

Creating Premium Environments Through High Ad Viewability

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INTRODUCTION

As marketers increase spend on digital ads they have also intensified their efforts to ensure that these ads are viewable and free of fraud. Ads that are not viewable continue to cost advertisers billions of dollars in wasted impressions.

As far back as 2011, the Association of National Advertisers (ANA), the American Association of Advertising Agencies (4A's) and the Interactive Advertising Bureau (IAB) came together to solve this issue by working with The Media Rating Council (MRC) to implement measurement standards. This cross-industry initiative called Making Measurement Make Sense (3MS) aimed to shift the currency from served impressions to viewable impressions. Measured impressions were to be held to a 70% viewability threshold.

Although significant progress has been made since that time, the industry as a whole has not fully adopted one standard and is still struggling to find consensus. There are currently multiple viewability standards for display and video ads.

The most widely accepted viewability standard is the MRC's:

- Display Ad Units: >50% of Pixels for > 1 second
- Display Large Ad Units: >30% of Pixels for > 1 second
- Video: >50% of Pixels for > 2 seconds

GroupM, the largest media agency in the world, has created a more stringent "fully on-screen" standard:

- Display Ad Units: 100% of Pixels with no time requirement
- Display Large Unit: 243K Pixels or larger count on render
- Video: 100% of Pixels for ½ the video and press to play with sound on

More recently there have been new *emerging viewability standards* that require 100% of ad pixels in view for one second for display and 100% of pixels in view for two seconds with sound on for video. These competing viewability standards create confusion because solutions that work for one standard can negatively impact another. This not only makes it challenging to solve viewability, but leads to poor standards adoption across the industry.

In addition to these challenges, there is the added complication of having multiple viewability measurement companies accredited by the MRC that all produce different metrics. There are seventeen alone just for display viewability.

At this year's IAB Leadership Summit, Marc Pritchard the CMO of Procter & Gamble, the world's largest advertiser, seemingly spoke for all marketers when he said, "The time and days of giving digital a pass are over. It's time to grow up. It's time for action." His call to action encouraged the industry to adopt only the MRC standard.

Media publishers, while eager to solve ad viewability, have confronted some of the same obstacles experienced by marketers including different viewability standards, different view rates for ads on desktop PCs vs. mobile, multiple measurement vendors and non-human/invalid traffic which can impact viewable impression counts.

OBJECTIVE

In order to support Time Inc.'s position as a premium digital publisher and to ensure that all digital marketing messages have the opportunity to be seen, we set out to measure viewability rates on all of our sites and across all ad placements. Although we have done previous work on improving viewability, including optimizing our sites to not load banner ads outside of the active tab and making some units adhesive, we felt there was still room for improvement. Most of our sites still have some underperforming placements that drag down viewability and we wanted solutions that would be valid across our network. While our overall in-view rate of 70% is significantly above Moat's Q2 2017 Internet average of 53% for PCs and 45% for mobile web we are not satisfied and aim to go beyond simply meeting the industry's minimum standard. Conducting this comprehensive audit allowed us to share new prescriptive insights to product teams, sales, technology partners, and management on how to increase viewability to a level that surpassed the industry benchmark of 70% viewable. We knew from previous research conducted by the IPG Media Lab that viewability is highly related to ad effectiveness and by increasing our in-view rates we can be more effective for our advertisers. As an industry thought leader, Time Inc. wants to lead the charge on viewability to the benefit of agencies and our fellow publishers.

Key goals of this paper:

- Outline key display (Native ads are excluded) viewability challenges
- Evaluate how different viewability standards and creative sizes can impact in-view rates
- Highlight the different variables that drive non-viewable rates and what steps can be taken to improve them

KEY FINDINGS

Although we acknowledge that viewability is still rapidly evolving both on the advertiser and publisher side and that the findings we highlight today will change in the future, we still came away from this analysis with these actionable insights.

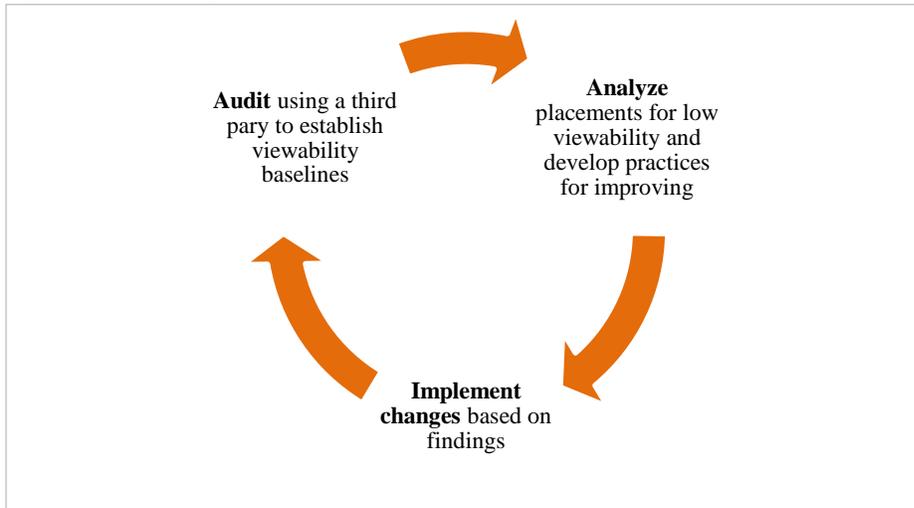
- Vertical banner ads have higher MRC viewability on PCs but do poorly for the GroupM and the emerging viewability standard. Vertical ads also do poorly on mobile devices
- Horizontal banner ads on PCs have more consistent in-view rates across differing viewability standards
- Tile ads have high viewability on PCs and mobile devices
- Although larger ad units with 96,000 pixels or more provide more space for marketing messages and promise higher consumer engagement, they are less likely to be "fully on-screen". In particular, taller vertical ad units (600 pixels in height) tend to have lower fully on screen rates
- Sticky video players have a dramatic impact on improving video ad viewability
- Ongoing auditing of website viewability is necessary and produces crucial insights that can drive improvement. Publishers have to continuously optimize as ad standards and user behavior changes.

METHODOLOGY

Time Inc. recognized early on that working with a third party vendor would be crucial to solving viewability. We had to establish a baseline of where we stood and what ad placements needed improvement. We also had agency partners who created stricter viewability standards and we needed to understand what placements work best for them. We considered several MRC accredited vendors and compared them based on accuracy of impression counts, ease of interface use, customer support and penetration with the industry and our key clients. We ultimately chose to work with Moat, one of the top vendors in the viewability space. By appending Moat's tags to all display ads served through our ad server and adding their plugin directly to our video player we were able to passively gain real time visibility of in-view rates, non-human traffic and a host of other diagnostic metrics.

We organized our data using five key variables which include website domain, website section, ad unit size, position on page and device platform. This allowed for extremely granular viewability analysis. In Q2 2017 we audited 146,640 ad placements across 29 Time Inc. websites, which represented 3.6 billion impressions. Because of the volume of data captured we made a decision to concentrate only on display units with 100,000 or more in-view measurable impressions and video ads. We didn't consider native, programmatically served or tablet ads (only constitutes 7% of impressions) in the audit. This pool of directly sold impressions currently makes up the majority of our inventory.

Figure 1: Viewability Measurement Workflow



Besides in-view percentages as defined by the MRC and GroupM, we identified four key Moat diagnostic metrics that would help us understand what drove non-viewable rates across our network. These diagnostics helped us hone in on the problems that were specific to our sites. The one that stood out to us was our Out of Sight rates which indicate that there are ads loading below the fold that don't have a chance to be seen. These ad impressions are counted as measurable, but will not register as a viewed impression.

Viewability Diagnostic Metrics

Out of Focus Rate: The percentage of impressions where the tab containing the ad was never brought into foreground

Out of Sight Rate: The percentage of impressions where the ad was in a foregrounded tab but the visitor did not see any portion of the ad

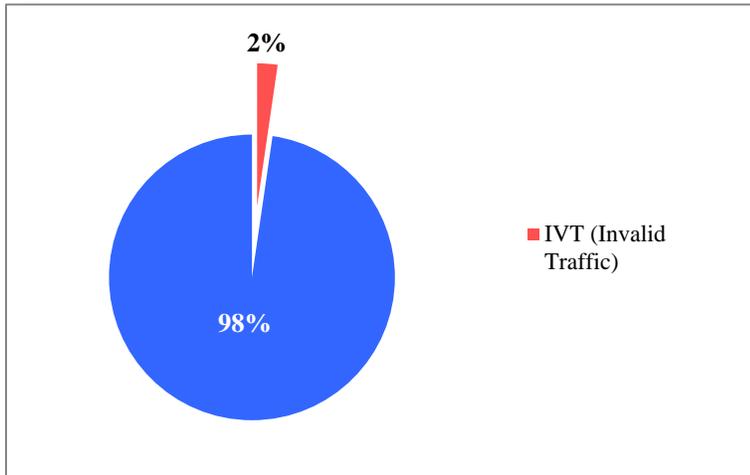
Missed Opportunity (Time) Rate: The percentage of impressions where the visitor saw at least 50% of the ad's surface but did not view the ad for at least a second

Missed Opportunity (Area) Rate: The percentage of impressions where the visitor saw part of the ad but did not see at least 50% of the ad's surface

INVALID TRAFFIC'S IMPACT

Before you can identify other factors that play a role in viewability you must first understand the baseline of impressions that are being filtered out as Invalid traffic (IVT) and where they are coming from. IVT or non-human traffic (NHT), which includes ad impressions from bots or spiders, can often play a significant role in viewability rates. Traffic flagged as invalid is removed from the available pool of impressions that can be viewable, thus lowering your viewability score before other factors can be considered. Invalid impressions are wasteful and detract from premium ad environments. In our analysis we determined that Time Inc. had less than 2% invalid traffic and it was not a significant factor that impacted our viewability rates.

Figure 2: Invalid Traffic Across Time Inc. Websites



Source: Moat, Q2 2017

DESKTOP PC VIEWABILITY AND AD SIZE CORRELATION

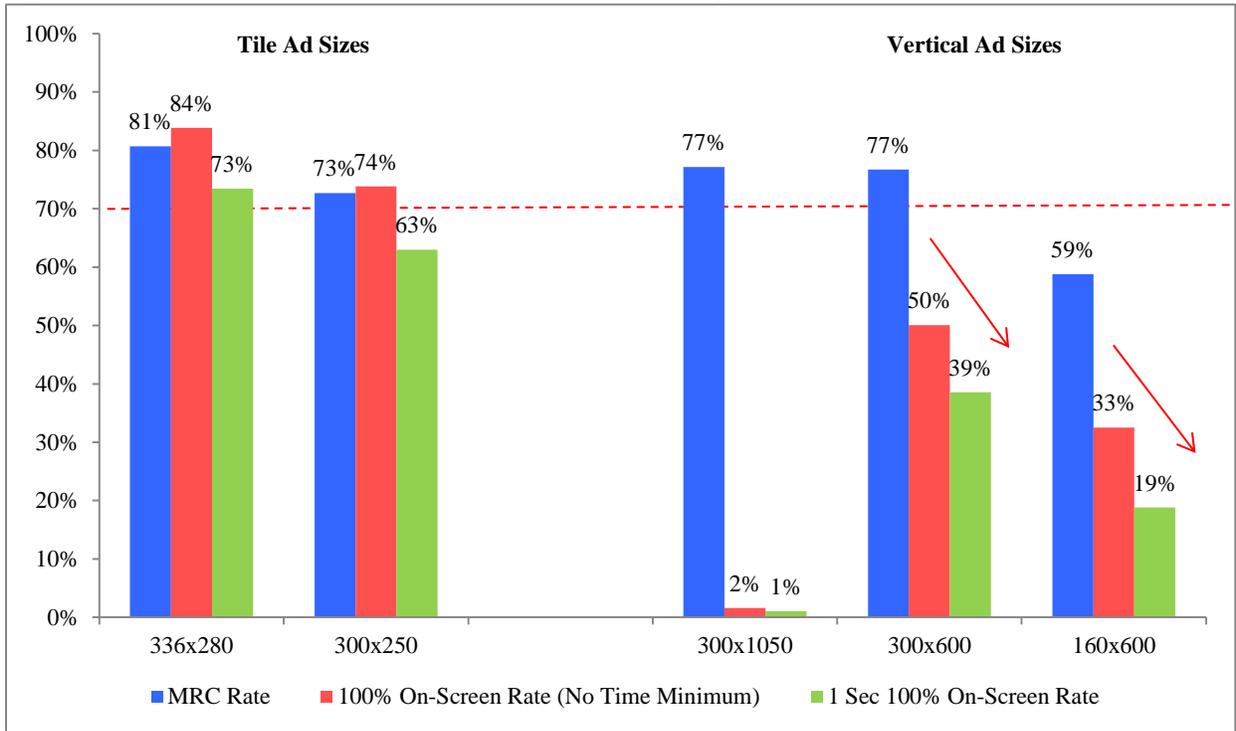
It can be frustrating to try to solve viewability since there are many variables that occur simultaneously that can impact in-view rates. Rather than looking for one silver bullet, our approach was to address each of them separately with the cumulative impact being that our viewability would see gains. In our analysis it was apparent that ad unit size had a strong correlation with the different viewability standards.

We found that vertical ad units have high MRC in-view rates on desktop PCs but underperform when measured against the GroupM or the emerging standard of fully on screen for one second. This is important because we can not ignore the fact that GroupM is the largest media investment agency and spends a significant amount online. In the bar chart in Figure 3 we see that as the height of vertical ad units increase they continue to perform well for the MRC rate but viewability plunges from above 70% to below 60% for the GroupM or the emerging rate. For GroupM and other advertisers who require that their ads be fully-on screen, large vertical ads (especially the 300x600 and 160x600) should be used sparingly and with constant monitoring.

We saw quite the opposite for tile ads which achieved higher in-view rates across all the standards. The 336x280 large rectangle and 300x250 medium rectangle units performed well for the MRC rate and all rates for that matter. With an average MRC rate of 77% and a GroupM rate of 79%, these were our most viewable units on desktop PCs.

It must be noted that while there were instances where vertical or tile units underperformed the MRC viewability standard the majority of times they did well even across varying websites with different content and site architecture.

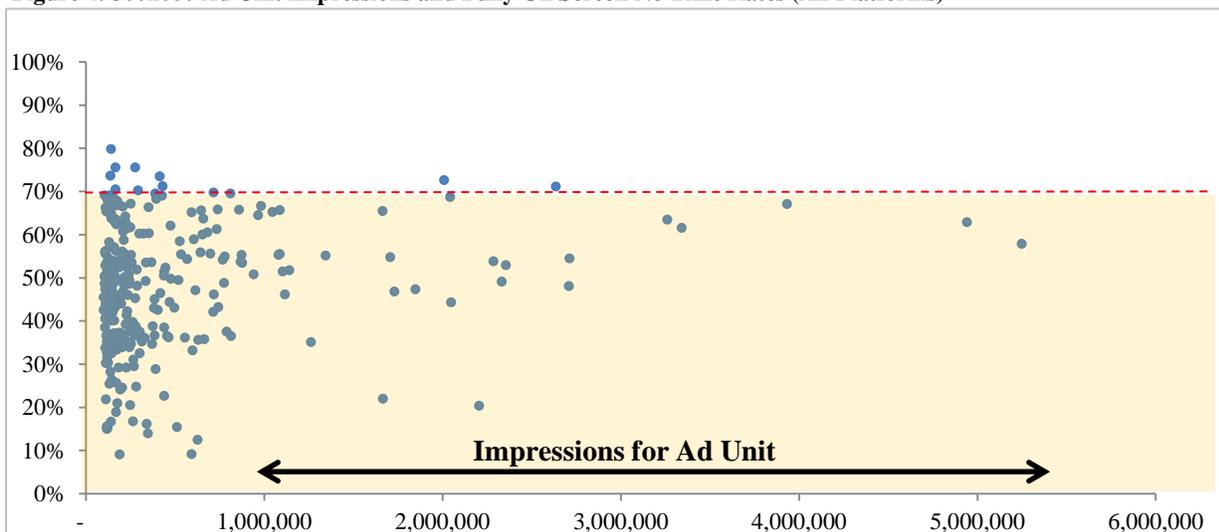
Figure 3: Vertical and Tile Banner Ad Units In-View Rates on Desktop PCs



Source: Moat, Q2 2017

Taking a closer look specifically at the 300x600 or half page unit which provides a larger space for advertisers and promises higher engagement, it only met the GroupM rate 50% of the time and was only 39% in-view for the emerging standard. While this ad size was our third most utilized in terms of impressions and is widely recognized by the industry as a top performer, it struggles to meet the more stringent “fully on screen” viewability standards.

Figure 4: 300x600 Ad Unit Impressions and Fully On Screen No Time Rates (All Platforms)

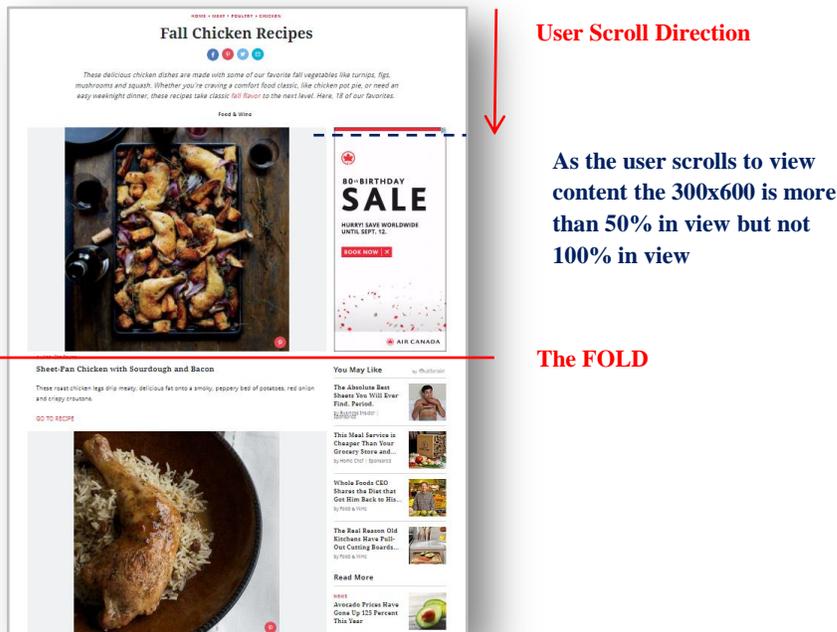


Source: Moat, Q2 2017, 300x600 with more than 100K impressions. 161 million total impressions

The lower fully on-screen rates can be attributed to how users consume content. To view content users typically scroll from top to bottom and vertical ads have trouble remaining 100% on screen. When a user scrolls down, the top portion of the ad goes out of view not allowing for the ad to be fully on screen. The half page unit only remained 80% on screen 59% of the time and had a

Missed Opportunity Area Rate of 7.3%. In contrast, the 728x90 and 300x250 had a Missed Opportunity Area Rate of 1% and 4%, respectively. In Figure 5 you can see an example of a half page ad that met the MRC standard but failed to meet the GroupM or the emerging rate. Ad units with 600 pixels or more in height will have difficulty meeting this standard.

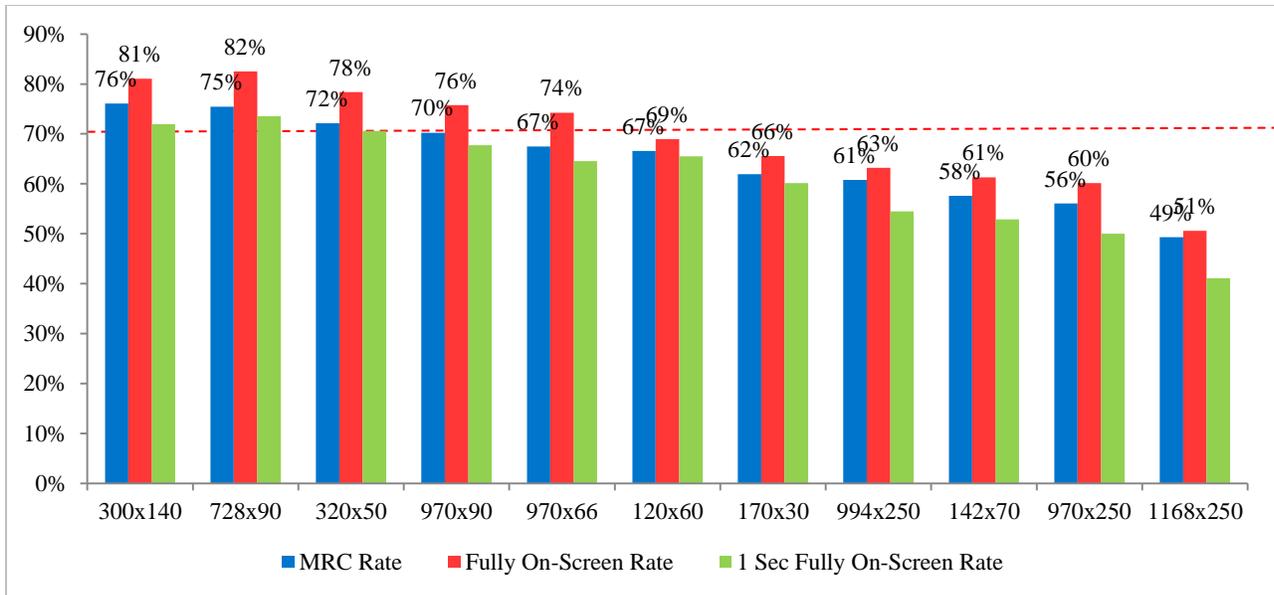
Figure 5: Example of 300x600 Ad Unit on Foodandwine.com



Horizontal ads on desktops PCs had more consistent viewability rates across all three standards. These units had an average MRC viewability rate of 65% and GroupM viewability of 69%. The top performing units were the 728x90 leaderboard and the 300x140, which had a viewability rate of 76%, six percentage points above the MRC standard. Their fully on screen rates were even higher at 81%. Prior to this analysis, Time Inc. had taken steps to make the 728x90 ad unit on the home page and article pages “sticky” for one second. This means these ads stay in a fixed position on the screen for one second even as the user scrolls down.

The worst performing horizontal units were the 970x250 and the 1168x250, which only averaged a 53% MRC viewability rate even with the lower threshold which requires only 30% of pixels to be viewable. Based on Figure 6 we have determined that horizontal ads consistently outperform vertical ads when using GroupM’s or the emerging viewability standard. The ads are on average five percentage points more effective when measured using GroupM’s standard vs. the MRC standard. The emerging standard of fully on screen for one second was consistently lower for most PC ad units with an average rate of 61%.

Figure 6: Horizontal Banner Ad Sizes In-View Rates on Desktop PCs



Source: Moat, Q2 2017

The orientation of horizontal ads on PCs allowed these units to have more consistent in-view rates across differing viewability standards. On average there is only a five percentage points difference between the different standards. We also saw that horizontal units had on average five percentage points higher in-view rates when measured on the GroupM standard vs. the MRC rate. The larger width of the ads allow for effective placement above or below content. As illustrated in figure 7, users scroll from top to bottom to read content causing horizontal units to come in-view at different times but still with high in-view rates depending on engagement with content. These ads fall within the users natural content consumption paths.

Figure 7: Example of 728x90 Ad Unit on Myrecipes.com

User Scroll Direction

The FOLD

As the user scrolls to view content all three 728x90 units come in view at different points but all have high viewability

One negative we observed is that largest horizontal units, the 970x250 and 1168x250 have a hard time staying in-view. Both of these larger units had Out of Sight rates of higher than 30%. Because of their large size this unit is often placed above the

branding bar but users scroll quickly to reach content and never see the ad. In figure 8 we see that the ad is prominently placed above the branding bar but not adjacent to content causing the user to scroll down past the ad.

Figure 8: Example of 1168x250 Ad Unit on EW.com 46% Out of Sight Rate

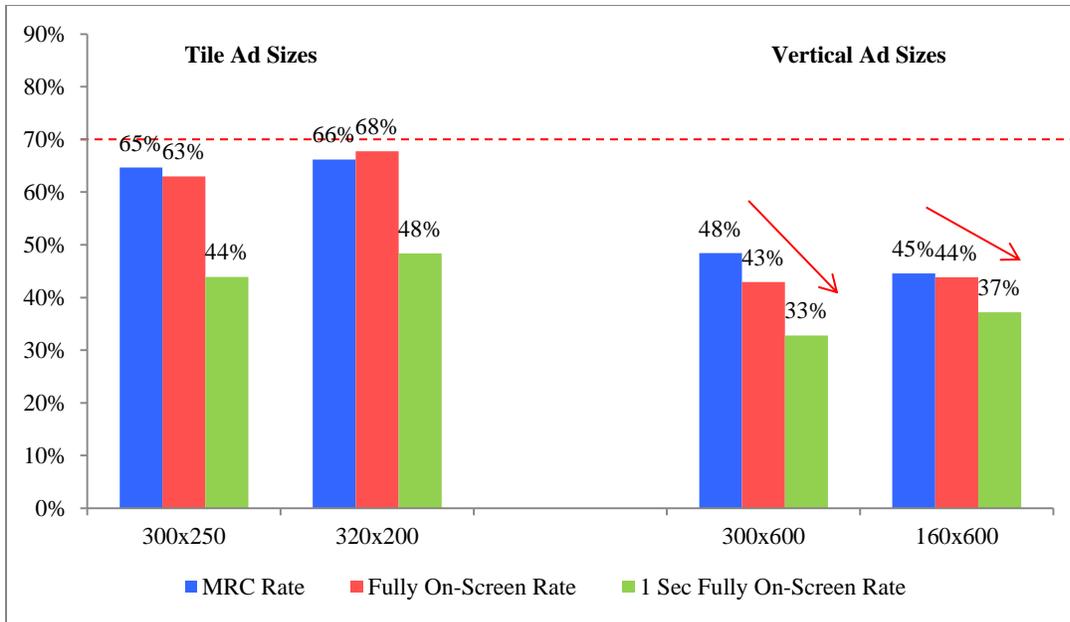


MOBILE VIEWABILITY AND AD SIZE CORRELATION

As digital content consumption shifts to mobile devices so eventually will the bulk of ad impressions. It is imperative that ads are viewable on mobile devices. In our analysis we found that Time Inc.'s mobile viewability lagged behind desktop PCs by 4 percentage points. Mobile ads had a slightly higher Missed Opportunity Time rate most likely due to faster scroll speeds since users can quickly swipe page up or down. The Out of Sight rate was also three percentage points higher than PCs as more content loaded below the fold.

We again found some correlation with ad size and orientation on mobile devices. Figure 9 shows that 300x250 and 320x200 Tile ads perform reasonably well on mobile devices with an average MRC in-view rate of 65%, while longer vertical ad sizes struggle. Vertical units on mobile had an average MRC in-view rate of 46% and an even lower rate at 43% for the GroupM standard.

Figure 9: Vertical and Tile Ad Unit In-View Rates on Mobile

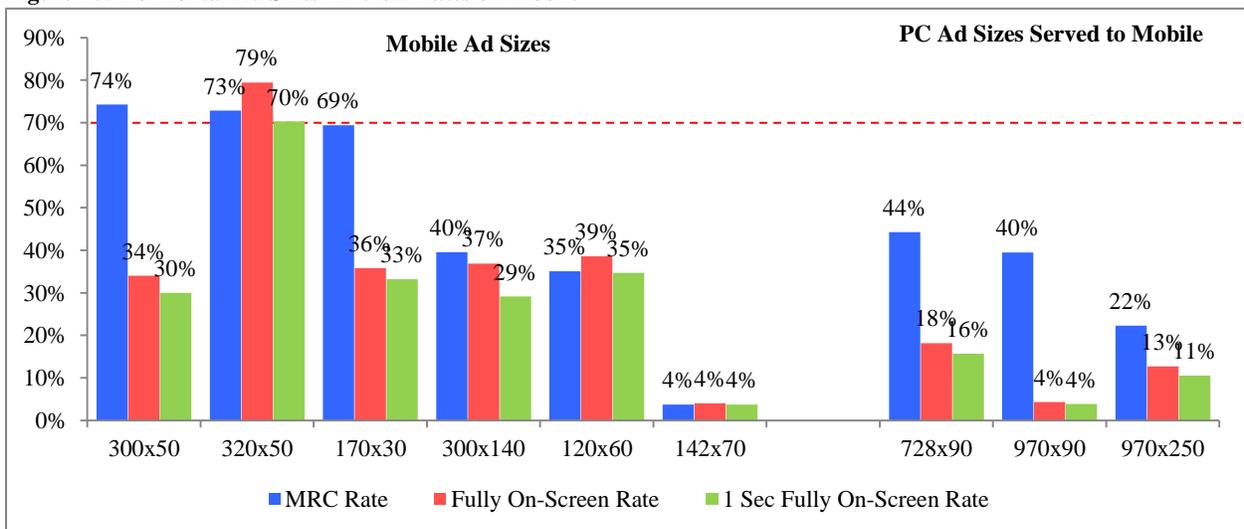


Source: Moat, Q2 2017

In contrast to what we saw for desktop PCs in Figure 7, horizontal ad units on mobile devices were less consistent across viewability standards. The top performing units based on the MRC standard were the 300x50 and 320x50. These units are ideal for mobile devices and fit within smaller screens. They are also easy to adhere to the top or bottom of mobile pages without compromising the users experience with content. Only the 320x50 unit met or exceeded the GroupM and emerging viewability rates on mobile.

Some of the worst performing horizontal ad units were sizes that are typically reserved only for desktop PCs that were served to a mobile device. These units are too large to be viewable on smart phones and should not be served into mobile ad slots. The 728x90, 970x90 and 970x250 had a Missed Opportunity Area rate of 25%, 16% and 42% on mobile. That is significantly above our overall network average of 3% for mobile. This analysis has prompted efforts to block these units from being served to mobile devices.

Figure 10: Horizontal Ad Sizes In-View Rates on Mobile



Source: Moat, Q2 2017

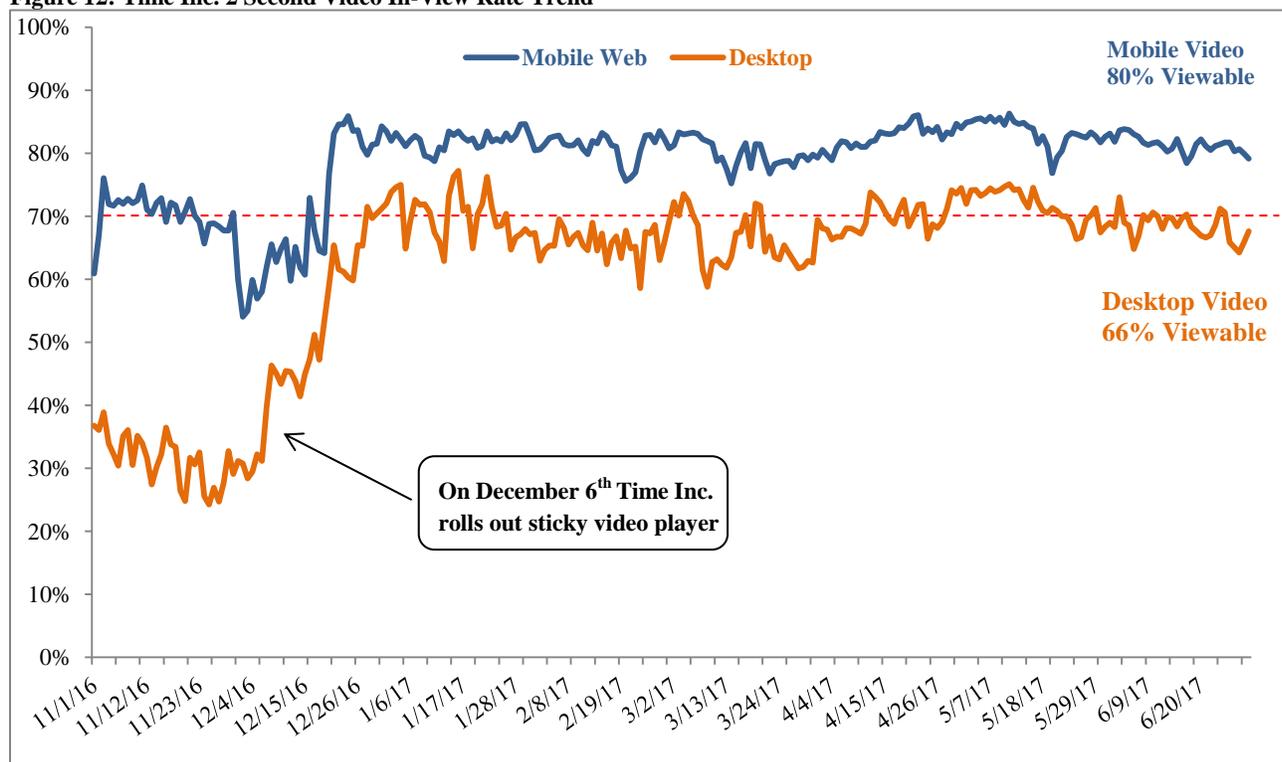
VIDEO VIEWABILITY

Although the banner display analysis done for this paper was conducted using data from Q2 2017 we had to go back further to illustrate the most significant driver of video viewability improvement for Time Inc., which was our new video player. On December 6th we began a staggered rollout of the Brightcove sticky player on our 20+ sites and the impact was immediate. In only the first five days after launch we saw a 16 percentage point increase in our 2 second video in-view rates. The new player locks the video window in the viewable screen area on PCs and minimizes it to the right rail upon scroll. The player never goes out of the viewable screen and doesn't pause unless the user selects that option.

Prior to launching this player our video in-view rates averaged 38% and post launch we saw a steady increase to just above 65% on PCs. Although this improvement was significant 17% of our PC video views still occur out of focus. These streams are occurring in a tab that was not brought into foreground.

On a mobile device the new video player opens to full screen mode, ensuring in-view rates just above 80%. This player is essentially always in-view with a less than one percent Out Of Focus rate.

Figure 12: Time Inc. 2 Second Video In-View Rate Trend



Source: Moat, 11/1/16 – 6/30/17

FUTURE RESEARCH

While this study was useful in helping Time Inc. address its viewability challenges there is more research needed as technology, advertiser standards and user preferences change. With the recent announcement on August 17, 2017 by GroupM to officially roll out expanded viewability standards we will again need to evaluate methods of optimizing our sites to meet these new guidelines. We have started some of that work here but more research is needed.

To date we also have not deployed a solution that tracks latency or file weight of ad creatives. While we know from research conducted by the IAB that latency and file weight can impact ad load speeds and therefore viewability, more work is needed to quantify their specific impact on our sites.

Another area where we will need more research is to understand viewability with LEAN ads. In July 2017 the IAB provided LEAN guidance (of Light, Encrypted, AdChoices supported, and Non-invasive ads) to create a better user experience for new media consumption trends, especially on mobile devices. In theory these improved standard ad units should perform better for viewability but we will have to continue to audit and analyze our viewability to truly understand how these units perform.

CONCLUSION

Solving for viewability can seem daunting, since media publishers must walk a fine line between providing great user experiences and pleasing advertisers, but we have illustrated that it can be achieved. In this paper we have shown why auditing is a constant part of an iterative process that is never complete. We have also shown that audits need to go beyond just in-view rates to diagnose problems.

We also shared data on ad creative sizes and its impact on viewability in a marketplace that has not yet fully adopted one standard. Time Inc. believes that solving for viewability, along with creating premium environments for our clients, will also allow us to move beyond this metric and to other more meaningful ones like the effectiveness of the ads.

ACKNOWLEDGEMENTS

I'd like to acknowledge the contributions of the following team members who contributed significantly to this analysis.

Ranjeet Bandi - Assistant Manager (Time Inc.)

Gaurav Ramesh - Senior Analyst (Time Inc.)

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