

Ad Quality Report for Publishers

The advertising industry's only report focused on the range of ad-related issues that can adversely affect publisher brands, audiences and revenues.

AD LIGHTNING 2017 | Q1

Ad Quality Report for Publishers | Q1 - 2017

Executive Summary:

Programmatic display advertising has caused a surge in ad quality issues that significantly delay the presentation of ad-supported web pages. Website latency causes drop off in audience reach and engagement, which diminishes publisher revenues and ROI. Recently, Google reported that the average load time for mobile sites has now slowed to 19 seconds (over 3G connections). This report provides a deeper look at the nature and scope of ad quality issues that contribute to that latency:

- The cumulative effect of "bad ads" contributes to a 100% increase in average page load time on desktop and mobile sites.
- 28% of the ads studied had one or more severe quality issues.
- The gap is wide between industry quality guidelines and actual industry practices.
- 5 contributing ad quality issues occurring at alarming rates:
 - 1 Oversized Ads: Ads that exceed industry file size guidelines
 - (2) Over-Requested Ads: Ad requests made to networks too many times
 - 3 Processor-Intensive Ads: Ads that use too much CPU time and power
 - (4) **SSL Non-Compliance:** Ads that are not using https protocols
 - (5) Intrusive Ad Formats: Ads delivered in non-compliant or unsupported formats

Background

Programmatic Advertising Spurs Costly Ad Quality Issues for Publishers

Programmatic advertising offers a variety benefits for both buyers and sellers, however, as programmatic has become widely adopted in display advertising, it has also spurred a significant decline in advertising quality. That shift is having a negative impact on publisher brands, audience experience and revenue. For publishers, that's a real ROI problem.



AD_CLIGHTNING 1 of 6

Ad Quality Issues Reduce Publisher ROI

The presentation of display advertising plays a critical role in the way users perceive and experience ad-supported websites (mobile and desktop). When publishers sell inventory programmatically, they cede control of the ad creatives that are served (and the way site visitors experience the ads) to an array of programmatic partners, many of whom have no business relationship with the publisher. This trade-off often results in ad quality issues that slow page loads and create content disruptions for internet audiences. The cumulative effect, as measured in the study, is substantial. Website visitors often respond to negative ad-based user experiences by visiting the offending websites less often (or not at all), viewing fewer pages on the site or initiating the use of ad blocking technologies. These outcomes are supported by a recent Google study that found that mobile sites that loaded in 5 seconds earned up to 2x more ad revenue than sites that load at the industry average speed of 19 seconds.²

In order to maximize ROI, web publishers need to effectively balance ad revenue and audience experience. That requires a clear understanding of the underlying ad quality issues and their ramifications on both.

A Focus on Non-Compliant Ad Creative

The ad quality issues covered in this report are the lesser known creative compliance problems behind these negative user experiences. Historically, they've been difficult to track. Presently, they're occurring at an alarming rate. Of course, there are additional ad quality issues that, while critically important, are intentionally not covered in the report. They include advertising malware (or "malvertising"), inappropriate content (belly fat ads, for example) and mobile redirects. These excluded issues affect a much smaller percentage of ads and have a different experiential affect on users.

The Gap Between Guidelines and Reality

Ad quality issues have become so common that the Interactive Advertising Bureau (IAB) has established industry guidelines, that, when followed, would greatly reduce the volume of ad quality issues (and their end affect). However, as this report illustrates, there is currently a very large gap between industry guidelines and industry reality.

A one second delay reduced page views by **11%** and customer satisfaction by **17%**

The Aberdeen Group, 20161

OVERALL FINDINGS

28% of ads have one or more of these quality issues

AD₄LIGHTNING

¹ The Very Real Costs of Bad Website Performance, Jim Rapoza, Aberdeen Group, 8/18/2016

² The need for mobile speed: How mobile latency impacts publisher revenue, Alex Shellhammer, Doubleclick by Google, 9/2016

This edition of the Ad Quality Report provides an overview of the five key advertising issues and their current magnitude within the industry.

Consumers experience these issues in ways that reflect on the publisher much more than the advertiser. The data from the study shows that, on average, advertising doubles On average, webpages that include ads take nearly twice as long to load as the same pages without ads

the amount of time it takes to load a webpage. Offending ad quality issues often delay page loads significantly longer. They keep the desired web page from loading until the ad issues have been resolved, or they reconfigure the loaded page once the lagging ads have loaded. Both outcomes disrupt the user experience and often shape perceptions about the publisher brand.

A Closer Look at the Issues

1 Over-sized Ads

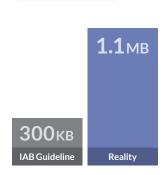
The size of standard banner ad files should be 200KB¹ or less, according to the IAB. And new guidelines dictate an absolute maximum file size of 300KB for display ads.

However, the data from the recent Ad Quality study indicates that 41% of the ads tracked exceeded the industry-approved maximum. Nearly 10% of the ads were larger than 5MB. **Some ads are as large as 30 MBs**.

(2) Over-Requested Ads and Excessive Tracking Scripts

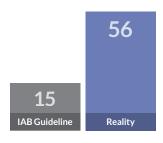
Each programmatic ad that appears on a website undergoes a complex computational process that determines which ad to deliver to that consumer at that moment. Once an ad has "won the bid" or been selected, it fires off a series of events (tracking scripts) that are used for measurement and reporting. This decisioning process introduces latency to page load time. The higher the number of network requests and tracking scripts the longer it takes for the ad unit (and surrounding content) to load. The communication between the ad and the page can also increase the risk of publisher or user data vulnerabilities. The IAB suggests a maximum of 15 network calls for any given ad unit.²

Across the ads analyzed for this report, the average number of network requests and tracking scripts per ad was 56: **3.7x** greater than the maximum suggested by the IAB.



On average, ads are more than **3.7x** the industry-approved maximum file size



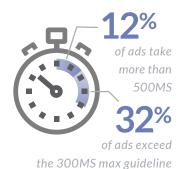


AD₂LIGHTNING 3 of 6

¹ IAB banner size guideline is for initial ad load

² The IAB ad request guideline only applies to requests required to display the ad upon initial load. No request limit has been placed on subsequent loads.

PROCESSOR-INTENSIVE ADS



NON-COMPLIANT ADS



INTRUSIVE AD FORMATS



(3) Processor-Intensive Ads

In some cases, page delays occur when an ad demands an unusually high amount of processing power on the user's computer in order to properly render. Ads that take more than 300 milliseconds are generally considered to be outside of acceptable standards.

The Ad Quality study found that about one third (32%) of the ads were overly processor-intensive. The study also found it common for processor-intensive ads, often video ads, to consume more than 3 seconds of CPU time to render a single ad within the user's browser.

4 SSL Non-Compliance

A growing number of publishers are adopting HTTP/2 on their public facing websites to protect their users, increase page speed and prevent data leakage. That means that all components of display ads, including the ad creative and tracking pixels, must be SSL compliant in order to appear on those sites. The IAB has strongly recommended that the digital ad industry adopt HTTP/2 encryption as a best practice across the board.

A look at SSL compliance across all network calls for each ad in the study reveals how far the industry needs to go. On average, for each ad, more than half, 51% of network calls were not SSL compliant.

5 Intrusive Ad Formats

Programmatic ad delivery significantly increases the occurrence of ads in unsupported (or undesired) formats that negatively impact the consumer experience. For example, ads delivered in Flash are not supported by Google Chrome. If a Flash ad is called, page delays occur for Chrome users as the ad attempts to render. In addition, most reputable publishers have policies against video banner ads that auto-play without user interaction. This is often a frustrating user experience and an unaccepted format by publishers. These impressions are often sold to the advertiser as pre-roll impressions but are served within banners instead.

The study revealed that 4% of video ads were in Flash format and 19% of in-banner video ads were auto-play.

AD,LIGHTNING 4 of 6

The Take-Away

For Publishers:

In order to maximize the return on content, infrastructure and operational investments, publishers should consider the costs and benefits of ad-related user experiences. This study reveals a significant gap between the recommended industry practices and actual industry practices. And that gap can reflect a costly difference. Here are a few protective steps publishers can take today to reduce the negative impact of ad quality issues on their bottom line:

- 1 Understand the details of these ad quality issues and the impact they can have on your website performance and audience experience.
- (2) Instill the importance of adhering to the IAB guidelines across ad operations teams.
- ③ Invest in monitoring technology to measure and manage ad quality on your live sites.

 Note: offline or "prescanning" ads won't show the cumulative effect of bad ads in production.
- 4 Enlist the help of your SSP Partners to reduce these issues through management of their inventory sources.

For Advertisers and Ad Platforms:

Ad quality issues drive increased adoption of ad blocking software by consumers. The use of ad blockers reduces the potential reach of ad campaigns among targeted audience segments. Brands, agencies and their DSP partners can improve the success of ad campaigns by taking steps to ensure compliance with IAB ad quality guidelines.

AD_/LIGHTNING 5 of 6

About This Report

The Ad Quality Report is the advertising industry's only report focused on the gamut of ad-related issues that adversely affect publisher brands, audiences and revenues. The ad quality data used for this report was automatically collected through the deployment of proprietary Ad Lightning ad tracking software. Ad Lightning technology is designed to track quality attributes of display advertising occurrences on public websites without requiring publishers to install or instantiate the software service. For this first edition of the study, Ad Lightning analyzed and referenced uncompressed data from a random sample of 605,613 ad creatives and 11,594,647 ad occurrences across 60 high-traffic public websites in the news, commerce and entertainment categories. The study was conducted over the 78-day period between October 1, 2016 and January 18, 2017. IAB guidelines cited in the report are publicly available at <u>IAB.net</u>.

About Ad Lightning

Ad Lightning helps advertising-dependent publishers and ad platforms improve their ROI by taking control of programmatic advertising creative. Through a suite of proprietary tools, the Ad Lightning platform provides full transparency and reporting of the advertising issues that negatively affect audience experiences, retention and ad revenue.

6 of 6