendered traffic.
- **Sophisticated Invalid Traffic (SIVT):** Includes traffic identified through advanced analytics, multipoint corroboration, human intervention — such as hijacked devices, ad tags, or creative; adware; malware; misappropriated content.

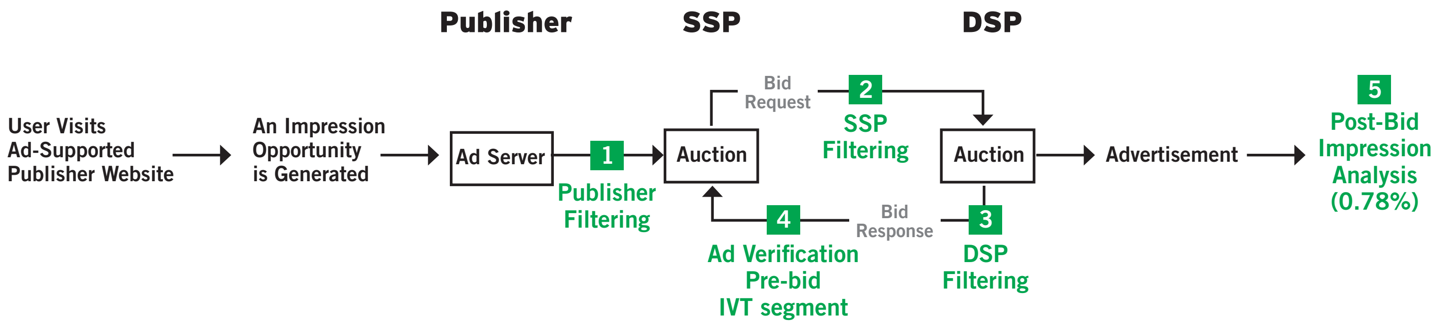
In calculating fraud rates, the study combined both SIVT and GIVT in order to achieve a comprehensive result.

35 MRC Invalid Traffic Detection and Filtration Standards Addendum

11. Measurability, Viewability, and Invalid Traffic

Where IVT is Present Along the Supply Chain

IVT is present at various points along the programmatic media supply chain and ad verification is also present at various points.



1. A user visits an ad-supported publisher website, and the publisher filters IVT.
2. SSPs also apply IVT filtering to the traffic they receive before sending a bid request to DSPs.
3. The DSP also filters for IVT.
4. An advertiser can use ad verification pre-bid segments to further avoid IVT before the DSPs respond to the bid request.
5. After the DSP bids and wins impressions, a post-bid analysis is conducted and in this study, IVT accounted for 0.78 percent of total impressions.

Again, unlike viewability metrics, IVT detection is capable of running on both measurable and non-measurable impressions (for viewability), covering close to 100 percent of impressions.

In this study, 0.78 percent of total advertiser impressions (and 0.69 percent of spend) were IVT. Given that there was $123 million in total spend among the 21 participating advertisers, there was just under $1 million wasted in IVT.

11. Measurability, Viewability, and Invalid Traffic

Findings:

- Overall IVT rate was an average of 0.78 percent of impressions.
- IVT rate varied from near-zero to 3.4 percent of impressions across exchanges and ad types (yet some individual exchanges and ad types were higher).
- There was no meaningful difference in IVT rates between:
  - Display (which was 82 percent of activity) and video.
  - Private Marketplaces (PMPs) with over 500 domains and Open Marketplaces (OMPs).
  - Made for Advertising (MFA) sites and other programmatic media.
- There were higher spikes of IVT present when analyzing more granular publisher, devices, and ad type combinations, but at a significantly lower volume.

> Per the MRC: "IVT rates vary widely depending on the source and inventory type. We see larger vendors measuring larger advertisers/ publishers in the 1–3 percent post-bid range."

It should be noted that the participating marketers tend to be highly engaged in protecting their brands and related ad spend, thus we would expect their IVT rates to be lower than brands that do not take proactive measures. The participating marketers are also likely to use pre-bid fraud protection which would help reduce the post-bid fraud rate.

Another benchmark is the **2023 TAG US Fraud Benchmark Study** (released in November 2023). IVT in TAG Certified Channels was 0.82 percent for the first six months of 2023.

11. Measurability, Viewability, and Invalid Traffic

A poll among a mix of study participants and ANA Media & Measurement Leadership Council members (29 respondents) in November directionally supports the above IVT rates. We asked, “What type of post-bid invalid traffic (IVT) rates does your company typically receive?” The results:

- 1 percent or less: 21 percent
- Between over 1.0 percent and 2.0 percent: 38 percent
- Between over 2.0 percent and 3.0 percent: 24 percent
- Between over 3.0 percent and 4.0 percent: 14 percent
- Over 4 percent: 3 percent

The about equates to a weighted-average IVT rate of approximately 2 percent, which is consistent with the MRC rate of 1-3 percent.

Recommended Playbook: Measurability and Viewability

In order to improve transparency and optimize measurability (for viewability) and viewability, we recommend the following actions:

1. Marketers, in consultation with their ad verification partners, should prioritize publishers that accept ad verification tags, with the goal of allowing 100 percent of their impressions to be measured. Advertisers should only pay for impressions that are measurable. Inclusion lists should be updated to only include such publishing partners.
2. Viewability rates were relatively high across the measured inventory, but marketers must remain vigilant in employing ad verification services to keep their campaigns performing at a high level. Advertisers should only pay for impressions that are viewable.
3. Industry trade associations should encourage every seller to adopt the latest advertising standards and protocols that will allow for more inventory to be measurable. Industry trade associations should better educate their respective members on this issue.
4. Marketers should use the TrueKPI framework (page 76) to assist in measuring value and aligning supply chain incentives with goals.

11. Measurability, Viewability, and Invalid Traffic

Recommended Playbook: Invalid Traffic

Invalid traffic (IVT) remains a very serious concern for marketers. Based on the learning from this study, the following action steps are recommended.

1. Work with your internal buying team or ad agency to develop a plan for identifying and filtering IVT from your campaigns. Ensure this plan includes benchmarks for acceptable levels of IVT and pre-determine how IVT will be remediated post-reporting (refunds, make-goods, etc.). Marketers should not pay for impressions with IVT.
2. Know which downstream partners (such as DSPs and SSPs) have engaged an MRC-accredited anti-fraud vendor. If possible, validate their reporting with a different vendor to ensure multiple technologies have been implemented to best protect your budget.
3. Where possible, leverage pre-bid and post-bid IVT filtering.
4. Understand that where you measure matters. Higher levels of IVT will always be reported when coming from the "first responders" that are operating closest to the media source. Lower levels of IVT will be reported as multiple parties filter inventory up the supply chain to marketers and agencies.
5. Consider working only with trusted, certified partners. The ANA, 4A's, and IAB created the Trustworthy Accountability Group (TAG) to help identify best actors. In 2016 TAG launched its **Certified Against Fraud** program to help buyers easily identify which companies were meeting the highest levels of fraud detection and filtration.

While the ANA is not in the position to recommend specific ad verification partners, the participants in this study should at least be considered: DoubleVerify, IAS, and Oracle Moat.

12. Sustainability Is Good Business

The report has referenced various opportunities to improve the sustainability of programmatic media buys, specifically:

- The sustainability impact of MFA sites is especially troublesome. MFA sites generate 26 percent more carbon emissions than non-MFA inventory, according to **Scope3** (a solutions provider with the mission to decarbonize advertising). With many ads per page that indiscriminately make ad calls to as many demand sources (like SSPs, DSPs, and ad networks) as they possibly can, carbon waste becomes an exponential issue. (page 38)
- Buy through direct inventory supply paths. Directness matters. Most supply chains fork, and the primary seller may buy from a secondary seller. This not only adds cost, but also starts breaking filtrations that are in place for viewability, IVT, brand safety, and inclusion. Additionally, each additional hop drives up your carbon footprint. (page 32)
- Work with trusted sellers, and not resellers. Trusted sellers, by definition, are partners known for their credibility and reliability in the programmatic ecosystem. Trusted sellers transact with buyers on direct supply paths as opposed to reseller paths that add more markup and generate carbon waste. (page 30) Primary SSPs often turn to secondary and tertiary suppliers behind the scenes – those are resellers. Such duplicative auctions run a high risk of breaking inclusion lists and fraud filters, diminishing viewability, and decreasing working media. These reseller chains create additional fees and generate excess carbon waste. (page 43)
- Work with SSP partners that have direct connections to the publishers on your trusted seller list and can deliver inventory without tapping into other sources. Apply pressure to preferred SSP partners to build curated marketplaces that exclude rebroadcasting auctions (i.e., supply chains that introduce unnecessary hops between the marketer and the publisher, resulting in elevated fees and a higher carbon footprint),[36] cheap reach placements, and Made for Advertising publishers (should the exclusion of MFA publishers be right for your business). (page 54)
- Concentrating programmatic media activity on a smaller number of curated websites provides the additional benefit of a reduced carbon footprint. (page 29)

36 Rebroadcasting is a form of reselling. While not all reselling is wasteful, rebroadcasting is the bad kind of reselling.

12. Sustainability Is Good Business

In June 2023 the Global Alliance for Responsible Media (GARM) in collaboration with **Ad Net Zero**[37] released ***GARM Sustainability – Action Guide to Reduce Media Greenhouse Gas Emissions***. The guide identifies a number of voluntary action points to reduce media's greenhouse emissions. The action points most relevant to programmatic media are:

- Build a Sustainability-Assured Media Partner List: The use of sustainable suppliers in the media value chain is the biggest decarbonization effort that can be achieved for the media industry. Therefore, sustainable partners are suggested in managing your programmatic media value chain as are additional filters for inclusion based on the environmental actions and commitments your media ecosystem partners make.
- Streamline Your Media Value Chain & Technology: Be selective in technologies used to support your digital media campaigns and look to streamline wherever possible. Digital runs on significant data and server infrastructures that require energy to power them, producing heat and generating GHG.
    - As the **IAB Tech Lab Sustainability Starter Guide** states in reference to programmatic media as an example: "Reducing the number of transactions in the bid stream has a direct impact on lowering energy consumption and a straightforward way to decrease transactions is to minimize duplication of requests. Fewer transactions, especially those that result from duplication in the bid stream, means less energy gets used. Said simply, multiple requests for the same ad slot, without clear business goals, creates unnecessary GHG emissions. Publishers should regularly review which parties are allowed to sell their inventory."
- Streamline and Optimize Data Usage: Data is frequently used to improve targeting. Reviewing the layers and ways in which data is handled and applied to campaigns, how it is stored and transacted, should be examined to do so in a way that is as energy efficient as possible.

While there is no single consistent source of sustainability measurement today in media, Ad Net Zero and GARM are currently working to create a robust methodology for measurement of the carbon contribution for the entire industry.

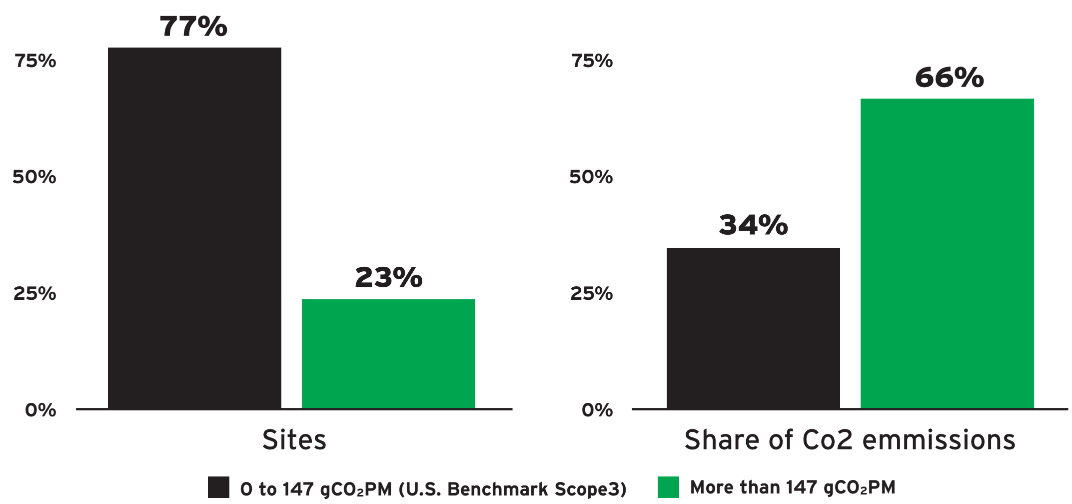
37 The advertising industry's drive to reduce the carbon impact of developing, producing and running advertising to operate at real net zero

12. Sustainability Is Good Business

Scope3 Analysis of ANA Study Data

Scope3's latest emissions data shows digital display advertising and streaming emits 7.2 million metric tons of carbon dioxide equivalent (CO_2e) annually. That's equivalent to the electricity consumption of 1.4 million U.S. households each year (1 percent of U.S. HH).[38]

The ANA provided Scope3 with a randomized and representative dataset, containing a list of 768 websites.[39] Scope3 assessed the websites using its emissions model, estimating the average carbon output during the month of October 2023 to be above the U.S. standard. The average grams of CO_2e per 1,000 impressions (gCO_2PM) was 155 gCO_2PM. This is above the U.S. display-web benchmark of 147 gCO_2PM. Looking at the weighted average based on total impressions, emissions were measured at 189 gCO_2PM. Notably, 23 percent of the sites exceeded the U.S. benchmark; these sites accounted for 66 percent of the total emissions, illustrating how a small number of sites can have a large impact on emissions.



U.S. October benchmark estimated by Scope3 is 147 gCO_2PM. The weighted average in the ANA data set is 189 gCO_2PM.

38 Scope3 Q2 2023 State of Sustainable Advertising Report. Streaming emissions for this particular estimate include only devices available in BIScience — phone, tablet, PC, not TV — so it's important to note that actual emissions are likely higher.

39 The randomized sample of 768 domains with a 95 percent confidence level and ±5 percent error rate.

12. Sustainability Is Good Business

There was a wide range of carbon emissions on a site-by-site basis. The lowest-emitting site was measured at 50 gCO_2PM. The highest-emitting site accounted for over 3,200 gCO_2PM — *65 times worse* than the lowest-emitting site.

Emissions are often closely aligned with ad selection. The greater the number of supply paths for auctioning and monetizing each ad impression, the higher the emissions. For example, a site may use over 25 SSPs. Each SSP connects to multiple DSPs. Let's say the SSP connects to 20 DSPs for this example. That creates 500 unique pathway pairings, excluding the likelihood that some SSPs resell to other SSPs before the impression gets to a DSP. This reinforces the importance of granular impression- and site-level data when optimizing toward environmentally friendly marketing decisions.

Looking at total impressions bought in the ANA dataset (gCO_2PM x impressions), optimizing toward greener sites could decrease total emissions by a whopping 56 percent.

To jumpstart your sustainability journey, Scope3 recommends:

- Measure the emissions footprint of your media buying ensuring you have access to granular site- and impression-level data. This data may be accessible through your DSP if it integrates with an emissions data company.
- Identify emissions hotspots and eliminate high-carbon, low-performing inventory. For example, the hotspots identified in the ANA data set can lead to a 56 percent reduction in emissions.
- Engage with your top partners to understand their sustainability strategies and what actions they are taking to reduce carbon emissions. Collaborate with your agency or in-house team to implement cleaner optimization strategies.

12. Sustainability Is Good Business

Putting Sustainability Into Action: A Case Study with Sanofi and Scope3

In the first half of 2023, Scope3 ran a pilot program with five global brands participating in the **WFA's Planet Pledge**. The pilot was conducted to understand how adding carbon emissions as a campaign metric affected performance. Every test demonstrated that removing high-emission inventory had no negative reach or performance implications. One brand in the study was global health care and pharmaceutical company Sanofi.

Sanofi's media team sought to expand their sustainability efforts to digital advertising, aligning with their organization's broader mission of achieving a healthier planet and society. Using its proprietary emissions model, Scope3 kicked off the engagement by conducting tests across several European markets to measure the overall carbon footprint of Sanofi's digital advertising and identify areas for improvement.

Scope3 worked directly with Sanofi to provide recommendations for making its campaigns lower in carbon emissions and more efficient. Changes included tailoring reduction strategies by market, identifying and removing MFA inventory, implementing custom exclusion lists, and increasing investment on sites that were both low in emissions and high in performance.

The results exceeded expectations: U.K. tests reduced carbon emissions by 56 percent compared to the pre-optimization period while campaigns in Spain had a 30 percent reduction. Performance was not affected in either of the tests. The collaboration between Scope3 and Sanofi proved that effective and sustainable marketing campaigns are possible.

For the detailed results of the Scope3 and Sanofi pilot, find the full case study **here**.

12. Sustainability Is Good Business

Recommended Playbook

1. Demand to understand the sustainability impact of programmatic media purchases. More productive buys can often lead to lower carbon emissions.
   - Buy through direct inventory supply paths. Most supply chains fork, and the primary seller may buy from a secondary seller. This not only adds cost, but also starts breaking filtrations that are in place for viewability, IVT, brand safety, and inclusion. Each additional hop then drives up your carbon footprint.
   - Work with trusted sellers, and not resellers. Trusted sellers transact with buyers on direct supply paths as opposed to reseller paths that add more markup and generate carbon waste.
   - Work with SSP partners that have direct connections to the publishers on your trusted seller list. Apply pressure to preferred SSP partners to build curated marketplaces that exclude unnecessary hops between the marketer and the publisher, resulting in elevated fees and a higher carbon footprint.
   - Evaluate the role of MFA sites, which generate 26 percent more carbon emissions than non-MFA inventory (according to **Scope3**).
   - Concentrating programmatic media activity on a smaller number of curated websites provides the additional benefit of a reduced carbon footprint.
2. Be familiar with **GARM Sustainability — Action Guide to Reduce Media Greenhouse Gas Emissions** from the Global Alliance for Responsible Media (GARM) in collaboration with Ad Net Zero. The guide identifies a number of voluntary action points to reduce media's greenhouse emissions.

Cost Waterfall and Wrap-Up

Here, we quantify the spend associated with each element in the programmatic supply chain, following the "journey" of an ad dollar invested by an advertiser that enters a DSP until it results in TrueAdSpend, which is the ad spend that leads to impressions delivered to the consumer that meet a set of quality requirements.

Between the advertiser and the consumer there are intermediaries claiming their share of the ad dollar. We have bucketed them in two ways:

1. **Transaction costs: Accounting for 29 percent of the ad dollar entering the DSP and comprised of:**
   - DSP platform costs: paid to the DSP for usage of its platform.
   - DSP additional costs: costs such as tools or features bought with the DSP.
   - DSP data costs: data within the DSP such as audience or pre-bid segments.
   - SSP platform costs: paid to the SSP for usage of its platform.

Note that agency fees were beyond the scope of this project.

2. Loss of media productivity costs then accounted for 35 percent of the ad dollar entering the DSP and are comprised of:

- Non-viewable and IVT impressions that offer no value to advertisers.
- Non-measurable for viewability and Made for Advertising ad spend have subjective quality and value. Every advertiser should assign their own value to these respective costs.

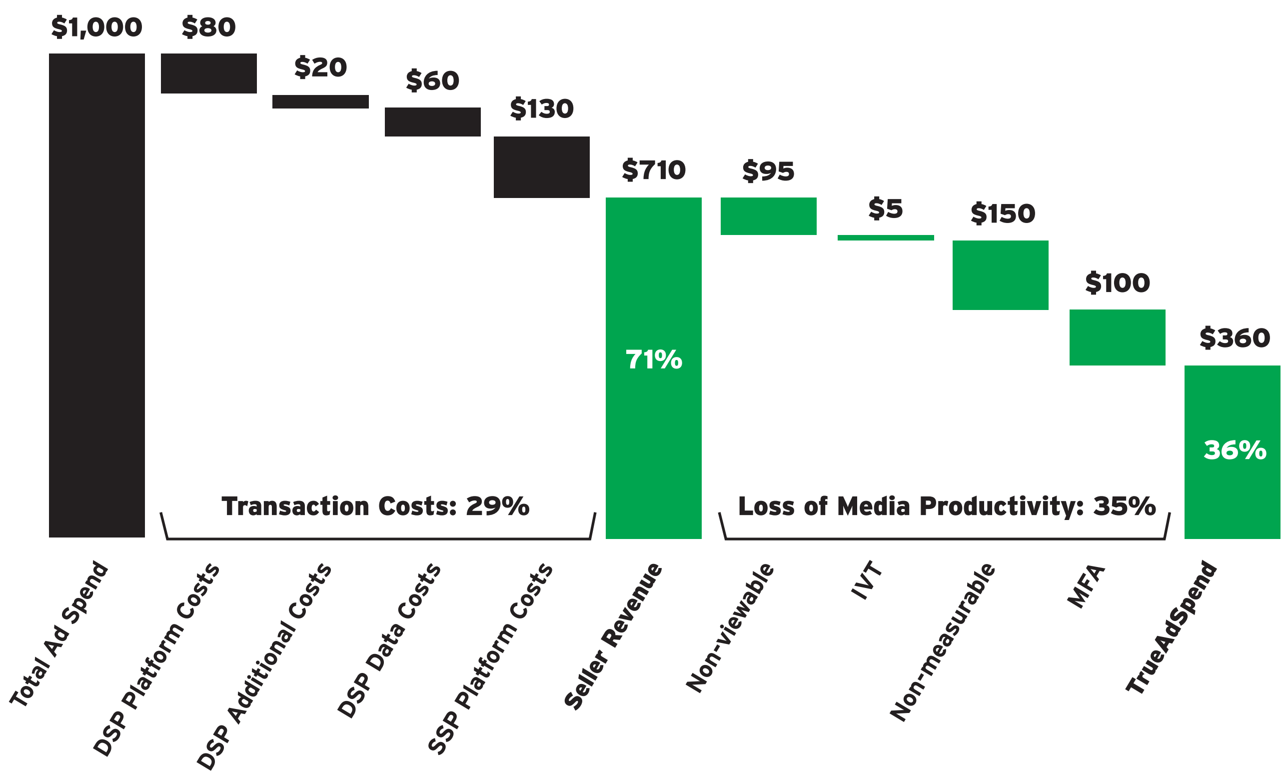
Note that brand safety is another potential quality-related consideration, but was beyond the scope of this study.

Cost Waterfall and Wrap-Up

After accounting for both transaction costs and loss of media productivity costs, only 36 cents of every ad dollar that enters a DSP effectively reaches the consumer. That is TrueAdSpend.

The cost waterfall is shown based on an initial ad spend of $1,000. $710 reaches the seller as revenue, which represents the basis for loss of media productivity costs.

Again, agency fees (a transaction cost) and brand safety (a loss of productivity cost) were both beyond the scope of this project. Depending upon those costs, less than 36 cents of every dollar would effectively reach the consumer.



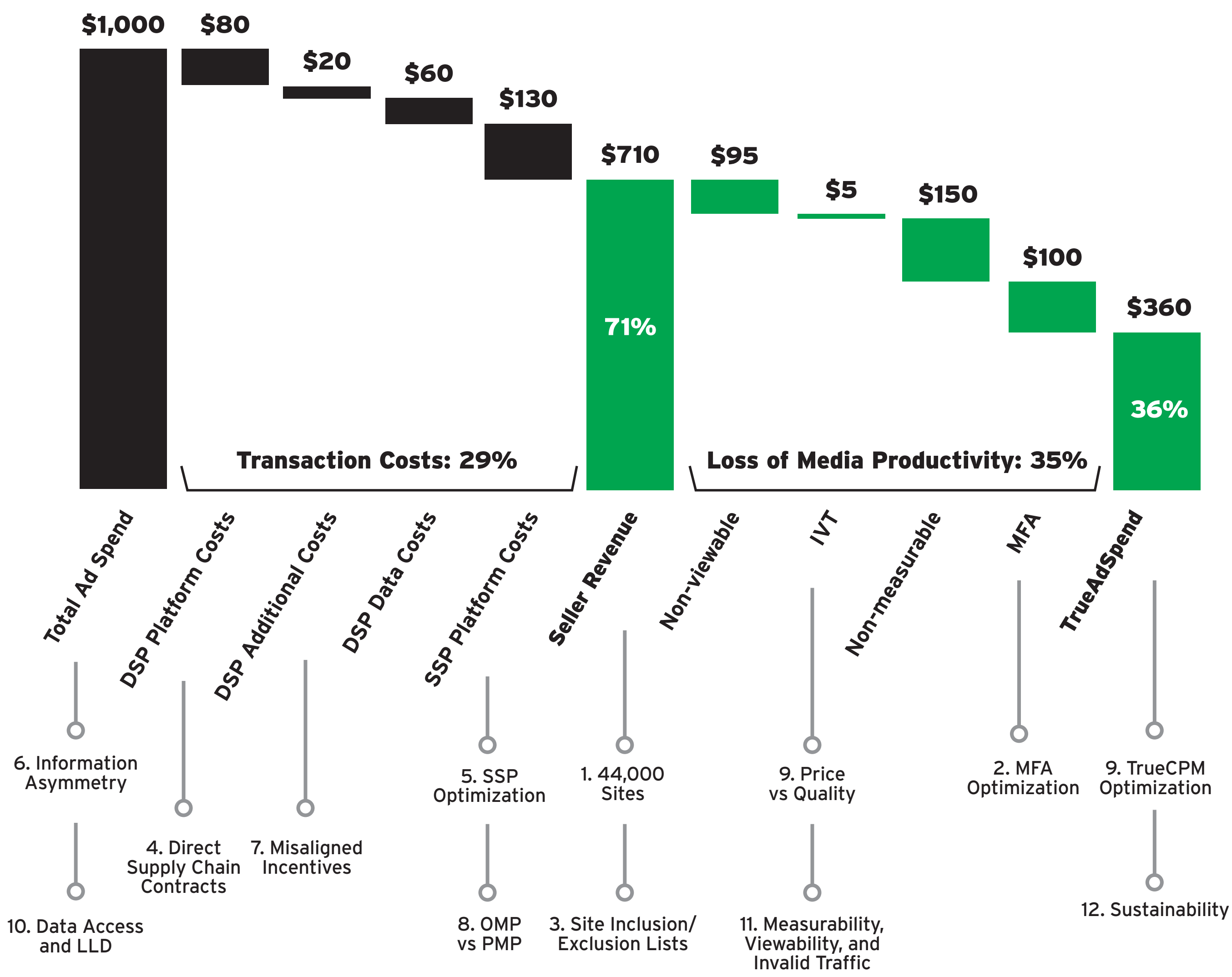
More details are in the Appendix.

Cost Waterfall and Wrap-Up

Optimizing Investment

The following reprises the programmatic cost waterfall and identifies the respective sections in this report that help optimize investment for the various steps.

As stated upfront, **there is the opportunity for $22 billion in efficiency gains.**



Cost Waterfall and Wrap-Up

Questions to Ask

Marketers are encouraged to proactively ask the following questions to help improve the performance of their programmatic media investments.

1. How many websites are being used for an average campaign?
2. How much of my media activity is on MFA sites?
3. Are we using inclusion lists?
4. Is context important?
5. When did we last update our media agency contract?
6. Should direct contracts with primary supply chain intermediaries be considered — DSPs, ad verification, SSPs?
7. Do we have a strategy for SSP optimization?
8. Do we have too much focus on "cheap CPM" deals?
9. When is my agency acting as a principal and what are the trade-offs of that for me?
10. Are my Private Marketplace (PMP) deals worth the premium and should we consider allocating more budget to Open Marketplace (OMP)?
11. Do we have a process in place to accurately measure ad quality and price in order to assess value?
12. Do I know how my campaigns perform on measurability, viewability, and IVT?
13. Should we be leveraging log-level data?
14. Do I know the sustainability impact of my programmatic activity and am I taking steps to reduce carbon emissions?
15. Are we staffed appropriately internally (on the client side) to be active stewards of our media investments?

TAG TrustNet Resources

TAG TrustNet was a technology partner on the *ANA Programmatic Media Supply Chain Transparency Study: Complete Report.* TAG TrustNet has activated and processed the data in the study, is publishing a quarterly **Data Register** providing an update of the suppliers providing access to LLD feeds, and is operating under the TAG not-for profit trade association of which the ANA is a founding board member. TAG has also launched the TAG **Certification for Transparency** program in Q4 2022 as a new certification, encouraging all companies involved in the programmatic advertising supply chain to adopt TAG's **Transparency Guidelines**.

Appendix

Appendix: 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.

Appendix: Project Background

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.

Appendix: Project Background

Study Focus: Open Web Programmatic Advertising

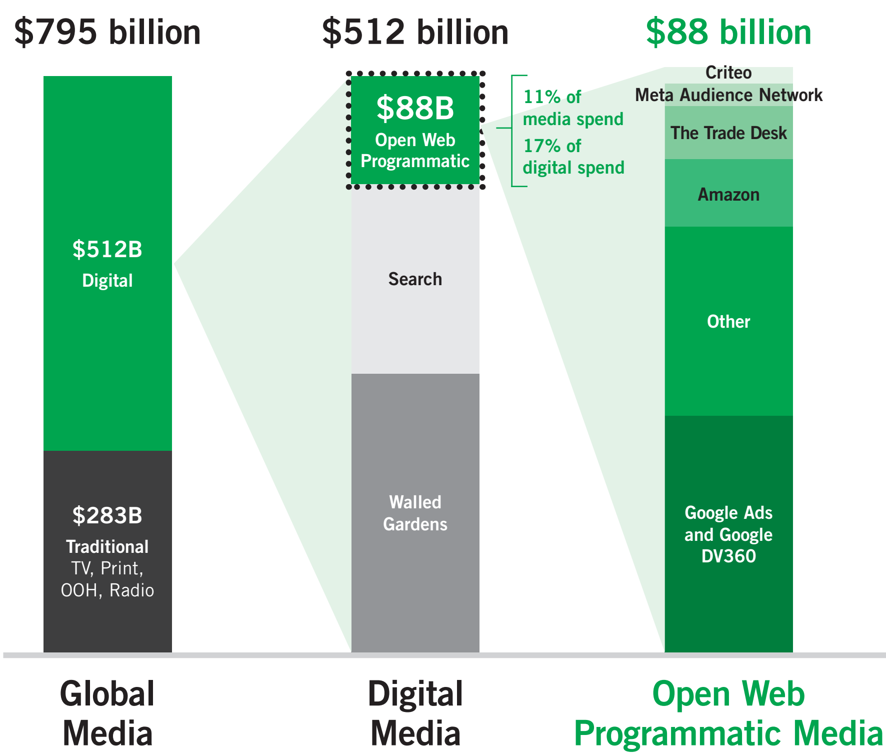
The study focused on open web programmatic advertising, an $88 billion global market.

According to Jounce Media, $88 billion of global advertising money left DSP platforms to buy web, mobile app, and CTV supply (~11 percent of global media) in 2022.[40]

$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 web programmatic 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 Web Programmatic Media



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

Appendix: Project Background

Past Precedent

This study is not the first supply chain examination and will not be the last. Each study is a stepping stone to what advertisers want in exchange for their open web programmatic media budgets: measurable effectiveness, provable value, and trustable transparency.

Study	Log-Level Data
2014 WFA Guide to Programmatic Media[41]	
2017 Programmatic: Seeing Through the Financial Fog[42]	●
2017 The State of Programmatic Media Buying[43]	
2021 TAG TrustNet UK Pilot[44]	●
2020 and 2023 Programmatic Supply Chain Transparency Study[45]	●
2023 Programmatic Supply Chain Transparency Study	●

41 WFA Guide to Programmatic Media (2014)
42 Programmatic: Seeing Through the Financial Fog (2017)
43 The State of Programmatic Media Buying (2017)
44 TAG TrustNet UK Pilot Report (2021)
45 ISBA Programmatic Supply Chain Transparency Study (2020) and ISBA Programmatic Supply Chain Transparency Study (2023)

Appendix: Project Background

Timeline

From the discovery process to *Complete Report* findings, the project took over three years.

May 2020	**ISBA releases *Programmatic Supply Chain Transparency Study* revealing the "unknown delta"**
July	**ANA kicks off discovery process to initiate a U.S.-based programmatic supply chain study**
February 2021	**ANA begins RFP development**
April	**RFP released**
June	**RFP responses due; more than two dozen companies respond**
December	**Job awarded to: PwC, TAG TrustNet, Kroll**
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**
January 2023	**Live collection ends, data matching and analysis begins**
June	***First Look* released**
August	**Kroll report released**
December	***Complete Report* released**

Appendix: The Unknown Delta

Importantly, the study team found that the previously identified "unknown delta" can be virtually eliminated through impression-to-impression matching of log-level data (LLD).

The unknown delta was first coined in ISBA's 2020 Programmatic Supply Chain Transparency Study.[46] It is defined as the unattributable ad spend between the funds that leave a DSP and the gross funds received by an SSP.

Initially, it was believed that the unknown delta accounted for 15 percent of working media. However, ISBA's follow-up study in 2023[47] revealed just a 3 percent unknown delta due to improved data matching. The ANA transparency study analysis of only 1-to-1 matched impression data continues this downward trend as we found a zero percent delta.[48]

The reassuring message for advertisers is that this mysterious delta is not about missing money between buyers and sellers but about missing data and limitations in data matching capabilities. Specifically, the fields required to match impressions are provided by most vendors, and data matching, when done with impression-level rather than aggregate data, generates an accurate cost waterfall without an unknown delta with impression-to-impression matching of log-level data (LLD).

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46 ISBA Programmatic Supply Chain Transparency Study (2020)

47 ISBA Programmatic Supply Chain Transparency Study (2023)

48 The 21 advertiser study participants were allocated to either of two technology platforms (one of those was TAG TrustNet) for log-level data collection, processing, and analysis. TAG TrustNet then aggregated both data sets into a single source and conducted the analysis for this report. Impressions from DSPs and ad verification vendors were mapped 1-to-1 and provided the media productivity cost waterfall. With respect to mapping DSP, SSP, and ad verification data sets, the methodology was different between TAG TrustNet and the other technology platform. As a result, the TAG TrustNet data set had no unknown delta while the data set from the other platform had a 17 percent unknown delta. Therefore, we only used the TTN data set for the transaction cost waterfall and then cross-verified it against the data set from the other technology platform. All costs were within one percent, except SSP platform costs (which was two percent) and publisher/seller revenue.

Appendix: Tips for Evaluating, Selecting, and Contracting with a DSP

There are great opportunities to be had by partnering with the right DSP(s). The drafting and negotiation of these agreements should be done by experts who are familiar with the ecosystem and have sufficient experience to understand the technicalities and nuances in the relationships. If done properly, it should ultimately lead to more effective management of your media investments. The process can be broken down into three stages: evaluation, selection criteria, and contracting.

1. DSP Evaluation

Historically, the selection and procurement of a DSP typically sat with a media agency and/or third-party programmatic service provider. Given the DSP's overall importance to successful advertising, it is now common for advertisers to contract directly with DSPs.

Although the job of a DSP is quite straightforward — to buy audience-targeted media — these platforms are also laden with features, functions, additional services, and often hundreds of technical integrations with other supply chain companies, making it difficult for the uninitiated to evaluate and get through a complex contracting process. If mishandled, it can lead to incorrect selection, which is potentially disastrous for advertisers spending millions of dollars and risky for marketers who are increasingly held accountable for their investment decisions.

Each stage in selecting a DSP is equally as important as the next. For the evaluation and selection stages, consider the following steps:

- **Step 1 (evaluation stage):** Create a steering committee of stakeholders who provide input on the selection process. This should include legal, privacy, IT, security, and finance stakeholders.
- **Step 2 (evaluation stage):** Define and understand the core use cases for what you want to achieve by using a DSP to buy audience-targeted media.

Appendix: Tips for Evaluating, Selecting, and Contracting with a DSP

- **Step 3 (evaluation stage):** Scour the market for both global and local providers of DSPs. A diverse range of suppliers makes for a better and more competitive process. If your brand is operating in various regions around the world, you'll find that a few large DSPs cover many regions, but not all. Since one size does not fit all, you need to be careful to assemble a mix of DSPs that can deliver the services you need in a coordinated and collaborative manner. This will require diligent oversight by the brand.
- **Step 4 (selection stage):** Configure a scorecard that is not overly onerous but captures critical criteria.
- **Step 5 (selection stage):** Run a robust RFP process in a tight timeframe, with a clear written proposal, and platform demo. Capture the key contractual elements up front with a mandate that if anything is not acceptable, the responders specify the issues and provide explanations and alternatives. Do not accept any rejection of a term without it. Try to avoid inconsistent terms between DSPs.
- **Step 6 (selection stage):** Make a decision ensuring all DSP participants are well-informed, and provide constructive feedback to those that do not get your business.

The timing of a technology RFP is often dictated by the number of stakeholders involved, the number of markets that need to be considered, and the number of partners evaluated at each stage. A typical single market RFP with a condensed group of decision-makers and four DSPs involved can take up to eight weeks to conduct, and could go longer depending on contract negotiations.

2. DSP Selection

The following considerations can factor into DSP selection.

- **Use Cases:** Can the DSP fulfill the specific use cases you have already identified?
    - For example: targeting your first-party data, maximizing ads that are seen, or increasing the number of app installs. Establish KPIs to measure campaign success and define what constitutes a successful campaign and how it will be measured. How will you measure the success of the DSP overall?

Appendix: Tips for Evaluating, Selecting, and Contracting with a DSP

- **Technology:** Does the technology itself integrate with any immovable technology you already have?
    - For example: A specific dynamic creative tool, a specific data clean room, a specific CRM tool.
    - Require the DSP to provide a list of all available products or services and features.
    - Does the DSP provide you with a log-level data product for your data and analytics needs?
- **Inventory:** Can the DSP access the types of inventory you need (for instance, if you want to advertise with niche publishers) and is there any unique access (particularly in newer media)?
    - For example: How does the DSP monitor your ads if you are in a sensitive category? Does it support DOOH, CTV, audio ads, etc.? How efficient are the DSP supply paths in general and with specific regard to environmental sustainability? What SSPs does the DSP work with? What standards does it have for its SSPs and how does it vet its SSPs?
- **Data:** Is the DSP progressive around the use of data for targeting and measurement given evolving legal regulations and software changes? Does it ensure that you, and not the DSP, owns the data?
    - For example: Does the DSP support ITP from Apple? Is the DSP working with the privacy sandbox APIs and does it work with alternative IDs? What third-party data providers does the DSP work with? What access to data does the DSP provide? The DSP should provide real-time access to log-level data. What costs are associated with the data access?
- **Measurement:** Does the DSP support custom metrics that you may also feed back into optimization or a custom algorithm?
    - For example: Can the DSP accurately measure and optimize against viewability, attention, or unique reach? Does the DSP have strong IVT prevention practices?
- **Service and Support:** Is the DSP providing an organogram to support your needs?
    - For example: Are there local points of account management? If in multiple territories, what level of exposure to product developers do you get, and do you get quarterly business reviews? Has the DSP shared the full scope of its service offerings (even if not part of your use cases) as well as a development roadmap for future improvements and new service offerings? Does the DSP work with your agency and other vendors you have relationships with?

- **Commercials: Is the commercial proposal transparent and fair?**
  - For example: Are you confident you know all costs that could be incurred? Do the proposed costs seem fair and competitive? Are the costs of the technology providing greater value than if you did not have it? Require the DSP to provide itemized costs or fees for all products, services, and features and any limitations or assumptions (e.g., maximum/minimum usage or users). Require the DSP to provide a case study with a sample invoice showing the fees that similar customers pay.
- **Company:** Does the DSP's company vision align with yours?
  - For example: How and where has the DSP invested in DEI, sustainability initiatives, and commitment to young talent? Is the DSP owned by or affiliated with another company in the advertising ecosystem which may be relevant to your decision? What does the DSP do to ensure transparency in its operations? What does the DSP do to ensure that it operates a clean ecosystem?

3. DSP Contracting

When an advertiser decides to work directly with a DSP, it's crucial to have a well-structured contract to ensure a clear understanding of the partnership and protect the interests of both parties. It is important that legal, IT, security, and privacy stakeholders be involved. There are multiple considerations that advertisers should look for in a DSP contract and be able to brief qualified legal counsel accordingly. Do not accept a DSP's form contract. Each brand's DSP contract should be bespoke to ensure it addresses a brand's unique concerns and goals.

- **Scope of Services:** Clearly define the scope of services the DSP will provide. That should include details on the type of advertising campaigns, platforms, and channels the DSP will manage, the training the DSP will provide, and other services such as data hosting and integration. Ensure you have guardrails to control contract terms that apply for the use of new products, services, or features in the future.

Appendix: Tips for Evaluating, Selecting, and Contracting with a DSP

- **Pricing and Fees:** Specify the pricing structure and fees associated with the DSP's services. This should encompass any platform fees, variable cost fees, management fees, performance-based fees, and audience data fees. In all cases, it is prudent to ensure total transparency in how fees are calculated. Ensure your budget and contract account for digital services and other tax implications. If there is an under-delivery or other problem with placement, how is the DSP accountable? Make-goods? Refunds? Credits?
- **Targeting and Audience Data:** Clearly outline how targeting and audience data will be utilized. Discuss data sources and targeting capabilities.
- **Data Usage and Ownership:** Clarify data usage, ownership, and transfer rights, particularly with log-level data and the various name data fields expected to be delivered in the log data. Ensure that the contract clearly states who owns the data generated through the campaigns and how it can be used. Ensure the contract addresses access to log file data, data portability, and the ability to share with your other suppliers (agencies, auditors, consultants).
- **Compliance and Legal Requirements:** Ensure that the DSP complies with all relevant laws and regulations, including data protection, compliance, and privacy laws. Specify the responsibility for compliance and ensure there are audit rights to confirm compliance.
- **Data Backup and Data Recovery:** Ensure you address data backup, storage, deletion, and recovery practices and cadence and data recovery obligations.
- **Reporting and Transparency:** Transparency in reporting is essential. Detail the reporting frequency and format. Advertisers should have access to campaign performance data and analytics and the ability to ingest such data at a cadence and in a format workable for the advertiser.
- **Ad Placement and Inventory:** Specify the types of inventory and ad placements the DSP will use. Discuss any preferences or restrictions on where ads can be displayed.

Appendix: Tips for Evaluating, Selecting, and Contracting with a DSP

- **Ad Fraud and Brand Safety:** Address what measures the DSP takes to combat ad fraud and maintain brand safety. Address measurement process and interoperability with your own third-party verification vendors. Define how the DSP will handle fraudulent activity and protect the brand's reputation as well as process refunds, make-goods, and credits. Are there scenarios where you will not get a credit, refund, or make-good?
- **Dispute Resolution:** Establish a process for resolving disputes between the advertiser and the DSP. This could include mediation or arbitration clauses.
- **Confidentiality:** Ensure that sensitive business information is protected through confidentiality clauses.
- **Rebates and Other Incentives:** If an agency will be involved in placing media through your DSP seat, ensure the DSP agrees there are no rebates or other incentives given to your agency or other third parties based on your spending.
- **Audit Rights:** Include robust compliance and performance audit rights.
- **Service Level Agreements (SLAs):** Include specific SLAs that outline the expected level of service, response times, support, and remedies (such as credits, termination, and refunds).
- **Performance Reviews:** Include regular performance reviews.
- **Indemnification and Liability:** Clarify the indemnification obligations and liability of both parties in case of any legal issues or breaches of contract.
- **Non-Compete and Non-Disclosure:** Specify any non-compete or non-disclosure clauses that restrict or limit the DSP from working with competitors or disclosing confidential information.
- **Amendments and Renewal:** Describe the process for amending the contract and options for renewal.
- **Term and Termination:** Define the duration of the contract and the conditions under which either party can terminate it. Include notice periods for termination. In a case where you switch DSPs which requires the transitioning of ongoing campaigns, outline the exit plan, including the process, protocols, and service support from the DSP.

Appendix: Tips for Evaluating, Selecting, and Contracting with a DSP

A clear and mutually agreed-upon contract can help build a strong and productive relationship between the marketer and the DSP. It is advisable to consult with legal experts who specialize in advertising and digital marketing contracts to ensure that the contract protects the marketer's interests and complies with applicable laws and regulations.

The ANA recognizes the contribution to this section by Wayne Blodwell, programmatic consultant, and Keri Bruce and Nick Swimer from the ANA's outside legal counsel, Reed Smith.

Appendix: Price, Ad Quality, and Unlocking Value

Definitions of Ad Quality

Consider the following basic definitions of ad quality for a display ad. The definitions for online video, CTV, audio, etc. would be slightly different because the ad units and available metrics are different.

Definition 1 **Base Definition**	**Definition 2** **Higher Standard Definition**	**Definition 3** **Even Higher Standard Definition**
Human (not bots)	Human (not bots)	Human (not bots)
Measurable for viewability	Measurable for viewability	Measurable for viewability
Viewability for 50% for at least 1 second (the MRC standard)	Viewability for 50% for at least 1 second	Viewability for 100% for at least 2 seconds
Brand-safe	Brand-safe	Brand-safe
	Not on MFA	Not on MFA

With a stated ad quality definition in place, the advertiser can then collect the data and compare it to pricing data to access value and make better optimization decisions.

Appendix: Price, Ad Quality, and Unlocking Value

Four Outcome Buckets

A great way to think about price and ad quality is by using a simple price-quality matrix. A buyer can pay a high price or a low price, and a buyer will get high-quality or low-quality ad impressions. That creates four outcome buckets which represent the basic scenarios advertisers encounter, emphasizing the importance of accurate ad-quality measurement.

Price/Ad Quality Matrix

Ad Quality \ Price	Low	High
High	Pay low price, Get high quality (aka "bargains")	Pay high price, Get high quality
Low	Pay low price, Get low quality	Pay high price, Get low quality (bad outcome; aka "winner's curse")

Appendix: Price, Ad Quality, and Unlocking Value

High Price, High Quality: In this scenario, advertisers pay a premium for ad inventory, but they receive high-quality ad impressions resulting in better business outcomes. High-quality ad impressions enhance brand visibility, engagement, and conversion rates, resulting in a higher opportunity of achieving whatever the stated KPI might be.

High Price, Low Quality: Advertisers which pay a high price for inventory but receive low-quality ad impressions face a significant challenge. Despite their financial investment, the diminished ad quality can lead to wasted resources and minimal returns. Again, this outcome highlights the importance of accurately assessing ad quality to avoid overpaying for subpar placements.

Low Price, High Quality: Advertisers which secure ad inventory at a lower price while receiving high-quality impressions have a distinct advantage. In layman's terms, these are "bargains." This outcome underscores the significance of smart bidding strategies and the potential for advertisers to identify undervalued inventory. However, a rational voice should also be questioning the repeatability of finding bargains again and again.

Low Price, Low Quality: In this scenario, advertisers opt for lower-priced ad inventory but compromise on ad quality. This outcome presents a significant risk as it can lead to ineffective ad campaigns, tarnish brand image, and introduce reputational risk. MFA inventory is a great example of this outcome. Advertisers must strike a balance between price and quality to avoid this undesirable outcome. Ad quality still matters even in cases where audience targeting is the primary rationale for buying low-cost inventory. Buying an audience in a poor-quality ad environment might very well be self-defeating.

Appendix: Cost Waterfall

In the below chart, we illustrate the relationship between impressions, total ad spend, and transaction costs. To avoid cost duplication, we have adjusted the loss of media productivity costs itemized on the right-hand side of the cost waterfall chart on page 101. Specifically, we multiply percent of total ad spend of each category within loss of media productivity by the percent of seller revenue (71 percent).

	Total Impressions	Total Ad Spend	Waterfall Loss of Media Productivity Based on Initial Ad Spend of $1,000	%		$
Non-viewable	15%	13.5%	13.5% x 71%	9.5%	or	$95
IVT	0.78%	0.7%	0.7% x 71%	0.5%	or	$5
Non-measurable	14%	21.5%	21.5% x 71%	15%	or	$150
MFA	21%	15%	15% x 71%	10%	or	$100

Total impressions and total ad spend percent varies for non-viewable, IVT, non-measurable and MFA because of different average CPMs and ad type ratios:

- **Non-viewable and IVT:** In this study, CPMs for non-viewable and IVT were lower than average.
- **Non-measurable:** Video as a format over-indexes for non-measurable inventory, and also has higher CPMs resulting in the delta we see here of 14 percent of impressions but 21.5 percent of spend.
- **MFA:** Tends to be lower priced inventory leading to 15 percent of ad spend, but 21 percent of impressions.

Appendix: Cost Waterfall

The project team adhered to the following methodology principles when building the cost waterfall:

- DSP platform costs, DSP data costs, and DSP additional costs were calculated as averages across participating advertisers based on log-level data provided by the DSPs.
- SSP costs were calculated as averages across participating advertisers based on log-level data matched between DSPs and SSPs with impression-level granularity, excluding impressions that did not have an impression-to-impression match (matching of the data at the aggregate level does not allow for the accurate calculation of the media cost delta), and impressions that did not have SSP cost disclosure (SSPs cannot report costs for impressions where legal agreements with publishers do not permit that cost information to be shared with the buyer).
- Non-viewable costs, IVT, non-measurable costs, and MFA were calculated as averages across participating advertisers based on log-level data matched between DSPs and ad verification providers with impression-level granularity, excluding outlier advertisers with extremely poor measurability (<50 percent of impressions measurable among impressions matched with ad verification providers).
- The project team used the DeepSee.io domain list to calculate the percentage of MFA.
- Each impression was attributed exclusively to viewable or non-viewable groups, IVT, MFA, and non-measurable to avoid duplication.

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PROGRAMMATIC MEDIA SUPPLY CHAIN TRANSPARENCY STUDY

COMPLETE REPORT

Ask Questions. Get Answers. Take Action. Improve Performance.

1. How many websites are being used for an average campaign?
2. How much of my media activity is on MFA sites?
3. Are we using inclusion lists?
4. Is context important?
5. When did we last update our media agency contract?
6. Should direct contracts with primary supply chain intermediaries be considered — DSPs, ad verification, SSPs?
7. Do we have a strategy for SSP optimization?
8. Do we have too much focus on "cheap CPM" deals?
9. When is my agency acting as a principal and what are the trade-offs of that for me?
10. Are my Private Marketplace (PMP) deals worth the premium and should we consider allocating more budget to Open Marketplace (OMP)?
11. Do we have a process in place to accurately measure ad quality and price in order to assess value?
12. Do I know how my campaigns perform on measurability, viewability, and IVT?
13. Should we be leveraging log-level data?
14. Do I know the sustainability impact of my programmatic activity and am I taking steps to reduce carbon emissions?
15. Are we staffed appropriately internally (on the client side) to be active stewards of our media investments?