

TAG FRAUD BENCHMARK STUDY

NOVEMBER 2018

A report conducted by The 614 Group,
commissioned by Trustworthy Accountability Group



614
GROUP



Executive Summary

The digital advertising industry has long acknowledged that the fight against fraud requires a concerted effort, with all market participants working together to ensure traffic quality and brand safety. In this vein, the industry came together in 2014 to form the Trustworthy Accountability Group (TAG), a cross-industry self-regulatory program to fight ad fraud and other criminal issues in the digital supply chain. TAG's Certified Against Fraud Program (aka, TAG Certification) focuses on combating fraudulent invalid traffic (IVT) across the digital advertising industry, and provides companies with a means to communicate publicly their commitment to combating this type of criminal activity.

The Trustworthy Accountability Group (TAG)'s mission is to eliminate fraudulent traffic, combat malware, prevent Internet piracy, and promote greater transparency in digital advertising. In 2016, the organization launched the TAG Certified Against Fraud a methodology for digital advertising to follow to eliminate fraud. How effective is it?

In July 2018, The 614 Group conducted quantitative and qualitative research to measure the impact of TAG Certification in reducing fraud in actual campaigns, and to assess the industry's perception of both TAG and the fight against fraud. The research focused on discovering whether rates of general invalid traffic (GIVT) and sophisticated invalid (SIVT)

were lower in TAG Certified Channels (i.e. channels in which multiple entities involved in the transaction – such as the media agency, buy-side platform, sell-side platform and/or publisher – had achieved the TAG Certified Against Fraud Program) in comparison to the industry average. We found that TAG Certified Channels:

- A 1.68% overall fraud rate vs. 10.43% industry average
- This represents an 84% reduction in fraud through TAG Certified Channels;
- Supported a proven track record of companies who are substantially improving traffic quality.
- The 2018 study measured over 75 billion impressions - a 12x increase in scope from the 2017 study



A special thanks to SCOTT CUNNINGHAM, founder of Cunningham.Tech Consulting, Advisor to TAG, and Founder of the IAB Tech Lab for his contributions to the research.

Differences Between 2017 and 2018 approach:

In 2017, TAG engaged The 614 Group to examine fraud levels found in TAG Certified Channels. That initial study looked at GIVT rates in predominantly desktop display traffic. That study found that TAG Certified Channels had a 1.48% rate of GIVT.

In 2018, we broadened the scope of the research to include SIVT which, along with GIVT, increased the volume of impression examined by 12x and examined a broader range of inventory types. We also increased the number of agency holding companies who participated in the study, as well as the number of participating TAG Certified venders by 5x.

Study parameters and results at a glance:

	2017	2018
Type of fraud measured	GIVT	SIVT/GIVT
Number of impressions studied	6.5 billion	75 billion
Inventory types examined	Desktop Display (Majority) Video	Desktop Display Desktop Video Mobile Web-Display Mobile Web-Video In App Display In App Video
Number of participating agencies	3	5
Number of TAG Certified sources	10	58
Overall fraud rate	1.48%	1.68%
% Reduction of fraud in Tag Certified Channels vs. non-optimized channels	83%	84%

Additionally, through interviews with senior agency and publisher executives, we observed changing perceptions of how fraud is viewed. In the past, many in the industry focused on fraud as a metric, with strict quotas as to how much fraud may be permissible. Increasingly, however, fraud is seen as one factor among many that affect traffic quality, and rather than dwell on a specific fraud rate, companies focus should be on business outcomes, such as whether a campaign achieved the advertiser's business goals.

TAG is also changing the conversations that agencies and publishers have with clients. Fraud detection and blocking is no longer seen as a tech tax imposed on buyers, but rather as an integral part of a strategy to help them achieve KPIs. In fact, many publishers tout their TAG Certification in their pitch process.

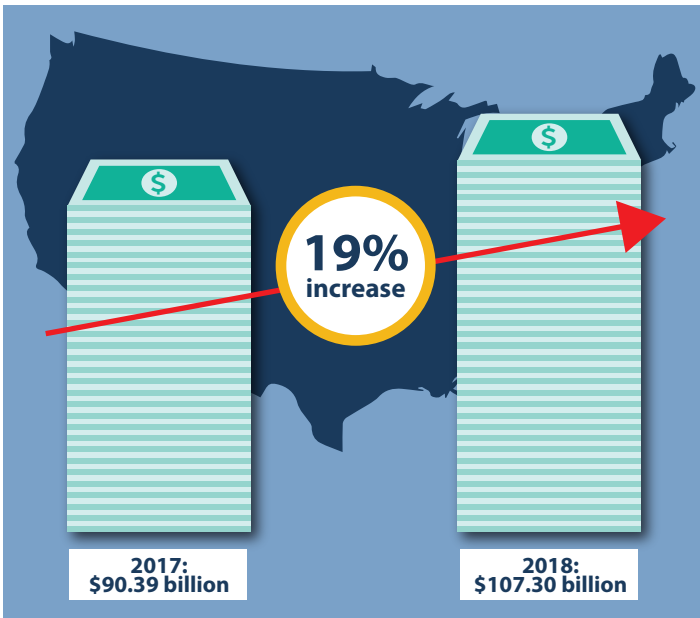
As a result of this study, we can definitively state that these proof points conclude that companies that follow the TAG Certification protocols have successfully protected their clients from fraud (in 2018).

Study Background and Objectives

The digital advertising industry has long acknowledged that the fight against fraud requires a concerted effort, with all market participants working together to ensure traffic quality and brand safety. In this vein, the industry came together in 2014 to form the Trustworthy Accountability Group (TAG), a cross-industry self-regulatory program to fight ad fraud and other criminal issues in the digital supply chain. TAG's Certified Against Fraud Program (aka, TAG Certification) focuses on combating fraudulent invalid traffic (IVT) across the digital advertising industry, and provides companies with a means to communicate publicly their commitment to combating this type of criminal activity.

Initiatives such as TAG are growing in importance, given the vast sums of revenue that flow into the digital ad ecosystem. In the U.S. alone, digital advertising is expected to top \$107.30 billion in 2018, up from \$90.39 billion in 2017, a year over year increase of nearly 19%¹. But challenges are growing alongside the digital advertising ecosystem. The sheer volume of revenue at stake provides ample incentives for nefarious actors to divert as much of that money as possible into their own pockets via multiple schemes. In September 2017, Juniper Research reported that advertisers will lose an estimated \$19 billion to fraudulent activities in 2018, or about \$51 million per day. Worse, that loss will climb to \$44 billion by 2022². Meanwhile, publishers lose up to \$1.27 billion each year³.

In July 2018, The 614 Group conducted quantitative and qualitative research to measure the impact of TAG Certification in reducing fraud in actual campaigns, and to assess the industry's perception of both TAG and the fight against fraud.



¹ <https://www.emarketer.com/content/digital-ad-spending-benchmarks-by-industry-2018>

² <https://www.businesswire.com/news/home/20170926005177/en/Juniper-Research-Ad-Fraud-Cost-Advertisers-19>

³ <https://www.marketingdive.com/news/publishers-lose-127b-yearly-to-ad-fraud-new-study-finds/512911/>

TAG Certified Channel



84% REDUCTION IN IVT*

* Compared to general industry fraud rates.

A TAG Certified Channel is a media transaction where the agency, a demand-side platform, and a supply-side platform are all Certified Against Fraud by TAG and where available, the TAG Certified Channel includes a TAG Certified Against Fraud publisher.

TAG Testing Methodology

The research conducted by The 614 Group is a follow up to a 2017 study, but with significant changes. For instance, it includes campaigns from the largest media agencies, a vast increase in volume of impressions examined, included SIVT as well as GIVT, and a broader set of inventory types. We analyzed 100% of the impressions of the campaigns to which we were given access to by the agencies whom shared data with the 614 Group analyst team. We also interviewed publishers for the first time, as well as an expanded list of agencies.

Quantitative Analysis

Fraud is a generic term, encompassing a range of nefarious activities. For the purposes of this report, we are specifically concerned with invalid traffic, which is defined by the Media Ratings Council (MRC) 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. Among the reasons why ad traffic may be deemed invalid is it is a result of non-human traffic (spiders, bots, etc.), or activity designed to produce fraudulent traffic.”

There are two types of invalid traffic: general invalid traffic (GIVT), and sophisticated invalid traffic (SIVT). These are described by the MRC in the following ways:

- **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, we combined both GIVT and SIVT in order to achieve a comprehensive result.

We assessed the levels of IVT present in several campaigns, executed by four media holding companies, listed above, through TAG-certified channels. These campaigns included display media and video on desktop, mobile web and in-app. These campaigns ran from January 1, 2018 through August 31, 2018.

Study Parameters:

Inventory Type	Types of Fraud Examined	Volume of Impressions Examined	Study Duration	Data Examined
Desktop Display Desktop Video Mobile Web Display Mobile Web Video In-App Display In-App Video	SIVT GIVT	75 Billion (including traffic from the world's largest media companies)	January- August, 2018	100% of data to which we have been given access from actual campaigns executed by the world's largest agency holding companies: GroupM, Horizon Media, IPG Mediabrands, Annalect Consulting, and Publicis Media

In conducting the study, The 614 Group relied on measurement of data on inventory characteristics conducted by measurement vendors including MOAT, DoubleVerify and Integral Ad Science. These three anti-fraud measurement vendors are both TAG Certified Against Fraud and hold accreditations from the Media Rating Council (MRC) that include IVT measurement – both GIVT and SIVT.

In order to create a comparison of TAG Certified Channels versus the industry standard, we reviewed the publicly available metrics regarding fraud from a group of respected verification partners, specifically DoubleVerify, Integral Ad Science, White Ops and Forensiq. We then compiled an average of these numbers in order to compare it to the rate of fraud we measured in TAG Certified Channels. We make no claim as to the validity the third-party tests since we have not seen the sources or the methodologies used for assessing fraud rates (e.g. percentage of traffic measured, types of fraud measured, etc.). Therefore, our comparison should be considered directional.



Qualitative Analysis

The qualitative portion of our research involved extensive interviews with senior level executives at five agencies and three publishers to provide context to the data and to understand how the industry responds to fraud once it is discovered.

This portion of the study was iterative: when new insights were uncovered in an interview, The 614 Group returned to each interviewee to gain their perspective in that newly identified area. The questions focused on:

- impressions of the TAG Certification methodology,
- current best practices for fraud including how often they check for it and interact with measurement companies and partners,
- actions taken once fraud is discovered,
- understanding remediation process, and
- uncovering additional issues and missing pieces in the fight against fraud.

Participants in this portion of the analysis were:







Results

With just 1.68% fraud, TAG Certified Channels have 84% less fraud than Non-Certified Channels.

The amount of fraud (both SIVT and GIVT) found in TAG Certified Channels across multiple inventory types is 1.68%⁴. The overall blended rate we will use for comparison is 10.43%, which represents that TAG partners have 84% cleaner traffic than partners who work outside of this certification.

Here are the deeper insights we have discovered.

FRAUD RATE IN TAG CERTIFIED CHANNELS





	Impressions	Fraud Rate in TAG Certified Channels
 All Traffic	76,958,048,162	1.68%
 Display	66,616,673,455	1.66%
 Video	10,287,883,254	1.76%
 Mobile App ⁵	18,235,754,013	0.41%

⁴ TAG certification requires all entities to measure 100% of their traffic, i.e. all monetizable transactions. This analysis encompassed all relevant campaign traffic.

⁵ Mobile App impressions appear in both display and video - ie. Mobile App Video and Mobile App Display

Going further, we analyzed the rate of fraud by fraud designation and media type within TAG Certified Channels:

SIVT /GIVT WITHIN TAG CERTIFIED CHANNELS

Media Type	SIVT	GIVT
 Overall	1.39%	0.28%
 Display	1.37%	0.29%
 Video	1.55%	0.21%
 Mobile Web ⁶	0.99%	0.05%

⁶ Mobile App impressions appear in both display and video - ie. Mobile App Video and Mobile App Display

COMPREHENSIVE DATA ON FRAUD RATES WITHIN TAG CERTIFIED CHANNELS BY INVENTORY TYPE

Media Type	Impressions	Fraud Imps	SIVT %	GIVT %	IVT %
Overall	76,958,048,162	1,289,360,722	0.39%	0.28%	1.68%
Desktop Display	29,116,940,549	821,734,070	2.21%	0.61%	2.82%
Desktop Video	3,249,126,552	121,101,947	3.29%	0.43%	3.73%
Mobile Web Display ¹⁰	23,737,643,921	245,445,847	0.99%	0.04%	1.03%
Mobile Web Video ¹⁰	1,547,989,115	20,327,999	1.15%	0.17%	1.31%
Mobile App Display	13,423,909,829	37,404,588	0.23%	0.05%	0.28%
Mobile App Video	4,811,844,184	37,555,839	0.70%	0.08%	0.78%

⁹ Overall includes 1,070,594,012 imps of Unknown Media Type

¹⁰ Mobile Web combines both Mobile Web and Tablet

The Process of Remediation: Taking Action When Fraud is Identified

Although 1.68% fraud is low and manageable, **advertisers reasonably don't want to pay for any amount of fraud**. This raises the question: what steps do agencies take when they discover the presence of fraud -- however small -- in their campaigns?

Once the presence of SIVT or GIVT is discovered, each agency holding company immediately seeks remediation. There is no standard for doing so; each agency we interviewed follows a process unique to them. In general, all fraud is remediated and clients pay only for valid traffic.

In speaking with representatives of the largest holding companies regarding the process they follow when learning about the presence of fraud, we learned that agencies go to great lengths prior to and throughout the flight of a campaign to ensure that the numbers discussed at its conclusion represent valid traffic only. For instance, they work with verification and blocking providers throughout the campaign and escalate results to publishers as soon as fraud is discovered in order to resolve issues in real time.

Agencies Take Remediative Action in the Face of Fraud:

- Ensuring that the publisher has a verification partner in place
- Sharing verification data with publishers at the campaign level so they can be proactive in blocking fraudulent traffic,
- Providing the publisher with a list of keywords they intend to block so the publisher can better estimate inventory availability, and the campaign pacing can be accurately monitored,
- Actively monitoring ad placements and inventory sources that deliver the fraud and block them in real time when running programmatic campaigns, and monitoring campaign pacing. If a campaign is under-delivering, work with the publisher to understand why.

Additionally, all of the agency holding companies indicated that TAG Certification was just one important component of a larger traffic quality initiative. Agencies look at a wide variety of fraud, brand safety, budget safety and other metrics to assess the quality of traffic.

Key Insights Derived From Interviews

- 1. The industry is no longer viewing fraud simply as a stand-alone metric. Traffic that has little to no fraud is seen as one of many important factors that drive positive business outcomes, which is now where agencies and publishers alike place their focus. The fight against fraud is important because there is a direct link between clean traffic and achieving an advertiser's campaign goals.**

All interviewees, including publishers, believe that fraud should be viewed as just one aspect of campaign performance. Agencies and publishers have the responsibility to help advertisers drive business outcomes, whether that's brand lift or increased sales, and they have a higher probability of achieving those goals in fraud-free campaigns.

"[Fraud is] now tied to business outcomes and no longer is it just a metric. It's about what does it mean to my bottom line," explained Huascar Peralta of IPG Mediabrands.

The sell-side agrees. "Because fraud is so tied to business outcomes, detection and monitoring is a daily activity. Every buy must be paid attention to," said Lee Barstow A&E Networks.

Adam Moser of Hulu goes further, explaining, "To Hulu, it's a component to what we call budget safety, which is ensuring that our advertisers are effectively and their desired business outcomes have been achieved. Budget safety is not just about building a premium, fraud-free environment that's safe for brands. It means that marketers have assurances that their budgets are being spent effectively on accredited platforms which deliver to human, verifiable eyeballs."

- 2. Benefits of the TAG methodology go beyond fighting fraud; it has changed the conversations agencies and publishers have with clients.**

TAG Certification isn't that onerous to accomplish because best practice companies are often meeting many of the requirements in their normal course of business – but the benefits are great. Derek Nicol of CBS Interactive explained, "The benefits of TAG are great. It's easy to accomplish as most vendors already have much of the infrastructure in place. We already had the ability to audit and self audit in place. The process of going through the certification allowed us to make a larger commitment in our cloud infrastructure."⁷

TAG Certification offers clout in the marketplace, an indication that the agency, vendor or publisher offers a more premium experience. This is an idea that many are actively promoting as a differentiator in the pitch process. "I think it's fantastic that ad operations is part of the pitch process now. It has made it that much easier in conversations, especially with onboarding new clients, to really get them going all in on verification - right away," explained Eric Warburton of Horizon Media.

"TAG has done a great job in [in emphasizing to the market] how important it is to use certified partners and verification partners; it's not like you have to sell the client on what you're doing anymore." - Eric Warburton, Horizon Media



⁷ Note: While each company must obtain TAG certification individually, working with TAG Certified partners can help significantly in a company reaching full compliance with TAG's requirements.

Fighting fraud has also brought an unforeseen business opportunity, as Ross Jenkins of IPG Mediabrands points out: “It’s about the bottom line and the business opportunity that TAG has revealed to us. On one side, our internal teams communicate with clients to demonstrate the value of a cleaner supply chain. On the other side, our clients expect the cleanest traffic possible. Through TAG, we now are able to show them the benefits of their ask.”

For some, TAG certification moved the internal conversation forward, specifically justifying the importance of tackling fraud on a holistic level and, in some cases, made the case for hiring a senior brand safety officer.

3. TAG is now table stakes. The marketplace accepts TAG as a proven methodology and recognizes that, if that methodology is followed, companies can assume that the amount of fraud in campaigns will be lower (an assumption proven out in the data). Therefore, if companies in a campaign follow that methodology – creating a TAG Certified Channel – they can prove to the world that they have reduced fraud to the lowest possible level in industry today.

We heard a loud and clear message from agencies and publishers that companies lacking TAG Certification are no longer considered as valid partners. The only exception would be in cases where companies are seeking cheap impressions and are willing to buy fraud in the process.

GroupM and Publicis consider using a TAG Certified supply chain a best practice for their agencies. “GroupM has adopted a best practice of investing with a TAG supply chain,” explained Joe Barone of GroupM. For Publicis, TAG certification is a qualifier for its preferred vendor program, known as Verified.





4. There is a disconnect between what the data advertisers offer at the start of their campaigns and what the data agencies and publishers need in order to help those advertisers achieve their campaign goals. Meaningful improvement in overall campaign performance will be possible when all parties are transparent with their data and are willing to share it.

Advertisers are sometimes reluctant to share the actual goals of their campaigns, opting to share only the programmatic parameters of the buy with publishers. Increased transparency will help the partners throughout the chain drive great outcomes, as a buy is only as good as the data that feeds it.

“Many clients are very forthcoming with their advertising goals as it relates to type of audience, spend, and scale, yet they don’t always equate these KPI’s to their level of aversion to brand risk and brand safety. For example, some clients provide us with their own 1,000 site blacklist and then inform their agency that they want massive scale but of course they can’t have both. We actively work with our clients to better understand the goals of their brand and how best to achieve these goals in a cost effective and brand safe manner.” explained Nicole Cosby of Publicis.

Travis Howe of ESPN agrees, “Disney is committed to solutions that improve the advertiser and consumer experience during this time of rapid tech transformation; we believe eliminating IVT is of particular importance. We applaud the strides TAG is making to combat cross-industry fraud and look forward to continued advancements and transparency across the board, to better serve brands, marketers and agencies.”

Publishers will also disagree with the reports provided by the verification partners at times. As Derek Nicol of CBS Interactive explained, “We find that some verification companies make it difficult to get to atomic level data. We see an opportunity working with TAG and the MRC on focusing on how discrepancies should be resolved. Today the process is very one sided. This data is used to transact against which means there is a small window to resolve any issues”.

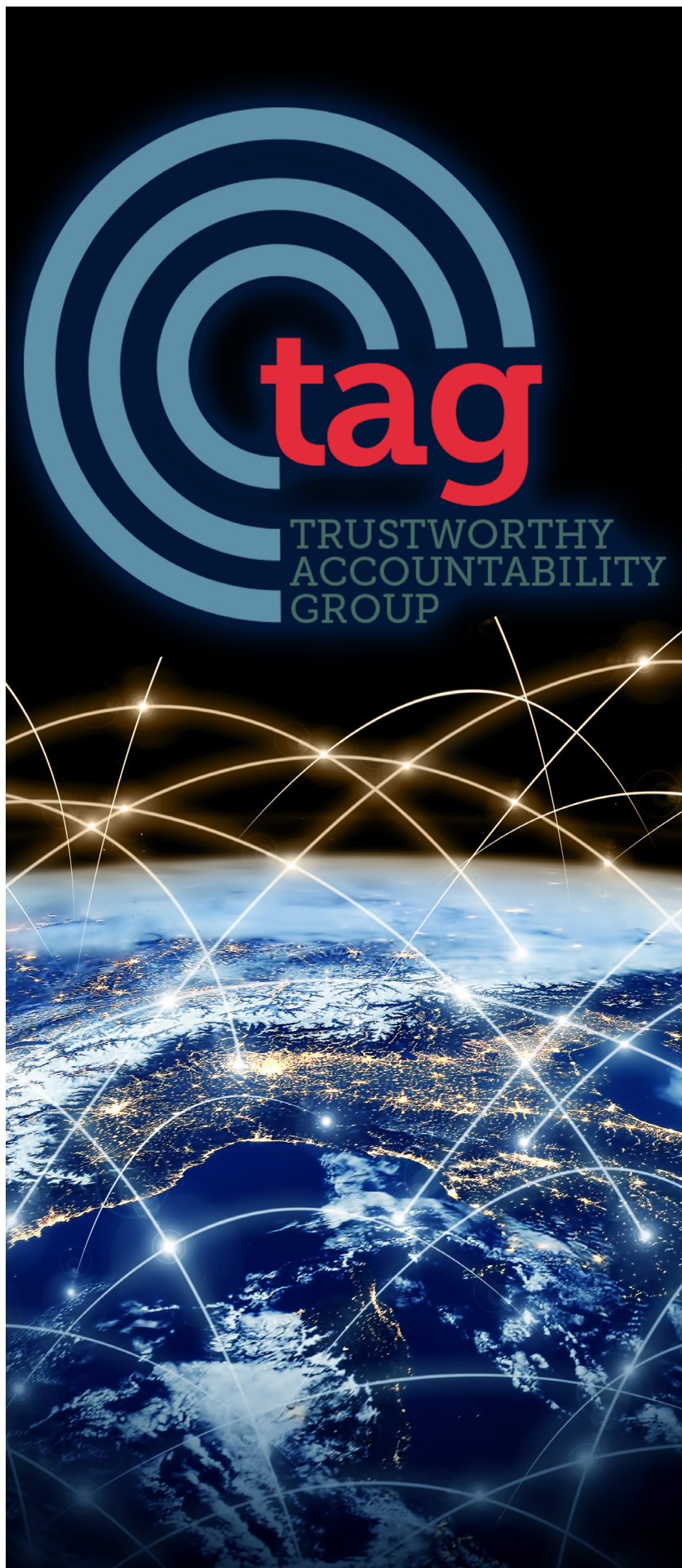
Conclusion

TAG Certification has a proven track recording of reducing fraud. Looking at the largest sample size ever studied, we found just 1.68% in a combined measurement of SIVT/GIVT of ad traffic that flowed through TAG-Certified Channels. That's 84% lower than a comparative unfiltered number.

TAG measurement requires 100% measurement by every party in a channel, which means the 1.68% fraud rate is the most comprehensive in the industry. **It also means that by measuring and filtering 100% of traffic, partners have the opportunity to engage in much more robust and granular conversations regarding discrepancies and how best to resolve them.** This, in turn, means that the industry is more aware of when, where and how fraud is occurring, and taking steps to curb it.

The secondary impact of TAG adoption is that as an industry we are finding more problems to solve in terms of the communications, conversations, and reconciliation among the numerous partners. Those conversations are aided by actual numbers, which is critical in that publishers suspect their measurement vendors overstate their fraud rates and agencies think their vendors are exaggerating their SIVT rates, and no one is quite sure that what they're getting is fully accurate.

Finally, but no less importantly, companies now recognize that industry-wide action to combat fraud – including TAG Certification – leads to better business results. Going further, we can say that less fraud is a proxy for better business outcomes. In the future, it will be worthwhile to quantify the impact of reducing fraud on business behaviors and better returns on advertising investments.



Requirements for TAG Certification

TAG launched its Certified Against Fraud Program in 2016 to combat invalid traffic in the digital advertising supply chain. Companies that are shown to abide by the Certified Against Fraud Guidelines receive the Certified Against Fraud Seal and use the seal to publicly communicate their commitment to combating fraud.

Requirement	Scope	Direct Buyer	Direct Seller	Intermediary	Anti-Fraud & Measurement Services
Complete TAG Registration & be a TAG Member in Good Standing	Administrative	✓	✓	✓	✓
Have a designated TAG Compliance Officer	Administrative	✓	✓	✓	✓
Attend a Certified Against Fraud Training annually	Administrative	✓	✓	✓	✓
Comply with GIVT Detection & Filtration Requirements of MRC IVT Guidelines	Anti-Fraud	✓	✓	✓	✓
Employ Domain Threat Filtering	Anti-Fraud	✓	✓	✓	✓
Employ Data Center IP Threat Filtering	Anti-Fraud	✓	✓	✓	✓
Implement Publisher Sourcing Disclosures	Transparency		✓		
Implement Payment ID System	Transparency			✓	
Implement Ads.txt	Transparency		✓		

More information about the specific requirements and application process for the TAG Certified Against Fraud Seal can be found on the TAG website.