

SOVRN



Whitepaper:

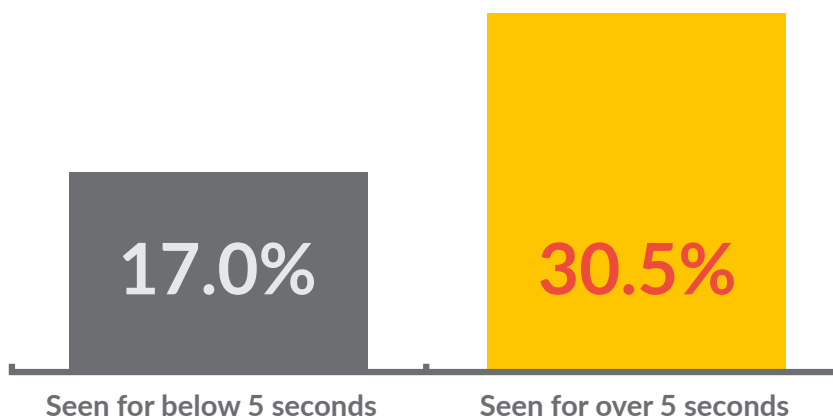
Harnessing the true value of user engagement time online.

Introduction

As humans the most important thing we have in life is time. Time is invaluable, irreplaceable, and we're increasingly conscious of how we spend it, and who we give it to.

The whole point of advertising is to give brands time with consumers. Time for brands to tell a story and for consumers to engage with this message, which might ultimately result in some kind of interaction, engagement or impact on memory. When this is true, we see the positive result of engagement as demonstrated by the Financial Times, whose study revealed that by exposing consumers to ads for more than five seconds, it achieved significant improvements in ad recall, as well as brand familiarity, association, and consideration. [1]

% of people who recalled seeing a brand before and after 5 seconds



It is incredibly valuable when a consumer chooses to spend their time on a website and to engage with its content. When measurable, these engagements offer an exceptionally attractive platform for advertisers. The online digital advertising industry needs to move beyond viewability to find a way to harness the worth of time by valuing impressions based on the amount of time a user invests with them.

Current methods for valuing online ad impressions are still inefficient. Should we be looking to enhance our offering by aligning online advertising delivery with other ad formats such as TV and radio by adding a Cost Per Second (CPS) or Cost Per Hour (CPH) opportunity to advertisers which harnesses the value of engagement and quality content?

Times are already demonstrating success at selling time-in-view with their direct business, proving the market is hungry for this development, and advertisers are eagerly anticipating the point where the OpenRTB protocol evolves to enable CPS or CPH in a programmatic environment.

*“At Infectious Media, our view is that dwell time or exposure time is a bare minimum, rather than a measure of performance. **If you’re not seeing ads that are in view for a minimum time, it seems fairly obvious that they won’t be effective, but having the ad in view doesn’t guarantee that it will be effective.** When we work with clients, we tend to recommend that they incorporate some form of engagement with their viewability/dwell time/exposure time measurement, making sure they’re meeting the minimum, but also measuring a response.”*



Rachael Morris,
Optimisation and Insight Director
at Infectious Media

In this whitepaper, Sovrn has used its proprietary tools and technologies to better understand how audiences spend their time online, and how they engage with web content, helping the industry to move towards a point where impressions can be valued by engagement time, enabling buyers to see the true value of users when viewable engagement time is tracked.

Using a large volume of first-party data from individual user sessions, corroborated by third-party research, we tested multiple hypotheses including:

- Dwell time is an ineffective measure of ad performance
- Engagement time is a better measure of success
- Ads placed below the fold (BTF) are more engaging than those above the fold (ATF)
- Publishers can adopt load-on-view without losing revenue
- Fewer ads per page does not mean less revenue

For this whitepaper Sovrn measured engagement time using ten different engagement events, grouped into four broad categories; clicks, scrolls, tab changes and keyboard movements.

By better understanding how users spend their valuable time online, we aim to harness the value of audience engagement and move the industry forward in preparation for a point where it is possible to trade online digital advertising programmatically by time.



A brief history of viewability

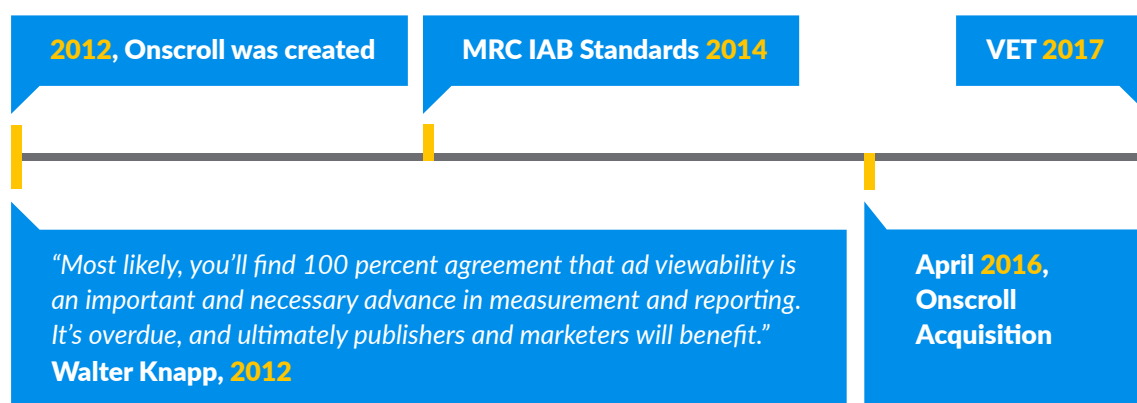
Before delving into Sovrn's current stance on audience engagement time, it's worth understanding a little about the evolution of viewability, and the part we have played.

Prior to 2012, when the industry started to pay attention to viewability, publishers and ad networks were free to load up their sites with ads anywhere on the page without a thought for whether they were going to be seen or not. It's not that publishers were being malicious, more that the industry was growing fast and there was an appetite to make money from the rise of digital advertising. As a result, some analysts claim, more than 50% of ads delivered online were not seen.

Sovrn took a firm view on viewability and quality inventory early on and our now CEO, Walter Knapp, was quoted back in 2012 saying: "Most likely, you'll find 100 percent agreement that ad viewability is an important and necessary advance in measurement and reporting. It's overdue, and ultimately publishers and marketers will benefit."^[2]

Around the same time a solution known as OnScroll was created to proactively solve the issue of viewability by only loading an ad when it was in-view. This was eventually acquired by Sovrn in April 2016.

Industry interest in ad viewability first started to peak in April 2014 and shortly after industry associations Media Ratings Council (MRC) and Internet Advertising Bureau (IAB) decided to set an industry standard for ads to be 50% in-view for more than one second before they can be deemed viewable.^[3]



Today, OnScroll technology has been built into Sovrn's product set and has evolved to include Viewable Engagement Time (VET). It is this proprietary technology that has allowed Sovrn to gain deep insight into how audiences spend their time online, and to test various hypotheses regarding audience engagement.



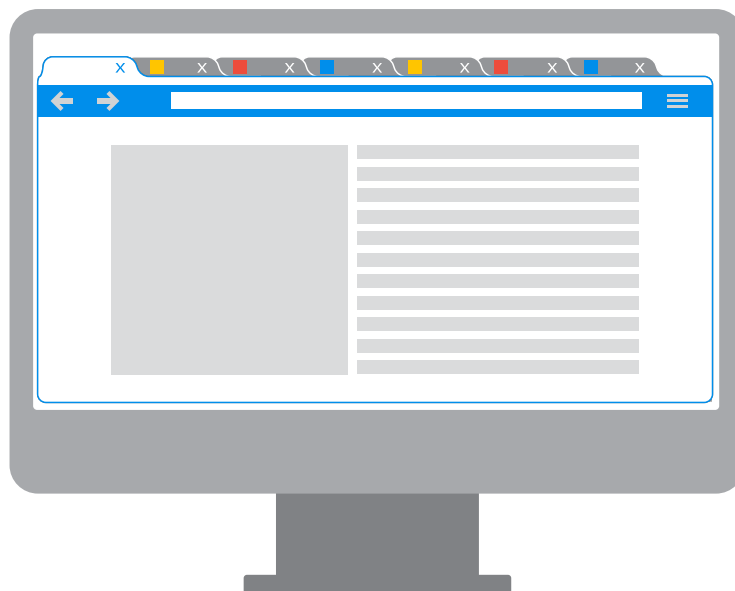
Dwell time is not the way forward

Dwell time, also known as viewable time, is the time-related metric most commonly used to judge the value of a web page and its impressions, and is employed across the industry by the world's leading measurement and analytics tools. But looking at this metric alone can be misleading and often means buyers are not getting what they pay for.

Dwell time

1. Dwell time is defined as *“the total time spent on a page from when it is opened to when it is closed”*.

But just because the user has opened a page, that doesn't mean they are engaged with it. What if the user has left the browser to go to another application such as Word or Excel or has received a Skype call? Or they opened another tab within the browser, leaving the page in question open in the background? When ten browser tabs are open, only one can truly be active. This behaviour is particularly prevalent on desktop, where users tend to have multiple applications and tabs running at the same time.



The net result is an ad placed on an article that has recorded a dwell time of 10-15 minutes where it is apparently open and in-view, when in fact it has just run in the background without the user investing any time with it at all.

Engagement time holds more value

Every time users navigate a webpage they emit signals in the browser, so rather than just measuring how long a web page is open, these signals can be used to measure when users are active and to gauge engagement levels.

Engagement Time

1. Engagement Time defined as:
“The total time a page is open, and a user is deemed to be active”



Clicks



Scrolls

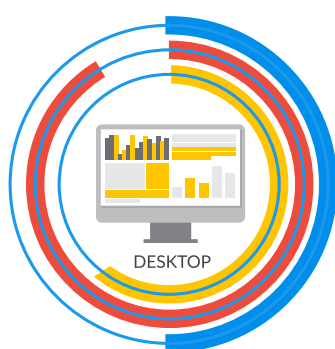


Tab Changes

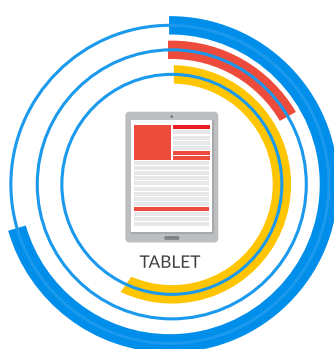


Keyboard Movements

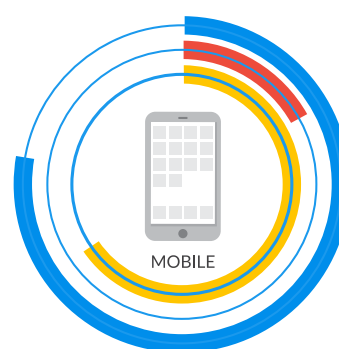
In our analysis, a surprisingly large number of engagement signals per page view were recorded with 260 on desktop, 418 on mobile and 349 on tablet. The average number of engagement events rises sharply on mobile devices, due to smaller screens, which necessitate additional scrolling, swiping and touch actions for content consumption.



260 Engagements
419 secs of Dwell Time
41 secs Engagement Time



349 Engagements
91 secs of Dwell Time
38 secs Engagement Time

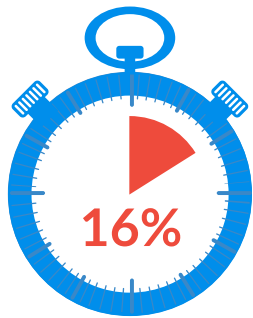


418 Engagements
70 secs of Dwell Time
47 secs Engagement Time

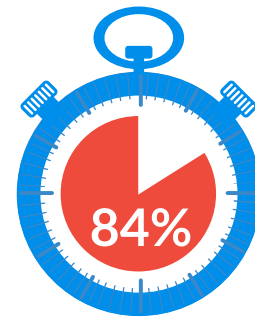
When engagement events are recorded we can measure how long the user is actively engaged with the page on which an ad is displayed – how much time they are investing in the content – rather than just how long the page is open. Despite a disparity in engagement events, the average engagement time is similar across all devices.



Recording engagement events reveals a significant gap between dwell time and engagement time. For all sessions, engagement time only accounted for 16% of all dwell time measured. This means users were not actively engaged for 84% of the time. The 16% of dwell time that users are actively engaged is the time that is really valuable to advertisers.



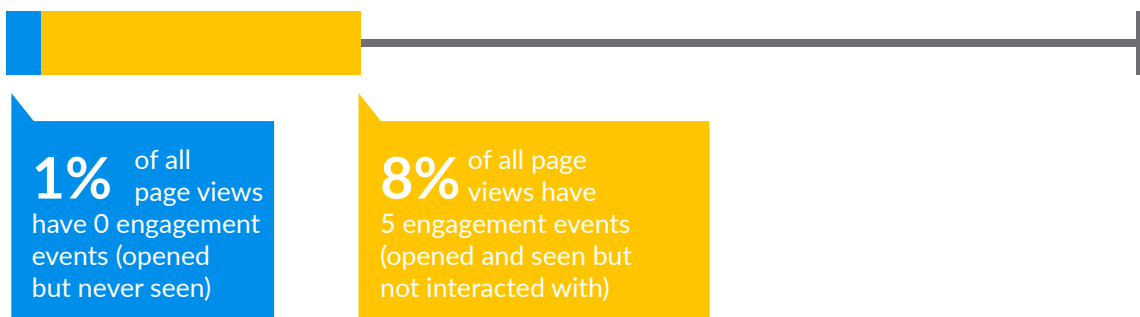
For all sessions in the study, Engaged Time only accounted for 16% of all page dwell time. This means that users were not actively engaged for 84% of the time.



When looking only at sessions below 90 seconds in total length, engaged time jumped to 77% of dwell time, indicating the gap between dwell time and engagement time is largely caused by longer browsing sessions where the page is left open while the user takes part in another activity. The gap between dwell time and engagement time is particularly wide on desktop where users are likely to open a tab to come back to later.

In fact, the study revealed 1% of pages had no engagement events at all, meaning the browser was closed before the page was viewed, and 8% had less than five engagement events meaning the user only viewed the page in order to close it.

Combined, this shows 9% of all webpages have no or minimal engagement.



This phenomenon makes sense when we consider common place browsing habits. Many of us are guilty of spotting an interesting article, right clicking and opening it in another tab to read later, then ultimately shutting down the page without reading the article when we run out of that most valuable of commodities – time. When this occurs, there might be an ad that is potentially deemed viewable at the top of the page recording dwell time, even though the user never spends any time with the content before closing the tab.



Viewable Engagement Time (VET)

Sovrn has created a new metric, Viewable Engagement Time (VET), a distilled version of dwell time that determines whether the user is actually present and investing time with the content on the page.

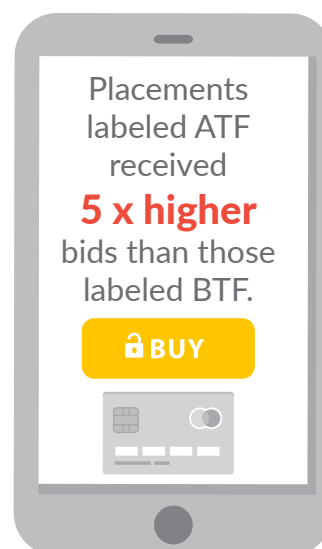
VET

1. VET is the total time the ad has been viewable (based on MRC guidelines) while the user has been actively engaged, based on the engagement time definition.

The buy side still places a premium on ATF ads

On the buy-side, programmatic ad placements can be labelled as Above the Fold (ATF) or Below the Fold (BTF), with, on average 1.43 ad placements ATF and 2.34 ad placements BTF on each web page.

The buy side still places a premium on ATF ad units, with research from Adomik indicating average ATF bids are \$0.43, compared with just \$0.08 BTF. This means buyers are on average paying more than five times the amount for placements labelled ATF ads than they are for BTF ads.



"Sovrn gives a great example of leveraging bid-level data analytics to challenge general truths in the programmatic world with a neutral, data-driven approach. Position is no longer the best proxy for content value, viewability might show some limitations, hence the need for an even smarter measurement of publishers' inventory value."

adomik

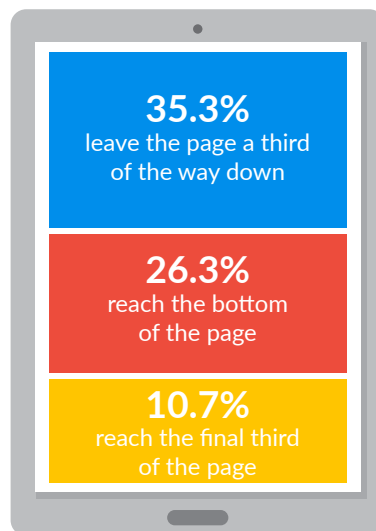
Nicolas Schueller,
CEO, Adomik

Adomik provides publishers with a data platform to holistically manage their advertising revenue.

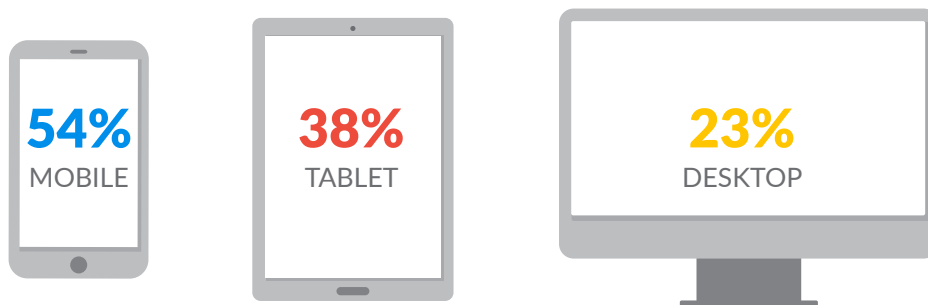


The idea that ATF ads are more premium than BTF ads has a number of sources, for instance using standard metrics ATF ads are 16% more likely to be in-view than those below the fold. In fact, MRC viewability guidelines encourage ads to be placed ATF, stating that, “upon initial page load, advertising or content placed at the top and left side of the page is most likely to be viewable.”^[4]

When accounting for all ads (both viewable and non-viewable), ATF ads have a 3.5 x longer average viewable time than those BTF, which is largely due to some users never scrolling below the fold because they arrive at a page, quickly decide the content is not for them, and then leave again. To gain a view of scroll depth we broke each web page into sections of 10% and determined the typical exit point of the user. Across desktop, tablet and mobile we discovered:



Scroll depth varied significantly by device, with the study revealing on average users exit a page halfway through the content on mobile (54%), a third of the way down the page on tablet (38%), and a quarter of the way down the page on desktop (23%).



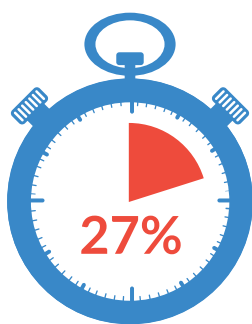
This discovery has implications across the advertising industry. [Advertisers should be thinking about a different creative for different devices.](#) Creative that engages audiences viewing on desktop may not be the same for those viewing it on mobile or tablet. [Publishers may also need to think about the value of their inventory.](#) For example, BTF ads are reached most easily on mobile so perhaps they should be given a lower value than BTF ads on desktop and tablet, if loaded on-view.

But BTF ads are more engaging

While standard metrics might make ATF ads appear a better deal, Sovrn's ability to measure engagement tells a different story. [VET metrics reveal BTF ads that are viewable are seen for 2.6 times longer than those ATF, offering far higher levels of engagement.](#)

For BTF ads users are actively engaged for 27% of viewable time, while for ATF ads users are actively engaged for just 3% of viewable time. These results show the limitations of dwell time or viewable time as trading currencies and indicate both the buy and sell sides need to move toward using new metrics to define the value of the traded inventory.

BTF ads users are actively engaged for 27% of viewable time or dwell time.



ATF ads users are actively engaged for just 3% of viewable time or dwell time.



Sovrn's findings are corroborated by Chartbeat research, which indicates almost two-thirds (66%) of engagement happens BTF. [\[5\]](#)

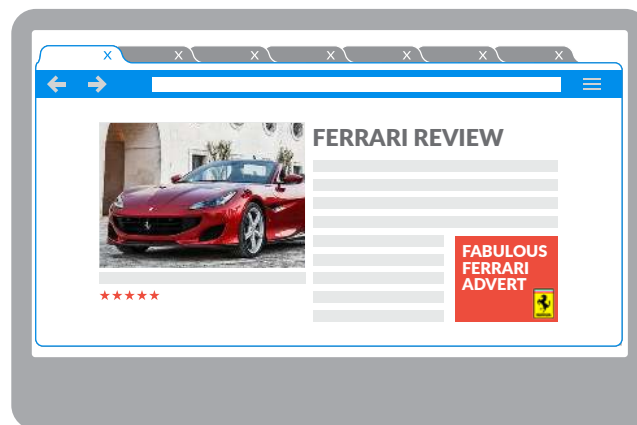
Assuming ads only load on view, ads BTF are worth much more than those ATF and a brief foray into the user mind-set explains why:

If a user arrives at a page where the content is interesting and engaging they will start to scroll and read. They are less likely to pay attention to an ad at the top of the article but will simply scroll away, after all they've only just arrived, why would they want to leave straight away? Once they have read the entire article and reached the bottom of the page, however, the user will feel nourished because they have learned something, and will be ready to move on, perhaps to discover more or even to place an order.



When ads are contextually relevant and timely, the ad at the bottom of the page is no longer a distraction, as the ad at the top of the page might have been, but a welcome and productive way of continuing the user journey. Engagement, click through and conversion rates are naturally far higher for ads at the bottom of a page that the user has chosen to spend time with than those at the top assuming the ad was loaded on-view.

Even where publishers aren't using technology that only loads ads on view, in some circumstances, it may be worth advertisers buying ads at the bottom of the page and carrying the cost of a few non-viewable impressions. As an extreme example, consider an audience of car enthusiasts reading a review of the latest Ferrari. The proportion of users who are really interested in purchasing the car, and can afford to do so, will be miniscule, but they will be the ones truly engaged in the article and reading right to the end. The cost to a Ferrari dealer of not serving their ad contextually at the bottom of that particular page – either because they didn't bid high enough or didn't want to buy BTF – would be far higher than the cost of a few non-viewable impressions.



The same applies to other high value products such as holidays, financial services products or insurance. Once a user has read and engaged with an article that offers advice on these subjects, they will look for a solution, so if there is a relevant ad that provides a relevant answer they are highly likely to click on it.

Ideally buyers want ads that only load on view, but where this is not possible they should weigh up the relative value of the product they are selling and the content they are buying against deciding if they wish to invest additional ad spend to reach an audience of serious, engaged users they really want. Only 10% of users reach the end of a page, but alongside the right content, with the right audience, it could be worth sacrificing up to 90% to reach highly engaged users with the other 10%, where ads are not loaded on-view. Alternatively, buyers should look for publishers who are using load-on-view tools such as Sovrn's OnScroll technology.

Ultimately advertisers should be bidding on the engagement a page generates for their ad – the time the user actively spends with the ad – in addition to the ad's position on the page. While the technology and standards are not yet widely available to allow them to do so, the OpenRTB protocol is becoming continually richer in data, and advertisers will eventually be able to buy engagement time through CPS (Cost Per Second) and CPH (Cost Per Hour). Alternatively, buyers should look for publishers who are using load-on-view tools such as Sovrn's OnScroll technology.



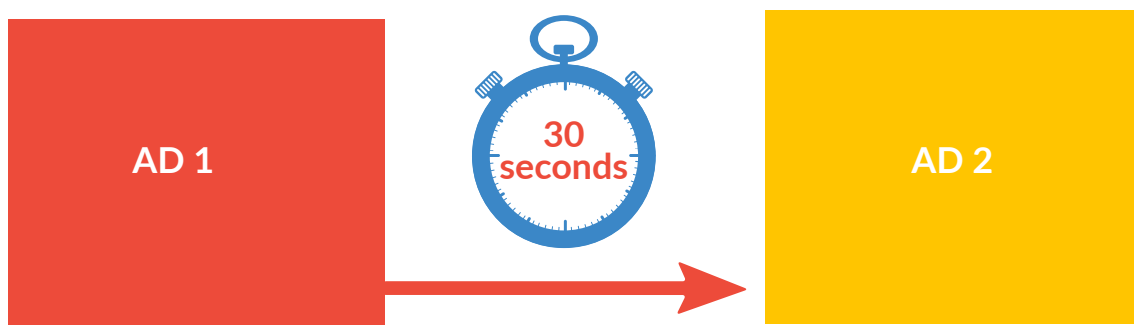
Publishers can load on-view without losing out

Publishers are understandably reluctant to totally adopt load-on-view models for fear of missing out on the revenue generated by ads that might load out of view. But when publishers fully understand engagement, they can value their load-on-view ad placements in a way that prevents revenue loss. Ultimately, buyers want to see less ads per page and will continue to pay more for better quality.

Introducing VET Reload

VET Reload allows publishers to value the most engaged content pages above others, making impressions with higher engagement time available to advertisers at a premium, but through a transparent process. MRC's Viewability Standards are now seen as the 'hygiene factor' or 'table stakes' within the industry, however, publishers can set up deals which deliver different levels of viewability and engagement, with variable pricing, so that the buy side can make educated decisions on what to buy.

Two important attributes for publishers should be their audience and the attention that the audience pays to their content, and now with VET Reload and with a future roadmap towards CPS and CPH, they can go to market with the true value of their biggest asset, which is their audience's engagement time. VET Reload also allows advertisers to target users based on actual engagement levels, in addition to traditional targeting factors, such as demographic and context.



When an ad position is viewable and actively engaged with for at least 30 seconds, using VET Reload, publishers have the opportunity to load a new advertisement in that position and generate additional revenue from highly engaged content pages.

Maximum viewability thresholds allow ad reload

Minimum threshold standards for viewability were very welcome back in 2014, the value of which should not be underestimated, but the time has come to also create an industry standard for maximum viewability.

A Chartbeat study recently revealed that after a user has engaged with an ad for 25 seconds, diminishing returns start to set in and the brand impact is significantly reduced, with the likelihood of the user absorbing the message or taking action on it plummeting dramatically. [6]

With VET Reload, the publisher knows whether the user is actively engaged with content on the page, so can define an engagement time threshold where the publisher can legitimately reload the single ad to create a new impression and a new opportunity for revenue generation.

By setting a threshold of 30 seconds of VET, ads will reload after 30-45 seconds of dwell time, as VET only measures active engagement and inevitably, there is likely to be some inactivity during viewable engagement time tracking. The advertiser has half a minute where they know the user is present and actively engaged to create brand awareness or secure a click, after which time the ad unit loads a new creative, as would be the case with other formats such as Digital Out of Home (where typical reloads are between 10-12 seconds), TV (where typical commercial lengths are 15-30 seconds) and Radio (where typical commercial lengths are 30-40 seconds). Reloading the ad unit after a set amount of VET is different to periodically refreshing the page, which was a bad habit some publishers historically fell into to generate more revenue and had a negative impact on the user experience.

Minimum viewability thresholds offered a valuable benchmark, but buyers are looking further than viewability now and publishers should be looking to deliver against the future needs of their buyers. Sovrn has released its VET Reload product to enable publishers to optimize revenue from reloading their ad units against their most engaged content, while the market is slowly moving towards programmatic CPS and CPH trading.

Industry call to arms

The time has come for the digital advertising industry to stop putting high values against impressions just based on factors such as publisher size, on-page placement, and viewability, **but to start focusing on what really matters: how much time users are spending engaged on page and with ads.**



About Sovrn:

Sovrn owns and operates a proprietary ad exchange with direct connections to every major buyer in the world. Sovrn gives content creators tools and services to make money; scale to grow their audience; manage their ad operations; improve their cash flow, all underpinned by a massive data commons for extraordinary insights. Sovrn is headquartered in Boulder, Colorado, with offices in Denver, New York and London.

Learn more:

PUBLISHERS:

To learn more about VET Reload and Sovrn's other viewability tools, visit:

<http://www.sovrn.com/VET>

BUYERS:

To learn more about Sovrn's Viewable and Engagement Deals, visit:

<https://www.sovrn.com/deals>

Or email marketing@sovrn.com



Methodology

To explore how users behave when browsing the internet, Sovrn collected a large amount of anonymous data on user sessions. Constructing such a substantial dataset allowed observation of the most common forms of user interaction with a website, allowing us to learn about user behaviour in general.

The data was collected for extended periods of at least a week on a range of sites, from major news publications, to sites with a more niche audience. The data was collected this way on the assumption people behave differently on different sites, or even on the same site, and that behaviour can be affected by factors such as the time of day.

For each session we collected three sets of data, each focusing on a different aspect of the session. These three data types were:

- Page data: tracking the user's engagement with the page as a whole
- Placement data: tracking the user's engagement with specific placements
- Event data: tracking events such as clicks and mouse movements that signaled engagement

These metrics were then combined with metadata about the user, including browser, operating system, and device, to allow trends in user engagement with ads on the web to be investigated.

Sample Details

- 400 + websites
- 130 million page views
- 3 billion engagement events

Data was collected between 14th December 2016 and 18th January 2017 and re-sampled during the remainder of 2017 to concur findings. At the peak 100,000 engagement events per minute were recorded, and 27 unique environments – or browser / OS / device combinations – were captured.



Definitions

Above the fold (ATF): These are adverts that are positioned in the upper half of a web page and so are visible without scrolling down the page

Below the fold (BTF): These are adverts that are positioned in the lower half of a web page and so are visible only after scrolling down the page

Dwell time: The total time that a page is open, determined by the time between a user loading a page and leaving a page (through closing the window, or clicking to another link).

Engagement events: Signals that occur when a user is active on a web page such as scrolling, mouse moving or clicking

Engagement time: The total time that a page is open and the user is deemed as active. A user is only deemed active if a) an engagement event has been detected within the last 5 seconds & b) the window/tab is in the users viewpoint and is not obstructed by any other application / window

Load on view: Load on view ad units only load when scrolled into the viewable area of the browser

OpenRTB protocol: an API specification for the automated trading of digital media across a broader range of platforms, devices, and advertising solutions

Scroll depth: This shows how far a user scrolls down a web page

Viewable: MRC guidelines state that a display advert is deemed as viewable when a minimum of 50% of the advert is in-view for one second or more

Viewable Engagement Time (VET): The total time the ad has been viewable (based on MRC guidelines) while the user has been actively engaged, based on the engagement time definition

OnScroll: A Sovrn technology which enables publishers to pro-actively load ads only once they are deemed to be in-view and meet MRC / IAB minimum threshold standards

VET Reload: A Sovrn technology which first ensures that an ad is 100% in-view, and then tracks to ensure that the ad is engaged with by tracking events which demonstrate that the user is present as outlined in this paper.



- [1] Nikul Sanghvi (on behalf of Financial Times - Cost Per Hour: Using a Time-Based Currency for Digital Advertising
- [2] Digiday UK - Publishing in the viewable ad era
- [3] Media Ratings Council - Viewable Ad Impression Measurement Guidelines
- [4] Media Ratings Council - Viewable Ad Impression Measurement Guidelines
- [5] Time - What you think you know about the web is wrong
- [6] Chartbeat - Economics of Ad Refreshing

