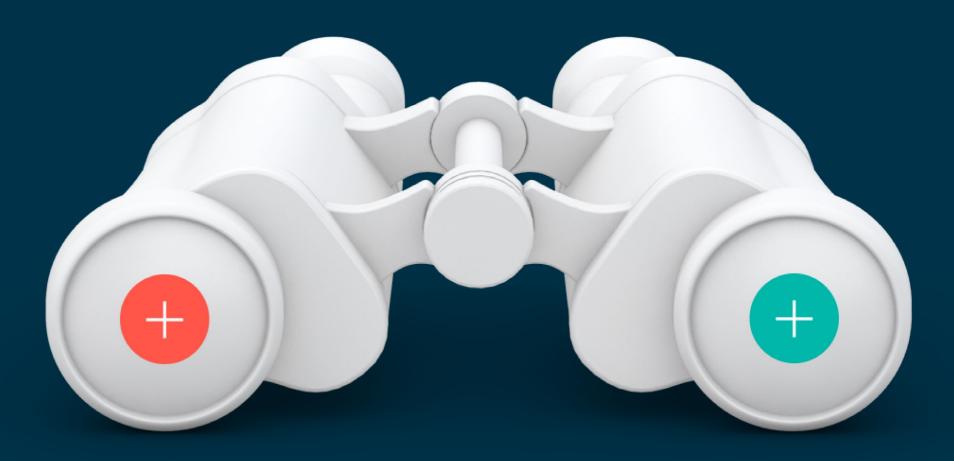


a short guide



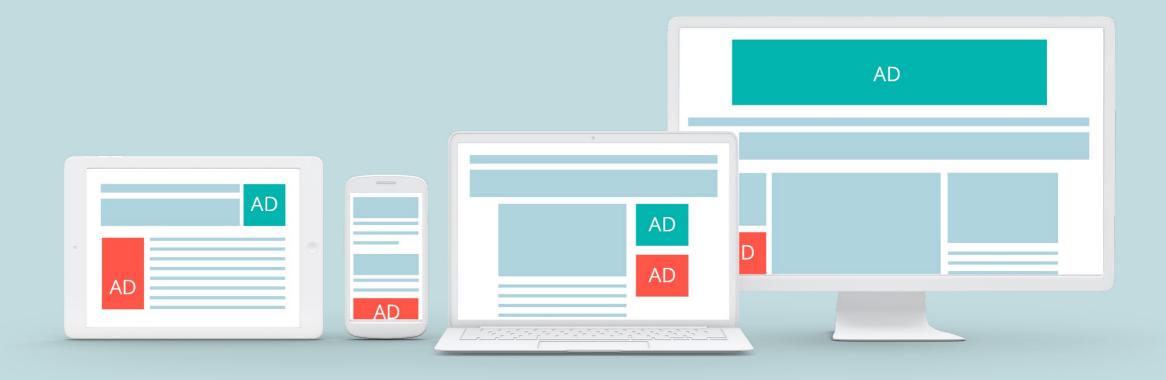


Viewability is the ability for a digital ad to be seen by an actual consumer.

To be considered viewable, an ad must meet the minimum guidelines set by the industry, and illegal bot traffic and other forms of ad fraud should never be included in the number of viewable impressions. Viewability does not describe how effective an ad was, whether it was seen by target audiences, or even if it was seen at all.

What are the industry guidelines for viewability?

The MRC guidelines define a general standard for measuring viewable impressions on desktop and mobile, web and in-app, for display and video formats.



| Video | Display | Large format |
|--|--|--|
| 50% of the ad placement in view, for at least 2 continuous seconds | At least 50% of the ad in view, for at least 1 continuous second | At least 30% of the creative in view, for at least 1 continuous second |

A lot can happen between fetching an ad and the ad displaying, however. Even after the ad is loaded, environment or consumer elements can interfere with the visibility of the ad.

Why would an ad not be viewable?

Environment

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1. Ad loads in an area outside of the consumer's browser



2. Multiple ads are stacked on top of each other (called ad stacking)



3. Multiple ads are stuffed within the same pixel (called pixel stuffing)



4. Pages are frequently refreshed

Why would an ad not be viewable?

Consumer interaction



Takes an action before the ad can load



Takes an action before the minimum time requirement is met



Minimizes browser



Opens multiple tabs, and the ad is displayed in a tab that's not currently open



Isn't a real person

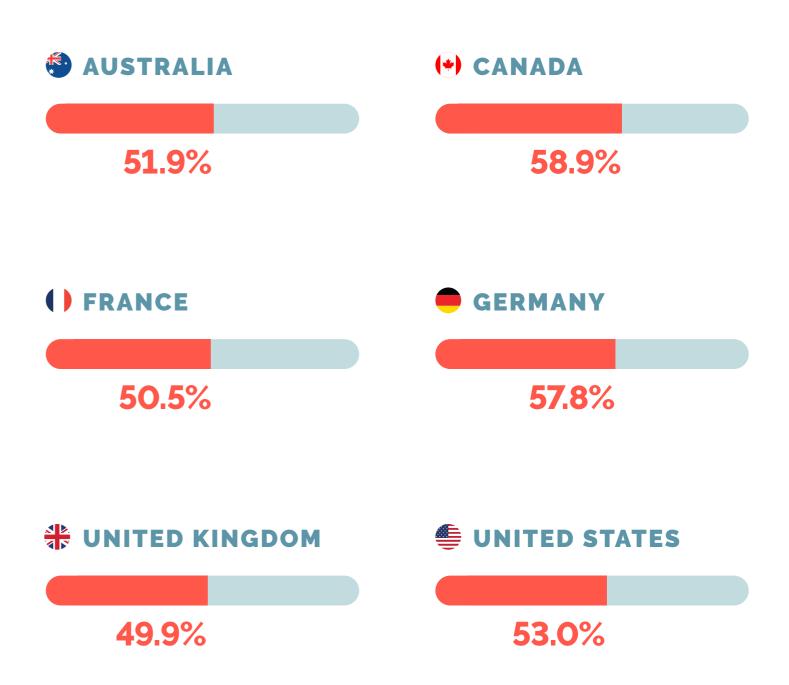


How are we doing as an industry?

According to our H2 2016 Media Quality Report (MQR), 53% of US display ads were in view per the MRC standard.

To check out the entire report, download it here.

How do we match up on a global scale?



Note: this is based on display on desktop and mobile web.

Digital offers a wealth of consumer insights that are extremely valuable to the advertising ecosystem. However, there are several challenges in reaching better measurement for all parties involved.

Core challenges in viewability

| Not all impressions are measurable | Different brands and agencies have different viewability requirements, putting more burden on publishers and ad tech companies |
|---|--|
| | |
| Companies measure viewability differently, leading to discrepancies in the reports for brands and agencies | Despite being different technologies and platforms, the current parameters for mobile web and in-app viewability and display are similar |
| | |
| Vendors measuring from the publisher side may calculate viewability differently than those measuring from the advertiser side | Not all vendors have the same measurement capabilities |

Some agencies have come up with their own standards for what qualifies as a viewable impression. There is a persistent concern that there is no one standard for all agencies.

"We must have uniform standards. Agencies should not have their own, and vendors should not support them."

- SELLER AT A PUBLISHER

Desktop and mobile web

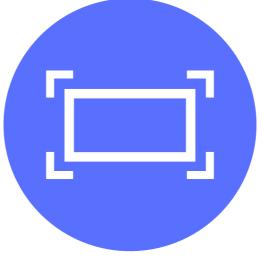
Display and video impressions within web browsers act similarly enough across both desktop and mobile devices that they can be measured using the same methods.

Display

Industry guidelines: At least 50% of the pixels are viewable for one continuous second.



Standard banner ads At least **50%** in view for at least **1** second



Large format ads At least 30% in view for at least 1 second



Video ads At least 50% in view for at least 2 seconds

How can you measure display viewability on desktop and mobile web?



Geometric methodologies

- Measure the position and size of the ad relative to the position and size of the viewport
- Calculate the overlap to assess percentage of an ad in view

Browser optimization and simulated event methodologies

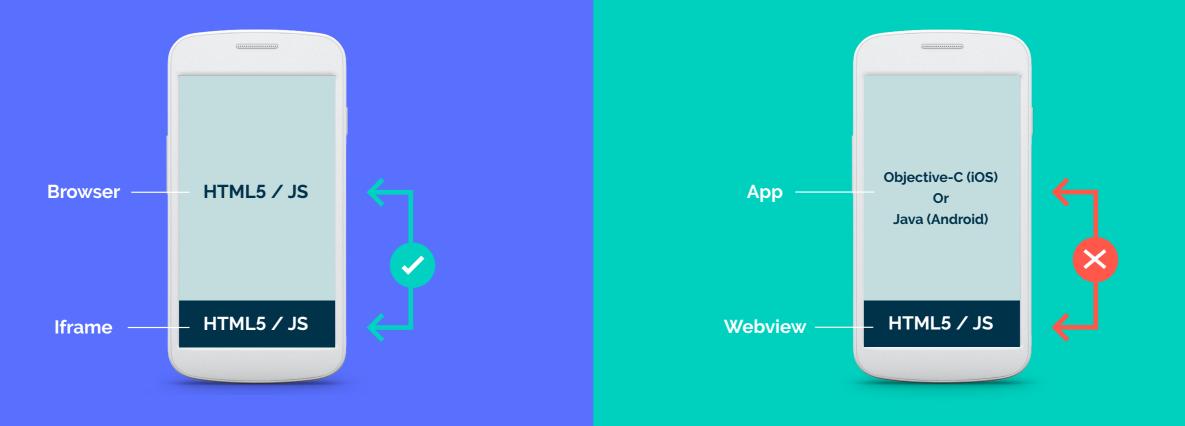
 Analyze ad processing on-screen versus off-screen

The methods change depending on the browser. Currently, there are technical differences between Internet Explorer, Chrome, and Firefox that determine which method can be used. However, most of the major browsers are working towards a more consistent approach.

Video in browsers uses the same measurement methodologies as display.

MOBILE APP ENVIRONMENTS

MOBILE WEB ENVIRONMENTS

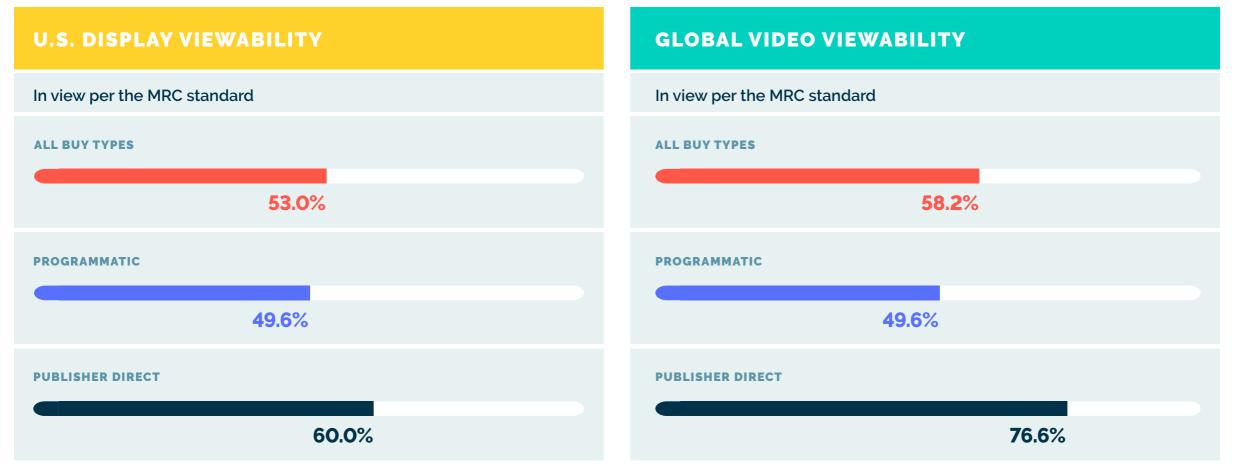


In mobile web environments, the container in which an ad is rendered (the iframe) speaks the same languages as the web browser, enabling JavaScript tags to communicate outside the container and access the information needed to evaluate whether the ad is in view.

In-app, however, the container (webview) speaks different languages than the mobile app. As a result, JavaScript tags are limited to accessing only the information available in the webview, which creates limitations for measuring viewability. For instance, it's possible for the ad to be in view within the container but for the container itself to be out of view. Current accredited mobile in-app viewability measurement solutions leverage software-development kits (SDKs), which are libraries of code that enable an application to communicate with a mobile device and with services outside of the device. There is now an open source SDK in the market, managed by the IAB Tech Lab Coalition for Open Measurement, which will enable widespread adoption of the open source SDK as a single, standard solution.

For more on this open source initiative, check out our white paper, <u>Transparent, efficient, and universal: making the case for open</u> <u>sourcing software</u>.

Programmatic vs. direct



IAS H2 2016 MQR

The viewability of inventory sourced directly from publishers has historically been better than impressions sourced programmatically, and understandably so. The efficiency of programmatic buying often comes at the price of transparency, which makes it harder for buyers to know exactly what media they're getting, and the quality of that media.

However, predictive targeting within all major demand-side platforms (DSPs) has given advertisers the ability to regain quality control. For both display and video ads, buyers are able to apply predictive data right from their DSP platform to target impressions that are more likely to be viewable. Robust samples of historical information of web pages are dynamically fed into the predictions, in order to ensure accuracy.

Conclusion

Viewability – the ability for a digital ad to be seen by an actual consumer – is a key component of digital media quality. The industry guidelines provide a baseline to help everyone in the digital advertising ecosystem make sure ads are served and rendered in a way that makes sure it has a chance to be seen, by a real person.

It can also be used to better inform media plans, improve publishers' sites, and potentially provide a more effective way to transact.

However, there are several core challenges in addressing viewability, primarily around differing opinions, technologies,

and capabilities. To add more complexity to the situation, some of these challenges change depending on the channel, environment, or format of digital advertising. Not to mention that the digital landscape is constantly changing with new innovations.

All of these factors create operational roadblocks for brands, agencies, publishers, and ad tech companies alike. And ultimately impact their ability to focus on what really matters: reaching and influencing consumers.

We as an industry can – and should – solve the concerns around viewability. Once we do, we can focus more on consumer attention and what's going to influence their behavior.

About IAS

Integral Ad Science (IAS) is a global technology and data company that builds verification, optimization, and analytics solutions to empower the advertising industry to effectively influence consumers everywhere, on every device. We solve the most pressing problems for brands, agencies, publishers, and technology companies by ensuring that every impression has the opportunity to be effective, optimizing towards opportunities to consistently improve results, and analyzing digital's impact on consumer actions. Built on data science and engineering, IAS is headquartered in New York with global operations in 13 countries. Our growth and innovation have been recognized in Inc. 500, Crain's Fast 50, Forbes America's Most Promising Companies, and Business Insider's Hottest Pre-IPO Ad Tech Startups.



To learn more about viewability, how it's measured, and how to improve your digital performance, download our full guide, **Viewability: the essentials**.

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Metrics that move digital forward