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TAG FRAUD BENCHMARK STUDY

NOVEMBER 2019

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



Executive Summary

Trust is essential for the digital advertising ecosystem to function. Advertisers must be able to trust that their ads are seen by real humans in brand-safe environments, and publishers must trust that they will be fully compensated when ads appear on their sites. That type of confidence and trust in digital advertising requires players across the supply chain to work together to ensure traffic quality and brand safety.

Digital ad fraud has been a persistent brand safety challenge for the industry. According to eMarketer's Digital Ad Fraud 2019 report, the industry suffers losses of \$6.5 billion to \$19 billion to ad fraud annually.¹ Recognizing that individual companies or agencies cannot combat fraud alone, the problem is one that the entire supply chain has tackled with concerted effort. In that vein, the industry came together in 2014 to form the Trustworthy Accountability Group (TAG), a crossindustry self-regulatory program to fight ad fraud and other criminal issues in the digital supply chain. TAG's Certified Against Fraud Program (i.e, TAG Certification) focuses on combating invalid traffic (IVT) across the digital advertising industry and provides companies with a means to communicate publicly their commitment to fighting this type of criminal activity.

The digital ad industry's coordinated action through TAG and other initiatives has begun to bear fruit. For instance, <u>The Bot Baseline Report</u> released by ANA and White Ops in May 2019 found that, "fraud attempts amount to 20 to 35 percent of all ad impressions throughout the year, but the fraud that gets through and gets paid for now is now much smaller."² These findings point to the importance of TAG Certified partners: while fraudsters still attempt to defraud advertisers, TAG Certified Channels provide a path to avoid paying for fraud.

From January to August, 2019, The 614 Group conducted its third annual quantitative and qualitative research study to measure how considerable an impact TAG Certification has had in reducing fraud in actual campaigns, and to assess how agencies respond when discovering IVT in a campaign.



The research focused on discovering whether rates of sophisticated invalid traffic (SIVT) and general invalid traffic (GIVT) 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. We found that:

- TAG Certified Channels have an overall IVT rate of just 1.41%, the lowest overall rate to date in three years of measurement, despite a marked increase in the total impression pool for this year's study.
- This represents an 88% reduction of IVT in TAG Certified Channels as compared to the industry fraud average of 11.41%.
- The TAG Certified Against Fraud Program has grown by more than 26% in the past twelve months alone. At the time of the study, there were 137 companies carrying the TAG Certified Against Fraud Seal. We received over 200 billion impressions as a result of our request – a 168% increase over 2018.
- Because there are so many TAG Certified partners with whom to work, agencies can now meet their goals of finding safe, welllit and largely fraud-free environments. Marketers can create virtually fraud-free media plans by staying within TAG Certified Channels.

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.

¹ https://www.emarketer.com/content/digital-ad-fraud-2019

² https://www.whiteops.com/botbaseline2019



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. 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 (i.e., 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 digital ad industry's coordinated action through TAG and other initiatives has begun to bear fruit. In 2017, TAG approached The 614 Group for help in measuring the effectiveness of TAG Certification in reducing IVT in actual digital advertising campaigns and establishing a benchmark that could be used to assess continued efficacy over time, noting improvements or declines in the IVT rate. TAG and The 614 Group continue to partner in releasing an annual benchmark of the rate of IVT found in campaigns that flow through TAG Certified Channels as compared to IVT found in non-Certified channels.



Research Methodology

This is the third annual TAG Fraud Benchmark Study conducted by The 614 Group, and continues to follow the methodology established in 2017. 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 experts at agencies and others on background.

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 (IVT), 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 that 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: sophisticated invalid traffic (SIVT) and general invalid traffic (GIVT). These are described by the MRC in the following ways:

- 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."
- 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 prerendered traffic."

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



Data Collection and Processing

The 614 Group partnered with six agency holding companies and their MRC-accredited measurement vendors to collect and aggregate all impressions for campaigns that were executed during the period of January 2019 through August 2019. These campaigns included display media and video ads in desktop, mobile web and in-app environments.

We did not use sampling of any kind: 100% of all impressions given to The 614 Group were included in the measurement. Upon receipt, all data was aggregated within a secure database in order to create the proper reporting.

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 | 200 Billion | January - August 2019 | 100% of data provided by 6 leading media agencies: Dentsu Aegis Network Omnicom Media Group (Annalect) WPP (GroupM) Horizon Media Interpublic Group (Kinesso) Publicis Groupe |

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

In order to determine an industry fraud average, we blended fraud rates from several MRC-accredited measurement vendors. These rates were obtained directly from Moat's Fraud Report for H1 2019, the ANA/ White Op's 2019 Bot Baseline Report, and IAS, Media Quality Report for H1 2019.

Qualitative Interviews with Industry Leaders

The qualitative portion of our research involved extensive interviews with senior level executives at six of the largest agency holding companies and others on background to gain insights on the state of IVT identification, containment, and elimination. Our goal was to get a sense of the requirements, accountability, and best practices in current use. The questions focused on:

- What is the operational process followed when your team discovered IVT in a campaign?
- What has changed in your processes in 2019?
- Has the assignment of responsibility or the perception of brand safety changed in the past year?
- How does your team use the TAG Fraud Benchmark internally and externally?

We interviewed the following senior-level executives, as well as others on background:

| Name | Title | Media Agency | |
|-----------------|--|--------------------------------|--|
| Adam Gitlin | President | Omnicom Media Group (Annalect) | |
| Anny Buakaew | U.S. Director of Operations for Annalect | Omnicom Media Group (Annalect) | |
| Manny Mark | Sr. Account Manager, Hearts & Science | Omnicom Media Group (Annalect) | |
| Joe Barone | Managing Partner, Brand Safety, Americas | WPP (GroupM) | |
| John Montgomery | Global Executive VP of Brand Safety | WPP (GroupM) | |
| Chandon Jones | SVP, US Ad Operations | Interpublic Group (Kinesso) | |
| David Murnick | EVP Digital Media Operations | Dentsu Aegis Network | |
| Yale Cohen | EVP, Digital Investment & Standards | Publicis Groupe | |
| Eric Warburton | VP, Ad Operations | Horizon Media | |

Results

With just 1.41% fraud, TAG Certified Channels have 88% less fraud than Non-Certified Channels.

The amount of fraud (both SIVT and GIVT) found in TAG Certified Channels across multiple inventory types is 1.41%. The overall blended rate we used for comparison is 11.41%, which represents that campaigns run through TAG Certified Channels have 88% cleaner traffic than those run through Non-Channels.



Comprehensive Data on Fraud Rates Within TAG Certified Channels By Inventory Type

| Media Type | Impressions | IVT Impressions | SIVT % | GIVT % | IVT % |
|--------------------|-----------------|-----------------|--------|--------|-------|
| Overall | 201,002,927,877 | 2,731,933,922 | 0.92% | 0.49% | 1.41% |
| Desktop Display | 59,437,321,002 | 1,439,463,441 | 1.49% | 0.97% | 2.46% |
| Desktop Video | 9,090,268,652 | 235,617,157 | 2.38% | 0.71% | 3.09% |
| Mobile Web Display | 8,965,917,286 | 130,294,233 | 1.03% | 0.43% | 1.45% |
| Mobile Web Video | 1,225,763,408 | 16,656,930 | 0.84% | 0.52% | 1.36% |
| Mobile App Display | 73,070,373,609 | 689,978,276 | 0.67% | 0.28% | 0.94% |
| Mobile App Video | 49,213,283,920 | 249,857,067 | 0.30% | 0.21% | 0.51% |

Year-Over-Year Comparison

TAG Certified Channels has consistently delivered significant improvements in IVT rates (over 80% in yearly reductions) as compared to Non-Certified Channels. Over the past two years, the volume of impressions that flow through TAG Certified Channels has grown exponentially, driven by the explosive growth in the number of partners who have earned the TAG Certified Against Fraud Seal.

The TAG Certified Against Fraud Program has grown by more than 26% in the past twelve months alone. At the time of this study, there were 137 companies carrying the TAG Certified Against Fraud Seal. Because there were so many TAG Certified partners with whom marketers and their agencies could choose to work, we received over 200 billion impressions that had flowed through TAG Certified Channels in response to our data request this year – a 168% increase over 2018.

That increase in TAG Certified partners has had a direct impact on the rate of fraud that buyers feel is unavoidable in a campaign. Agencies and brand marketers can now meet their goals of finding safe, well-lit and largely fraud-free environments. Brand marketers can create virtually fraud-free media plans by staying within TAG Certified Channels.

| | 2017 | 2018 | 2019 |
|--|----------------------------------|--|--|
| Types of Fraud Measured | GIVT | SIVT/GIVT | SIVT/GIVT |
| Number of Impressions Studied | 6.5 Billion | 75 Billion | 200 Billion |
| Inventory Types Examined | Desktop Display Desktop Video | Desktop Display Desktop Video Mobile Web Display Mobile Web Video In-App Display In-App Video | Desktop Display Desktop Video Mobile Web Display Mobile Web Video In-App Display In-App Video |
| Number of Participating Agencies | 3 | 5 | 6 |
| Overall Fraud Rate | 1.48% | 1.68% | 1.41% |
| Measurable Improvement Over Industry Averages | 83% | 84% | 88% |

Key Insights Derived from Expert Interviews

The TAG Fraud Benchmark is Used to Demonstrate that an Agency Takes Fraud Seriously – And to Encourage Partners to Do the Same

The TAG Fraud Benchmark can be a useful tool when agency account teams and brand marketers seek to assure that they have established strong IVT detection and prevention practices. "We are using this benchmark to prove what we're doing is working," said one of the leaders. "It needs to be [more widely] disseminated." Another agency leader agreed, stating that the benchmark is "good to have in your back pocket; good to be able to tell clients we're in the industry range."

Agencies find the TAG Fraud Benchmark is helpful in selecting partners as well. For instance, one agency executive noted that it is used "whenever it can be a differentiator between two potential partners." Another agency envisions a future where the benchmark is the standard for all agency teams to meet, saying, "I can see that since the TAG benchmark is low, [this year it's 1.41%] this could be used as a mandate and then we can tell the agency teams that's the level of fraud they need to meet."

Some agencies use the TAG Fraud Benchmark globally as a way of establishing goals in each region. "We set a benchmark with a number [...] that we've got for a country or we compare it to the [TAG Fraud] Benchmark that we've got to measure our progress against whatever IVT. The number may vary from supplier to supplier, but we try and normalize the best way we possibly can and then we use that as a benchmark against which to optimize".

Finally, the benchmark also has PR benefits. "We used [the TAG Fraud Benchmark] from a PR perspective absolutely in terms of best practice to work with TAG Certified platforms when possible."

Brand Safety Officers Focused on Internal Organization and Supply Chain Optimization Spell Cleaner, More Trusted Transactions

Advertisers and agencies can drive the optimization of their supply chain further by working exclusively – or to the greatest degree possible – with TAG Certified partners, creating TAG Certified channels that safeguard campaigns from fraud. Checking a company's TAG status is an effective way to know whether you working with responsible partners – a key goal for brands, agencies, publishers and technology companies alike. As one agency leader explained, "If we found someone who wasn't up to snuff from a fraud perspective, the first thing we do is to confirm they're TAG Certified, and highly suggest to them that they need to do that."

Moreover, our respondents indicated that their businesses have applied better organizational processes to ensure that all aspects of their fraud policies are properly implemented. This includes global terms and conditions stating clearly that clients will not pay for identified IVT, and increased vetting of supply chains. As one agency leader explained, "This year the conversations have become way more nuanced about the overall value of the digital accountability and digital transparency – the digital supply chain." Another noted that any DSP his agency works with must complete a 1,200-point question RFI as well as a two-day process of techvetting and interviews.

Finally, media agencies are moving towards centralized fraud detection and migration teams, often led by a Brand Safety Officer. These teams serve as experts to individual media teams – some are even embedded in the teams of particularly large clients. Additionally, many have established global tactics and partnerships with vendors to support all of the agencies within the holding company.

Interviewees report that a centralized Brand Safety Officer enable agencies to enforce global practices, and to demand that partners meet established benchmarks for IVT. These centralized teams provide assurance to clients that the agency has experts assigned to brand safety and allow account representatives to focus their full attention on campaign optimization.

Agencies Are Partnering Across the Supply Chain to Ensure Clients' Ads Appear in Safe Environments.

their clients look to them to protect both their budgets and brands, as well as to recommend best practices and technology, and to ensure that they are adequately compensated when "make goods" are appropriate. As an agency leader pointed out, "Advertisers need context. [It is] difficult for them to navigate the capabilities and methodologies by partner. Also, methodologies are interpreted and applied differently among partners."

Agencies acknowledge that their clients expect them to take responsibility, but also recognize that they need good partners across the entire industry to help them meet that commitment. As one leader explained, "We're responsible for [brand safety, and fighting IVT], along with our partners. Along with the IASs and DVs and Moats. I think the agency is hired to be the [client's] expert".

But that's not to say that brands are off the hook as consumers hold them responsible for ad fraud. For instance, a recent survey of US consumers by TAG and the Brand Safety Institute (BSI) found that more than 80% of consumers said they would reduce or stop buying a product they regularly purchase if it advertised in a range of hypothetical situations involving extreme or dangerous content. When asked who should be responsible for ensuring ads do not run with dangerous, offensive, or inappropriate content, more than 70% of respondents assigned responsibility to the brand advertiser.³

Conclusion

2019 was a transformational year in the fight against fraud. Of the 200 billion ad impressions that flowed through TAG Certified Channels and were sent to The 614 Group for analysis, just 1.41% were identified as IVT. This is remarkable progress by any yardstick.

While the fight against fraud – and the evolution of this criminal activity – continue, this year's TAG Fraud Benchmark clearly shows that there are clean,

Across the board, agencies acknowledge that

³ https://www.brandsafetyinstitute.com/blog/survey-brand-safetycrisis-consumer-backlash

brand-safe places to do business despite the fraud occurring elsewhere in the digital ad supply chain. Marketers who opt to work with the sizeable universe of TAG Certified partners – buying through TAG Certified Channels – can rest assured that their campaigns will have the cleanest possible inventory in the industry.

As the fight against fraud continues to evolve, advertising in emerging channels such as over-the-top (OTT), addressable, and connected TV (CTV) are attracting marketers' dollars. These channels must receive the same level of focus that the industry has placed on safeguarding display, mobile, and video from fraud. Nefarious players go where there is opportunity, and that means the industry urgently needs to deliver and test tools to detect, block, and measure invalid traffic in those channels.

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 | Ø | Ø | Ø | Ø |
| Attend a Certified Against Fraud Traning annually | Administrative | Ø | Ø | Ø | Ø |
| Comply with GIVT Detection & Filtration Requirements of MRC IVT Guidelines | Anti-Fraud | Ø | 0 | Ø | 0 |
| Employ Domain Threat Filtering | Anti-Fraud | | | Ø | Ø |
| Employ Data Center IP Threat Filtering | Anti-Fraud | | Ø | Ø | Ø |
| Employ App Threat Filtering | Anti-Fraud | | | Ø | Ø |
| Implement Payment ID System | Transparency | | | Ø | |
| Implement & Honor Ads.txt Files | Transparency | | 0 | Ø | |

More information about the specific requirements and application process for the TAG Certified Against Fraud Seal can be found at www.tagtoday.net.