

TAG Fraud Benchmark Study

DECEMBER 2017

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





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Executive Summary

Digital advertising revenue reached \$72.5 billion in 2016 in the U.S. market alone. While this driver of the U.S. economy is expected to increase in size and importance in the coming years. its growth has been hindered by the persistent challenge of fraud within the sector. By some estimates, brands will lose over \$6.5 billion in 2017 due to invalid traffic (IVT) from bot fraud.1

Defeating fraud in the digital advertising ecosystem is an ongoing struggle, and the industry has responded with a variety of tactics, ranging from real-time filtering to whitelists and private marketplaces. Despite these efforts, fraud - specifically IVT - remains high, with an average fraud rate of 8.83% across display inventory in North America.2 When combined with video inventory, that rate increases to 12.03%.3

Previous research quantifying the cost of ad fraud has noted the vital nature of industry coordination in order to fight fraud.4 In 2014, the digital advertising industry responded to such calls for collaboration by creating 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 focuses on combatting fraudulent IVT across the digital advertising industry, and provides companies with a means to communicate publicly their commitment to combatting this type of criminal activity.

In this study, The 614 Group sought to measure the impact of the TAG Certified Against Fraud Program in lowering fraud across the digital advertising supply chain. Commissioned by TAG, our research focused on discovering whether rates of IVT 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 Seal) in comparison to the industry average.

TAG Certified Channels have a measured IVT rate of 1.48% across video and display inventory.

The study found that TAG Certified Channels have a measured IVT rate of 1.48% across video and display inventory - an 83% reduction in IVT as compared to the general industry fraud rates.

These finding suggest a number of important steps that marketers can take to ensure brand safety.

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TAG Certified Channel



83% REDUCTION IN IVT*

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Study Background and Objectives

In mid-2017, TAG commissioned The 614 Group to assess the effectiveness of the TAG Certified Against Fraud Program in the marketplace. In our view, that assessment required us to examine both the levels of IVT found in TAG Certified Channels, as well as the specific actions that media agencies took when informed of the presence of fraud.

QUESTIONS RAISED

As we shall see in this report, brands look to their media agencies to provide them with IVT-free inventory and hold them responsible for reconciliation. This raises a few questions:

- What is the impact of the TAG Certified Against Fraud Program in reducing rates of IVT in the digital advertising supply chain? Can TAG Certification move the industry closer to its goal of minimal IVT?
- How do media agencies respond when they learn that a percentage of the traffic they purchased on behalf of a client was invalid?

To answer the first question, we conducted a quantitative analysis measuring the amount of IVT present in several display and video campaigns executed by three media agencies - GroupM, IPG Mediabrands and Horizon Media. We focused specifically on campaigns that ran through 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 Seal).

To answer the second question, we interviewed senior-level executives at the three media agencies in order to understand how they respond to the presence of IVT in traffic they purchase on behalf of their clients. Highlights from each of these interviews are included in an appendix of the report.

We conducted this study independently on behalf of TAG between July and October 2017.

The 614 Group did not audit the information given to us and provides no opinion or other forms of assurance with respect to the report's findings.

^{*} Compared to general industry fraud rates.



Industry Efforts to Combat Fraud

As the problem of fraud in the digital advertising supply chain grew, companies across the industry employed a variety of tactics to combat it, ranging from real-time filtering to whitelists and private marketplaces. Despite these efforts, rates of fraud continued to grow.

In 2014, in response to calls for a coordinated response to the growing issue of fraud in the digital advertising supply chain, the industry took action to create the Trustworthy Accountability Group (TAG). Founded by the US Interactive Advertising Bureau (IAB), the Association of National Advertisers (ANA) and the American Association of Advertising Agencies (4As), TAG is a cross-industry self-regulatory program that works collaboratively with companies to eliminate fraudulent traffic, combat malware, prevent Internet piracy, and promote greater transparency in digital advertising.5

TAG's Certified Against Fraud Program focuses on combatting IVT across the digital advertising industry, and provides companies with a means to communicate publicly their commitment to combatting this type of criminal activity. Companies seeking the Certified Against Fraud Seal must first meet a rigorous set of guidelines

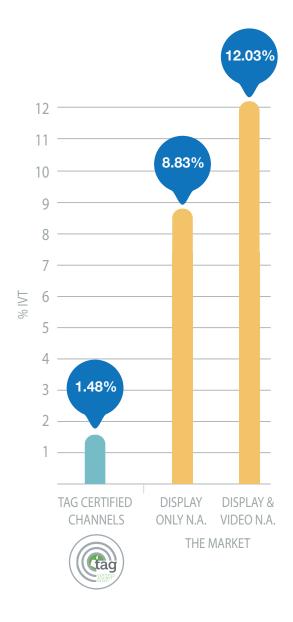
specific to the role they play in the digital advertising supply chain:

- Buyers such as advertisers and authorized advertiser agents (AAAs) must pass the TAG Registration verification process. designate a TAG Compliance Officer, and ensure compliance with the Media Rating Council's Invalid Traffic (IVT) Detection and Filtration Guidelines for all monetized ad impressions.
- Direct Sellers such as publishers and authorized publisher agents (APAs) must comply with all of the steps required of buyers, as well as requirements to employ domain list filtering and data center IP list filtering, and to publish disclosures regarding paid sourced traffic.
- Intermediaries such as ad networks and other indirect buyers and sellers must comply with all of the steps required of buyers, as well as domain list filtering, data center IP list filtering, and participation in TAG's Payment ID System.

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

Tag About Us. (n.d.). https://www.tagtoday.net/aboutus/

Comparing Fraud Rates—Industry Average vs. Inventory Purchased through TAG Certified Channels*



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Findings and Key Takeaways

Of the more than 6.5 billion impressions run through TAG Certified channels that were measured for the purpose of this study, just over 97 million impressions were identified as fraudulent. This quantitative analysis shows that TAG Certified Channels have a measured IVT rate of only 1.48% across video and display inventory.

Given that TAG Certified Channels deliver an 83% reduction in IVT as compared to general industry fraud rates, it follows that working with TAG Certified companies creates an opportunity to reduce fraud and boost overall trust in the industry.

Qualitative analysis of how media agencies respond when traffic they purchased on behalf of a client was invalid revealed several key themes:

- Agencies strongly encourage their clients not to pay for fraudulent traffic and support them in avoiding it.
- Agencies have standing policies for handling IVT issues, but those policies, by necessity, are operationalized on the individual group client
- Reconciliation is a time-consuming and inefficient process.
- Agencies judge a publisher's commitment to quality based on IVT levels found in their traffic.
- Sharing data with publishers is the best strategy to reduce IVT in the market at present.
- Much is still needed in the fight against IVT.

Key Data Points:

Impressions Measured:	6,554,518,004
Impressions Classified as Fraud:	97,317,210
IVT Rate:	1.48%



Important Steps for Marketers to Ensure Brand Safety

We believe that the actions media agencies take in response to learning of IVT today form a de facto baseline for best practices, and will serve as the starting point for future best practices. This baseline, in our view, will guide new media agencies that come to market, as well as foster much-needed discussions within the industry.

Our analysis in light of this research leads us to recommend a number of important steps that marketers can take to ensure brand safety:

- Lead the Charge: Designate a trained Brand Safety Officer to protect your brand from ad fraud and other criminal activity.
- Communicate Your Commitment: Work with your agencies to establish a clear and consistent policy to measure fraud effectively.
- Know Your Partners: Choose to work with TAG Certified Against Fraud partners.
- Be Vigilant: Refuse to pay for fraud.

Appendix A: Methodology

The 614 Group sought to measure the impact of the TAG Certified Against Fraud Program in order to better understand whether TAG Certification has the potential to move the industry closer to its goal of reducing fraud across the industry.

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.7
- 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.8

The 614 Group research focused on measuring rates of IVT found in campaigns run through TAG Certified Channels. A TAG Certified Channel is a channel 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 Seal.

We assessed the amount of IVT present in several display campaigns run through TAG Certified Channels that were executed by three media agencies – GroupM, IPG Mediabrands and Horizon Media – on behalf their clients. These campaigns ran from July 1 through October 31, 2017.

Specifically, we looked at over **6.5 billion impressions** that had been measured by either MOAT, DoubleVerify or Integral Ad Science, prior to reaching us. 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.

Our study focused primarily on display inventory. Although we did not exclude video inventory, the vast majority of measured impressions came from display. We did, however, specifically exclude mobile in-app impressions.

This exercise allowed us to create an initial "baseline" level of IVT present in a TAG Certified Channel: 1.48%.

We then compared our TAG Certified baseline to a combination of the publicly reported marketplace fraud data collected by DoubleVerify,⁹ Integral Ad Science¹⁰ and White Ops¹¹ and documented in reports they made publically available. The various vendor studies identified a blended IVT rate in display and video, of 12.03% in U.S.-based display traffic.¹²

It is important to note that in these studies, DoubleVerify, IAS, and White Ops looked only for GIVT, excluding SIVT. While we felt that these studies were the most relevant points of comparison to the TAG Certified baseline, it should be noted that the TAG Certified baseline includes both GIVT and SIVT and therefore encompasses more of the measurable fraud in a campaign than the vendor studies against which it is compared.

The 614 Group intends to use the initial baseline as a benchmark for measuring IVT levels in TAG Certified Channels going forward. Our goal is to repeat this test annually to assess ongoing improvements as more and more players adopt the TAG requirements.

In addition to the quantitative analysis of IVT levels in TAG Certified Channels, **The 614 Group also conducted in-depth qualitative interview of post-campaign fraudulent activity** covering such topics as:

- How many impressions ran to fraudulent inventory based on agency-vendor data?
- How they handle fraudulent delivery with client?
- How they handle fraudulent delivery with an intermediary?
- What agencies can do to avoid running to such inventory in the future?

Interviewees include senior executives at the following agencies:

- GroupM;
- IPG/Mediabrands; and
- Horizon Media.

⁶ Media Ratings Council. (2015, October 15). "Invalid Traffic Detection and Filtration Guidelines Addendum" – FINAL (Version 1.0). Retrieved from http://mediaratingcouncil.org/101515_IVT%20Addendum%20FINAL%20(Version%201.0).pdf

⁷ PR Newswire. "Media Rating Council (MRC) Issues Final Version of Invalid Traffic Detection and Filtration Guidelines Addendum." October 27, 2015. https://www.prnewswire.com/news-releases/media-rating-council-mrc-issues-final-version-of-invalid-traffic-detection-and-filtration-guidelines-addendum-300166843.html

⁸ PR Newswire. (2015, October 27). "Media Rating Council (MRC) Issues Final Version of Invalid Traffic Detection and Filtration Guidelines Addendum." Retrieved from https://www.prnewswire.com/news-releases/media-rating-council-mrc-issues-final-version-of-invalid-traffic-detection-and-filtration-guidelines-addendum-300166843.

⁹ DoubleVerify, (2017, June 29). DoubleVerify Global Insights 2017 Report. Retrieved from https://www.doubleverify.global-insights-2017 Report. Retrieved from https://www.doubleverify.global-insights-2017 Report. Retrieved from https://www.doubleverify-global-insights-2017-report/

¹⁰ Integral Ad Science, (2017) United States Edition: Media Quality Report, H! 2017. Retrieved from https://go.integralads.com/us-mgr-2017h1.html

¹¹ ANA/WhiteOps. (2016- 2017). "The Bot Baseline 2016-2017" Retrieved from http://www.ana.net/content/show/id/botfraud-2017.

¹² We anticipate higher rates once DoubleVerify, IAS and WhiteOps are MRC-accredited for capturing and measuring SIVT and begin to report on it.



Appendix B: Highlights from Agency Interviews

Agencies strongly encourage their clients not to pay for fraudulent traffic and support them in avoiding it

Brands and marketers do not believe that they should have to pay for any IVT, a stance that they make clear in the reconciliation process with their agencies. Agencies support that desire in a number of ways. GroupM says it has "strong contract language that gives us the option not to pay for impressions we believe are fraudulent" while Horizon Media is "bullish on being able to back out of a media commitment as it relates to fraudulent activity."

When IVT traffic is found, agencies may request a make-good or pay for legitimate impressions only, dependent on client requirements.

IPG added, "Despite our best efforts, NHT will occur, but it's important that we don't simply punish publishers. In good faith, we work collaboratively in developing fair and effective reconciliation guidelines. Our new KPIs are agreeing to too standards, sharing of insights with publishers, benchmarking, and clearly defining NHT/SIVT upfront. In the long run, we rebuild trust, reduce exposure and minimize the need for future make goods. Partnership over punishment."

Agencies have standing policies for handling IVT issues, but those policies, by necessity, are operationalized on the individual group client level

Each agency with whom we spoke to agreed that a standing policy for handling IVT is necessary, but that the details of that policy may vary from client to client, and directly reflect a state of the market currently. For example, Horizon Media noted that, "some premium publishers will only allow monitoring versus blocking but we try and push back where possible."

Some clients aren't willing to incur the additional costs of a verification partner, while others demand that their agencies use their verification partners. Some insist on using a media source the agency feels is lower quality. All of these scenarios lead to implementing IVT policy on a client, or even campaign, level. Said GroupM, "What are we prepared to do, and what are our clients prepared to do, in cases when publishers are unwilling to play ball for one reason or another (e.g. no JavaScript, blocking, viewability, etc.,)? Will our clients "vote" with their budgets?"

Finally, each agency stated that education of clients and media teams remain a key factor towards reducing the IVT number in the marketplace.

Reconciliation is a time-consuming and inefficient process

Agency teams spend significant amounts of time reconciling impressions, with major reconciliation meetings occurring every week for bigger clients. GroupM reported that, "the media operations coordinators sit in a big room and it's everybody's time to reconcile. Bring in your invoices, look at your IO's, match them up to data reports and reconcile. We do this because clients want us to clear the cash as fast as possible."

The 614 Group believes that stronger IVT detection and blocking technologies will free up agency staff to focus on more strategic activities.

Agencies judge a publisher's commitment to quality based on SIVT levels found in their traffic

The entire industry understands that despite heroic efforts, some amount of IVT will appear on every publisher site, given the financial motivation and the technical sophistication of the fraudsters. That said, every agency has a threshold of IVT in mind which tells them that a publisher isn't serious enough about eliminating fraud, and agencies will cease to work with a publisher who exceeds that level. Horizon Media noted that, "Holistically, the benchmarks are the same across all clients along the way. I would say either zero tolerance or perhaps 1%, we've had some hard negotiations with some very premium vendors that have stated they want at least some lee-way, which is often no more than 1%."

Sharing data with publishers is the best strategy to reduce IVT in the market at present

Agencies agreed that they must share their data with publishers so that they can do a better job in identifying and blocking IVT. GroupM stated that, "on the publisher's side, our main thrust is to share data. We provide publishers with log-ins so they can see what we're looking at." This sentiment is echoed by Horizon Media, which stated that, "the first thing [is to ensure that] all publishers have the same access we do to review their own reporting. They can see everything they're doing." Horizon Media further noted that, "to the best of our ability we are providing an aggregated view across different verification providers and ad servers, so that we can give people a rank order for the relative value of media. That trending information is most critical as it informs long-term planning/buying strategy."

When fraud is found, media agencies are eager to share verification data with publishers in the hopes that they'll take immediate action, but not all publishers respond as quickly as the agencies would like. According to Horizon Media, "We found many publishers, I believe, are ignoring their ability to optimize among themselves, which is why we are often calling them out."

That said, budget is an additional motivator. GroupM said that, "the number one way we encourage publishers to do a better job of fraud is to tell them not to pay for it."

Clients also need to be better educated on the difficulty and costs of detecting and blocking IVT. Horizon Media noted that, "it's hard to get everyone aligned around what is and isn't possible because it requires resource and energy and education and there is plenty to do aside from focus your energy on ad verification solutions. I think we are trending in a positive direction but there is still certainly a gap."

Much is still needed in the fight against IVT

Throughout our conversations, we identified areas in which improvement is needed. Agencies believe that publishers should become more transparent regarding their traffic sources. Horizon Media reported that, "historically, there has been a lack of transparency on the publisher side of what traffic sources. inventory and exchanges publishers choose to use and that they rarely reveal."

The industry urgently needs solutions that work with programmatic. GroupM stated that, "if we get to the point where buyers can both see whether or not suppliers are TAG Registered and if so, which certifications are held under that registration, than fraud detection can occur in the pre-bid."

IPG added, "There may always be a level of exposure since most bots only live for a few days. However, we become very susceptible when using inventory where blocking is simply not being utilized, exposing our media to the possibility of serving fraudulent impressions. To have a chance at staying ahead, the adoption of the very latest blocking techniques and demanding, consistent partner compliance is key. Without that consistent commitment, the chain simply breaks down."